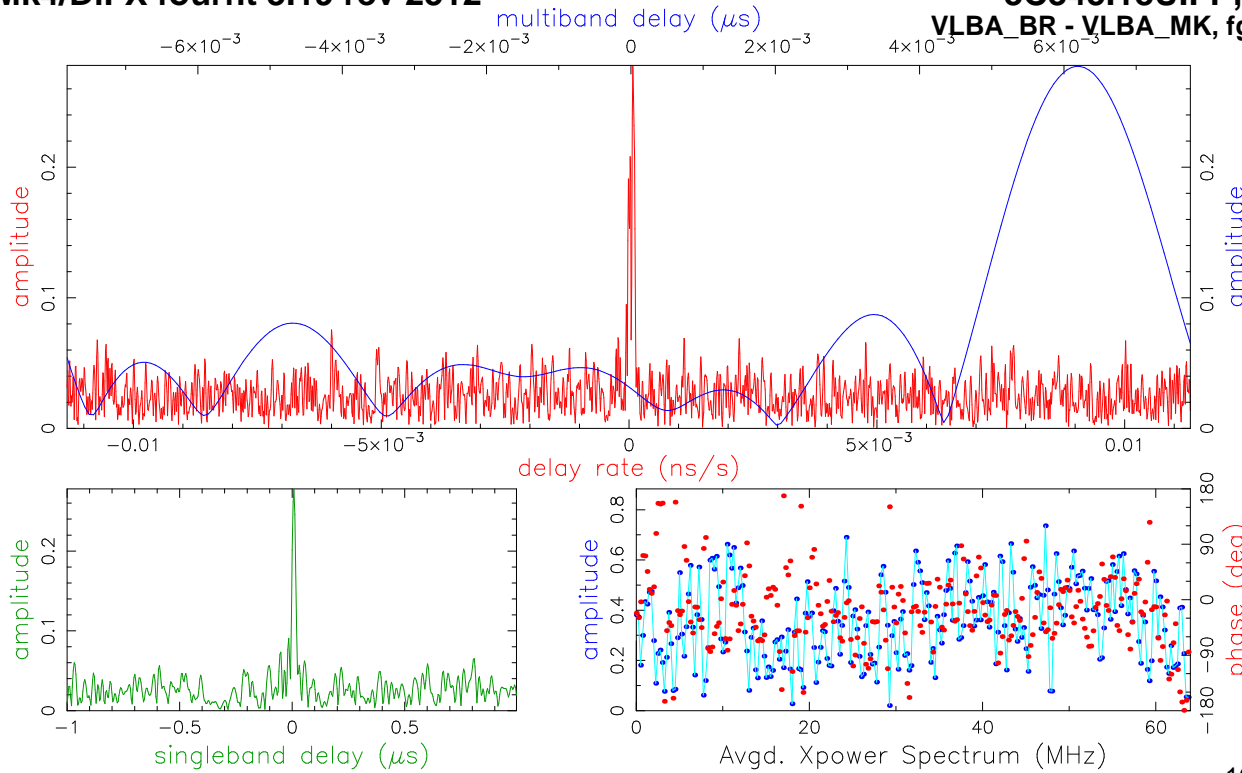


Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, bm
VLBA_BR - VLBA_MK, fgroup W, pol RR

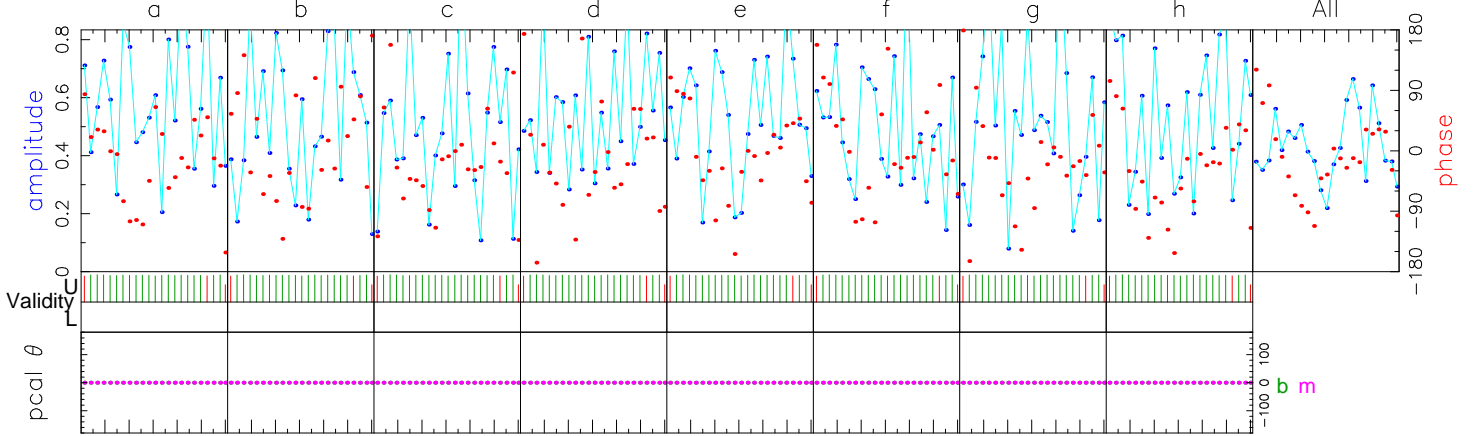


Fringe quality 9

SNR 14.2
Int time 348.702
Amp 0.278
Phase -11.5
PFD 6.1e-37
Delays (us)
SBD 0.007112
MBD 0.006175
Fringe rate (Hz) 0.006363
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

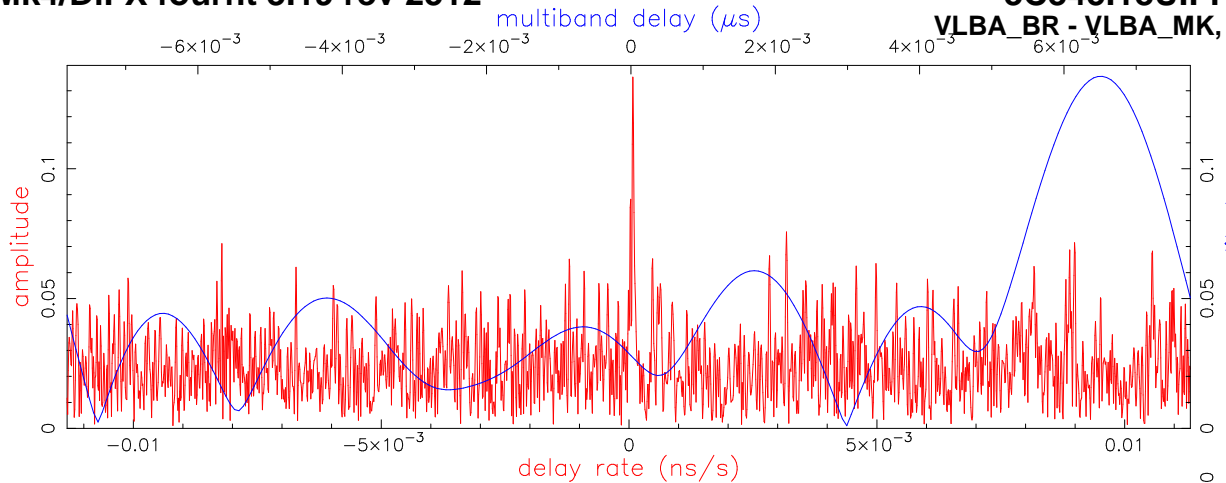
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.51
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150931
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

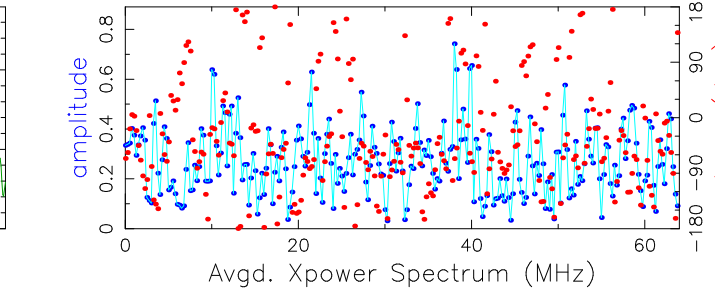
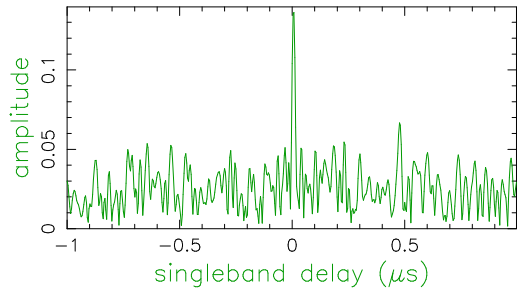


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-10.6	-10.3	-19.1	-26.0	5.4	2.8	-21.1	-8.9		-11.5
	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	Ampl.	0.3
	258.7	258.6	258.7	259.5	259.2	257.8	258.7	258.9	Sbd box	258.8
U/L	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0	APs used	
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	
									Tracks	
Group delay (usec)(sbd)	-2.82214535997E+03		Apriori delay (usec)		-2.82215153458E+03		Resid mbdelay (usec)		6.17461E-03	+/- 7.6E-05
Sband delay (usec)	-2.82214442208E+03		Apriori clock (usec)		-9.5395870E+00		Resid sbdelay (usec)		7.11250E-03	+/- 6.1E-04
Phase delay (usec)	-2.82215153495E+03		Apriori clockrate (us/s)		-5.3299997E-07		Resid phdelay (usec)		-3.70075E-07	+/- 2.6E-07
Delay rate (us/s)	-2.76187080301E-01		Apriori rate (us/s)		-2.76187154172E-01		Resid rate (us/s)		7.38707E-08	+/- 1.3E-09
Total phase (deg)			Apriori accel (us/s/s)		4.42139144735E-05		Resid phase (deg)		-11.5	+/- 8.1

ph/seg (deg) 57.7 19.4 Search (2048X32) 0.268 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.1 33.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.9 11.4 Inc. seg. avg. 0.413 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 16.4 19.9 Inc. frq. avg. 0.276 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 278.9 el 50.5 pa 59.2 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 2129.727 5628.408 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/bm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/bm.W.20.18UIFP

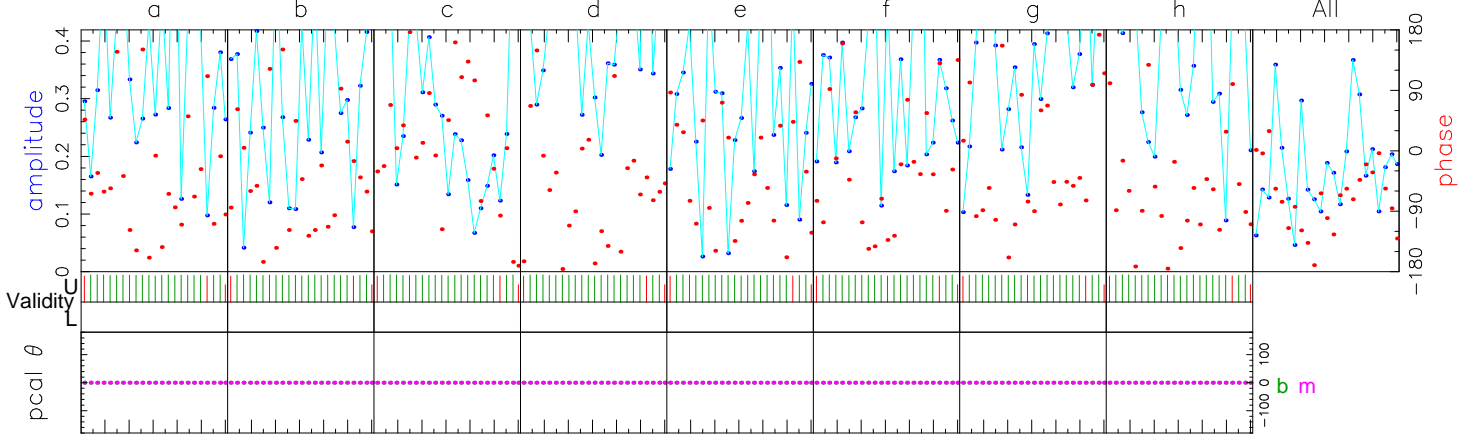


Fringe quality 0
SNR 7.1
Int time 348.703
Amp 0.140
Phase -70.0
PFD 2.9e-04
Delays (us)
SBD 0.005961
MBD 0.006576
Fringe rate (Hz) 0.006320
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.51
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150935
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-71.8	-87.1	11.1	-72.0	-43.5	-74.8	-73.2	-85.6	Phase	-70.0
	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	Ampl.	0.1
	79.0	214.0	71.6	181.1	378.9	401.4	74.9	257.8	Sbd box	258.5
U/L	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0	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	

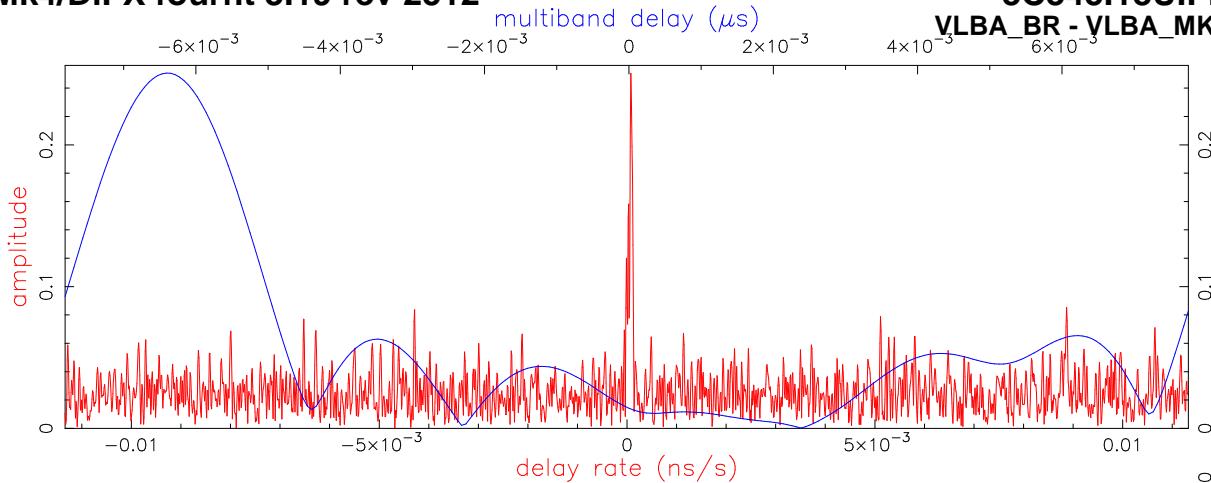
Group delay (usec)(sbd)	-2.82214495894E+03	Apriori delay (usec)	-2.82215153458E+03	Resid mbdelay (usec)	6.57564E-03	+/-	1.5E-04
Sband delay (usec)	-2.82214557358E+03	Apriori clock (usec)	-9.5395870E+00	Resid sbdelay (usec)	5.96100E-03	+/-	1.2E-03
Phase delay (usec)	-2.82215153684E+03	Apriori clockrate (us/s)	-5.3299997E-07	Resid phdelay (usec)	-2.25605E-06	+/-	5.2E-07
Delay rate (us/s)	-2.76187080797E-01	Apriori rate (us/s)	-2.76187154172E-01	Resid rate (us/s)	7.33747E-08	+/-	2.5E-09
Total phase (deg)	-137.9	Apriori accel (us/s/s)	4.42139144735E-05	Resid phase (deg)	-70.0	+/-	16.1

ph/seg (deg)	49.1	RMS	49.1	Theor.	38.5	Amplitude	0.140 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	66.9		66.9		67.2	Search (2048X32)	0.131	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	36.2		36.2		22.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	31.8		31.8		39.6	Inc. seg. avg.	0.148	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	0.136	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 278.9 el 50.5 pa 59.2 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 2129.727 5628.408 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/bm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/bm.W.40.18UIFP

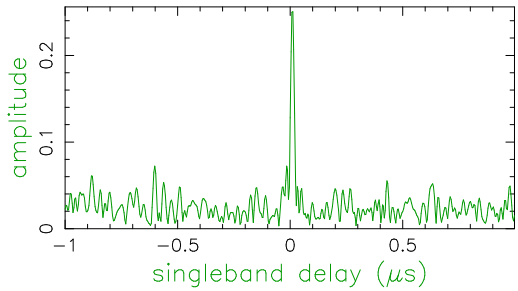
Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, bm
VLBA_BR - VLBA_MK, fgroup W, pol LL

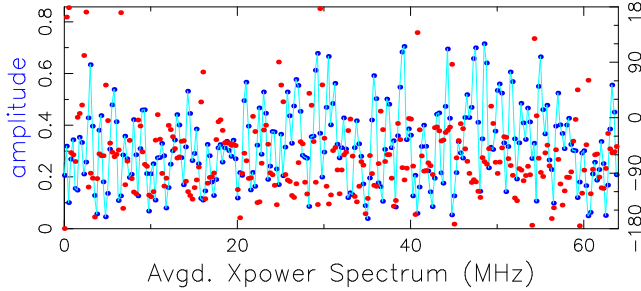


Fringe quality 9

SNR 13.1
Int time 348.701
Amp 0.256
Phase 109.9
PFD 2.6e-30
Delays (us)
SBD 0.009831
MBD -0.006435
Fringe rate (Hz)
0.006316
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

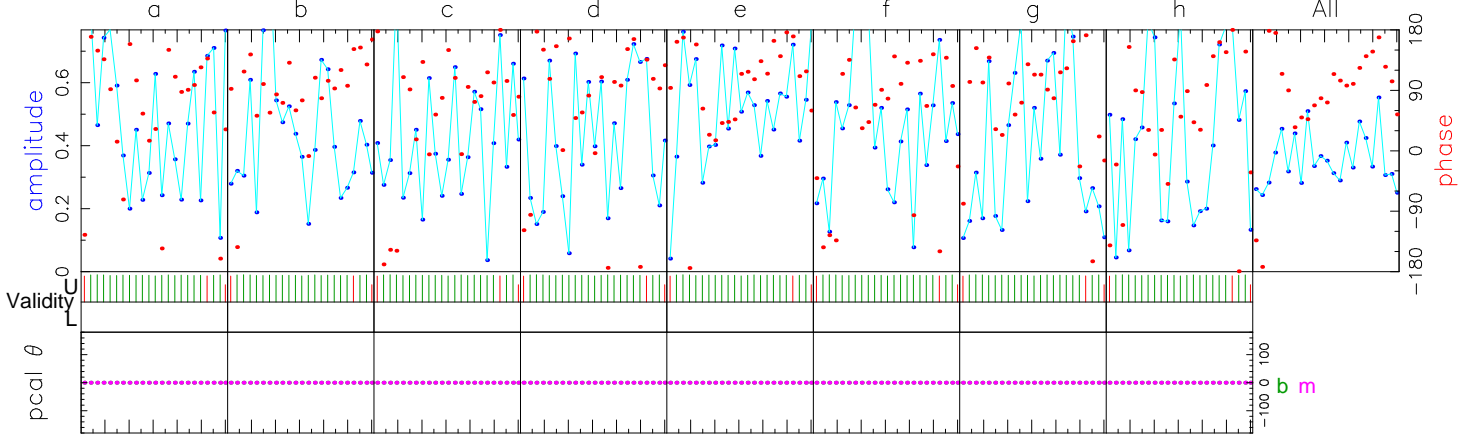


delay rate (ns/s)



Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.51
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150927
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

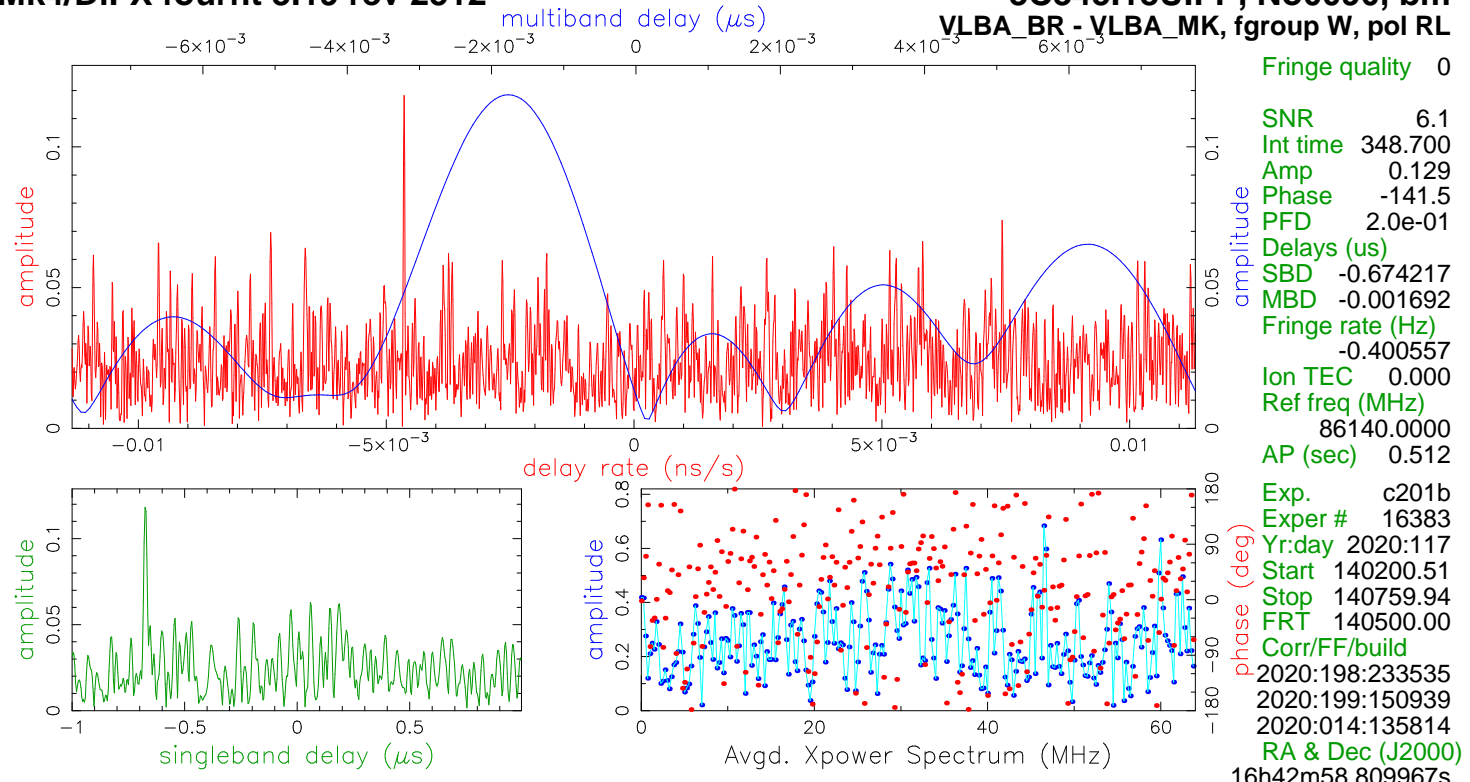


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

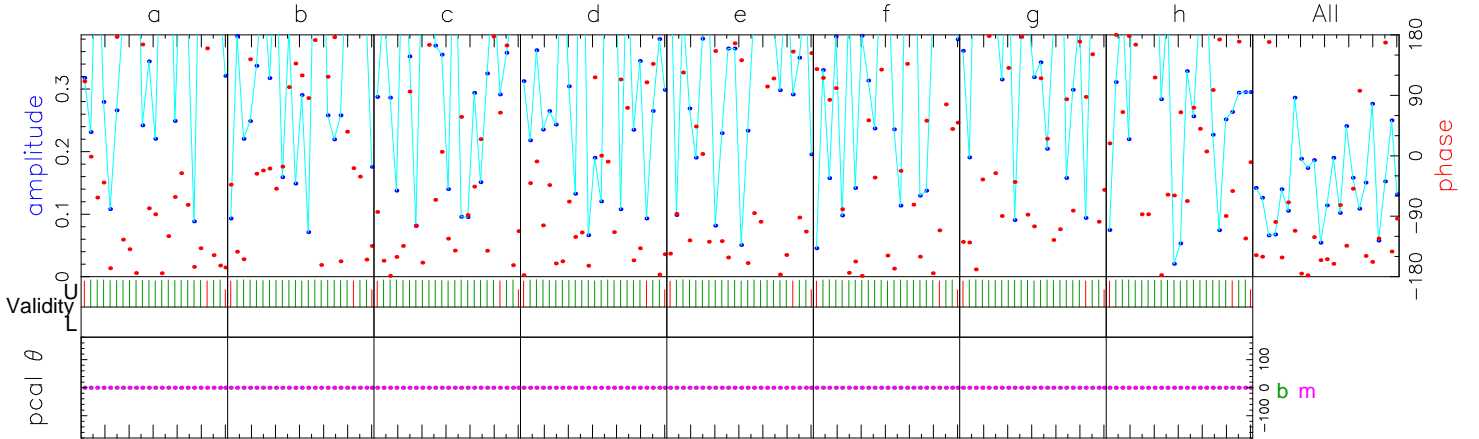
Group delay (usec)(sbd)	-2.82214234494E+03	Apriori delay (usec)	-2.82215153458E+03	Resid mbdelay (usec)	-6.43536E-03	+/-	8.3E-05
Sband delay (usec)	-2.82214170358E+03	Apriori clock (usec)	-9.5395870E+00	Resid sbdelay (usec)	9.83100E-03	+/-	6.6E-04
Phase delay (usec)	-2.82215153103E+03	Apriori clockrate (us/s)	-5.3299997E-07	Resid phdelay (usec)	3.54503E-06	+/-	2.8E-07
Delay rate (us/s)	-2.76187080845E-01	Apriori rate (us/s)	-2.76187154172E-01	Resid rate (us/s)	7.33265E-08	+/-	1.4E-09
Total phase (deg)		Apriori accel (us/s/s)	4.42139144735E-05	Resid phase (deg)	109.9	+/-	8.8

ph/seg (deg)	49.2	RMS	21.0	Theor.	Amplitude	0.256 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	51.5		36.7		Search (2048X32)	0.247	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000
ph/frq (deg)	9.5		12.4		Interp.	0.000	Bits/sample: 2x2	mb window (us)	-0.008	0.008
amp/frq (%)	23.1		21.6		Inc. seg. avg.	0.336	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
					Inc. frq. avg.	0.247	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00

b: az 278.9 el 50.5 pa 59.2 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 2129.727 5628.408 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/bm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/bm.W.5.18UIFP



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



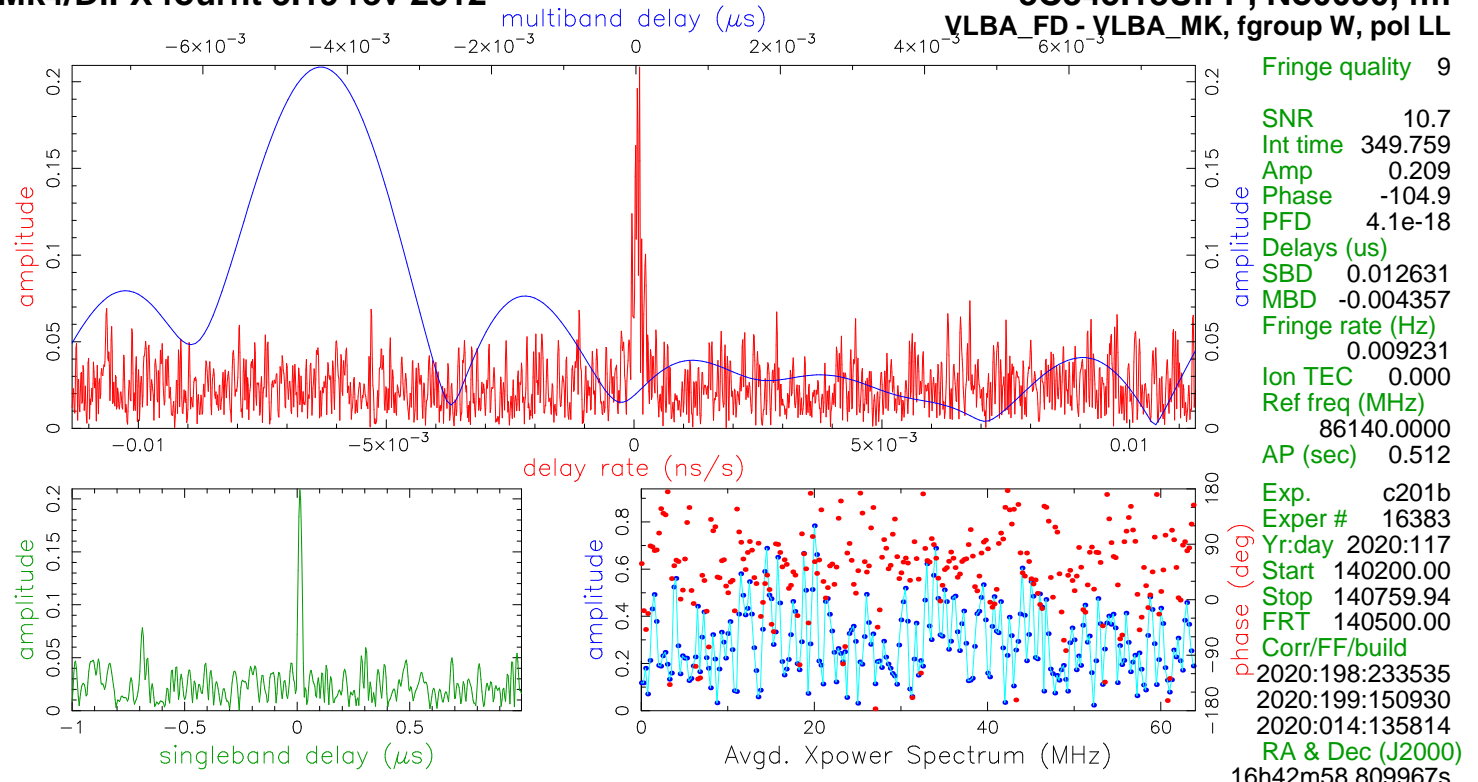
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-132.1	-118.4	-151.5	-120.1	-152.6	155.1	-127.9	-119.2	Phase	-141.5
	0.3	0.0	0.2	0.1	0.2	0.1	0.2	0.0	Ampl.	0.1
	83.3	291.7	311.8	483.6	84.8	306.2	85.2	126.5	Sbd box	84.4
U/L	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.82282510159E+03	Apriori delay (usec)	-2.82215153458E+03	Resid mbdelay (usec)	-1.69201E-03	+/-	1.8E-04
Sband delay (usec)	-2.82282575133E+03	Apriori clock (usec)	-9.5395870E+00	Resid sbdelay (usec)	-6.74217E-01	+/-	1.4E-03
Phase delay (usec)	-2.82215153914E+03	Apriori clockrate (us/s)	-5.3299997E-07	Resid phdelay (usec)	-4.56367E-06	+/-	6.0E-07
Delay rate (us/s)	-2.76191804241E-01	Apriori rate (us/s)	-2.76187154172E-01	Resid rate (us/s)	-4.65007E-06	+/-	2.9E-09
Total phase (deg)		Apriori accel (us/s/s)	4.42139144735E-05	Resid phase (deg)	-141.5	+/-	18.7

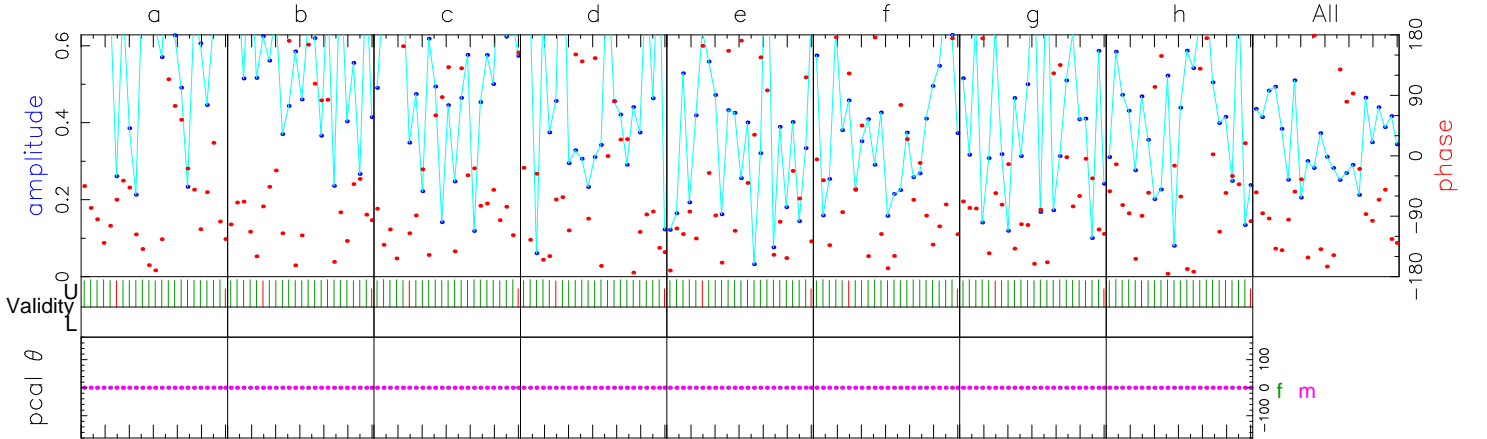
ph/seg (deg)	RMS 45.6	Theor. 44.8	Amplitude Search (2048X32)	0.129 +/- 0.021	0.117	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	60.5	78.1	Interp.	0.000	0.117	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	31.6	26.4	Inc. seg. avg.	0.124	0.124	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	56.0	46.1	Inc. frq. avg.	0.124	0.124	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

b: az 278.9 el 50.5 pa 59.2 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 2129.727 5628.408 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/bm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/bm.W.58.18UIFP

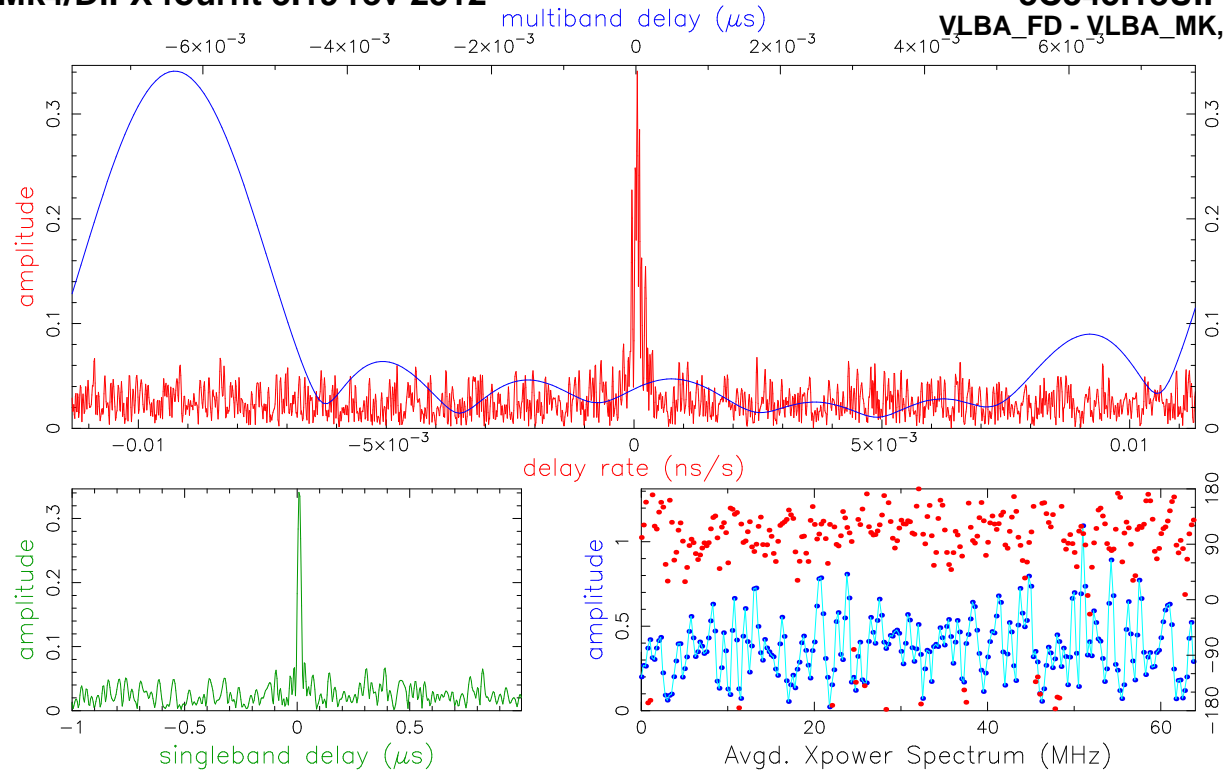


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-97.4	-100.2	-114.4	-100.7	-137.1	-114.1	-97.2	-96.4	Phase	-104.9
	0.3	0.3	0.3	0.2	0.1	0.1	0.3	0.1	Ampl.	0.2
	260.0	260.2	260.1	260.9	176.2	80.4	260.7	374.1	Sbd box	260.2
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-7.68306337865E+03		Apriori delay (usec)	-7.68307464674E+03	Resid mbdelay (usec)	-4.35691E-03	+/-	1.0E-04		
Sband delay (usec)	-7.68306201574E+03		Apriori clock (usec)	-4.2286229E+00	Resid sbdelay (usec)	1.26310E-02	+/-	8.0E-04		
Phase delay (usec)	-7.68307465012E+03		Apriori clockrate (us/s)	-3.8199999E-07	Resid phdelay (usec)	-3.38337E-06	+/-	3.4E-07		
Delay rate (us/s)	-5.91254701889E-01		Apriori rate (us/s)	-5.91254809048E-01	Resid rate (us/s)	1.07159E-07	+/-	1.7E-09		
Total phase (deg)		-130.2	Apriori accel (us/s/s)	5.31282061335E-05	Resid phase (deg)	-104.9	+/-	10.7		

ph/seg (deg) 70.8 25.7 Search (2048X32) 0.202 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 81.8 44.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.5 15.1 Inc. seg. avg. 0.323 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.8 26.4 Inc. frq. avg. 0.205 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 300.1 el 33.0 pa 75.2 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 4486.560 4585.477 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/fm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/fm.W.14.18UIFP

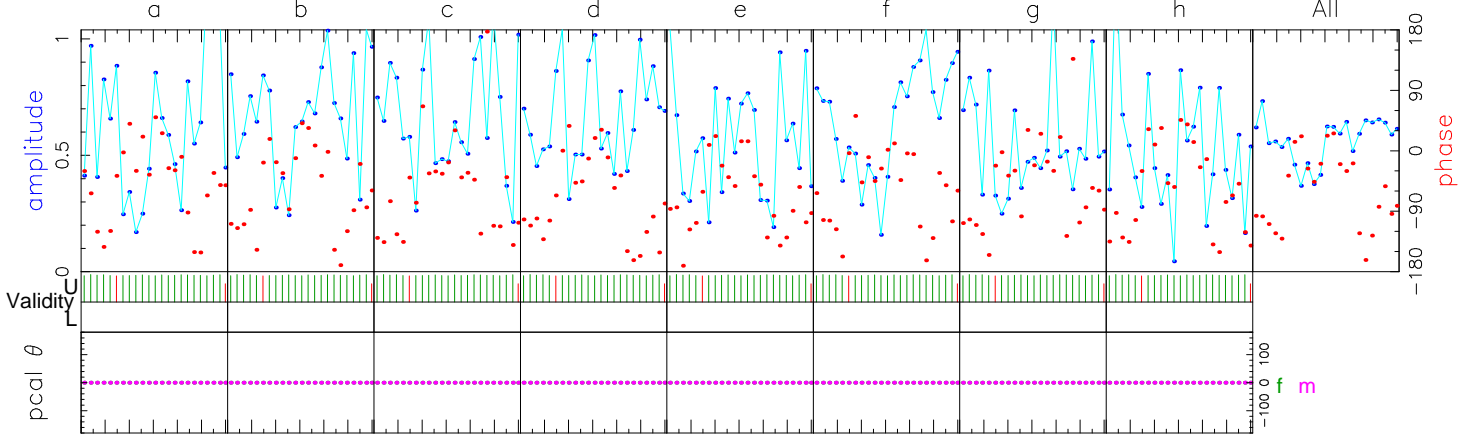


Fringe quality 9

SNR 17.7
Int time 349.763
Amp 0.346
Phase -65.6
PFD 0.0e+00
Delays (us)
SBD 0.009411
MBD -0.006364
Fringe rate (Hz) 0.005615
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

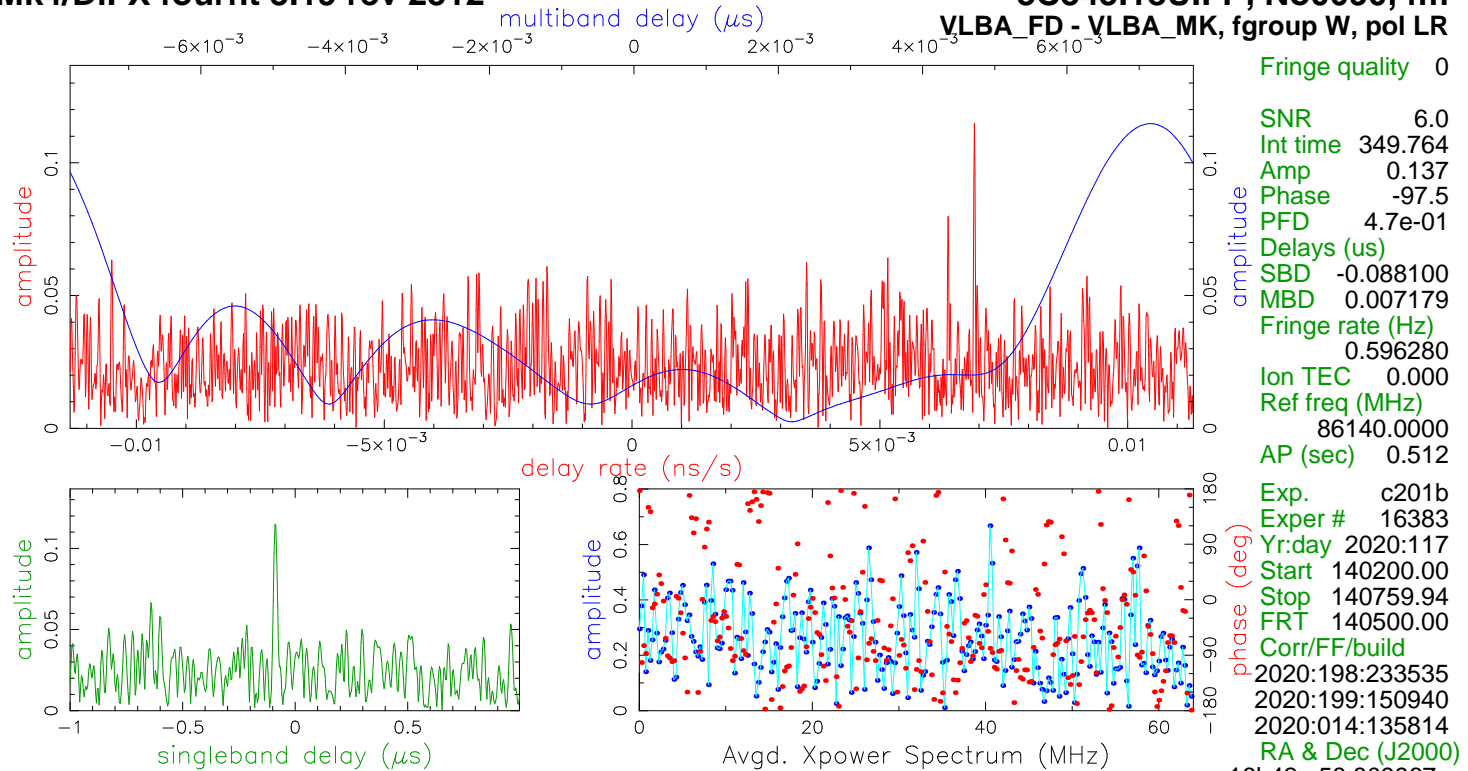
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150935
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

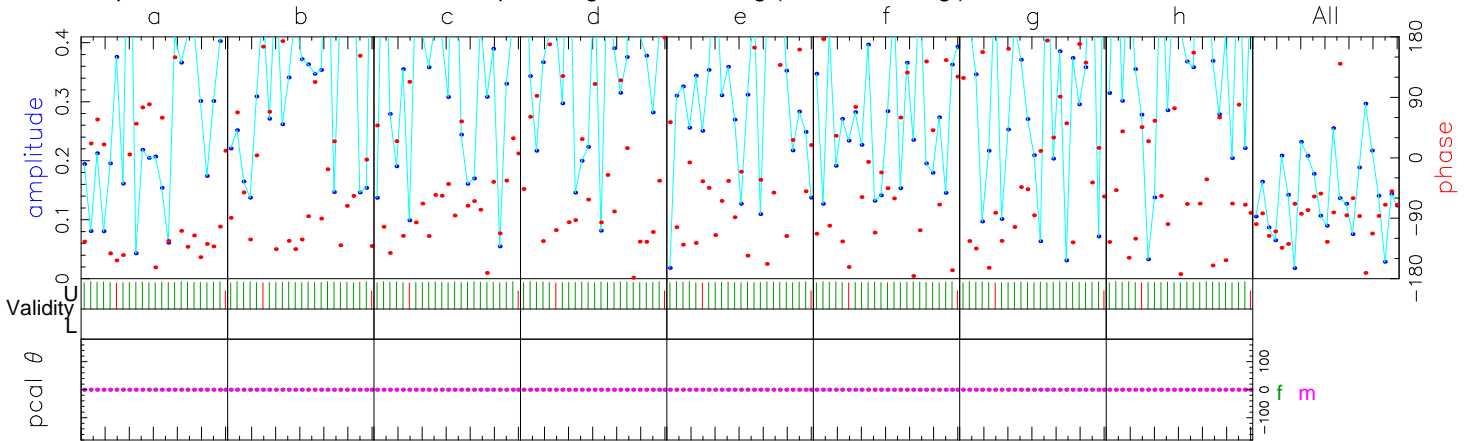


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-53.5	-57.6	-79.7	-73.6	-70.0	-63.2	-65.4	-58.9	Phase	-65.6
	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.2	Ampl.	0.3
	259.5	258.8	259.5	259.6	259.3	259.4	259.7	260.0	Sbd box	259.4
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	Manl 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	
									Tracks	
Group delay (usec)(sbd)	-7.68306538577E+03		Apriori delay (usec)		-7.68307464674E+03		Resid mbdelay (usec)		-6.36403E-03	+/- 6.1E-05
Sband delay (usec)	-7.68306523599E+03		Apriori clock (usec)		-4.2286229E+00		Resid sbdelay (usec)		9.41075E-03	+/- 4.9E-04
Phase delay (usec)	-7.68307464885E+03		Apriori clockrate (us/s)		-3.8199999E-07		Resid phdelay (usec)		-2.11411E-06	+/- 2.1E-07
Delay rate (us/s)	-5.91254743858E-01		Apriori rate (us/s)		-5.91254809048E-01		Resid rate (us/s)		6.51901E-08	+/- 1.0E-09
Total phase (deg)			Apriori accel (us/s/s)		5.31282061335E-05		Resid phase (deg)		-65.6	+/- 6.5

ph/seg (deg) 55.3 15.5 Search (2048X32) 0.339 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.0 27.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.5 9.1 Inc. seg. avg. 0.547 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 15.2 16.0 Inc. frq. avg. 0.340 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 300.1 el 33.0 pa 75.2 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 4486.560 4585.477 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/fm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/fm.W.38.18UIFP



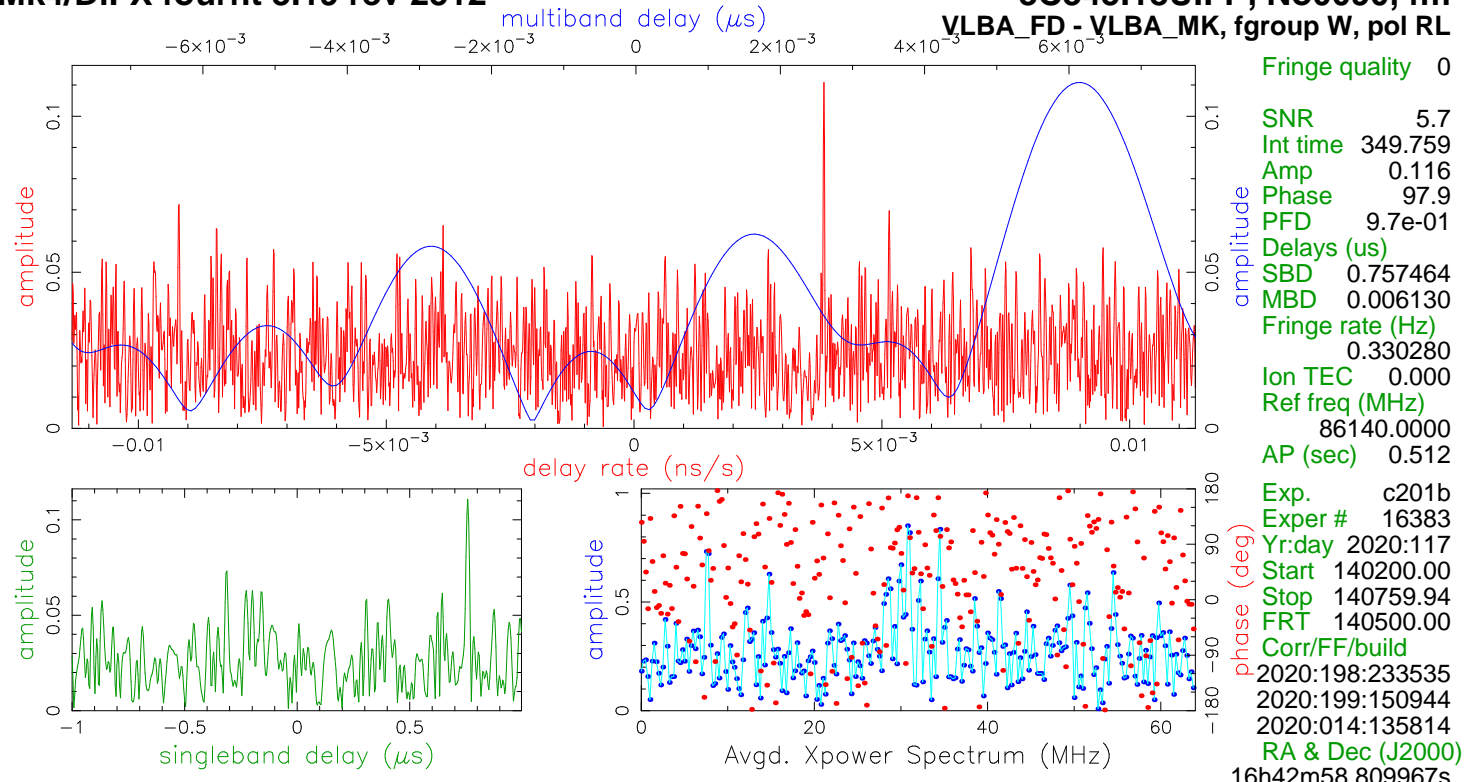
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



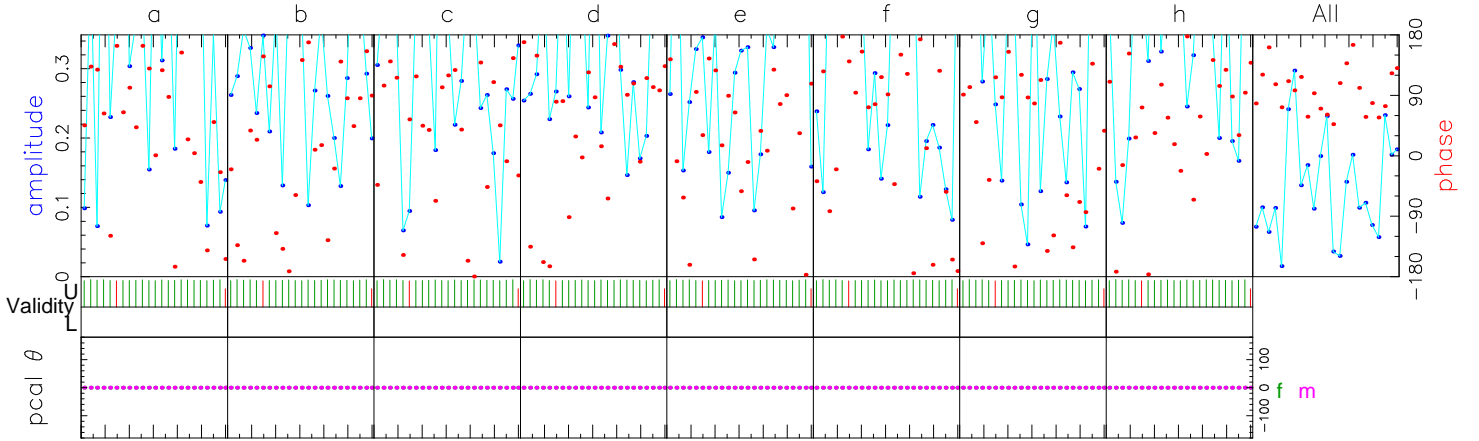
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-117.2	-101.5	-69.8	-115.7	-101.8	-109.8	-123.2	-79.6	Phase	-97.5
	0.1	0.2	0.3	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	333.5	431.0	234.7	123.6	419.8	369.1	153.2	92.8	Sbd box	234.4
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-7.68316121756E+03	Apriori delay (usec)	-7.68307464674E+03	Resid mbdelay (usec)	7.17918E-03	+/-	1.8E-04
Sband delay (usec)	-7.68316274649E+03	Apriori clock (usec)	-4.2286229E+00	Resid sbdelay (usec)	-8.80997E-02	+/-	1.4E-03
Phase delay (usec)	-7.68307464988E+03	Apriori clockrate (us/s)	-3.8199999E-07	Resid phdelay (usec)	-3.14268E-06	+/-	6.2E-07
Delay rate (us/s)	-5.91247886829E-01	Apriori rate (us/s)	-5.91254809048E-01	Resid rate (us/s)	6.92222E-06	+/-	3.0E-09
Total phase (deg)	-122.7	Apriori accel (us/s/s)	5.31282061335E-05	Resid phase (deg)	-97.5	+/-	19.2

ph/seg (deg)	RMS 39.2	Theor. 46.1	Amplitude Search (2048X32)	0.137 +/- 0.023	0.112	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	64.7	80.4	Interp.	0.000	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	21.0	27.2	Inc. seg. avg.	0.129	0.129	Bits/sample: 2x2	Sample rate(MSamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.9	47.4	Inc. frq. avg.	0.128	0.128	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	79.2	107.4	107.1	109.5	63.4	150.8	125.6	73.8	Phase	97.9
f	0.2	0.0	0.1	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
m	375.3	155.3	450.1	448.9	91.2	428.9	500.1	452.3	Sbd box	450.9
f:m	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
f: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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

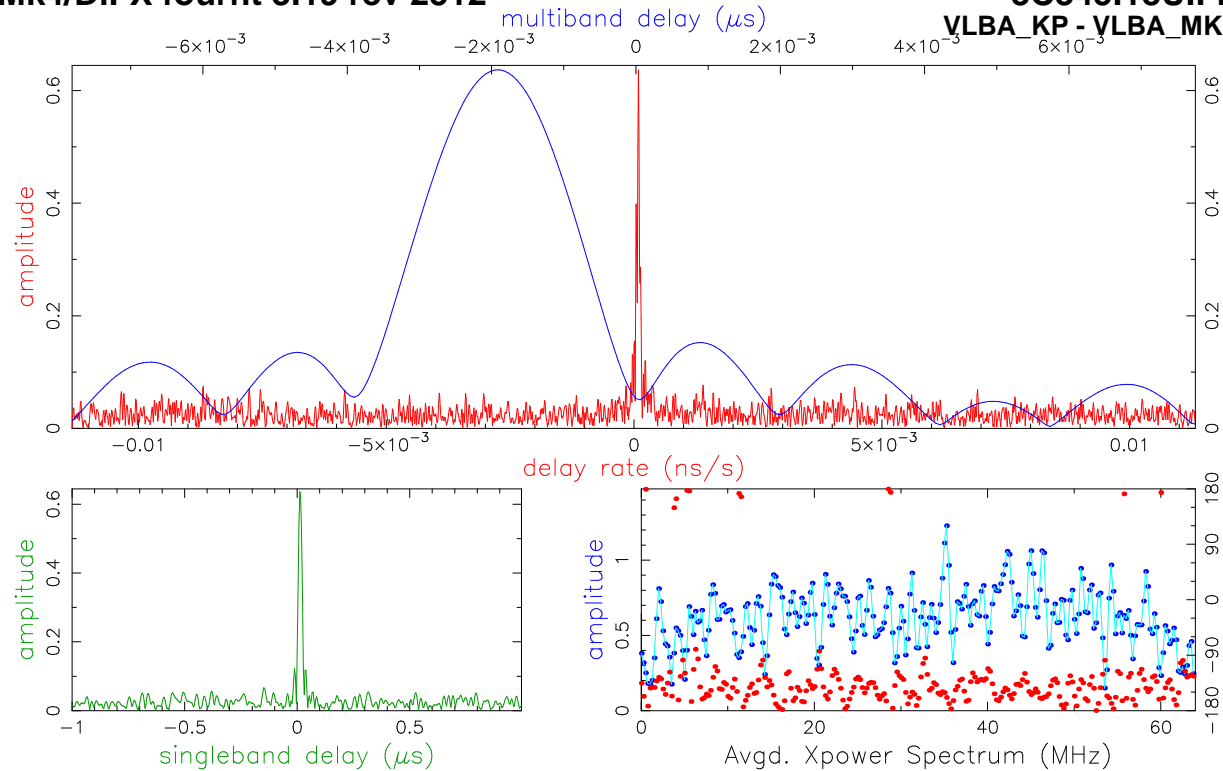
Group delay (usec)(sbd)	-7.68231851714E+03	Apriori delay (usec)	-7.68307464674E+03	Resid mbdelay (usec)	6.12960E-03	+/-	1.9E-04
Sband delay (usec)	-7.68231718324E+03	Apriori clock (usec)	-4.2286229E+00	Resid sbdelay (usec)	7.57464E-01	+/-	1.5E-03
Phase delay (usec)	-7.68307464358E+03	Apriori clockrate (us/s)	-3.8199999E-07	Resid phdelay (usec)	3.15750E-06	+/-	6.5E-07
Delay rate (us/s)	-5.91250974829E-01	Apriori rate (us/s)	-5.91254809048E-01	Resid rate (us/s)	3.83422E-06	+/-	3.1E-09
Total phase (deg)	72.6	Apriori accel (us/s/s)	5.31282061335E-05	Resid phase (deg)	97.9	+/-	20.2

ph/seg (deg)	RMS 32.8	Theor. 48.5	Amplitude 48.5	0.116 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	68.2	84.6	Search (2048X32)	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	31.6	28.6	Interp.	0.100	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	45.6	49.9	Inc. seg. avg.	0.116	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

f: az 300.1 el 33.0 pa 75.2 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 4486.560 4585.477 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/fm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/fm.W.81.18UIFP

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, km
VLBA_KP - VLBA_MK, fgroup W, pol LL

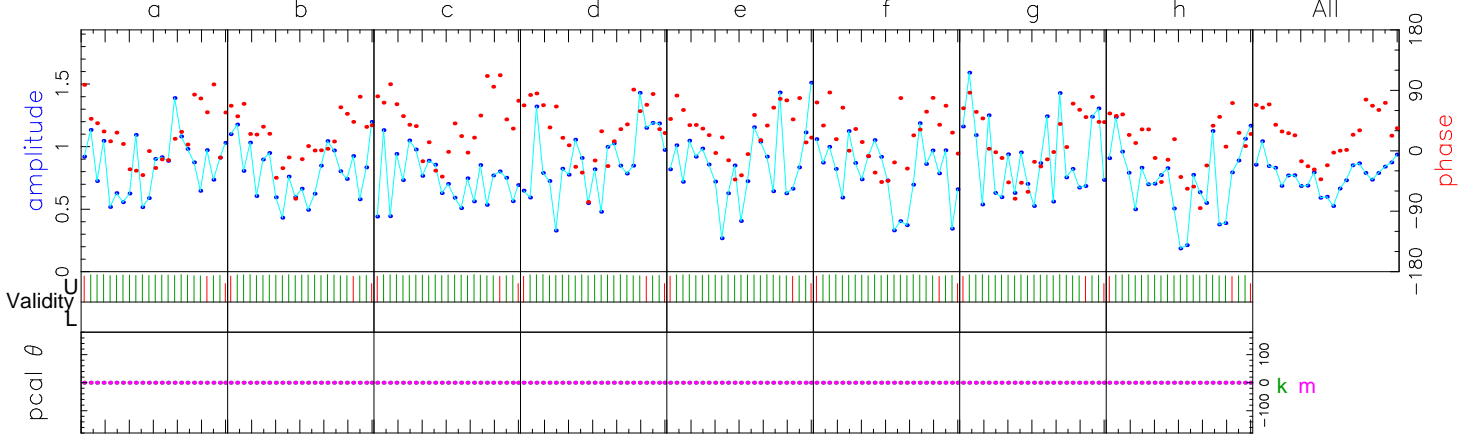


Fringe quality 8

SNR 33.0
Int time 350.041
Amp 0.645
Phase 28.7
PFD 0.0e+00
Delays (us)
SBD 0.013206
MBD -0.001871
Fringe rate (Hz) 0.007333
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150932
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-5.76455003267E+03	Apriori delay (usec)	-5.76456378631E+03	Resid mbdelay (usec)	-1.87136E-03	+/-	3.3E-05
Sband delay (usec)	-5.76455058031E+03	Apriori clock (usec)	-8.4750643E+00	Resid sbdelay (usec)	1.32060E-02	+/-	2.6E-04
Phase delay (usec)	-5.76456378538E+03	Apriori clockrate (us/s)	-4.8560000E-07	Resid phdelay (usec)	9.24754E-07	+/-	1.1E-07
Delay rate (us/s)	-5.26150829569E-01	Apriori rate (us/s)	-5.26150914699E-01	Resid rate (us/s)	8.51297E-08	+/-	5.4E-10
Total phase (deg)	-170.3	Apriori accel (us/s/s)	4.43265183907E-05	Resid phase (deg)	28.7	+/-	3.5

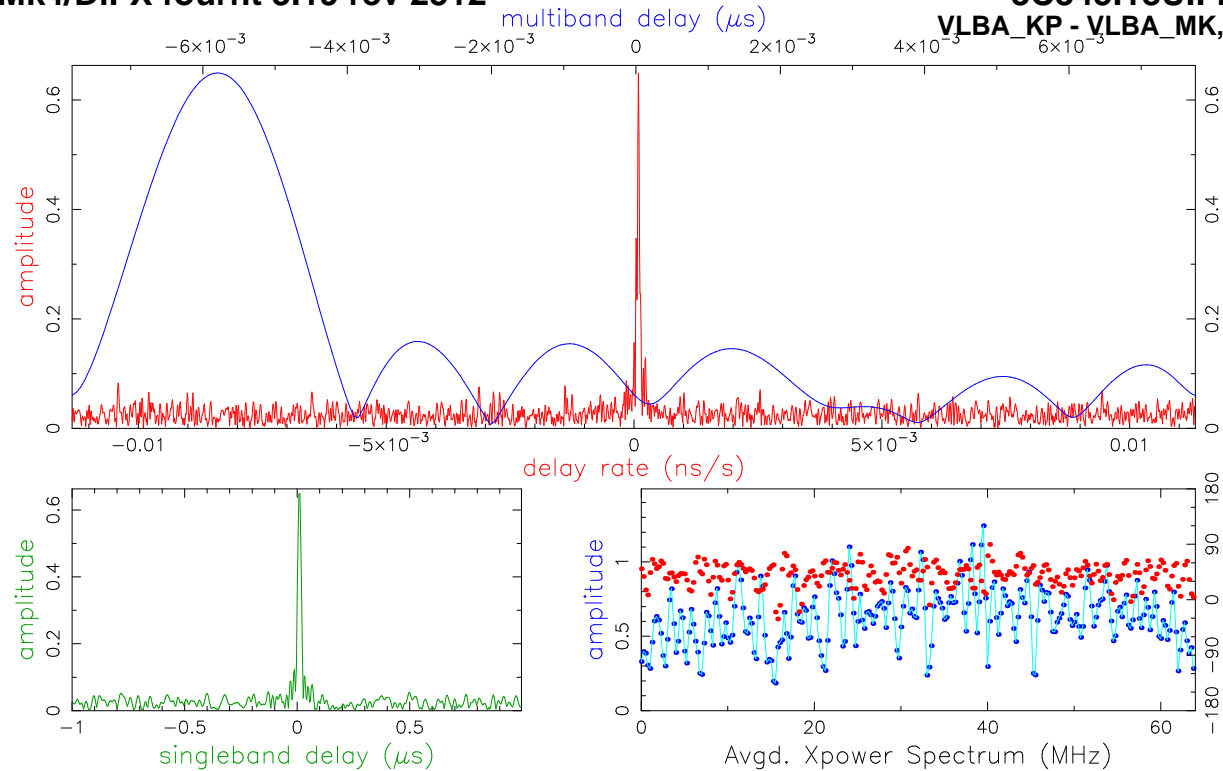
ph/seg (deg)	RMS 35.8	Theor. 8.3	Amplitude Search (2048X32)	0.645 +/- 0.020	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	26.4	14.5	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	9.0	4.9	Inc. seg. avg.	0.762	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	7.8	8.6	Inc. frq. avg.	0.640	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

k: az 297.6 el 39.4 pa 77.7 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 3988.760 4149.611 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/km..18UIFP Output file: /Exps/c201b/v1/1234/No0090/km.W.22.18UIFP

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, km
VLBA_KP - VLBA_MK, fgroup W, pol RR

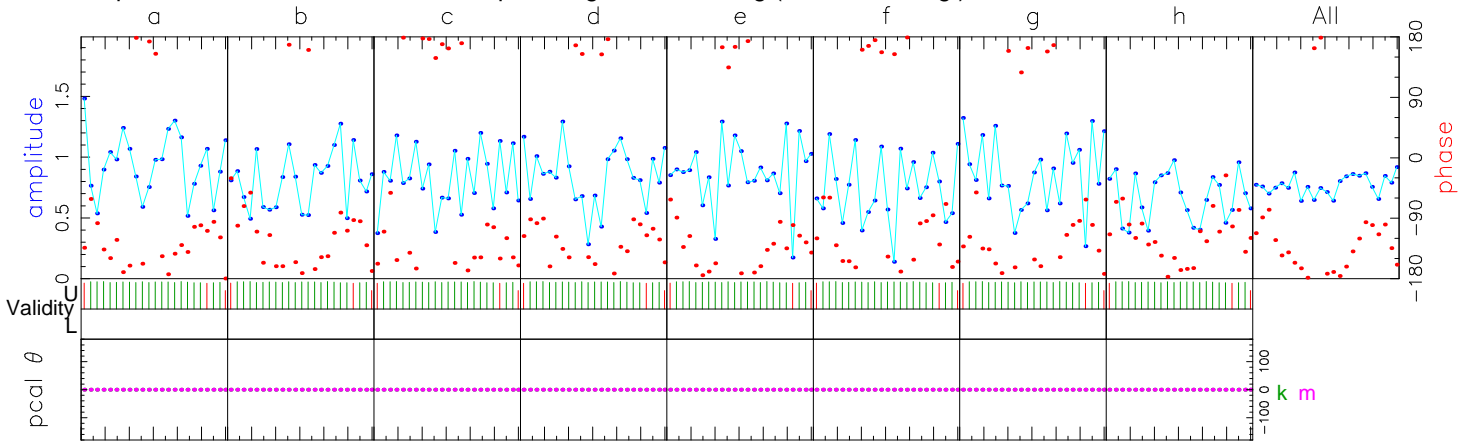


Fringe quality 7

SNR 33.9
Int time 350.046
Amp 0.663
Phase -138.9
PFD 0.0e+00
Delays (us)
SBD 0.009822
MBD -0.005846
Fringe rate (Hz) 0.007424
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150936
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

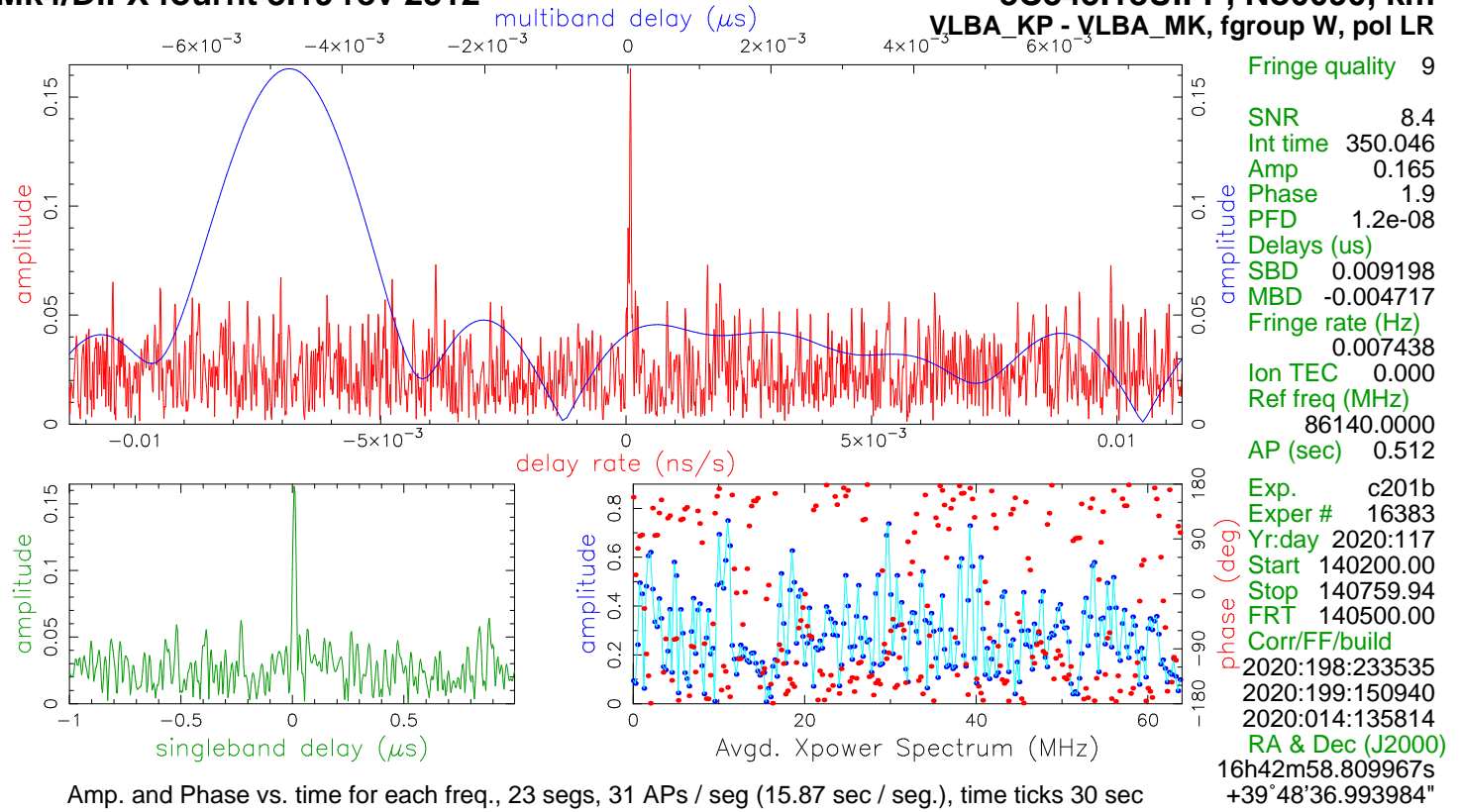


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-5.76455400754E+03	-5.76455396456E+03	-5.76456379079E+03	-5.26150828509E-01	-5.76456378631E+03	-8.4750643E+00	-4.8560000E-07	-5.26150914699E-01	-5.84624E-03	+/- 3.2E-05
Sband delay (usec)	-141.7	-126.9	-152.5	-135.1	-148.1	-141.0	-141.8	-118.0	9.82175E-03	+/- 2.5E-04
Phase delay (usec)	0.8	0.6	0.7	0.7	0.7	0.5	0.7	0.5	-4.47924E-06	+/- 1.1E-07
Delay rate (us/s)	259.2	259.2	259.6	259.8	259.3	259.7	259.6	260.1	8.61897E-08	+/- 5.2E-10
Total phase (deg)			-337.8						-138.9	+/- 3.4
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

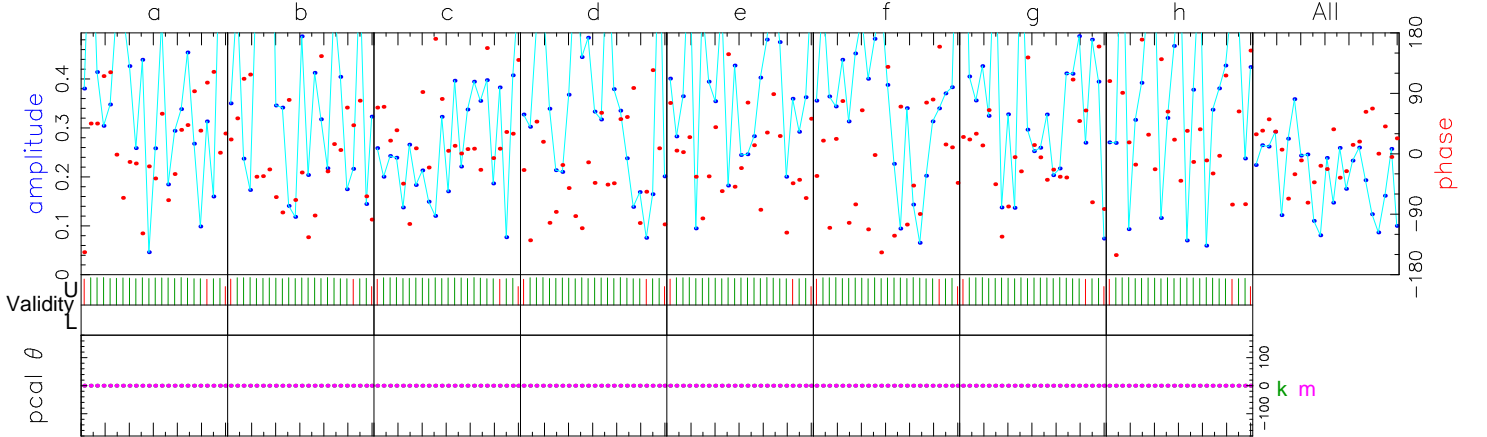
ph/seg (deg) 33.3 8.1 Search (2048X32) 0.642 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 19.6 14.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 12.2 4.8 Inc. seg. avg. 0.761 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 12.4 8.3 Inc. frq. avg. 0.657 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
k: az 297.6 el 39.4 pa 77.7 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 3988.760 4149.611 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/km..18UIFP Output file: /Exps/c201b/v1/1234/No0090/km.W.44.18UIFP simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, km
VLBA_KP - VLBA_MK, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

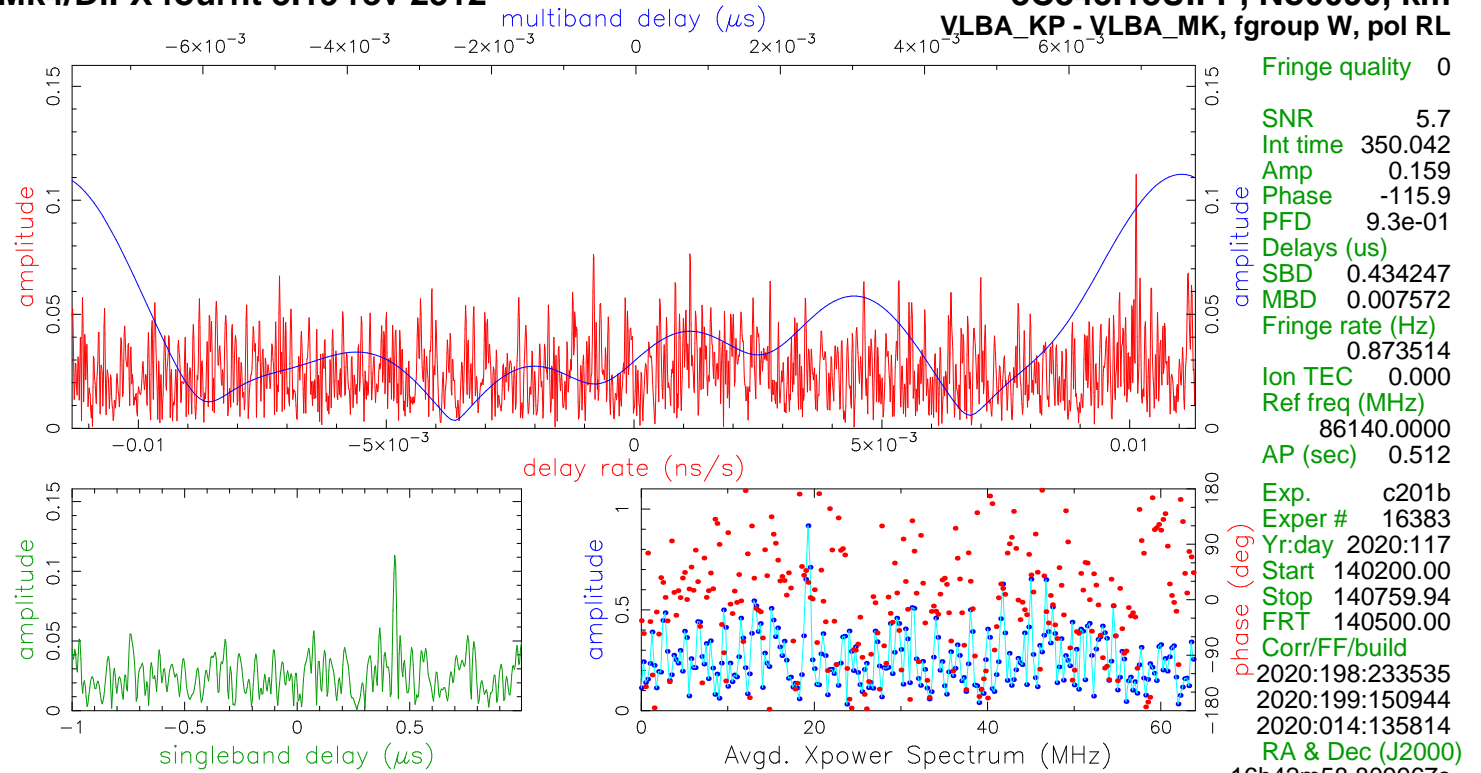


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)		-5.76455287879E+03			-5.76456378631E+03				-4.71749E-03	+/- 1.3E-04
Sband delay (usec)		-5.76455458831E+03			-8.4750643E+00				9.19800E-03	+/- 1.0E-03
Phase delay (usec)		-5.76456378625E+03			-4.8560000E-07				6.16407E-08	+/- 4.4E-07
Delay rate (us/s)		-5.26150828352E-01			-5.26150914699E-01				8.63470E-08	+/- 2.1E-09
Total phase (deg)			-197.0		4.43265183907E-05				1.9	+/- 13.6
	RMS	Theor.	Amplitude	0.165 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5			
ph/seg (deg)	38.2	32.6	Search (2048X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
amp/seg (%)	51.6	56.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
ph/frq (deg)	22.8	19.2	Inc. seg. avg.	0.178	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011		
amp/frq (%)	23.2	33.5	Inc. frq. avg.	0.163	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00	
k: az 297.6 el 39.4 pa 77.7		m: az 324.7 el 64.1 pa 134.4		u,v (fr/asec) 3988.760 4149.611						simultaneous interpolator

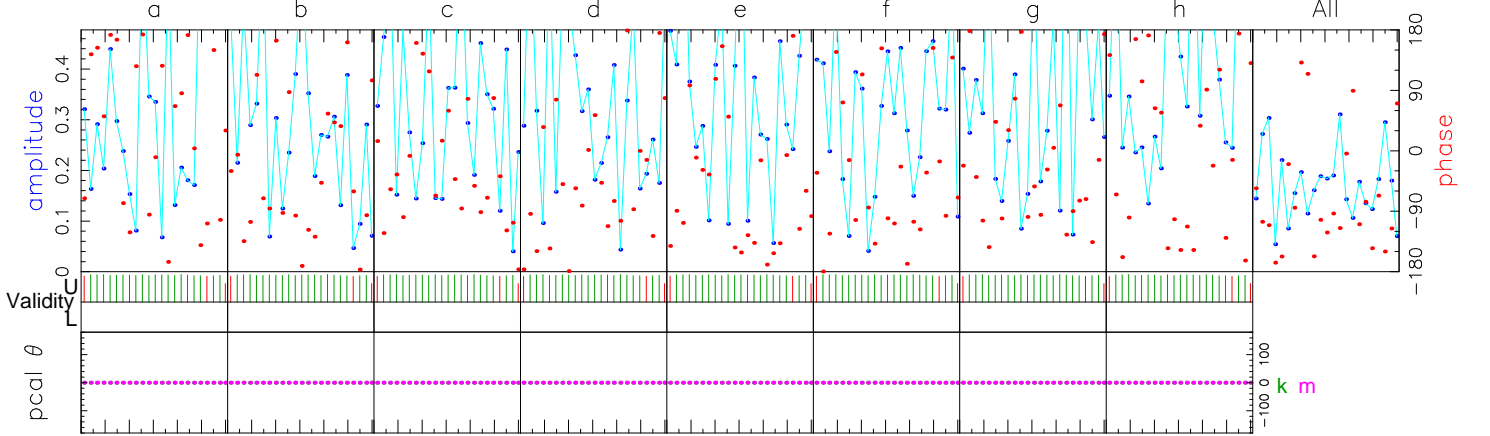
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/km..18UIFP Output file: /Exps/c201b/v1/1234/No0090/km.W.61.18UIFP

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, km
VLBA_KP - VLBA_MK, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



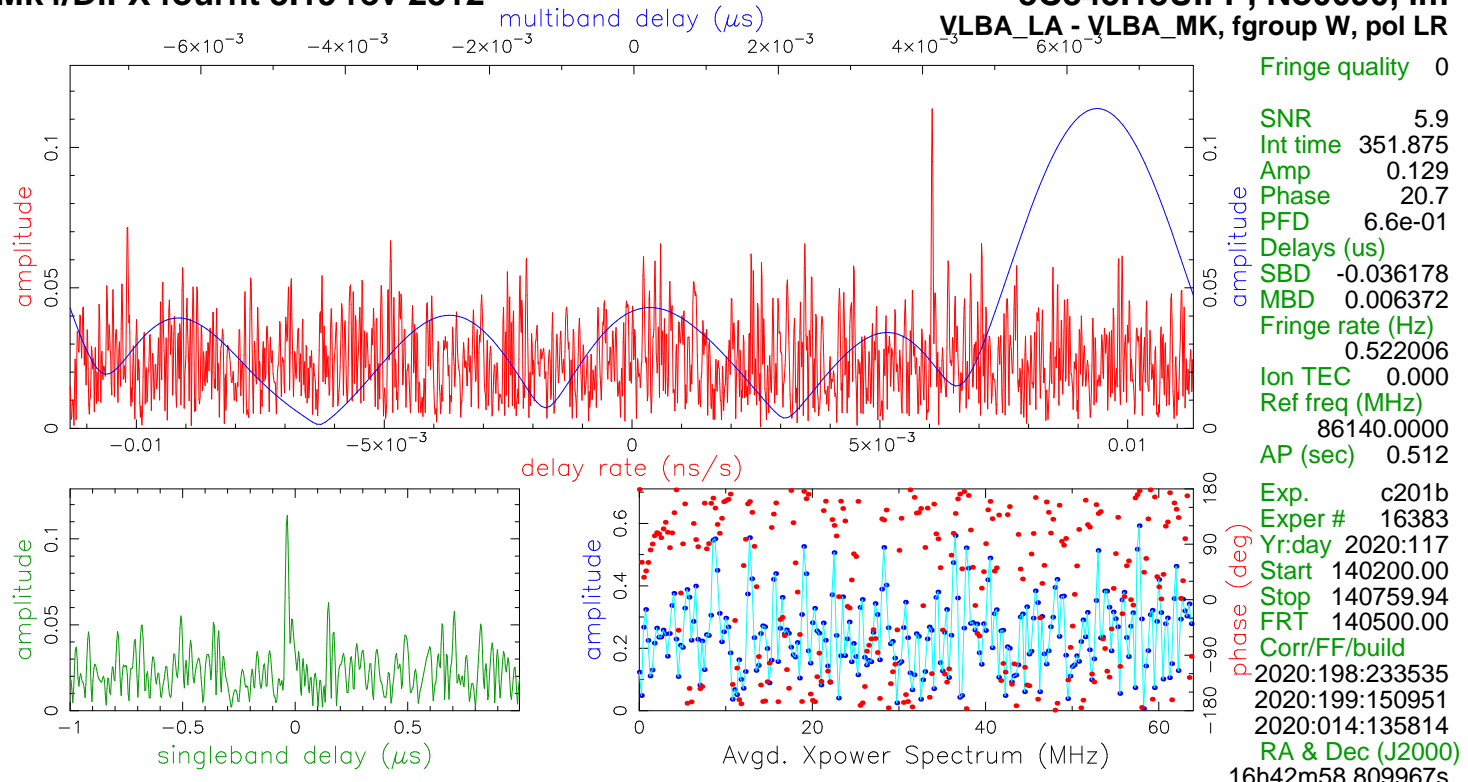
86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
-157.3	-111.9	-69.2	-99.0	-122.6	-139.1	-72.0	-160.5	Phase	-115.9
0.2	0.1	0.2	0.2	0.3	0.1	0.2	0.2	Ampl.	0.2
31.3	130.1	158.7	66.1	52.1	344.9	369.5	414.5	Sbd box	368.2
U/L 703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	Manl 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 W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
								Chan ids	
								Tracks	

Group delay (usec)(sbd)	-5.76413433886E+03	Apriori delay (usec)	-5.76456378631E+03	Resid mbdelay (usec)	7.57245E-03	+/-	1.9E-04
Sband delay (usec)	-5.76412953931E+03	Apriori clock (usec)	-8.4750643E+00	Resid sbdelay (usec)	4.34247E-01	+/-	1.5E-03
Phase delay (usec)	-5.76456379005E+03	Apriori clockrate (us/s)	-4.8560000E-07	Resid phdelay (usec)	-3.73775E-06	+/-	6.5E-07
Delay rate (us/s)	-5.26140774063E-01	Apriori rate (us/s)	-5.26150914699E-01	Resid rate (us/s)	1.01406E-05	+/-	3.1E-09
Total phase (deg)	-314.8	Apriori accel (us/s/s)	4.43265183907E-05	Resid phase (deg)	-115.9	+/-	20.0

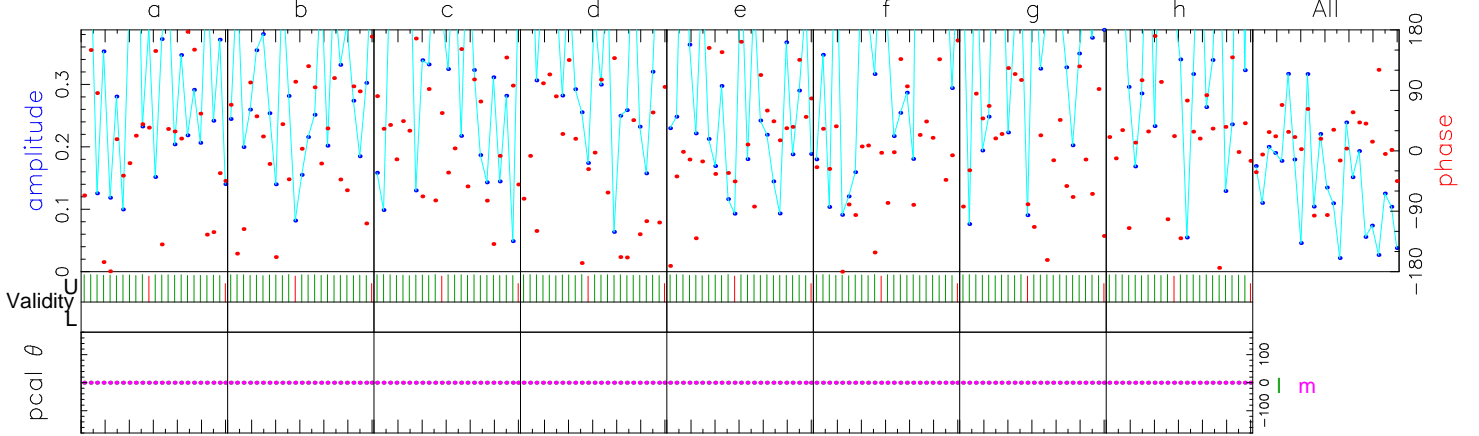
ph/seg (deg)	RMS 70.7	Theor. 48.1	Amplitude 0.159 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	83.8	83.9	Search (2048X32) 0.110	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	38.1	28.4	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.3	49.5	Inc. seg. avg. 0.185	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.168	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

k: az 297.6 el 39.4 pa 77.7 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 3988.760 4149.611 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/km..18UIFP Output file: /Exps/c201b/v1/1234/No0090/km.W.78.18UIFP



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



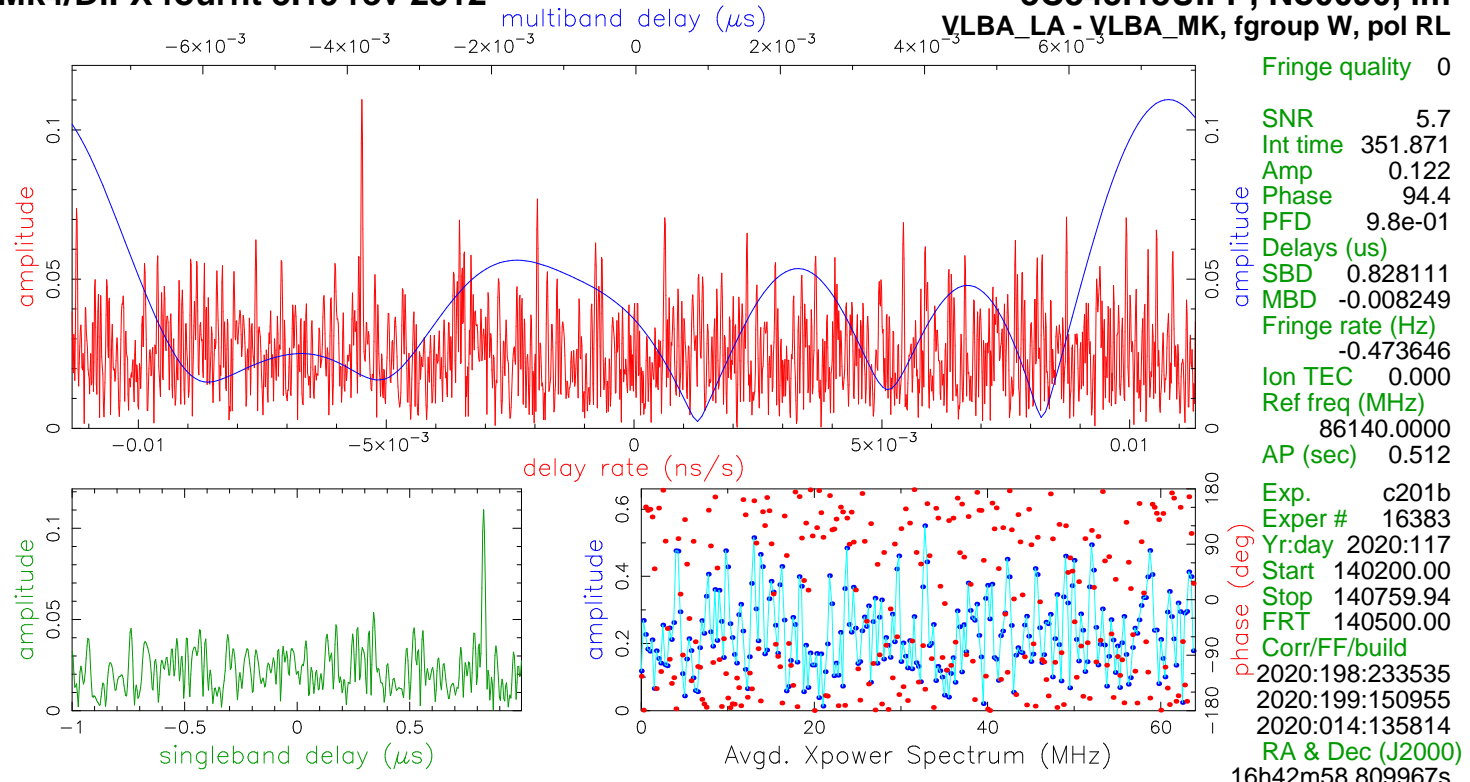
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)	-6.42521444817E+03	Apriori delay (usec)	-6.42517394544E+03	Resid mbdelay (usec)	6.37227E-03	+/-	1.8E-04
Sband delay (usec)	-6.42521012294E+03	Apriori clock (usec)	-1.1839885E+01	Resid sbdelay (usec)	-3.61775E-02	+/-	1.5E-03
Phase delay (usec)	-6.42517394477E+03	Apriori clockrate (us/s)	-6.4200002E-07	Resid phdelay (usec)	6.67746E-07	+/-	6.3E-07
Delay rate (us/s)	-5.22843864938E-01	Apriori rate (us/s)	-5.22849924907E-01	Resid rate (us/s)	6.05997E-06	+/-	3.0E-09
Total phase (deg)	-216.9	Apriori accel (us/s/s)	5.18131791288E-05	Resid phase (deg)	20.7	+/-	19.5

ph/seg (deg)	48.5	Theor.	46.8	Amplitude	0.129 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	75.5		81.6	Search (2048X32)	0.111	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	15.0		27.6	Interp.	0.000	Bits/sample: 2x2	mb window (us)	-0.008 0.008
amp/frq (%)	50.2		48.2	Inc. seg. avg.	0.122	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011
				Inc. frq. avg.	0.117	Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00

l: az 296.3 el 37.2 pa 70.9 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 3976.164 5015.845 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/lm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/lm.W.109.18UIFP



Fringe quality 0

SNR 5.7

Int time 351.871

Amp 0.122

Phase 94.4

PFD 9.8e-01

Delays (us)

SBD 0.828111

MBD -0.008249

Fringe rate (Hz)

-0.473646

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201b

Exper # 16383

Yr:day 2020:117

Start 140200.00

Stop 140759.94

FRT 140500.00

Corr/FF/build

2020:198:233535

2020:199:150955

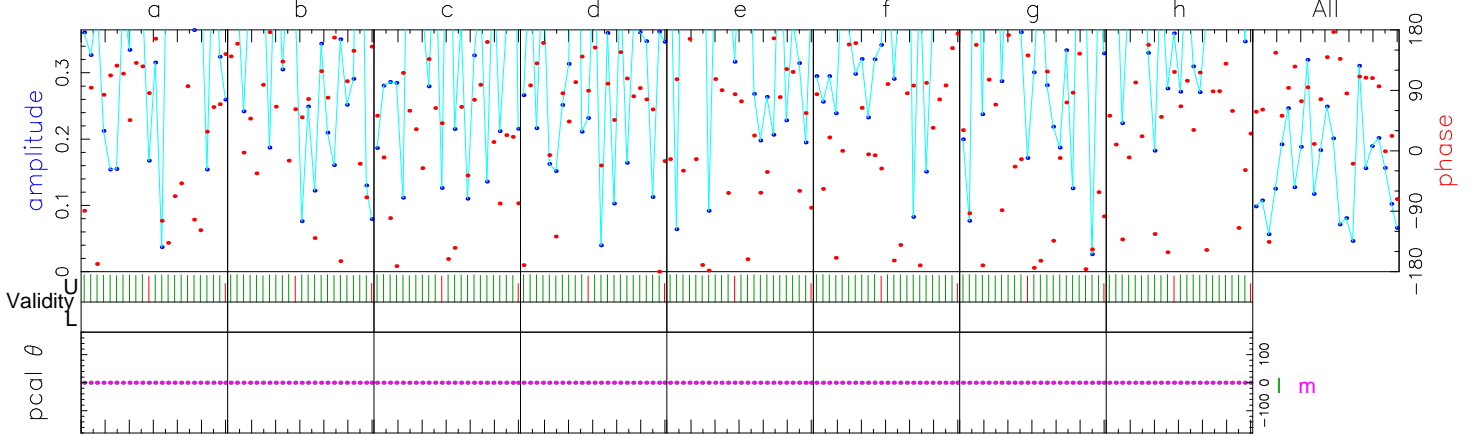
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
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)	-6.42433844492E+03									
Sband delay (usec)	-6.42434583444E+03									
Phase delay (usec)	-6.42517394239E+03									
Delay rate (us/s)	-5.22855423472E-01									
Total phase (deg)			-143.2							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									94.4	+/- 20.3
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 63.2 48.6 Search (2048X32) 0.107 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

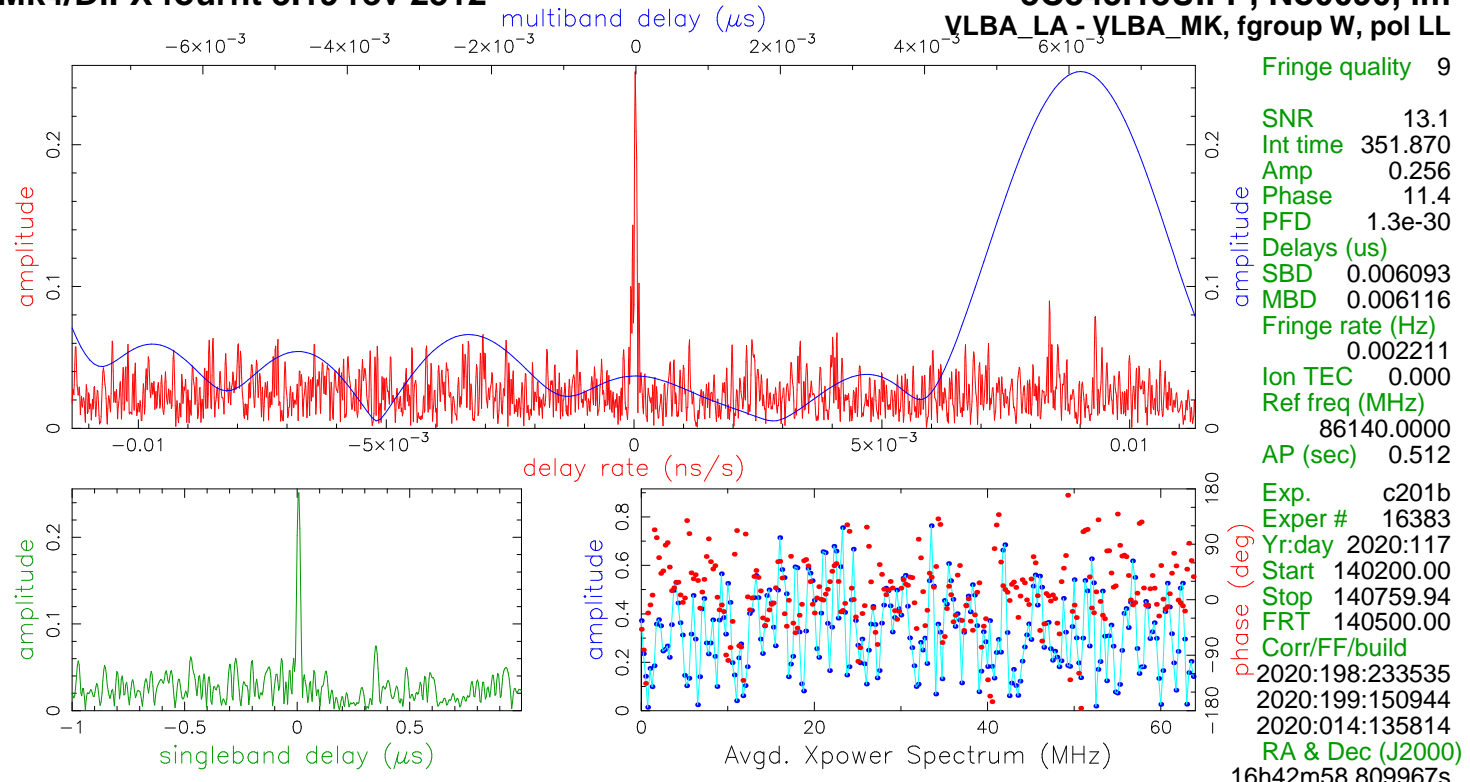
amp/seg (%) 80.2 84.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 38.1 28.7 Inc. seg. avg. 0.127 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

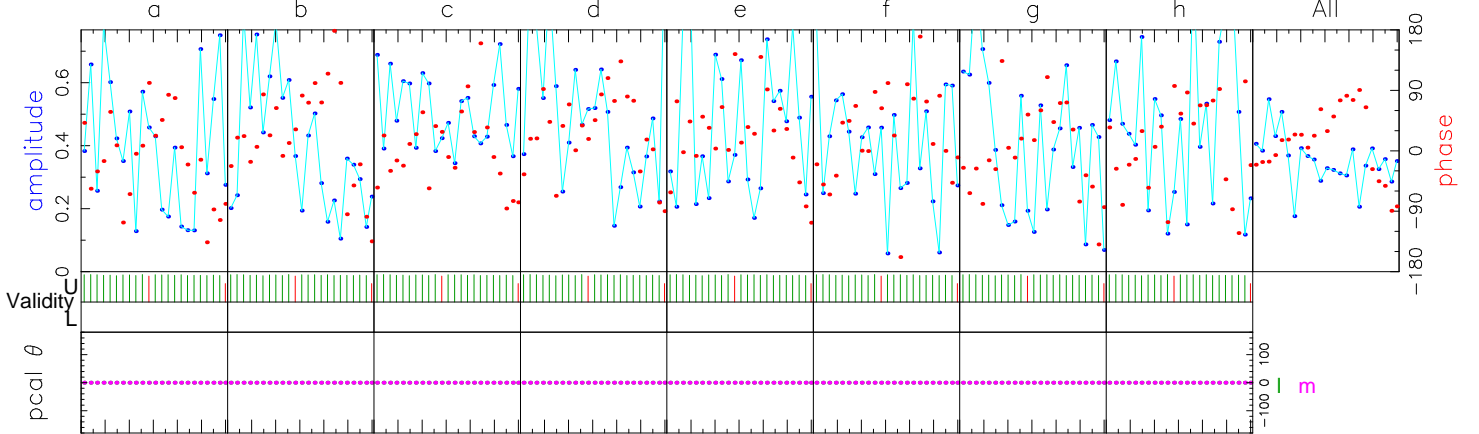
amp/frq (%) 48.5 50.0 Inc. frq. avg. 0.126 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

l: az 296.3 el 37.2 pa 70.9 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 3976.164 5015.845 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/lm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/lm.W.125.18UIFP



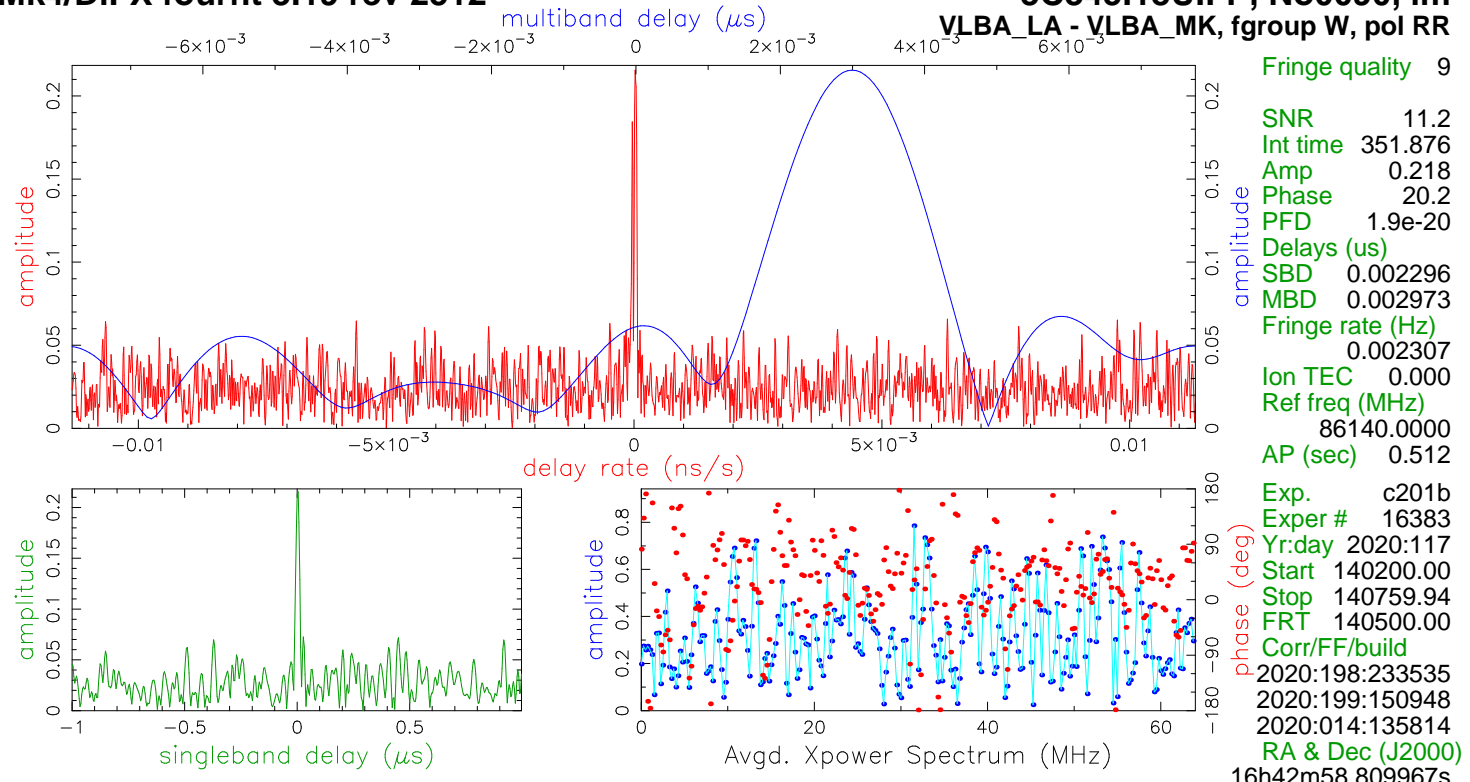
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-18.5	26.6	-5.2	30.7	25.5	20.0	-9.5	11.0	Phase	11.4
	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	Ampl.	0.3
	259.3	259.2	258.4	259.3	258.5	257.8	258.4	257.4	Sbd box	258.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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)	-6.42516782946E+03	Apriori delay (usec)	-6.42517394544E+03	Resid mbdelay (usec)	6.11598E-03	+/-	8.3E-05
Sband delay (usec)	-6.42516785219E+03	Apriori clock (usec)	-1.1839885E+01	Resid sbdelay (usec)	6.09325E-03	+/-	6.6E-04
Phase delay (usec)	-6.42517394507E+03	Apriori clockrate (us/s)	-6.4200002E-07	Resid phdelay (usec)	3.67260E-03	+/-	2.8E-07
Delay rate (us/s)	-5.22849899236E-01	Apriori rate (us/s)	-5.22849924907E-01	Resid rate (us/s)	2.56710E-08	+/-	1.4E-09
Total phase (deg)	-226.2	Apriori accel (us/s/s)	5.18131791288E-05	Resid phase (deg)	11.4	+/-	8.7

ph/seg (deg)	49.2	RMS	20.9	Theor.	Amplitude	0.256 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	49.4	Search (2048X32)	0.245	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	Interp.	0.000	SampCntNorm: enabled	sb window (us)	-1.000 1.000
ph/frq (deg)	20.3	Inc. seg. avg.	0.332	Sample rate(MISamp/s): 128	Inc. seg. avg.	0.332	nlags: 256	mb window (us)	-0.008 0.008
amp/frq (%)	17.0	Inc. frq. avg.	0.257	Data rate(Mb/s): 2048	Inc. frq. avg.	0.257	t_cohere infinite	dr window (ns/s)	-0.011 0.011



Fringe quality 9

SNR 11.2

Int time 351.876

Amp 0.218

Phase 20.2

PFD 1.9e-20

Delays (us)

SBD 0.002296

MBD 0.002973

Fringe rate (Hz)

0.002307

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201b

Exper # 16383

Yr:day 2020:117

Start 140200.00

Stop 140759.94

FRT 140500.00

Corr/FF/build

2020:198:233535

2020:199:150948

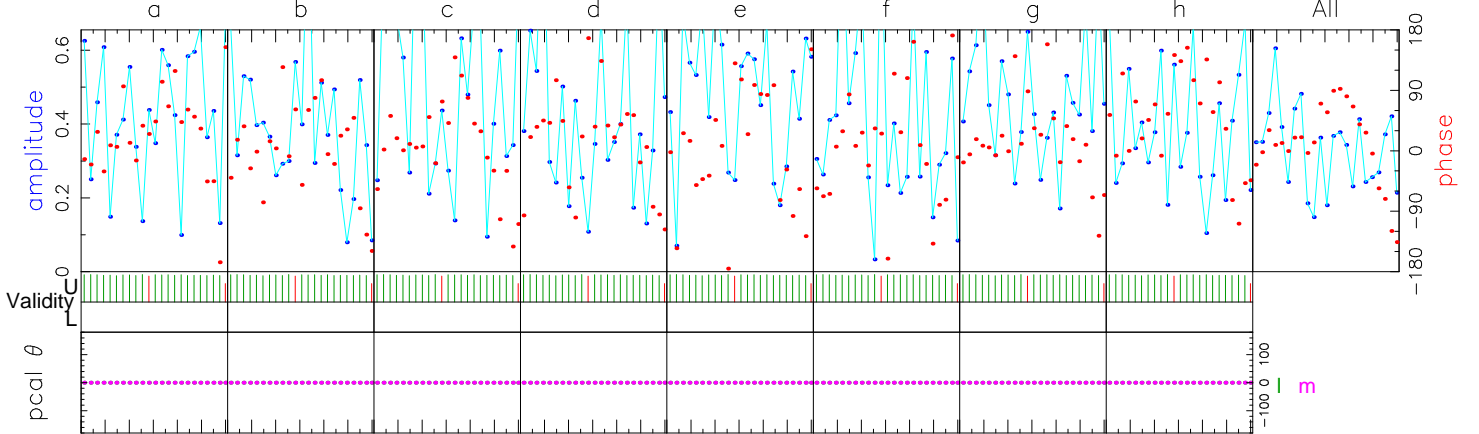
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	32.1	8.5	15.0	22.8	19.6	15.0	9.1	52.6	Phase	20.2
	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.2	Ampl.	0.2
	257.3	256.8	257.8	258.5	256.1	439.8	258.3	371.0	Sbd box	257.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.42517097274E+03		Apriori delay (usec)		-6.42517394544E+03		Resid mbdelay (usec)		2.97270E-03	+/- 9.7E-05
Sband delay (usec)	-6.42517164919E+03		Apriori clock (usec)		-1.1839885E+01		Resid sbdelay (usec)		2.29625E-03	+/- 7.7E-04
Phase delay (usec)	-6.42517394479E+03		Apriori clockrate (us/s)		-6.4200002E-07		Resid phdelay (usec)		6.52075E-07	+/- 3.3E-07
Delay rate (us/s)	-5.22849898130E-01		Apriori rate (us/s)		-5.22849924907E-01		Resid rate (us/s)		2.67771E-08	+/- 1.6E-09
Total phase (deg)			Apriori accel (us/s/s)		5.18131791288E-05		Resid phase (deg)		20.2	+/- 10.2

ph/seg (deg) 57.2 24.5 Search (2048X32) 0.213 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 73.1 42.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 15.9 14.5 Inc. seg. avg. 0.307 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

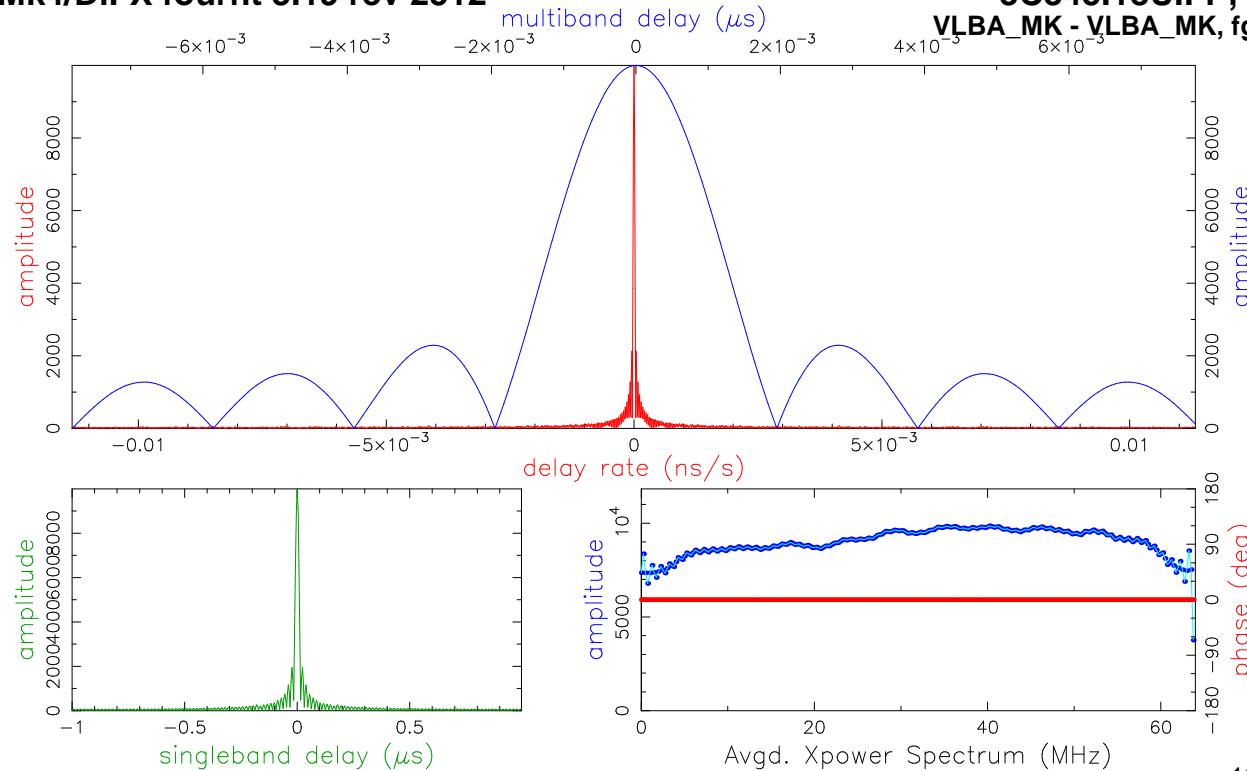
amp/frq (%) 26.4 25.2 Inc. frq. avg. 0.214 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

l: az 296.3 el 37.2 pa 70.9 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 3976.164 5015.845 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/lm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/lm.W.94.18UIFP

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, mm
VLBA_MK - VLBA_MK, fgroup W, pol RR

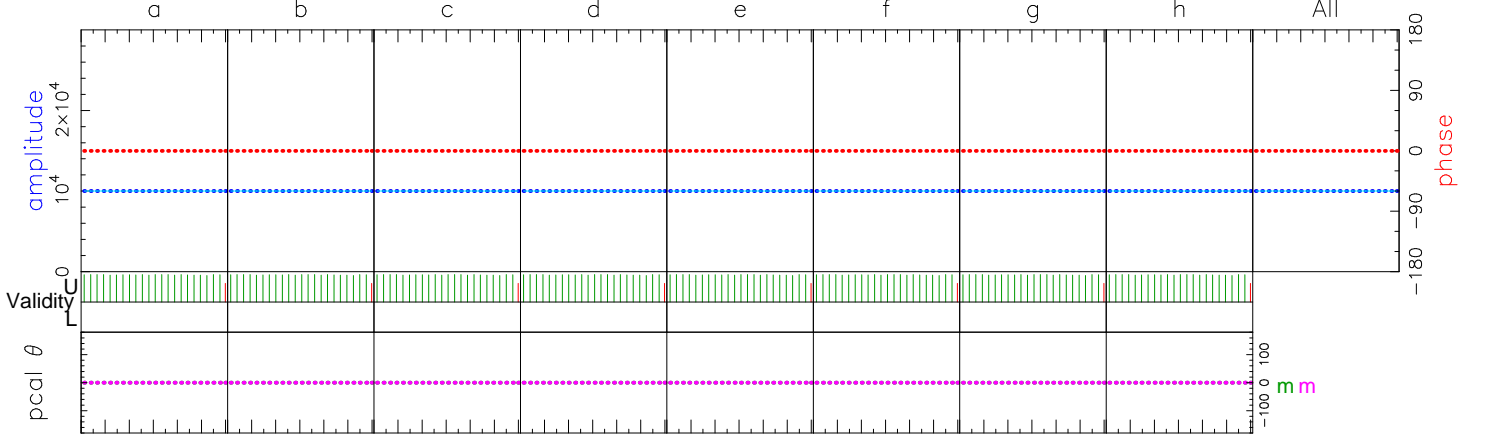


Fringe quality 9

SNR 515905.3
Int time 355.915
Amp 9999.987
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. c201b
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150950
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



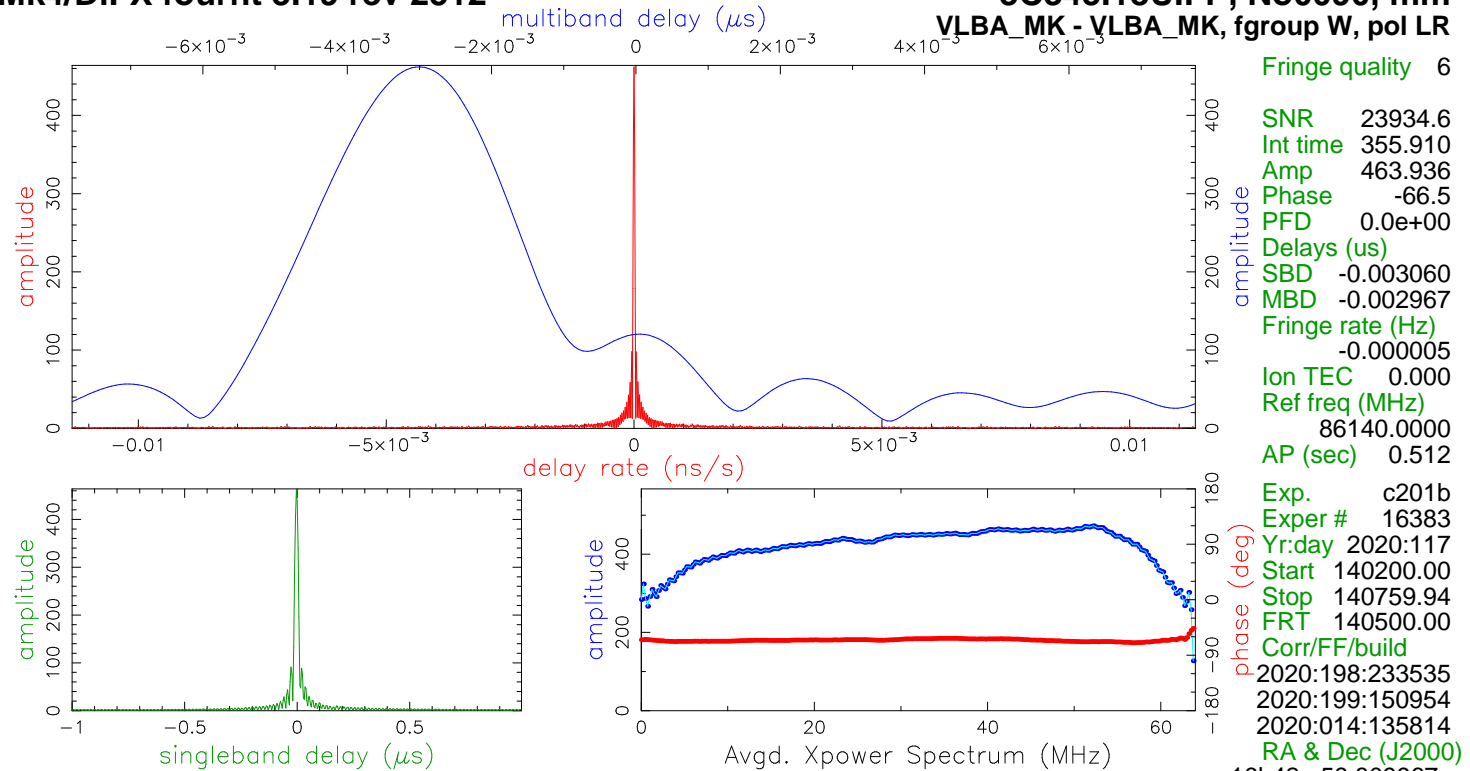
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	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	+/-	2.1E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.7E-08
Phase delay (usec)	-3.78320016214E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.78320E-20	+/-	7.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.4E-14
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

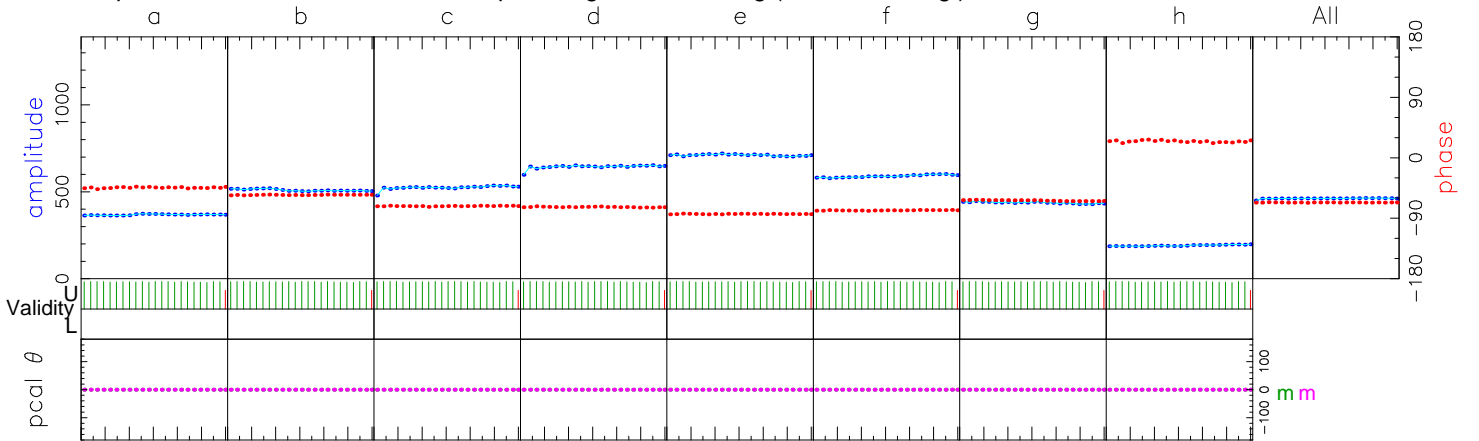
ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.987 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	9999.987	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	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.	9999.987	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 324.7 el 64.1 pa 134.4 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mm.W.104.18UIFP

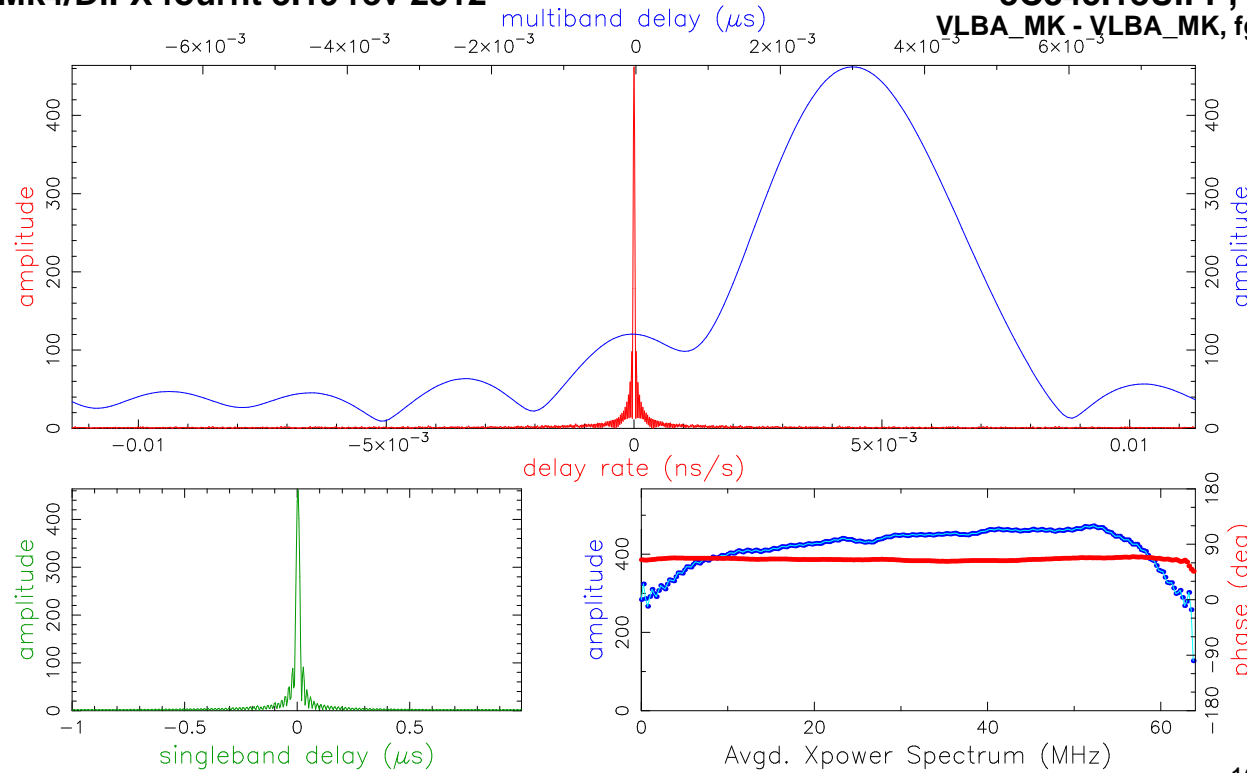


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-44.4	-55.2	-71.8	-73.3	-83.6	-78.3	-63.5	24.4	Phase	-66.5
	368.3	510.2	524.6	644.1	711.3	590.5	437.6	191.3	Ampl.	497.2
	256.3	255.8	256.0	256.4	256.0	256.5	256.9	257.6	Sbd box	256.2
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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)	-2.96750000000E-03								Resid mbdelay (usec)	-2.96750E-03 +/- 4.5E-08
Sband delay (usec)	-3.06050000000E-03								Resid sbdelay (usec)	-3.06050E-03 +/- 3.6E-07
Phase delay (usec)	-2.14579308370E-06								Resid phdelay (usec)	-2.14579E-06 +/- 1.5E-10
Delay rate (us/s)	-6.30616281430E-11								Resid rate (us/s)	-6.30616E-11 +/- 7.4E-13
Total phase (deg)			-66.5						Resid phase (deg)	-66.5 +/- 0.0

ph/seg (deg) 0.1 0.0 Search (2048X32) 461.383 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.7 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) 39.6 0.0 Inc. seg. avg. 461.914 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.1 0.0 Inc. frq. avg. 497.228 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 324.7 el 64.1 pa 134.4 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mm.W.121.18UIFP

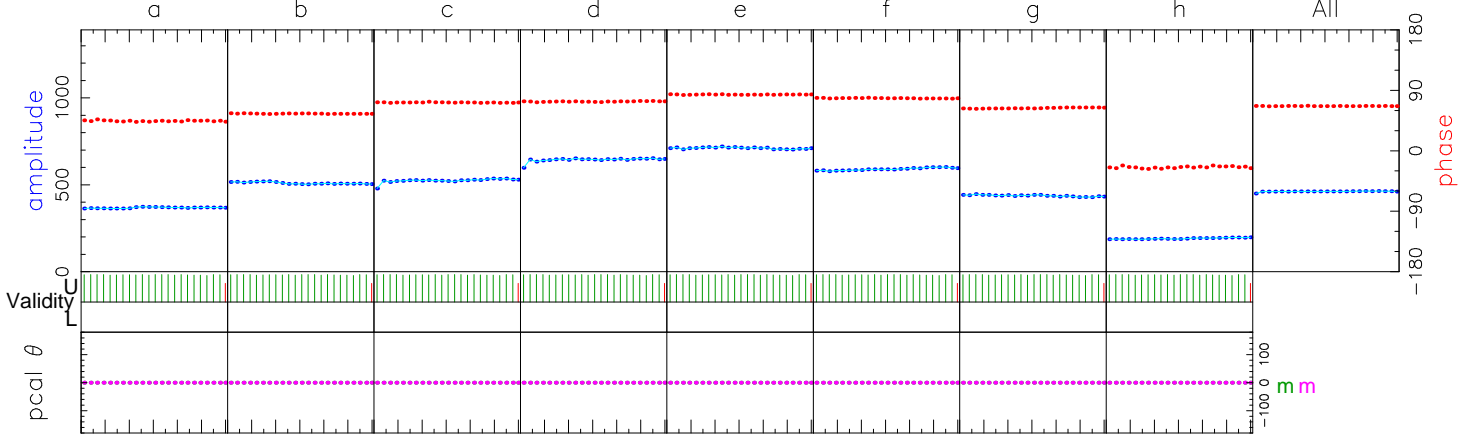


Fringe quality 6

SNR 23934.4
Int time 355.915
Amp 463.929
Phase 66.5
PFD 0.0e+00
Delays (us)
SBD 0.003060
MBD 0.002967
Fringe rate (Hz) 0.000005
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

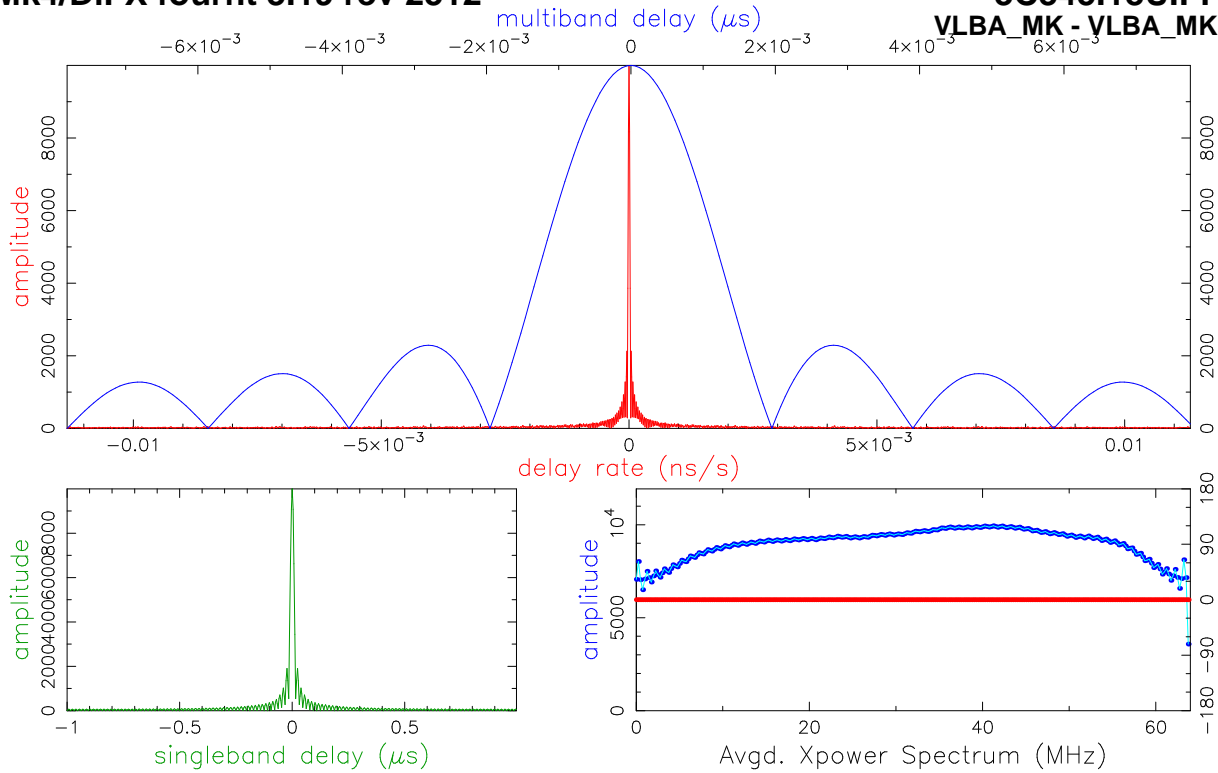
Exp. c201b
Yr:day 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150958
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	2.96750000000E-03								2.96750E-03	+/- 4.5E-08
Sband delay (usec)	3.06050000000E-03								3.06050E-03	+/- 3.6E-07
Phase delay (usec)	2.14579308393E-06								2.14579E-06	+/- 1.5E-10
Delay rate (us/s)	6.30616281430E-11								6.30616E-11	+/- 7.4E-13
Total phase (deg)			66.5						66.5	+/- 0.0
Apriori delay (usec)					0.00000000000E+00				Resid mbdelay (usec)	
Apriori clock (usec)					0.0000000E+00				Resid sbdelay (usec)	
Apriori clockrate (us/s)					0.0000000E+00				Resid phdelay (usec)	
Apriori rate (us/s)					0.00000000000E+00				Resid rate (us/s)	
Apriori accel (us/s/s)					0.00000000000E+00				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										
ion window (TEC)										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 0.1 0.0 Search (2048X32) 461.377 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.7 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) 39.6 0.0 Inc. seg. avg. 461.908 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.1 0.0 Inc. frq. avg. 497.221 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 324.7 el 64.1 pa 134.4 m: az 324.7 el 64.1 pa 134.4 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mm.W.135.18UIFP

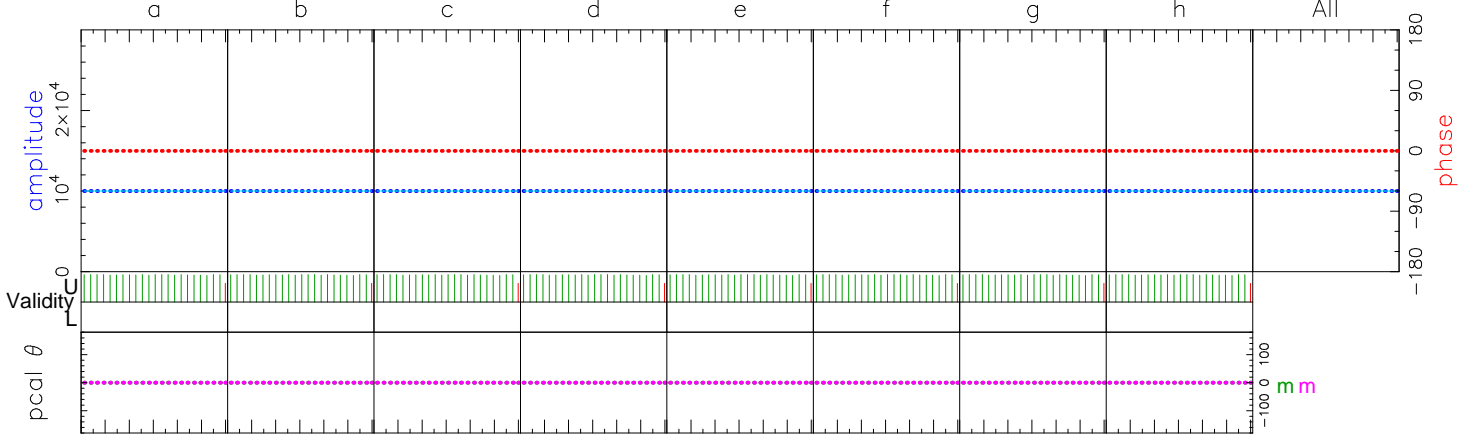


Fringe quality 9

SNR 515902.2
Int time 355.910
Amp 9999.996
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201b
Yr:day 16383
Start 2020:117
Stop 2020:198:233535
FRT 140500.00
2020:199:150947
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



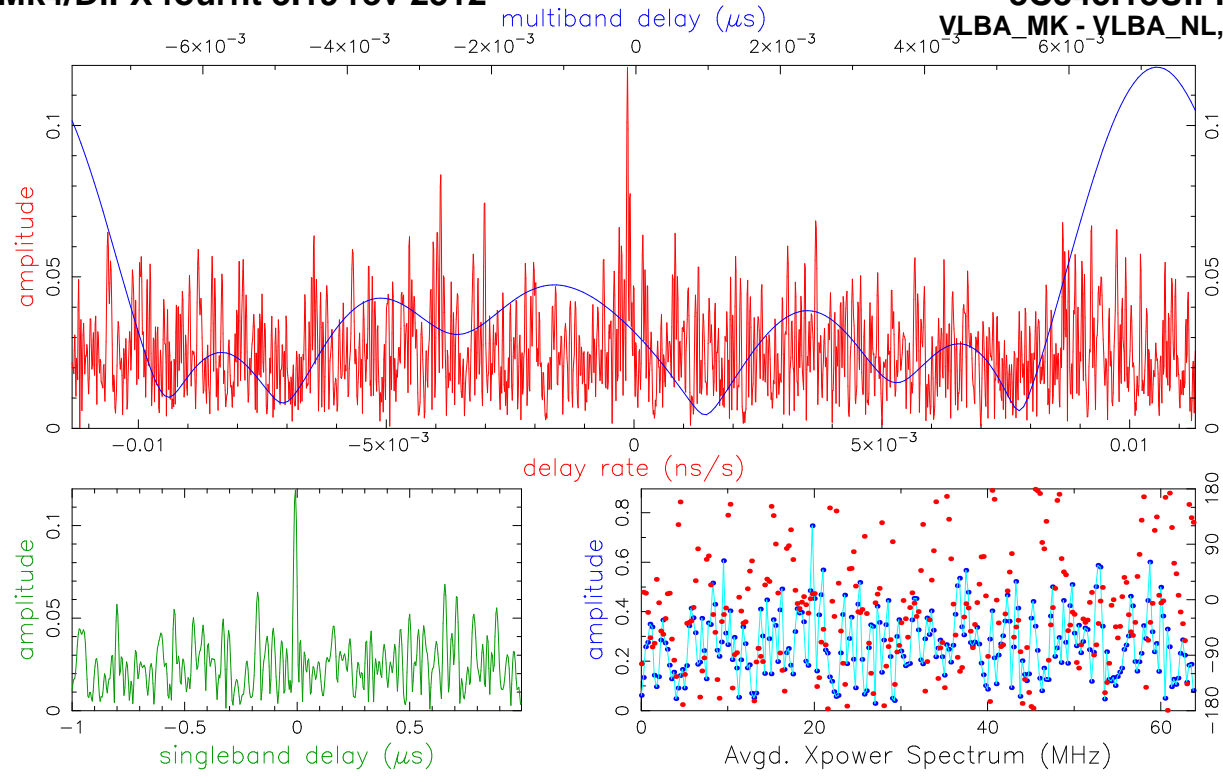
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	Ampl.	10000.0
m	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
									Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid mbdelay (usec)	0.00000E+00 +/- 2.1E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid sbdelay (usec)	0.00000E+00 +/- 1.7E-08
Phase delay (usec)	1.71403044370E-20	1.71403044370E-20	1.71403044370E-20	1.71403044370E-20	1.71403044370E-20	1.71403044370E-20	1.71403044370E-20	1.71403044370E-20	Resid phdelay (usec)	1.71403E-20 +/- 7.2E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid rate (us/s)	0.00000E+00 +/- 3.4E-14
Total phase (deg)		0.0							Resid phase (deg)	0.0 +/- 0.0

RMS Theor. Amplitude 9999.996 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.996 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.996 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 324.7 el 64.1 pa 134.4 m: az 324.7 el 64.1 pa 134.4 u,v (vr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mm..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mm.W.87.18UIFP

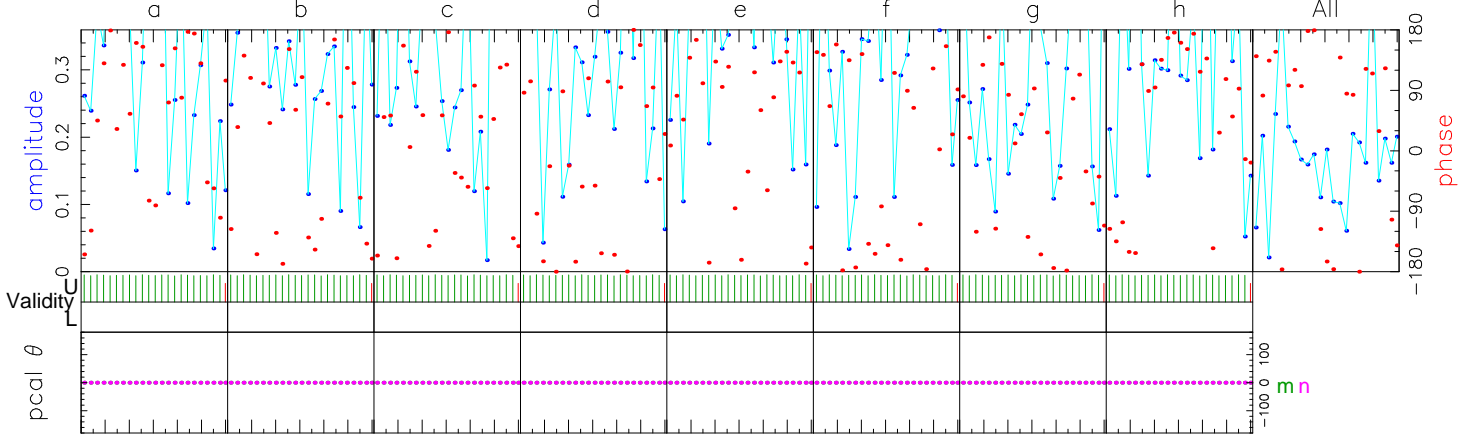
Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, mn
VLBA_MK - VLBA_NL, fgroup W, pol RR



Fringe quality 0
SNR 6.1
Int time 350.389
Amp 0.120
Phase 141.8
PFD 2.0e-01
Delays (us)
SBD -0.008708
MBD 0.007183
Fringe rate (Hz)
-0.011088
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150951
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



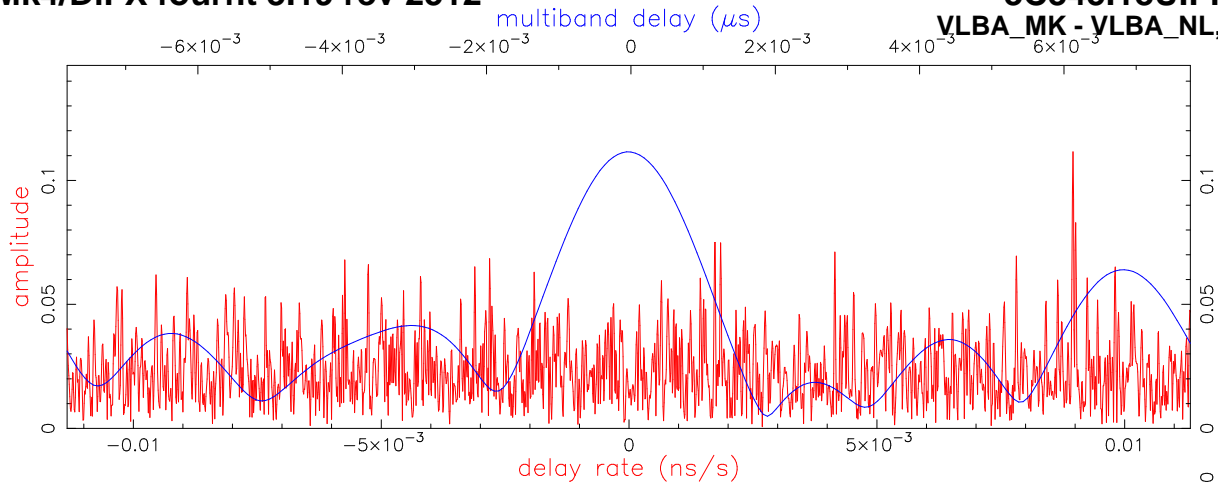
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)		8.69885902858E+03			8.69886747096E+03				7.18262E-03	+/- 1.8E-04
Sband delay (usec)		8.69885876296E+03			-2.4166088E+01				-8.70800E-03	+/- 1.4E-03
Phase delay (usec)		8.69886747553E+03			1.5700001E-07				4.57189E-06	+/- 6.0E-07
Delay rate (us/s)		5.03106786344E-01			5.03106915061E-01				-1.28717E-07	+/- 2.9E-09
Total phase (deg)			123.2		-6.99694405928E-05				141.8	+/- 18.7
ph/seg (deg)	54.3	44.8		0.116						
amp/seg (%)	99.9	78.2		0.000						
ph/frq (deg)	26.3	26.4		0.138						
amp/frq (%)	40.6	46.1		0.114						
m: az 324.7 el 64.1 pa 134.4										
n: az 298.5 el 29.7 pa 58.6										
u,v (fr/asec)					-3857.339					-6758.411

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
PCal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MISamp/s): 128
Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite
sb window (us) -1.000 1.000
mb window (us) -0.008 0.008
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00
simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mn..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mn.W.106.18UIFP

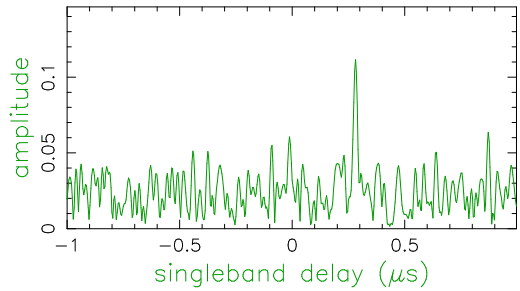
Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, mn
VLBA_MK - VLBA_NL, fgroup W, pol LR

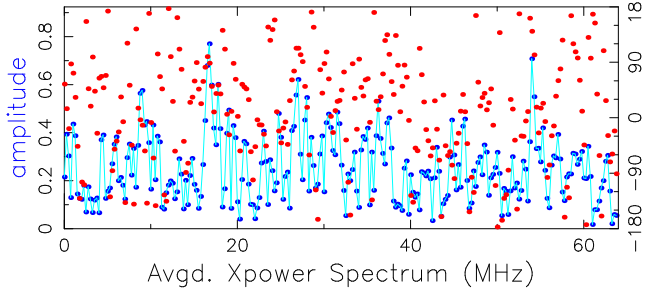


Fringe quality 0

SNR 5.7
Int time 350.385
Amp 0.146
Phase 38.5
PFD 9.4e-01
Delays (us)
SBD 0.281327
MBD -0.000034
Fringe rate (Hz)
0.772594
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

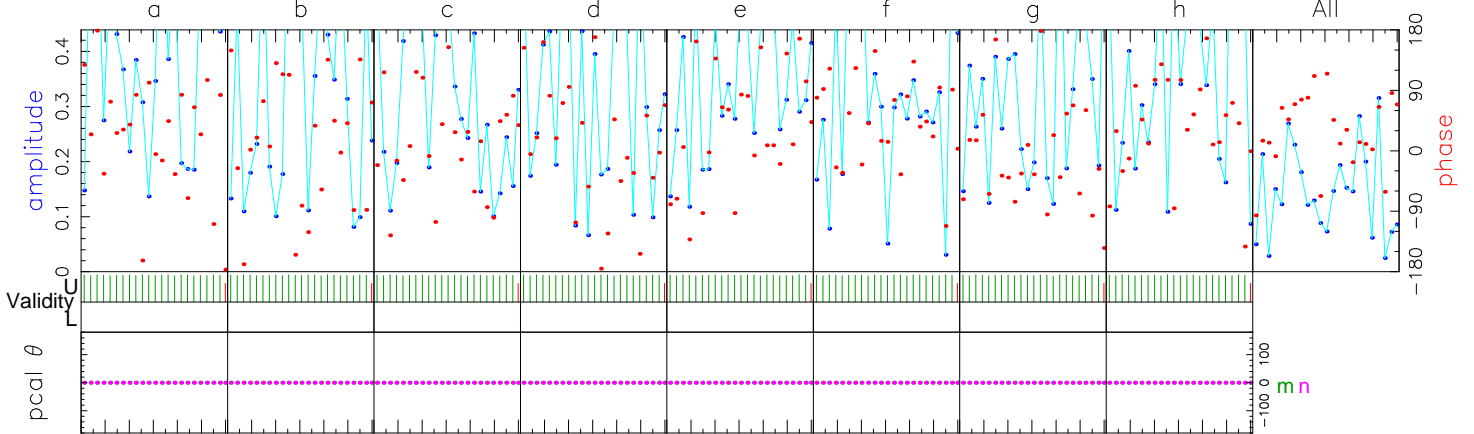


delay rate (ns/s)



Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150954
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

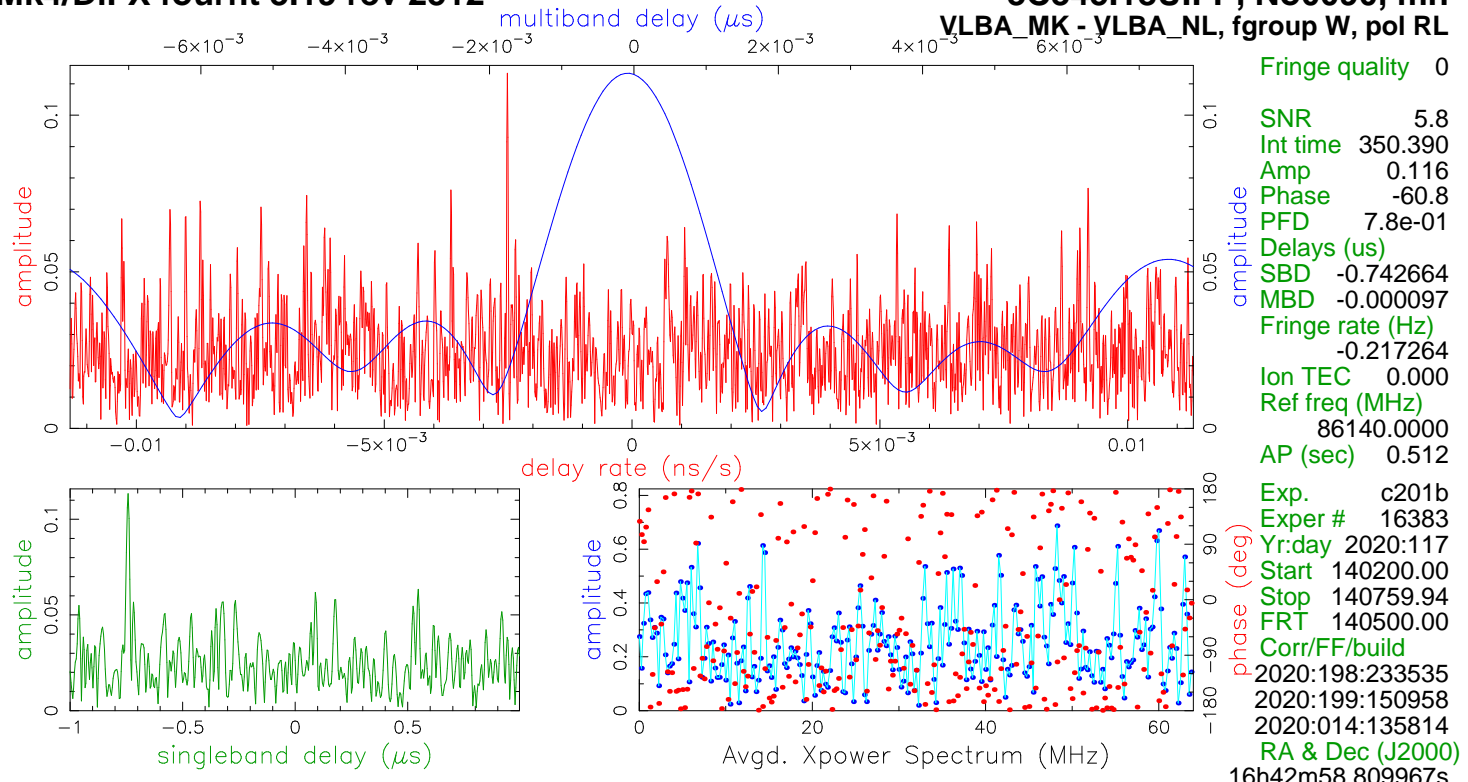
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



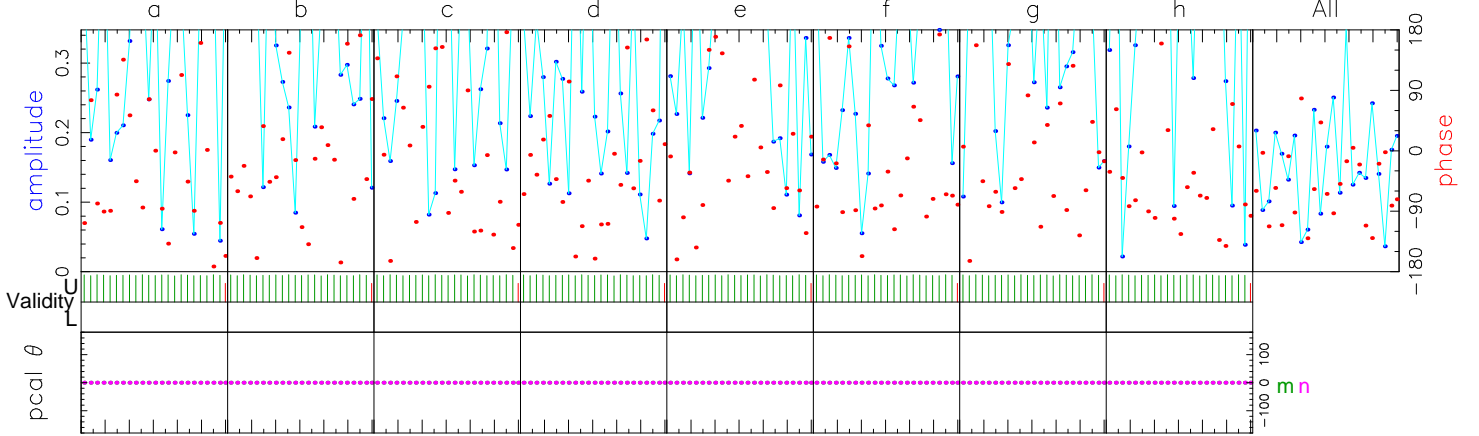
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0			
m	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000			
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
m	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000			
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	8.69914868707E+03					8.69886747096E+03			Resid mbdelay (usec)	-3.38941E-05	+/- 1.9E-04
Sband delay (usec)	8.69914879771E+03					-2.4166088E+01			Resid sbdelay (usec)	2.81327E-01	+/- 1.5E-03
Phase delay (usec)	8.69886747220E+03					1.5700001E-07			Resid phdelay (usec)	1.24102E-06	+/- 6.5E-07
Delay rate (us/s)	5.03115884110E-01					5.03106915061E-01			Resid rate (us/s)	8.96905E-06	+/- 3.1E-09
Total phase (deg)			19.9						Resid phase (deg)	38.5	+/- 20.1

	RMS	Theor.	Amplitude	0.146 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	55.2	48.1	Search (2048X32)	0.109	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	77.6	84.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	35.5	28.4	Inc. seg. avg.	0.141	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	35.4	49.6	Inc. frq. avg.	0.149	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

m: az 324.7 el 64.1 pa 134.4 n: az 298.5 el 29.7 pa 58.6 u,v (fr/asec) -3857.339 -6758.411 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mn..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mn.W.122.18UIFP



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

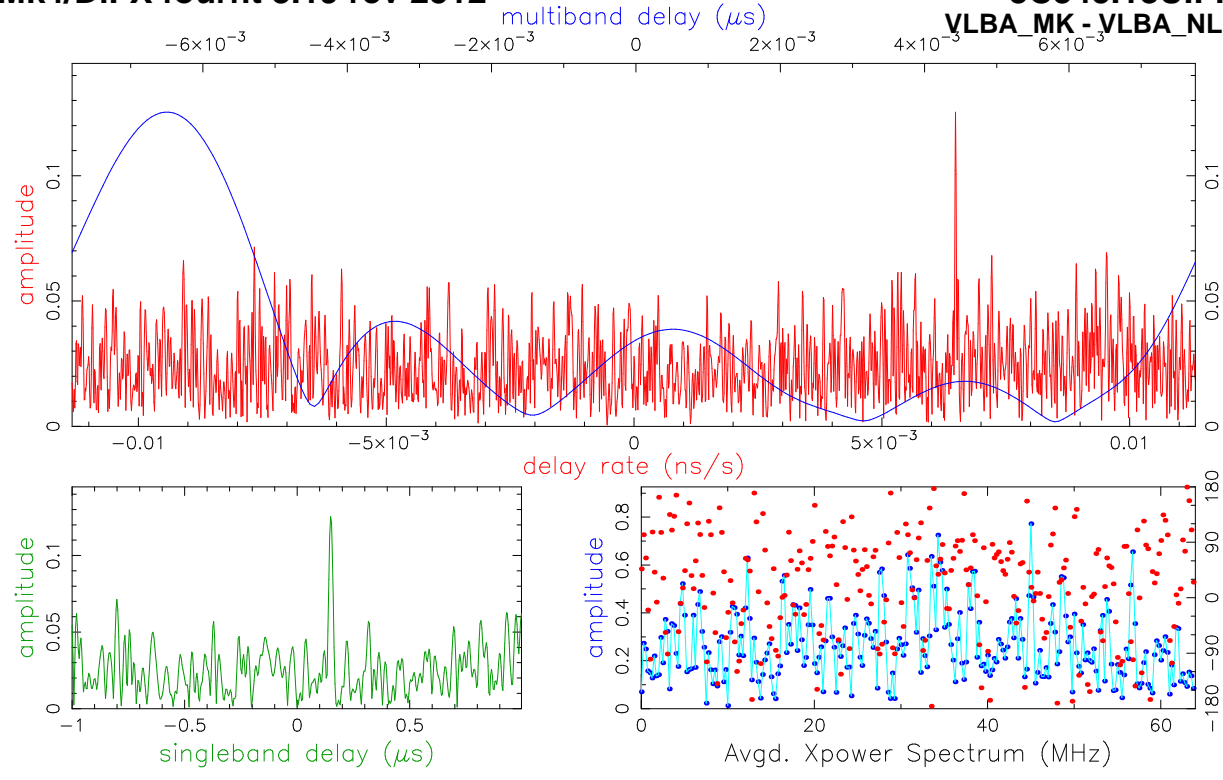


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-63.6	-54.5	-125.2	-47.1	-27.4	-72.4	-66.0	-57.4	Phase	-60.8
	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2	Ampl.	0.1
	166.5	67.3	176.5	46.4	148.4	312.0	215.4	454.6	Sbd box	66.9
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	8.69811737362E+03		Apriori delay (usec)		8.69886747096E+03		Resid mbdelay (usec)		-9.73414E-05	+/- 1.9E-04
Sband delay (usec)	8.69812480671E+03		Apriori clock (usec)		-2.4166088E+01		Resid sbdelay (usec)		-7.42664E-01	+/- 1.5E-03
Phase delay (usec)	8.69886746900E+03		Apriori clockrate (us/s)		1.5700001E-07		Resid phdelay (usec)		-1.96120E-06	+/- 6.4E-07
Delay rate (us/s)	5.03104392841E-01		Apriori rate (us/s)		5.03106915061E-01		Resid rate (us/s)		-2.52222E-06	+/- 3.1E-09
Total phase (deg)			280.6		Apriori accel (us/s/s)		-6.99694405928E-05		Resid phase (deg)	-60.8 +/- 19.7

	RMS	Theor.	Amplitude	0.116 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	55.2	47.3	Search (2048X32)	0.111	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	74.0	82.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	30.7	27.9	Inc. seg. avg.	0.118	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	42.1	48.7	Inc. frq. avg.	0.110	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

m: az 324.7 el 64.1 pa 134.4 n: az 298.5 el 29.7 pa 58.6 u,v (fr/asec) -3857.339 -6758.411 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mn..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mn.W.136.18UIFP

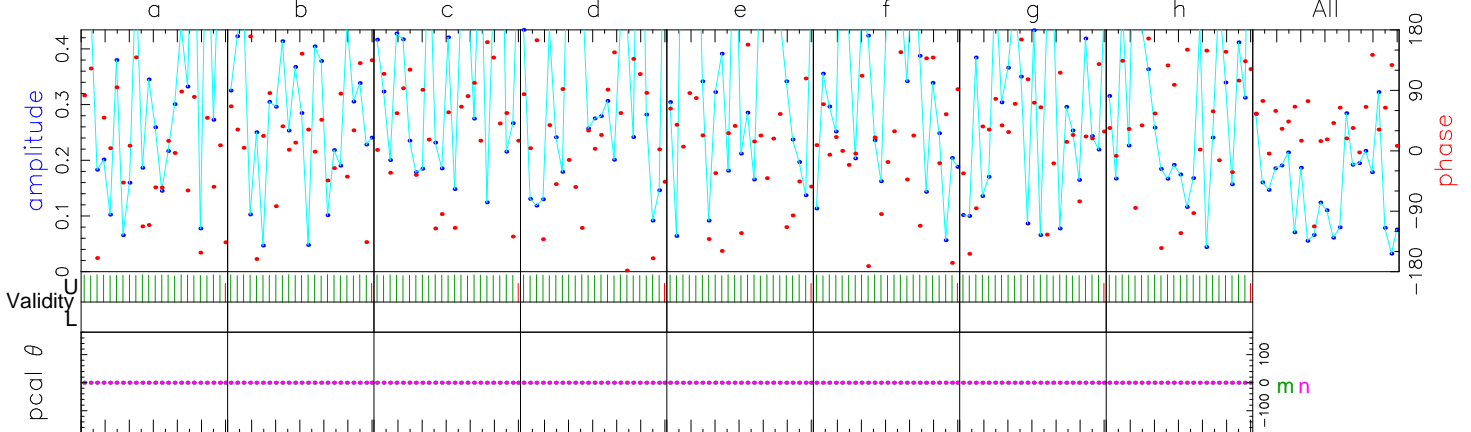


Fringe quality 0

SNR 6.5
Int time 350.385
Amp 0.145
Phase 39.9
PFD 3.0e-02
Delays (us)
SBD 0.149485
MBD -0.006473
Fringe rate (Hz)
0.559621
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150947
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

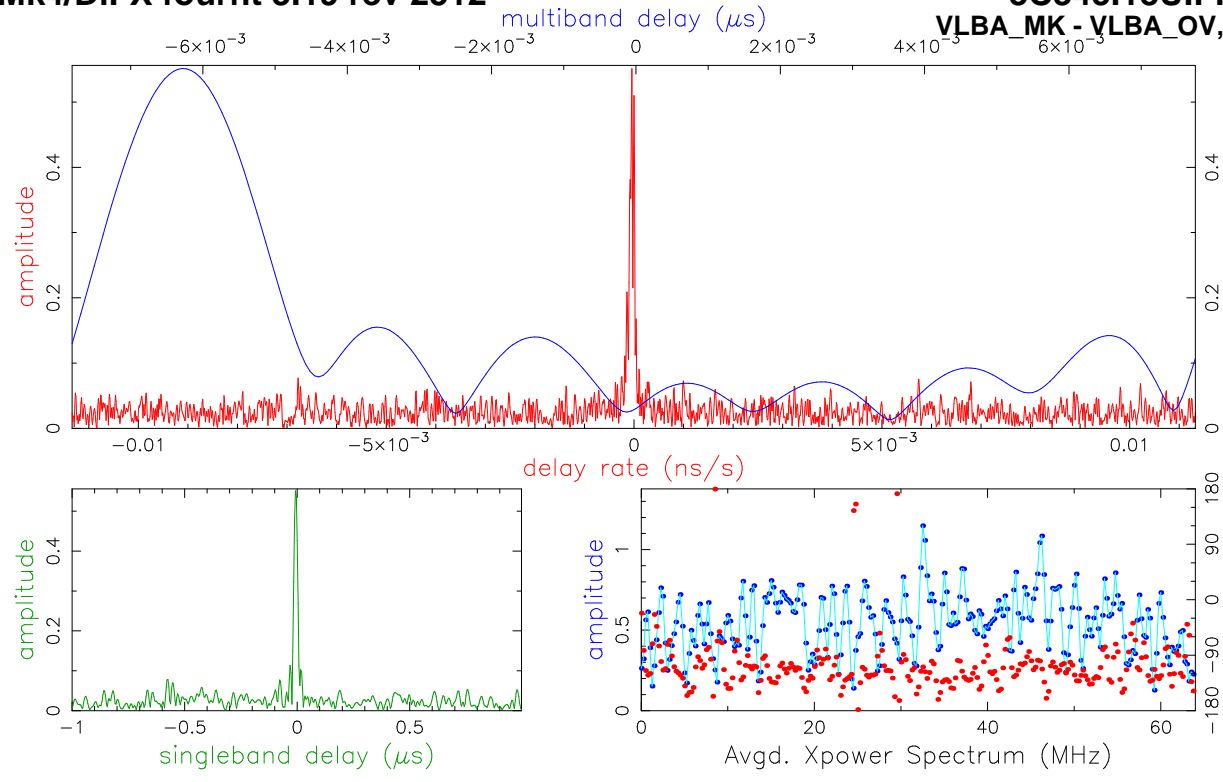


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	56.6	28.8	53.1	46.3	19.8	19.2	36.0	83.5	Phase	39.9
	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	137.5	151.7	295.7	506.6	495.4	478.8	91.7	477.1	Sbd box	295.3
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
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	Manl 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)	8.69901724833E+03		Apriori delay (usec)		8.69886747096E+03		Resid mbdelay (usec)		-6.47263E-03	+/- 1.7E-04
Sband delay (usec)	8.69901695596E+03		Apriori clock (usec)		-2.4166088E+01		Resid sbdelay (usec)		1.49485E-01	+/- 1.3E-03
Phase delay (usec)	8.69886747225E+03		Apriori clockrate (us/s)		1.5700001E-07		Resid phdelay (usec)		1.28805E-06	+/- 5.7E-07
Delay rate (us/s)	5.03113411711E-01		Apriori rate (us/s)		5.03106915061E-01		Resid rate (us/s)		6.49665E-06	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-6.99694405928E-05		Resid phase (deg)		39.9	+/- 17.8

ph/seg (deg) 48.8 42.6 Search (2048X32) 0.123 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.5 74.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.7 25.1 Inc. seg. avg. 0.138 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.6 43.8 Inc. frq. avg. 0.139 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 324.7 el 64.1 pa 134.4 n: az 298.5 el 29.7 pa 58.6 u,v (fr/asec) -3857.339 -6758.411 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mn..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mn.W.90.18UIFP

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, mo
VLBA_MK - VLBA_OV, fgroup W, pol RR

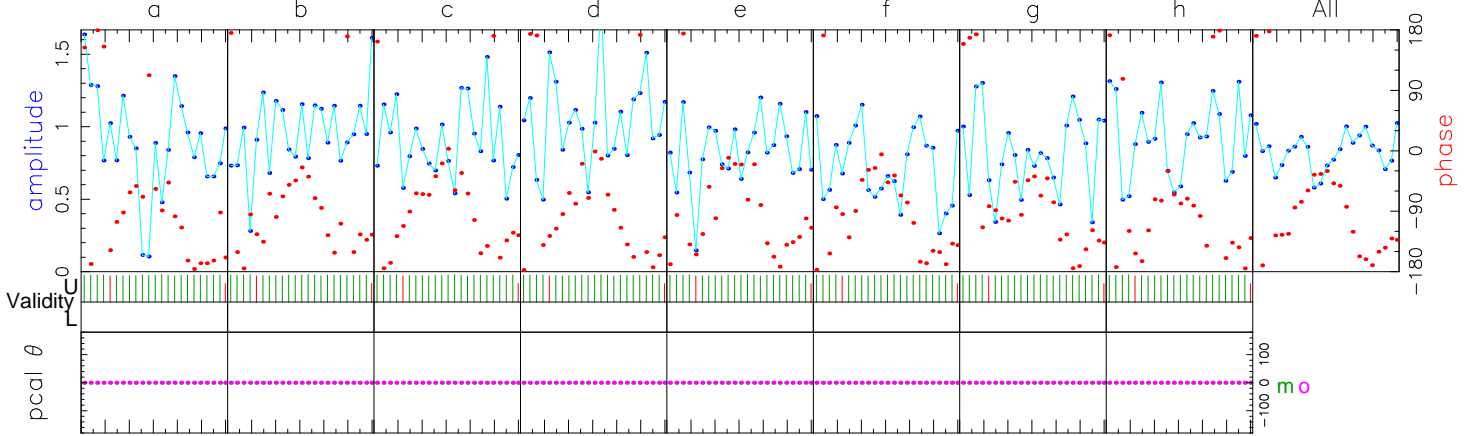


Fringe quality 6

SNR 28.5
Int time 350.650
Amp 0.556
Phase -117.8
PFD 0.0e+00
Delays (us)
SBD -0.006579
MBD -0.006245
Fringe rate (Hz)
-0.003898
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150952
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

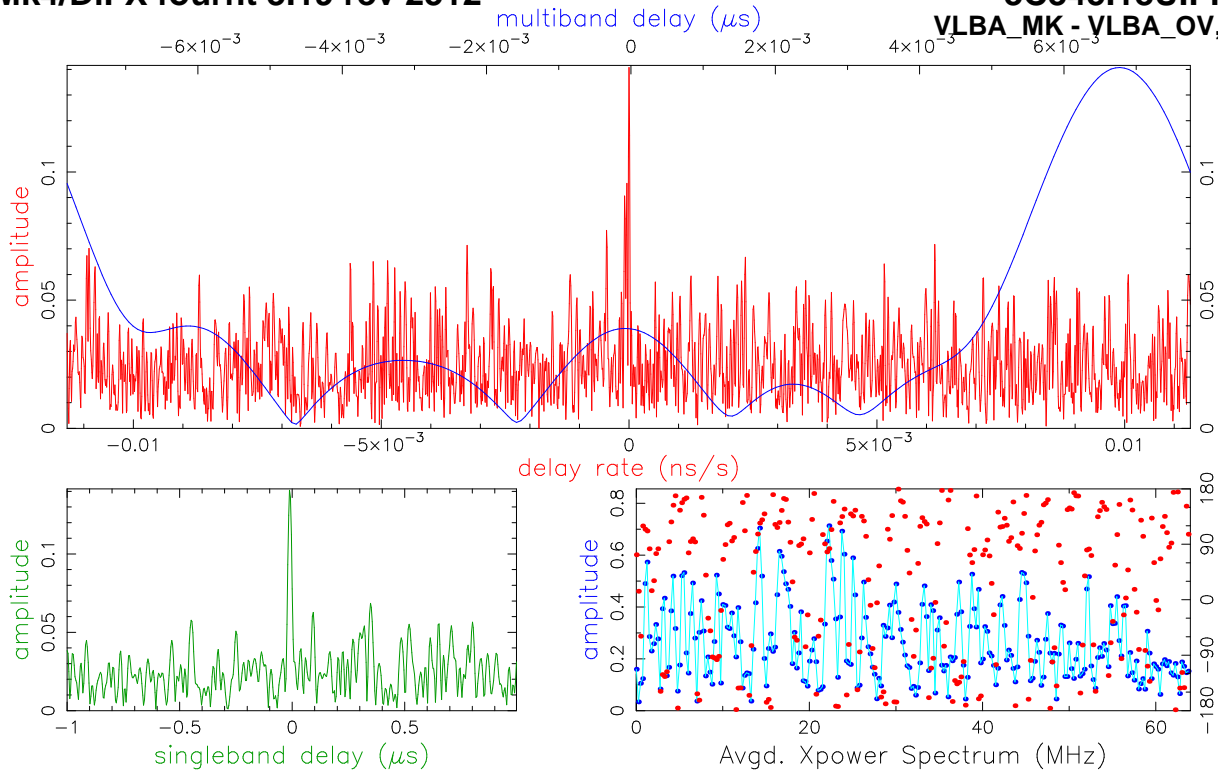


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-134.4	-110.6	-106.6	-119.5	-105.7	-109.1	-119.6	-133.6	Phase	-117.8
	0.6	0.7	0.5	0.6	0.5	0.4	0.5	0.6	Ampl.	0.6
	255.6	255.4	255.5	255.6	255.1	255.5	255.3	254.7	Sbd box	255.3
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	Mani 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)	3.77639963059E+03		Apriori delay (usec)		3.77640587595E+03		Resid mbdelay (usec)		-6.24537E-03	+/- 3.8E-05
Sband delay (usec)	3.77639929670E+03		Apriori clock (usec)		-1.1962978E+01		Resid sbdelay (usec)		-6.57925E-03	+/- 3.0E-04
Phase delay (usec)	3.77640587215E+03		Apriori clockrate (us/s)		2.8999998E-07		Resid phdelay (usec)		-3.80023E-06	+/- 1.3E-07
Delay rate (us/s)	4.15778798639E-01		Apriori rate (us/s)		4.15778843893E-01		Resid rate (us/s)		-4.52542E-08	+/- 6.2E-10
Total phase (deg)			Apriori accel (us/s/s)		-3.93242952287E-05		Resid phase (deg)		-117.8	+/- 4.0

ph/seg (deg) 50.9 9.6 Amplitude 0.556 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.9 16.8 Interp. 0.548 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.5 5.7 Inc. seg. avg. 0.819 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.9 9.9 Inc. frq. avg. 0.558 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 324.7 el 64.1 pa 134.4 o: az 291.5 el 46.6 pa 74.4 u,v (fr/asec) -3160.236 -4346.755 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mo..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mo.W.110.18UIFP

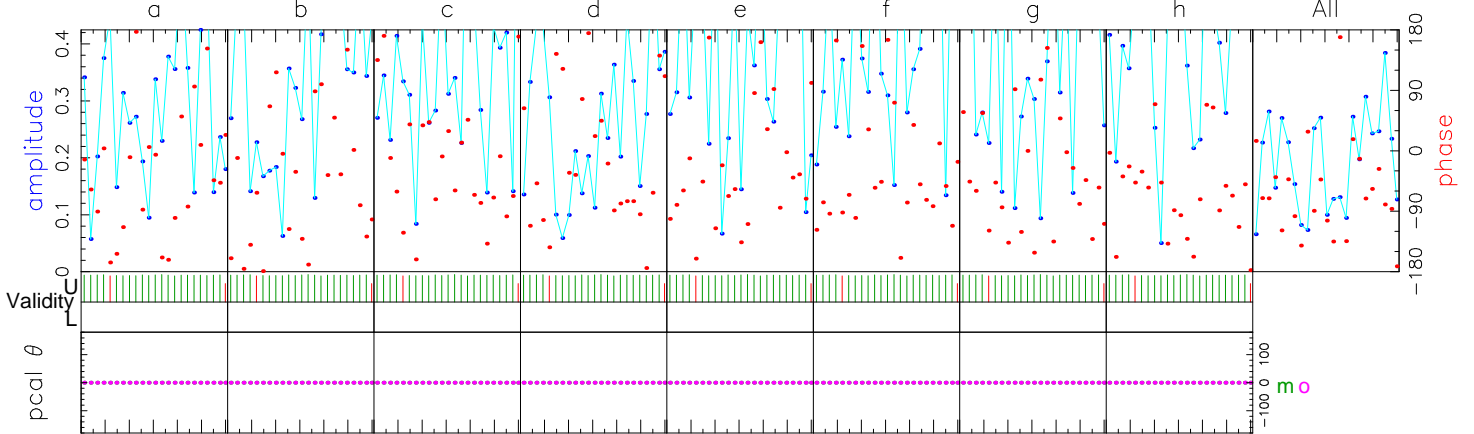
Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, mo
VLBA_MK - VLBA_OV, fgroup W, pol LR



Fringe quality 0
SNR 7.2
Int time 350.645
Amp 0.142
Phase -68.6
PFD 1.3e-04
Delays (us)
SBD -0.010611
MBD 0.006803
Fringe rate (Hz) 0.000054
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150955
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

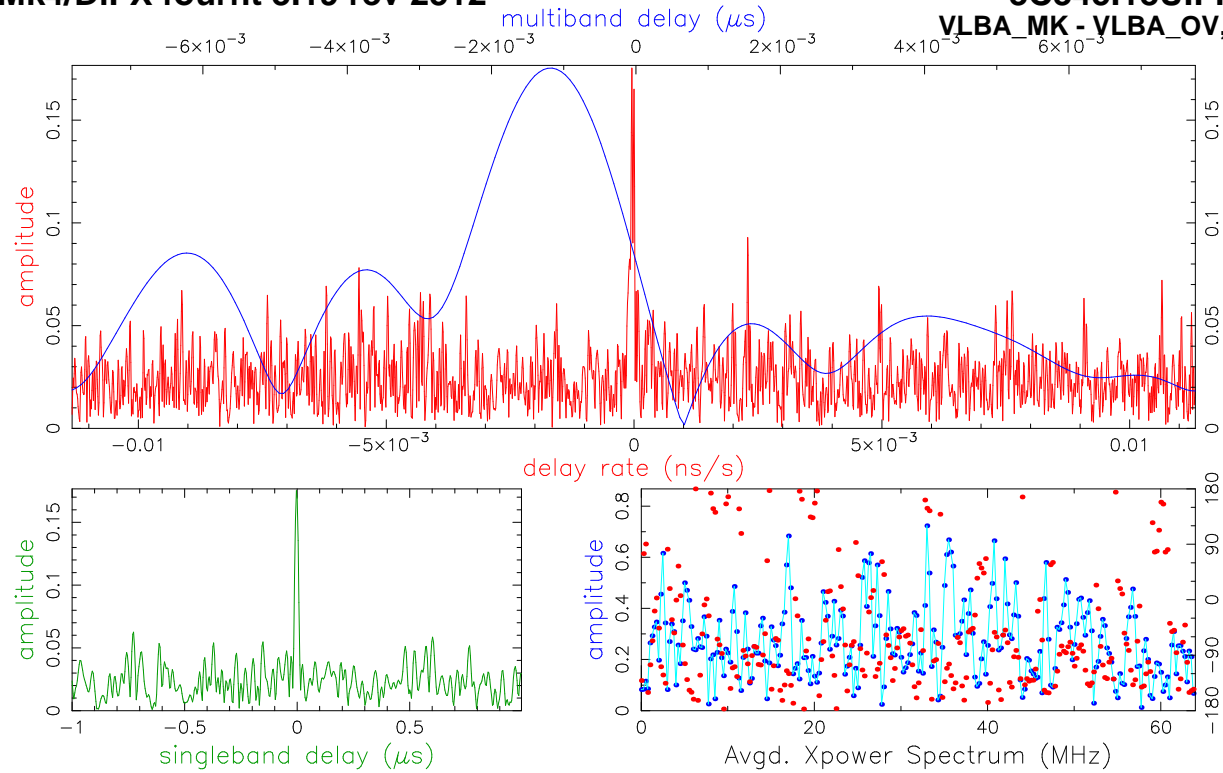


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-65.3	-88.9	-32.1	-83.2	-68.7	-74.6	-71.5	-65.7	Phase	-68.6
	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	Ampl.	0.1
	31.3	114.5	425.1	493.9	254.6	253.8	281.4	254.5	Sbd box	254.3
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	Mani 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	
									Tracks	
Group delay (usec)(sbd)	3.77639705442E+03		Apriori delay (usec)		3.77640587595E+03		Resid mbdelay (usec)		6.80347E-03	+/- 1.5E-04
Sband delay (usec)	3.77639526520E+03		Apriori clock (usec)		-1.1962978E+01		Resid sbdelay (usec)		-1.06107E-02	+/- 1.2E-03
Phase delay (usec)	3.77640587374E+03		Apriori clockrate (us/s)		2.8999998E-07		Resid phdelay (usec)		-2.21244E-06	+/- 5.1E-07
Delay rate (us/s)	4.15778844516E-01		Apriori rate (us/s)		4.15778843893E-01		Resid rate (us/s)		6.22822E-10	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.93242952287E-05		Resid phase (deg)		-68.6	+/- 15.8

ph/seg (deg) 56.6 37.9 Search (2048X32) 0.140 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.7 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) 18.4 22.4 Inc. seg. avg. 0.162 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 41.9 39.0 Inc. frq. avg. 0.135 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 324.7 el 64.1 pa 134.4 o: az 291.5 el 46.6 pa 74.4 u,v (fr/asec) -3160.236 -4346.755 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mo..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mo.W.126.18UIFP

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, mo
VLBA_MK - VLBA_OV, fgroup W, pol RL

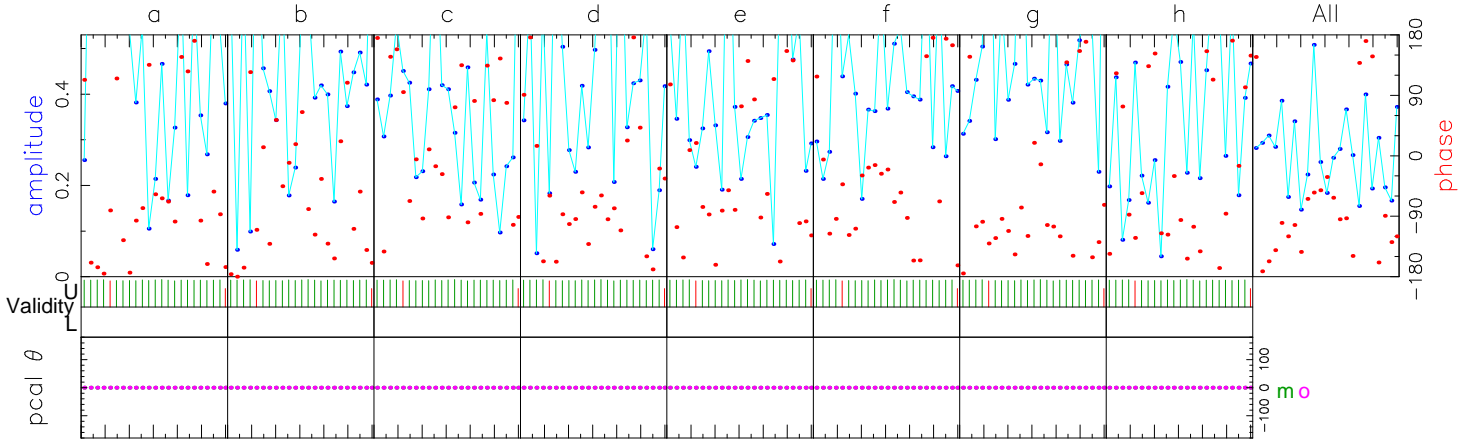


Fringe quality 9

SNR 9.0
Int time 350.649
Amp 0.177
Phase -120.2
PFD 5.6e-11
Delays (us)
SBD -0.002763
MBD -0.001156
Fringe rate (Hz)
-0.003933
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150958
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

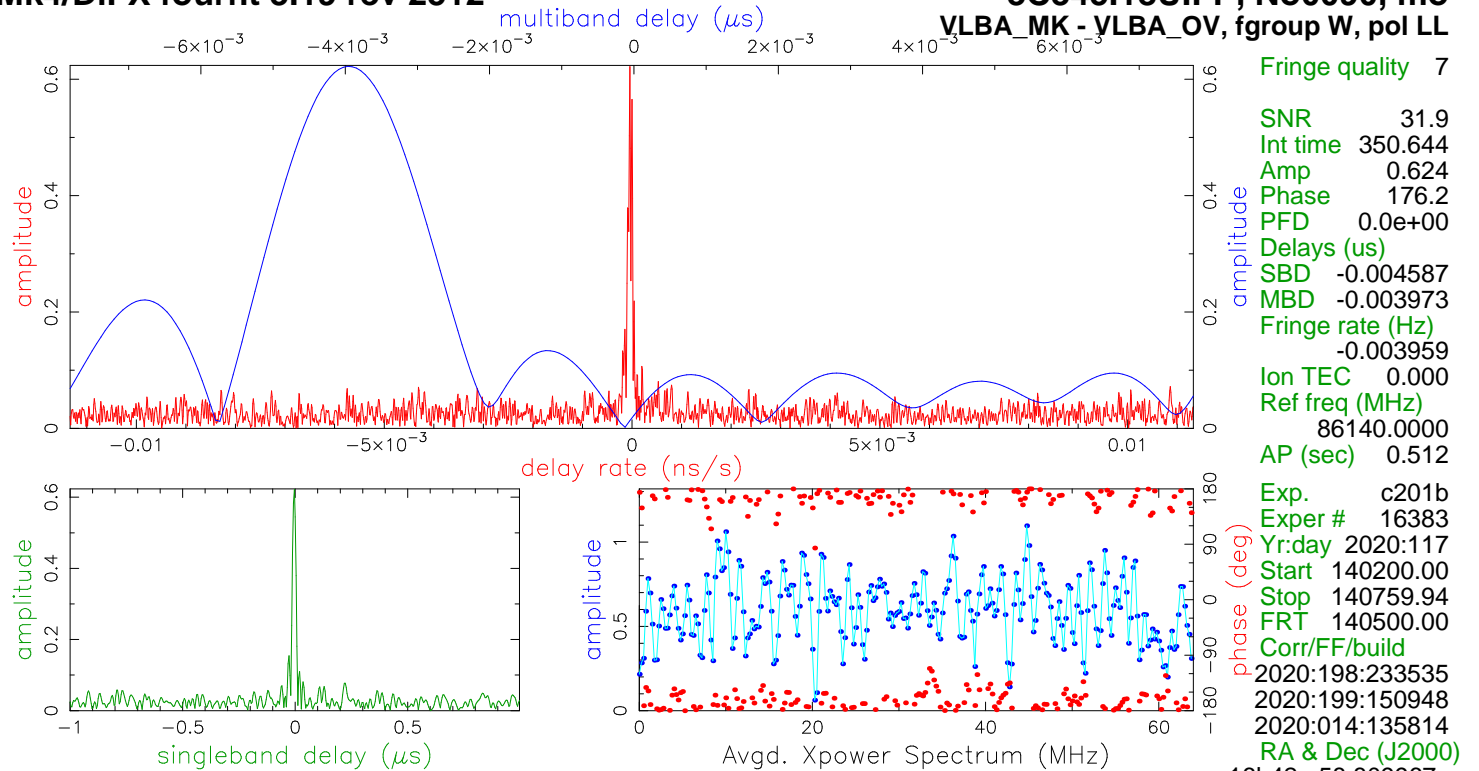


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-137.3	-103.6	-94.7	-107.6	-124.3	-93.2	-121.6	-159.8	Phase	-120.2
	0.3	0.1	0.0	0.2	0.1	0.2	0.3	0.1	Ampl.	0.2
	256.2	353.5	408.7	256.0	218.0	256.3	257.1	411.3	Sbd box	256.3
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.77640471965E+03		Apriori delay (usec)		3.77640587595E+03		Resid mbdelay (usec)		-1.15630E-03	+/- 1.2E-04
Sband delay (usec)	3.77640311295E+03		Apriori clock (usec)		-1.1962978E+01		Resid sbdelay (usec)		-2.76300E-03	+/- 9.5E-04
Phase delay (usec)	3.77640587208E+03		Apriori clockrate (us/s)		2.8999998E-07		Resid phdelay (usec)		-3.87679E-06	+/- 4.1E-07
Delay rate (us/s)	4.15778798238E-01		Apriori rate (us/s)		4.15778843893E-01		Resid rate (us/s)		-4.56552E-08	+/- 2.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.93242952287E-05		Resid phase (deg)		-120.2	+/- 12.7

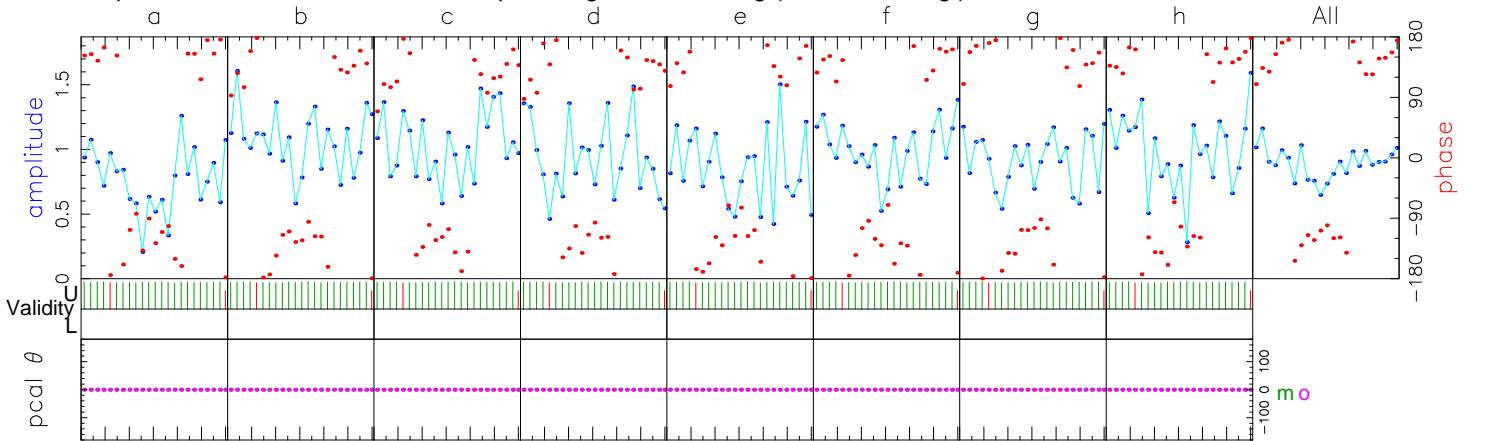
ph/seg (deg) 54.0 30.4 Search (2048X32) 0.172 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 74.9 53.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 24.8 17.9 Inc. seg. avg. 0.241 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 49.7 31.3 Inc. frq. avg. 0.177 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 324.7 el 64.1 pa 134.4 o: az 291.5 el 46.6 pa 74.4 u,v (fr/asec) -3160.236 -4346.755 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mo..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mo.W.139.18UIFP

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, mo
VLBA_MK - VLBA_OV, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

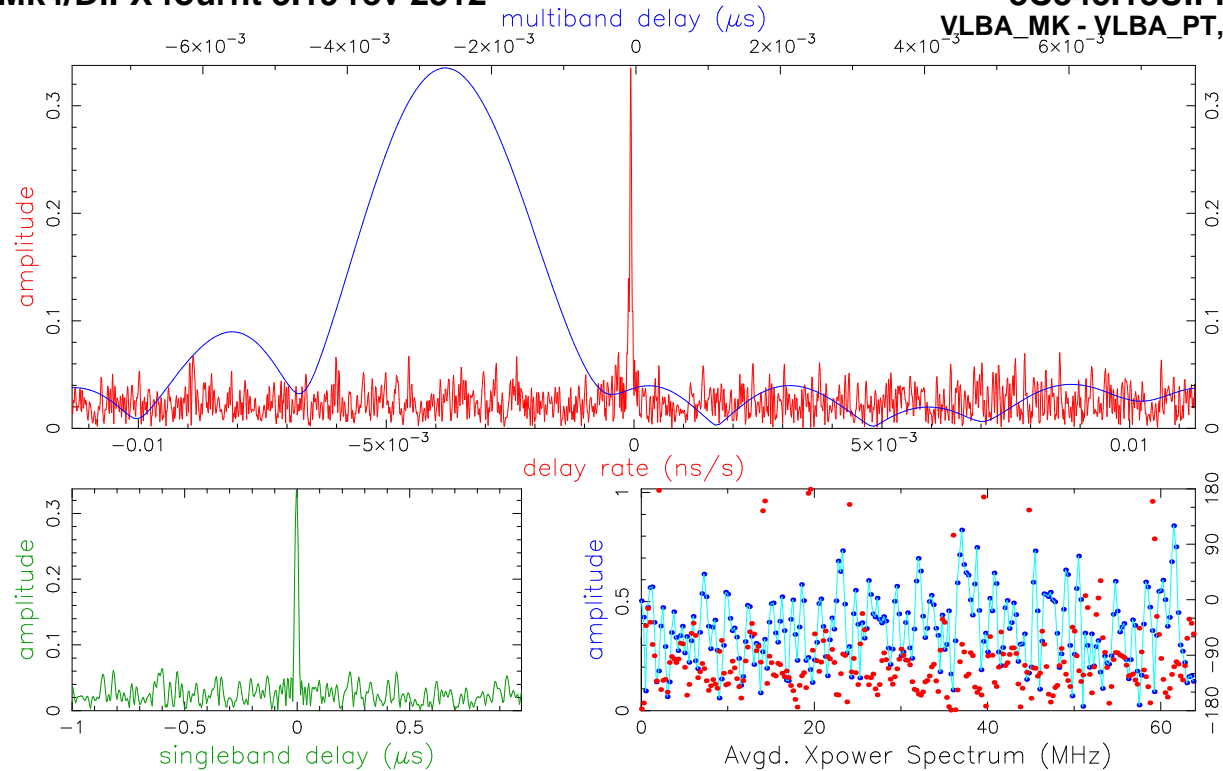


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-177.3	179.2	158.0	169.0	-178.9	178.7	-176.2	175.4	Phase	176.2
	0.6	0.7	0.6	0.5	0.6	0.7	0.6	0.7	Ampl.	0.6
	255.5	255.8	255.9	255.9	255.7	256.1	255.7	255.9	Sbd box	255.8
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.77640190293E+03		Apriori delay (usec)		3.77640587595E+03		Resid mbdelay (usec)		-3.97302E-03	+/- 3.4E-05
Sband delay (usec)	3.77640128870E+03		Apriori clock (usec)		-1.1962978E+01		Resid sbdelay (usec)		-4.58725E-03	+/- 2.7E-04
Phase delay (usec)	3.77640588164E+03		Apriori clockrate (us/s)		2.8999998E-07		Resid phdelay (usec)		5.68100E-06	+/- 1.2E-07
Delay rate (us/s)	4.15778797938E-01		Apriori rate (us/s)		4.15778843893E-01		Resid rate (us/s)		-4.59549E-08	+/- 5.6E-10
Total phase (deg)	231.9		Apriori accel (us/s/s)		-3.93242952287E-05		Resid phase (deg)		176.2	+/- 3.6

RMS Theor. Amplitude 0.624 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 48.3 8.6 Search (2048X32) 0.617 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 47.3 15.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 9.3 5.1 Inc. seg. avg. 0.885 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 10.9 8.9 Inc. frq. avg. 0.625 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 m: az 324.7 el 64.1 pa 134.4 o: az 291.5 el 46.6 pa 74.4 u,v (fr/asec) -3160.236 -4346.755 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mo..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mo.W.93.18UIFP

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, mp
VLBA_MK - VLBA_PT, fgroup W, pol RR

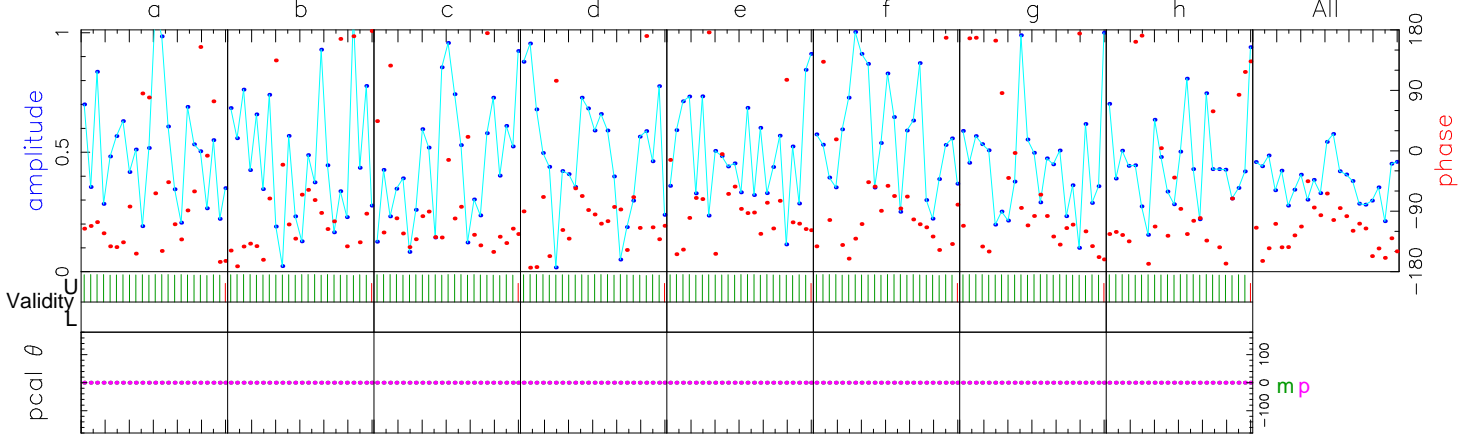


Fringe quality 9

SNR 17.4
Int time 355.351
Amp 0.337
Phase -117.0
PFD 0.0e+00
Delays (us)
SBD -0.002820
MBD -0.002621
Fringe rate (Hz)
-0.005943
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150951
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



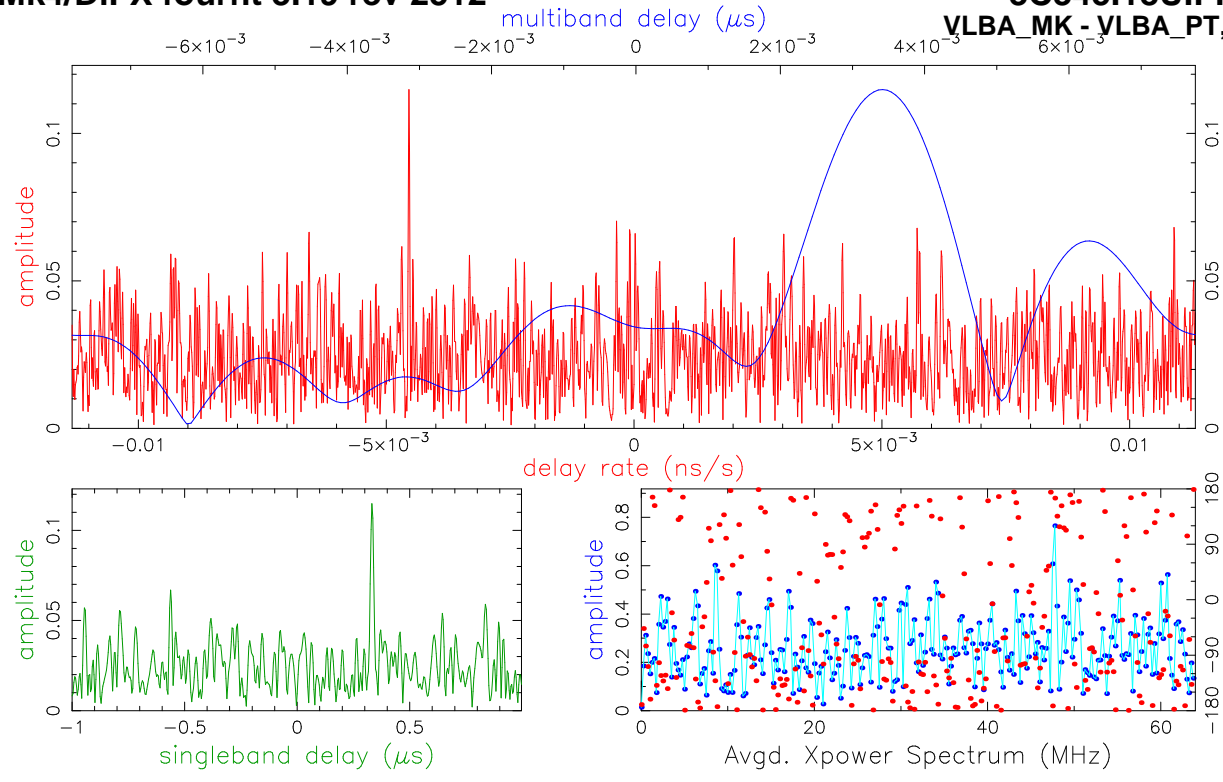
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-114.9	-128.9	-116.3	-114.8	-100.4	-107.6	-126.8	-134.7	Phase	-117.0
	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.2	Ampl.	0.3
	255.8	256.6	256.2	255.6	256.8	256.3	256.4	255.7	Sbd box	256.3
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	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)	6.19270468398E+03		Apriori delay (usec)		6.19270730455E+03		Resid mbdelay (usec)		-2.62057E-03	+/- 6.2E-05
Sband delay (usec)	6.19270448455E+03		Apriori clock (usec)		-9.1554356E+00		Resid sbdelay (usec)		-2.82000E-03	+/- 5.0E-04
Phase delay (usec)	6.19270730078E+03		Apriori clockrate (us/s)		2.8711340E-07		Resid phdelay (usec)		-3.77165E-06	+/- 2.1E-07
Delay rate (us/s)	5.27321881343E-01		Apriori rate (us/s)		5.27321950340E-01		Resid rate (us/s)		-6.89972E-08	+/- 1.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.91714842398E-05		Resid phase (deg)		-117.0	+/- 6.6

ph/seg (deg) 30.3 15.8 Amplitude 0.337 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 29.8 27.6 Search (2048X32) 0.326 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.4 9.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 15.1 16.3 Inc. seg. avg. 0.371 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 m: az 324.7 el 64.1 pa 134.4 p: az 296.8 el 37.9 pa 73.4 u,v (fr/asec) -4005.227 -4699.670 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mp..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mp.W.108.18UIFP

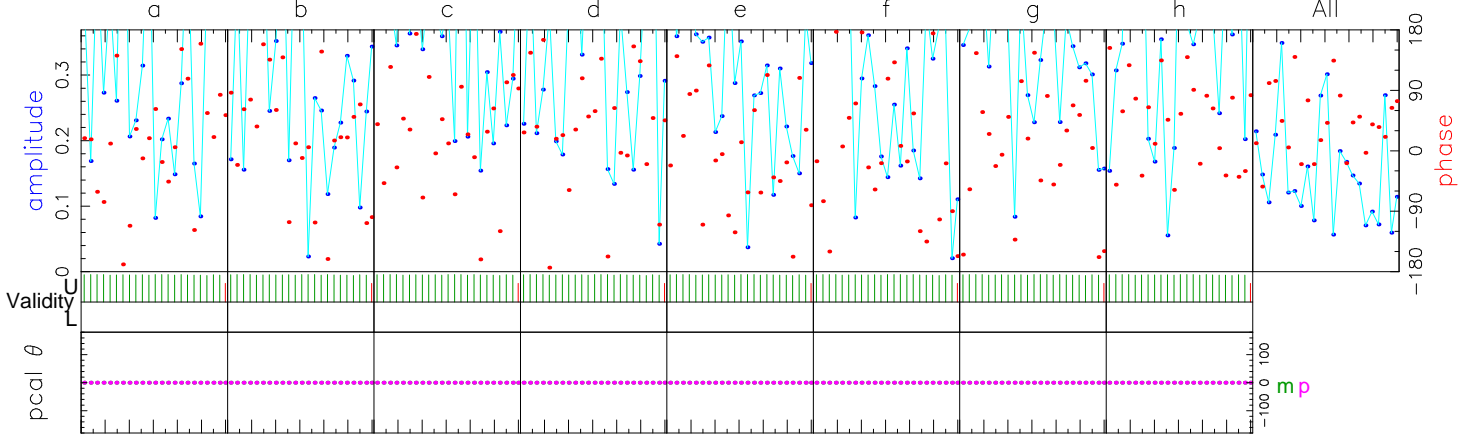
Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, mp
VLBA_MK - VLBA_PT, fgroup W, pol LR



Fringe quality 0
SNR 5.9
Int time 355.346
Amp 0.123
Phase 38.7
PFD 5.4e-01
Delays (us)
SBD 0.332605
MBD 0.003439
Fringe rate (Hz)
-0.391126
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150955
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	28.2	49.2	46.4	59.3	6.5	-50.8	38.3	49.6	Phase	38.7
	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
	209.2	119.3	114.7	508.1	185.6	420.2	343.9	341.0	Sbd box	342.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

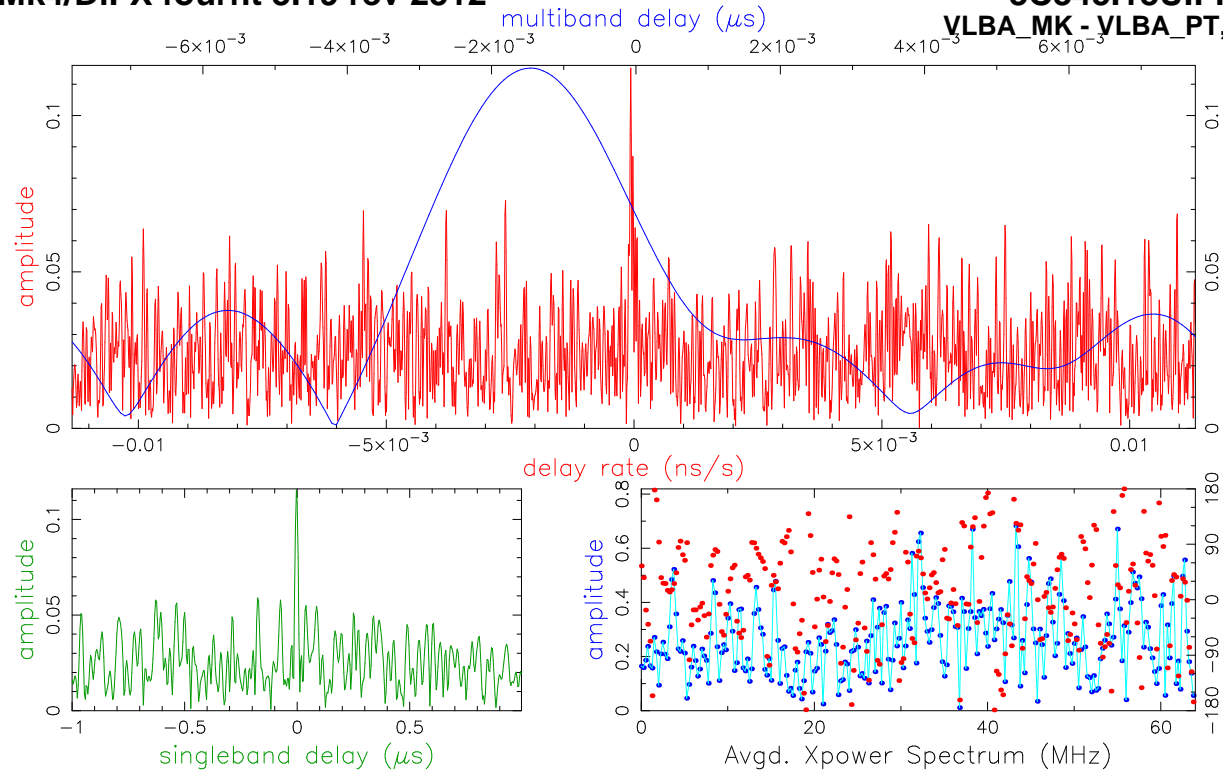
Group delay (usec)(sbd) 6.19303886834E+03 Apriori delay (usec) 6.19270730455E+03 Resid mbdelay (usec) 3.43879E-03 +/- 1.8E-04
Sband delay (usec) 6.19303990930E+03 Apriori clock (usec) -9.1554356E+00 Resid sbdelay (usec) 3.32605E-01 +/- 1.5E-03
Phase delay (usec) 6.19270730580E+03 Apriori clockrate (us/s) 2.8711340E-07 Resid phdelay (usec) 1.24696E-06 +/- 6.2E-07
Delay rate (us/s) 5.27317409760E-01 Apriori rate (us/s) 5.27321950340E-01 Resid rate (us/s) -4.54058E-06 +/- 3.0E-09
Total phase (deg) 115.7 Apriori accel (us/s/s) -4.91714842398E-05 Resid phase (deg) 38.7 +/- 19.3

RMS Theor. Amplitude 0.123 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 49.5 46.3 Search (2048X32) 0.112 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 77.4 80.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg) 40.6 27.3 Inc. seg. avg. 0.125 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
amp/frq (%) 35.6 47.7 Inc. frq. avg. 0.122 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 324.7 el 64.1 pa 134.4 p: az 296.8 el 37.9 pa 73.4 u,v (fr/asec) -4005.227 -4699.670 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mp..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mp.W.123.18UIFP

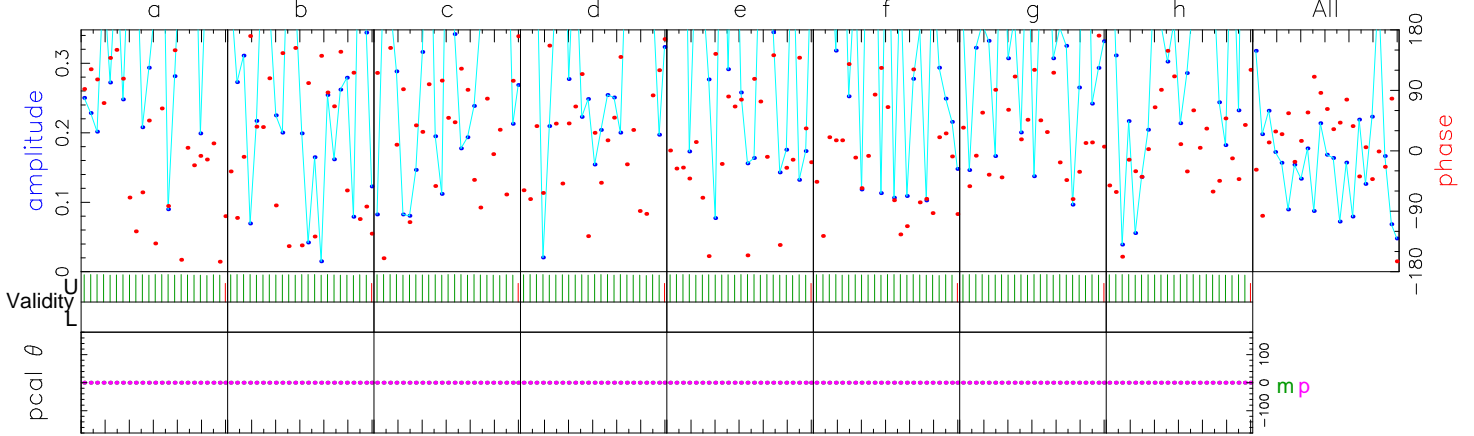
Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, mp
VLBA_MK - VLBA_PT, fgroup W, pol RL



Fringe quality 0
SNR 6.0
Int time 355.351
Amp 0.116
Phase 12.2
PFD 4.4e-01
Delays (us)
SBD -0.002905
MBD -0.001437
Fringe rate (Hz)
-0.005929
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150958
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

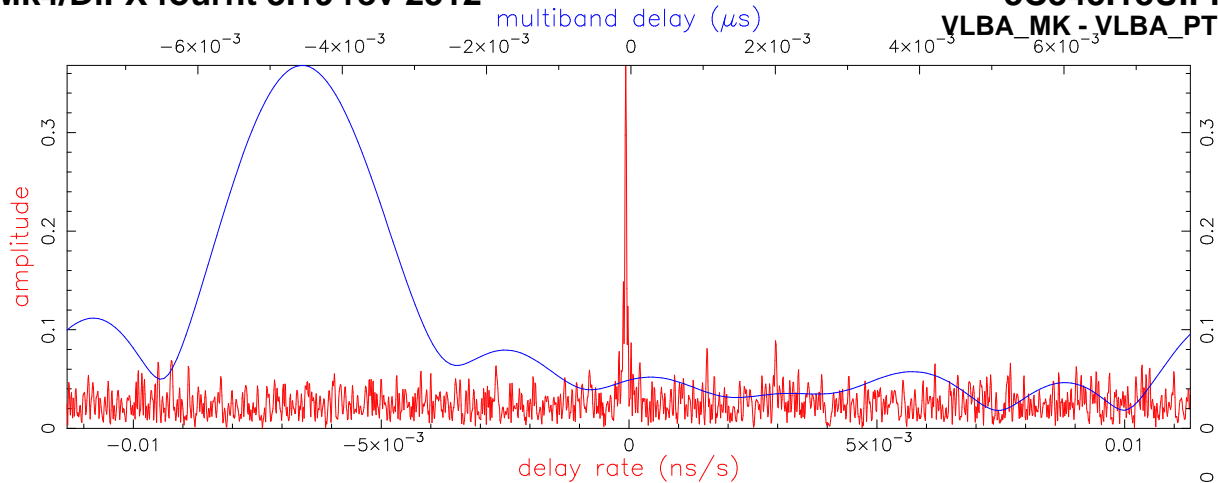


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	31.2	-111.8	45.0	3.7	7.1	-10.5	20.4	16.1	Phase	12.2
	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	Ampl.	0.1
	127.4	183.7	254.0	347.2	255.8	100.1	256.0	84.7	Sbd box	256.3
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs 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	
									Tracks	
Group delay (usec)(sbd)	6.19270586777E+03		Apriori delay (usec)		6.19270730455E+03		Resid mbdelay (usec)		-1.43678E-03	+/- 1.8E-04
Sband delay (usec)	6.19270439905E+03		Apriori clock (usec)		-9.1554356E+00		Resid sbdelay (usec)		-2.90550E-03	+/- 1.4E-03
Phase delay (usec)	6.19270730494E+03		Apriori clockrate (us/s)		2.8711340E-07		Resid phdelay (usec)		3.93018E-07	+/- 6.2E-07
Delay rate (us/s)	5.27321881510E-01		Apriori rate (us/s)		5.27321950340E-01		Resid rate (us/s)		-6.88300E-08	+/- 3.0E-09
Total phase (deg)	89.2		Apriori accel (us/s/s)		-4.91714842398E-05		Resid phase (deg)		12.2	+/- 19.2

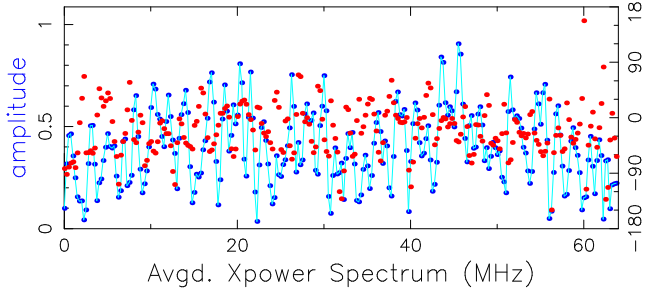
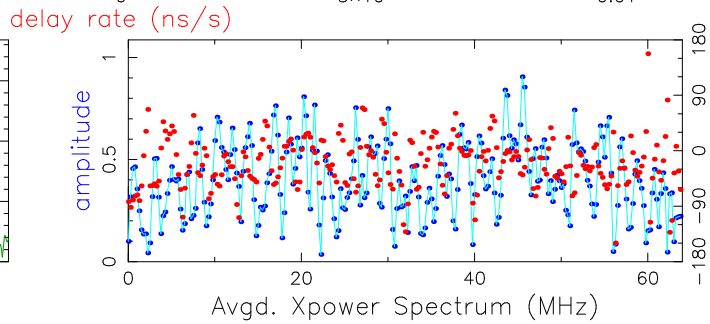
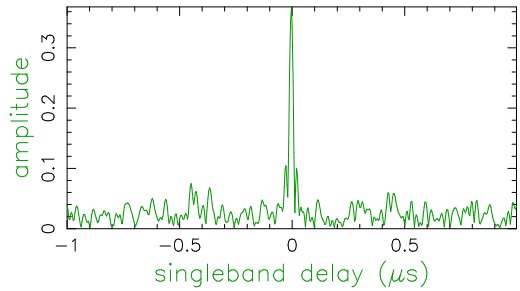
ph/seg (deg) RMS Theor. Amplitude 0.116 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 57.5 45.9 Search (2048X32) 0.114 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 54.0 27.1 Inc. seg. avg. 0.127 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 53.2 47.3 Inc. frq. avg. 0.115 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 324.7 el 64.1 pa 134.4 p: az 296.8 el 37.9 pa 73.4 u,v (fr/asec) -4005.227 -4699.670 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mp..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mp.W.137.18UIFP

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UIFP, No0090, mp
VLBA_MK - VLBA_PT, fgroup W, pol LL

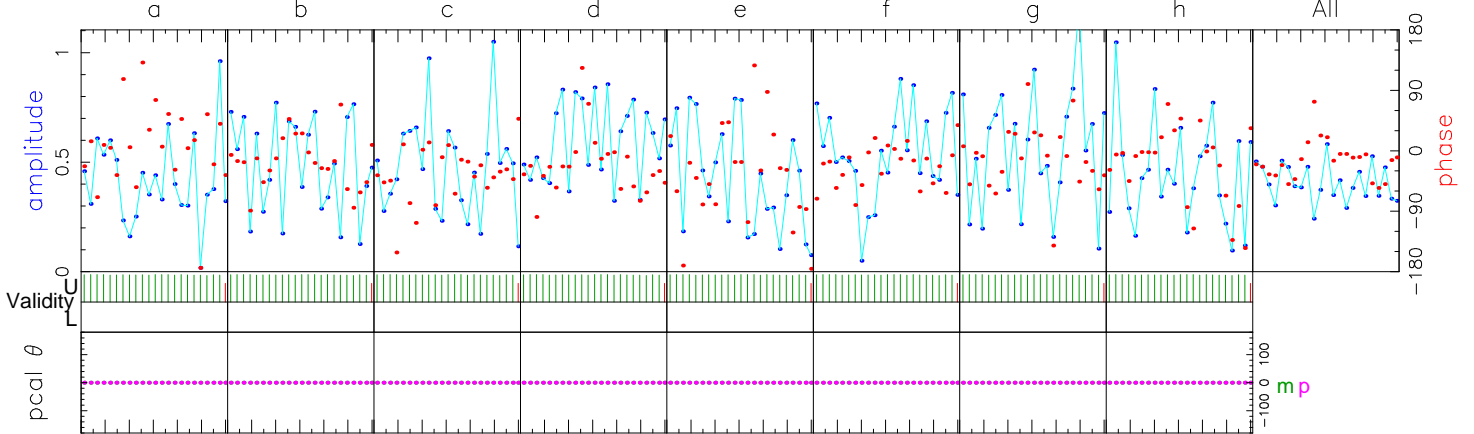


Fringe quality 9
SNR 19.0
Int time 355.347
Amp 0.368
Phase -17.1
PFD 0.0e+00
Delays (us)
SBD -0.004054
MBD -0.004559
Fringe rate (Hz)
-0.005952
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201b
Exper # 16383
Yr:day 2020:117
Start 140200.00
Stop 140759.94
FRT 140500.00
Corr/FF/build
2020:198:233535
2020:199:150948
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	13.8	-15.5	-35.1	-26.4	-33.2	-23.9	-6.9	-1.9	Phase	-17.1
	0.3	0.4	0.4	0.5	0.3	0.5	0.4	0.3	Ampl.	0.4
	254.5	255.5	255.6	256.1	256.4	256.0	256.1	256.9	Sbd box	256.0
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	
									Tracks	
Group delay (usec)(sbd)	6.19270274561E+03		Apriori delay (usec)		6.19270730455E+03		Resid mbdelay (usec)		-4.55894E-03	+/- 5.7E-05
Sband delay (usec)	6.19270325030E+03		Apriori clock (usec)		-9.1554356E+00		Resid sbdelay (usec)		-4.05425E-03	+/- 4.5E-04
Phase delay (usec)	6.19270730400E+03		Apriori clockrate (us/s)		2.8711340E-07		Resid phdelay (usec)		-5.52535E-07	+/- 1.9E-07
Delay rate (us/s)	5.27321881241E-01		Apriori rate (us/s)		5.27321950340E-01		Resid rate (us/s)		-6.90993E-08	+/- 9.4E-10
Total phase (deg)	59.9		Apriori accel (us/s/s)		-4.91714842398E-05		Resid phase (deg)		-17.1	+/- 6.0

RMS Theor. Amplitude 0.368 +/- 0.019
 ph/seg (deg) 28.6 14.5 Search (2048X32) 0.360 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 25.5 25.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.3 8.5 Inc. seg. avg. 0.396 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 19.3 14.9 Inc. frq. avg. 0.376 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 324.7 el 64.1 pa 134.4 p: az 296.8 el 37.9 pa 73.4 u,v (fr/asec) -4005.227 -4699.670 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0090/mp..18UIFP Output file: /Exps/c201b/v1/1234/No0090/mp.W.91.18UIFP