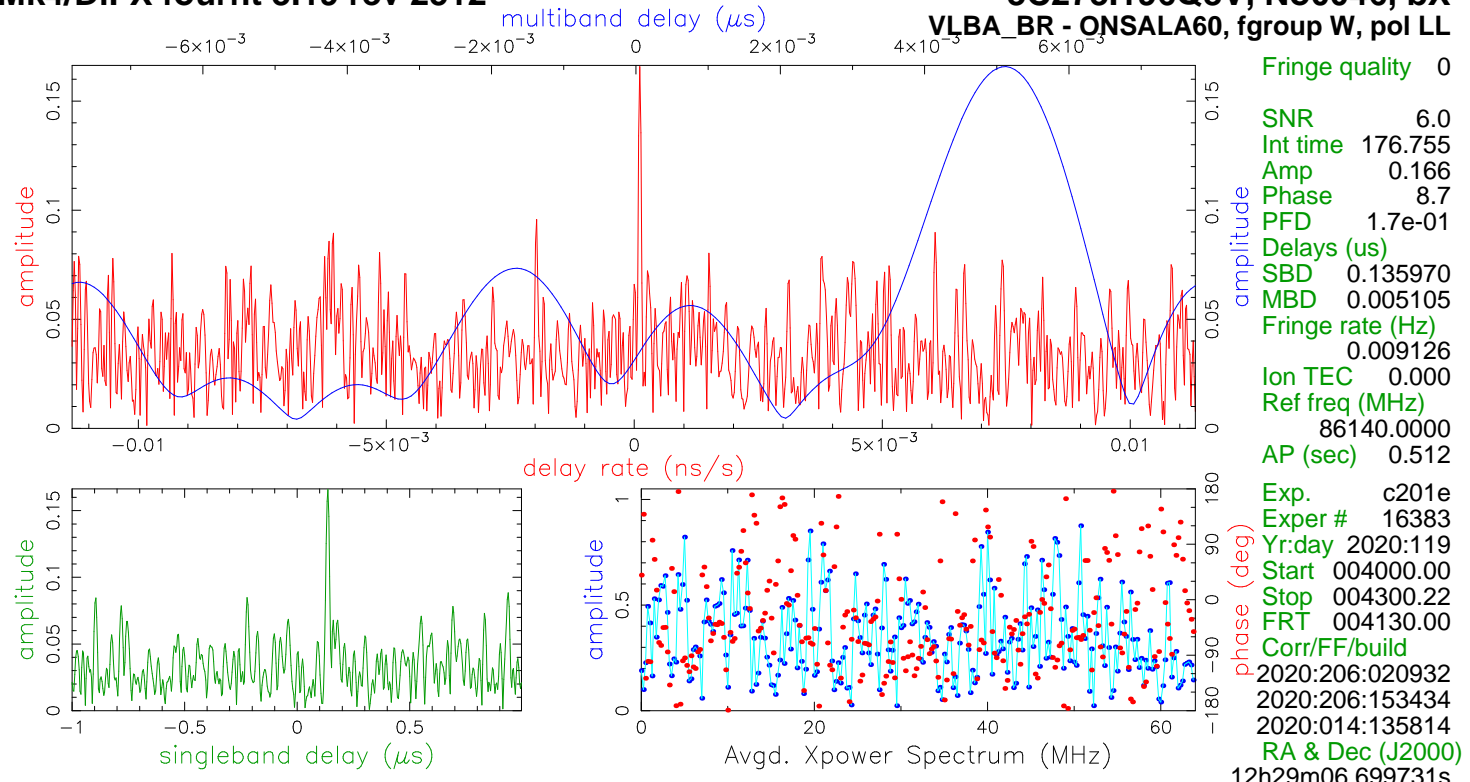
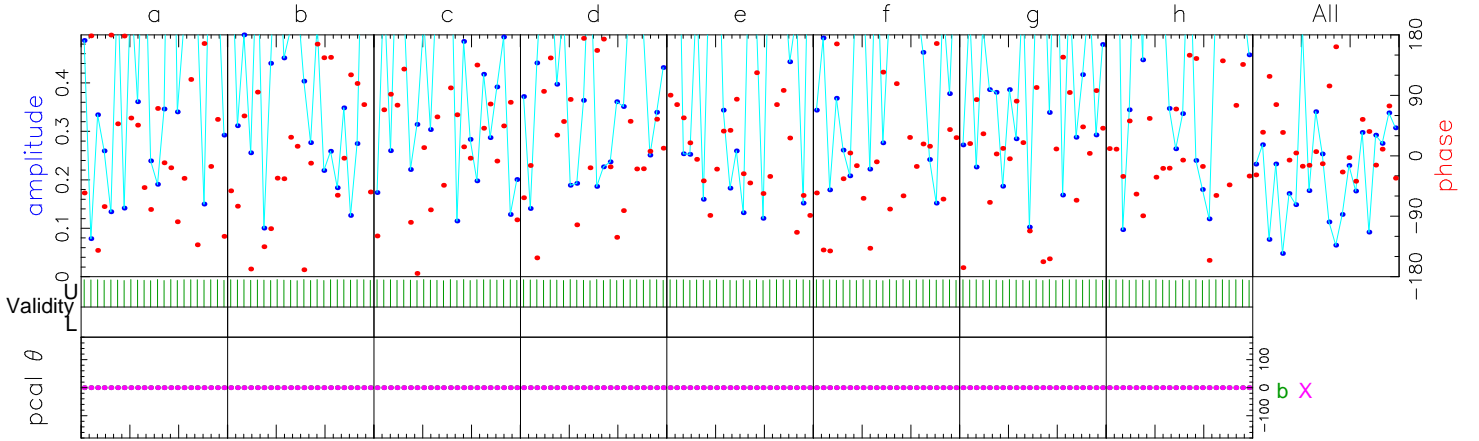


Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, bX
VLBA_BR - ONSALA60, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



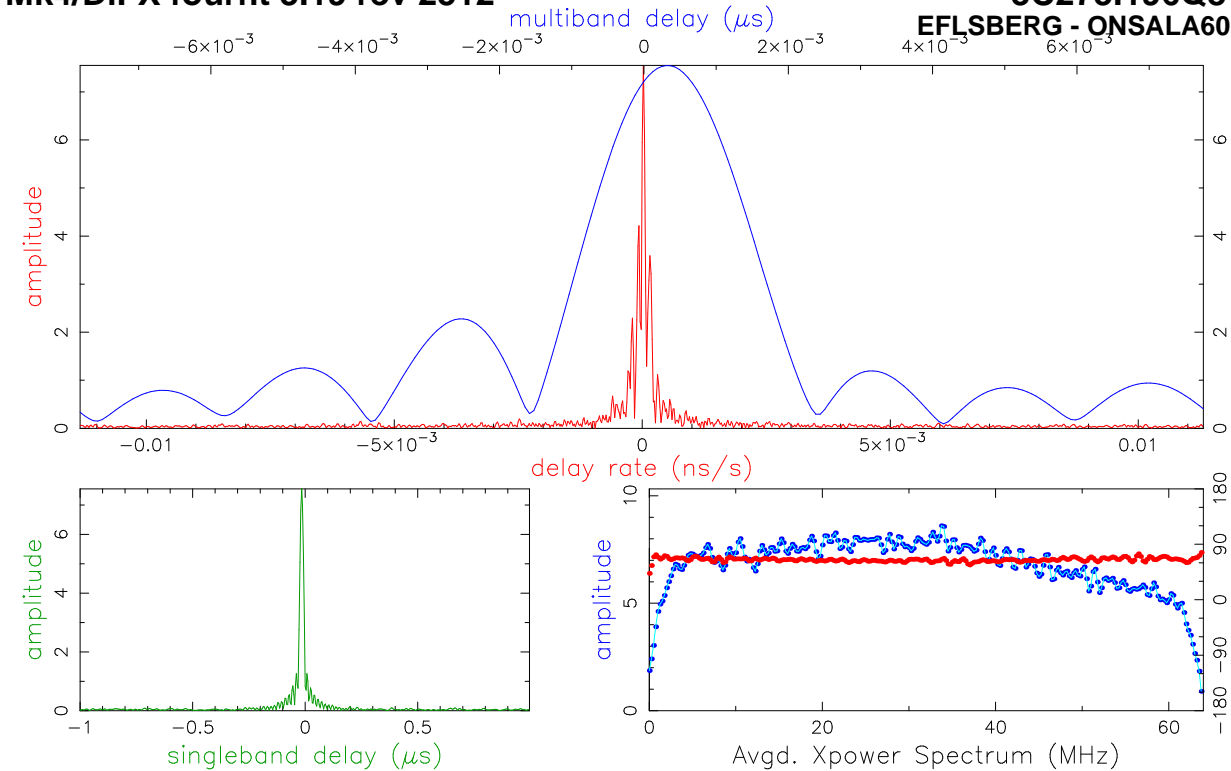
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		291.8
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-4.93411378097E+03	Apriori delay (usec)	-4.93424388606E+03	Resid mbdelay (usec)	5.10509E-03	+/-	1.8E-04
Sband delay (usec)	-4.93410791656E+03	Apriori clock (usec)	-4.2253475E+01	Resid sbdelay (usec)	1.35970E-01	+/-	1.4E-03
Phase delay (usec)	-4.93424388578E+03	Apriori clockrate (us/s)	-5.6999999E-07	Resid phdelay (usec)	2.79691E-07	+/-	6.1E-07
Delay rate (us/s)	1.67511476123E+00	Apriori rate (us/s)	1.67511465529E+00	Resid rate (us/s)	1.05946E-07	+/-	5.9E-09
Total phase (deg)	-115.7	Apriori accel (us/s/s)	2.56287745958E-05	Resid phase (deg)	8.7	+/-	18.9

ph/seg (deg)	54.9	Theor.	44.4	Amplitude	0.166 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.8	Search (1024X32)	0.160	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	25.2	Inc. seg. avg.	0.167	Inc. frq. avg.	0.162	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	30.3	Inc. frq. avg.	0.162			Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

b: az 95.6 el 7.6 pa -41.7 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -9586.120 -794.581 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/bX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/bX.W.22.196Q8V

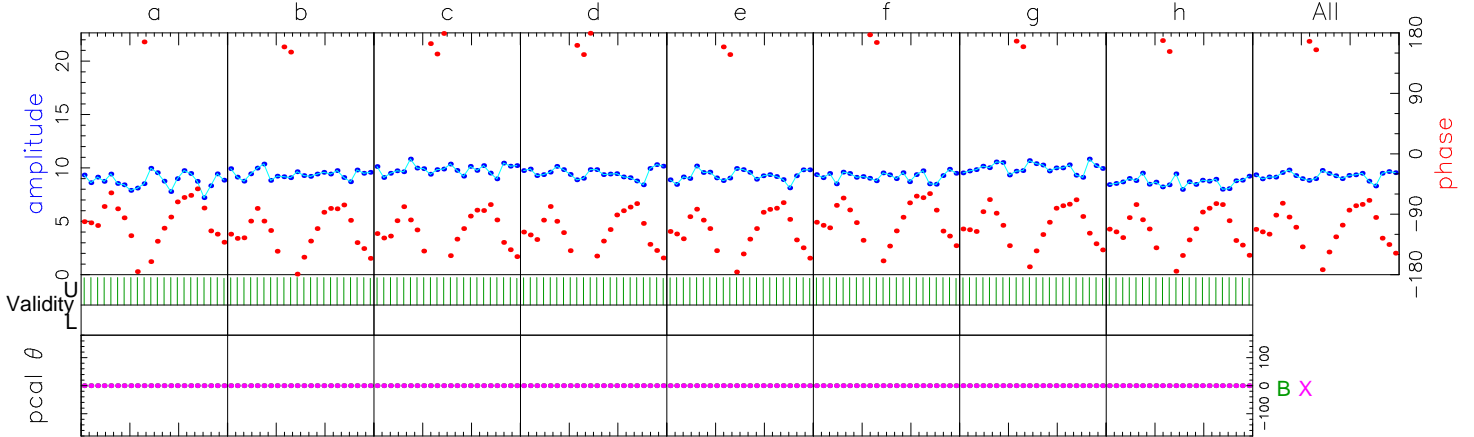


Fringe quality 6

SNR 277.0
Int time 179.931
Amp 7.551
Phase -116.7
PFD 0.0e+00
Delays (us)
SBD -0.015404
MBD 0.000332
Fringe rate (Hz) 0.000969
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153434
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



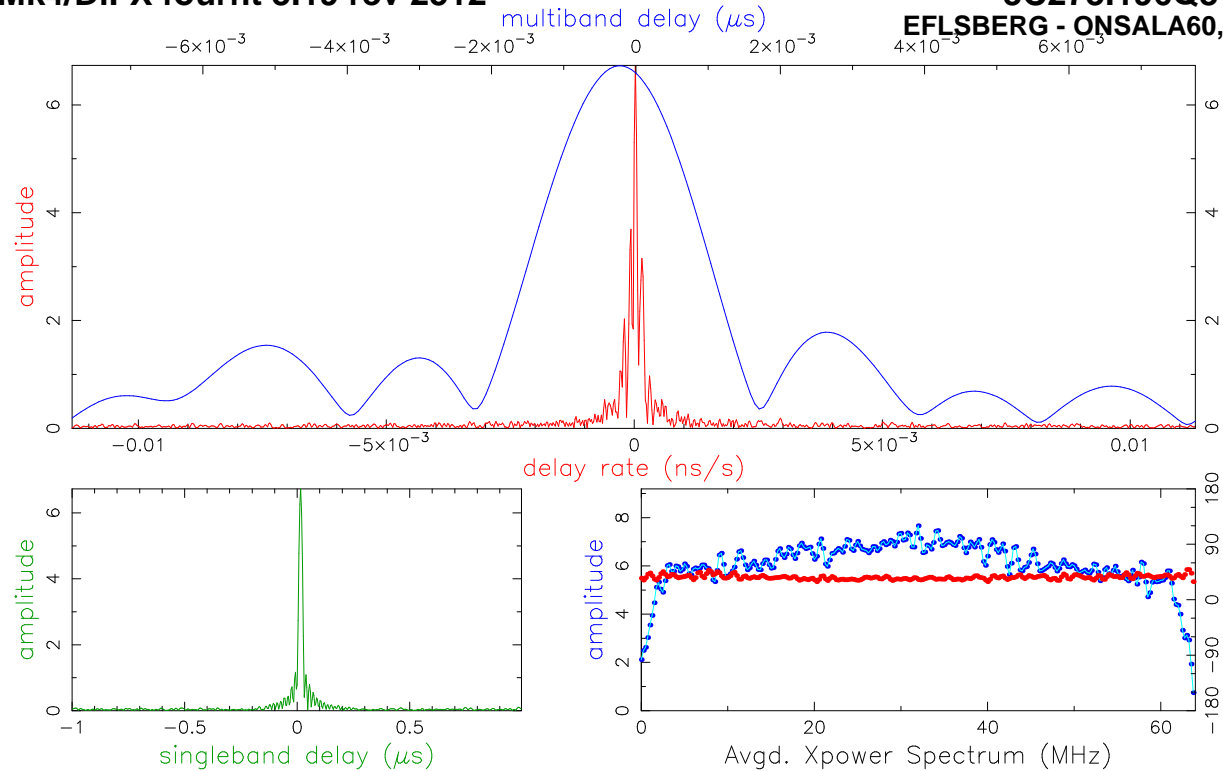
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-102.8	-122.6	-122.7	-123.7	-121.2	-106.3	-113.7	-119.4	Phase	-116.7
	7.2	7.6	8.1	7.7	7.5	7.5	8.2	7.1	Ampl.	7.6
	253.1	252.5	253.3	253.0	253.3	253.0	253.1	252.6	Sbd box	253.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.10779122896E+03	Apriori delay (usec)	2.10780652223E+03	Resid mbdelay (usec)	3.31737E-04	+/-	3.9E-06
Sband delay (usec)	2.10779111798E+03	Apriori clock (usec)	-2.7818235E+01	Resid sbdelay (usec)	-1.54042E-02	+/-	3.1E-05
Phase delay (usec)	2.10780651847E+03	Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	-3.76258E-06	+/-	1.3E-08
Delay rate (us/s)	-5.97915437813E-02	Apriori rate (us/s)	-5.97915550275E-02	Resid rate (us/s)	1.12462E-08	+/-	1.3E-10
Total phase (deg)	180.2	Apriori accel (us/s/s)	-1.16259476494E-05	Resid phase (deg)	-116.7	+/-	0.4

ph/seg (deg)	RMS 36.8	Theor. 1.0	Amplitude 7.551 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	23.1	1.7	Search (1024X32) 7.084	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	8.8	0.6	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	4.7	1.0	Inc. seg. avg. 9.255	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 7.613	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

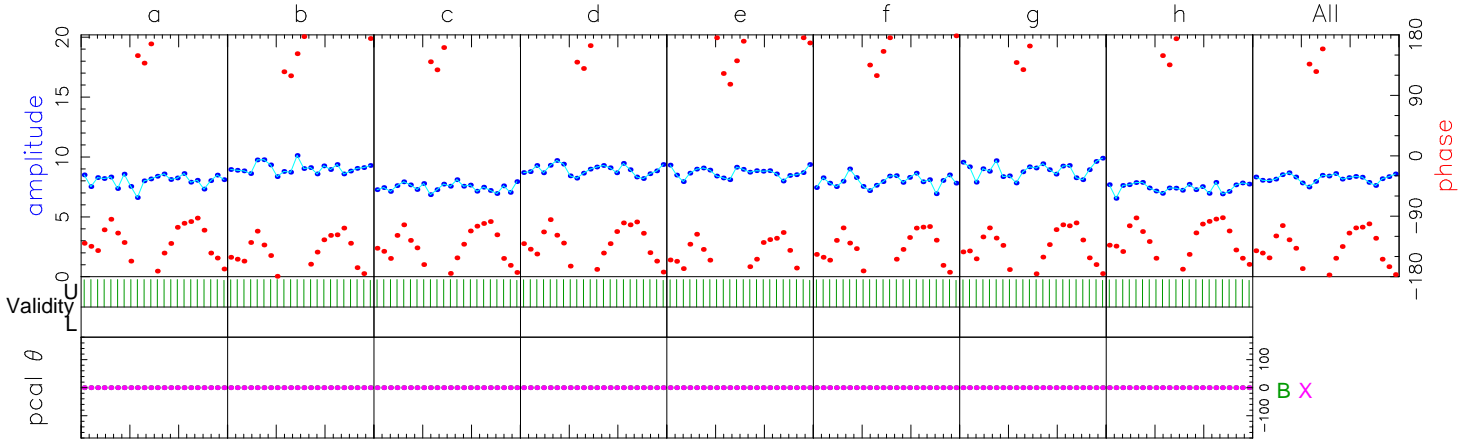
B: az 234.2 el 28.0 pa 31.1 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) 336.518 -656.839 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BX.W.23.196Q8V



Fringe quality 6
 SNR 247.0
 Int time 179.931
 Amp 6.732
 Phase -145.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.015186
 MBD -0.000236
 Fringe rate (Hz)
 0.000976
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153436
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



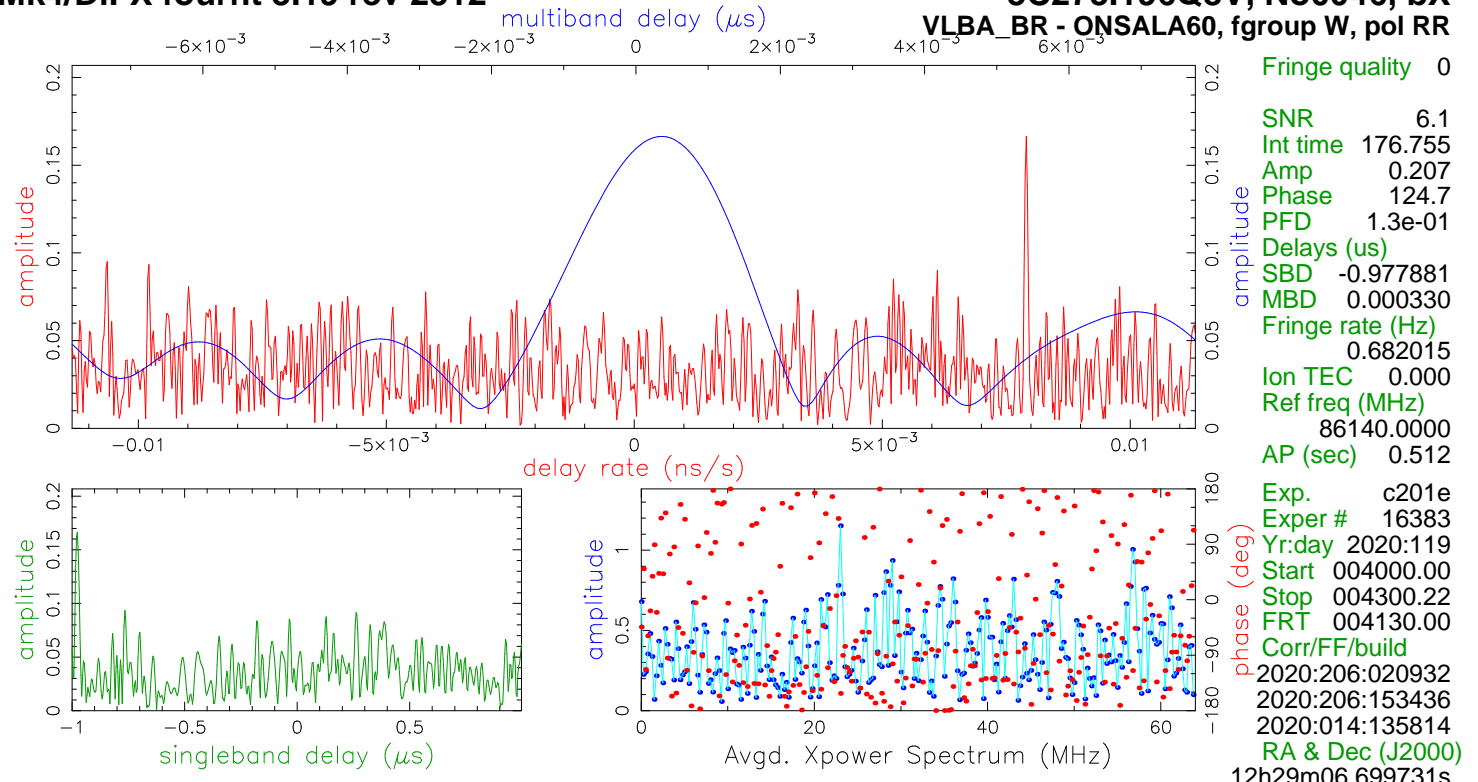
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-136.6	-155.2	-143.8	-139.6	-161.3	-150.0	-144.7	-134.1	Phase	-145.9
	6.6	7.4	6.1	7.3	7.1	6.5	7.3	6.1	Ampl.	6.8
	260.4	260.7	261.3	260.7	260.8	261.3	261.2	260.4	Sbd box	260.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.10782191131E+03		Apriori delay (usec)		2.10780652223E+03		Resid mbdelay (usec)		-2.35919E-04	+/- 4.4E-06
Sband delay (usec)	2.10782170873E+03		Apriori clock (usec)		-2.7818235E+01		Resid sbdelay (usec)		1.51865E-02	+/- 3.5E-05
Phase delay (usec)	2.10780651752E+03		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-4.70588E-06	+/- 1.5E-08
Delay rate (us/s)	-5.97915437019E-02		Apriori rate (us/s)		-5.97915550275E-02		Resid rate (us/s)		1.13256E-08	+/- 1.4E-10
Total phase (deg)	151.0		Apriori accel (us/s/s)		-1.16259476494E-05		Resid phase (deg)		-145.9	+/- 0.5

	RMS	Theor.	Amplitude	6.732 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	36.6	1.1	Search (1024X32)	6.256	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	22.4	1.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	10.1	0.7	Inc. seg. avg.	8.207	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	7.6	1.1	Inc. frq. avg.	6.803	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

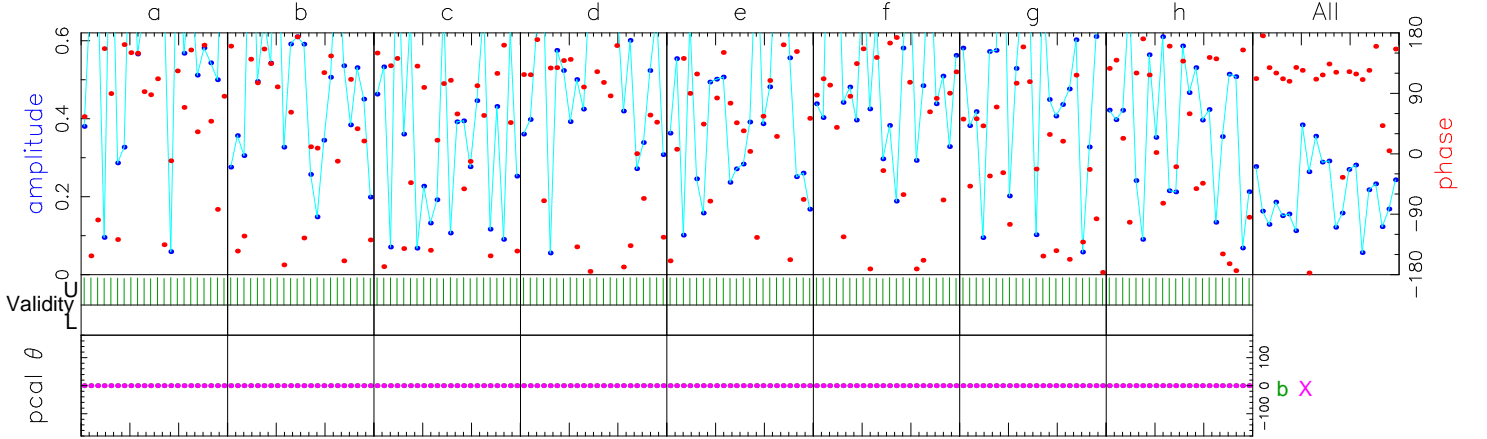
B: az 234.2 el 28.0 pa 31.1 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) 336.518 -656.839 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BX.W.32.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, bX
VLBA_BR - ONSALA60, fgroup W, pol RR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

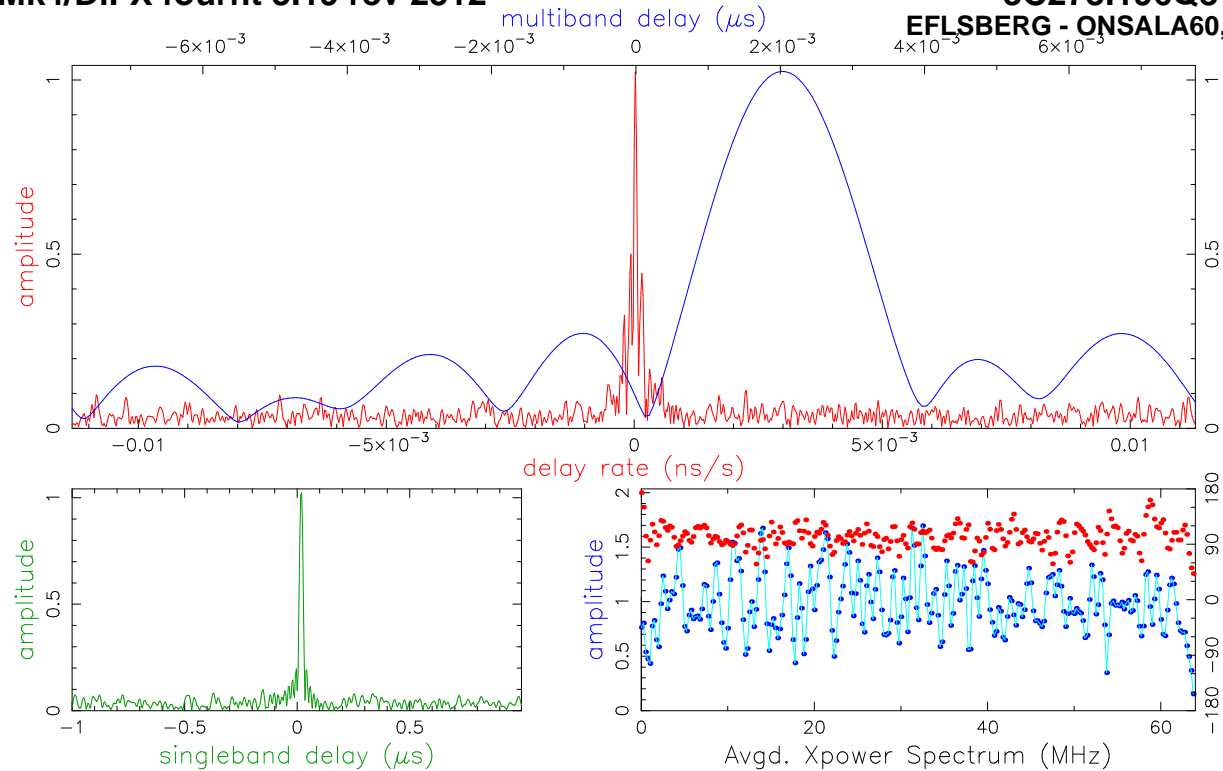


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	124.5	132.2	107.9	136.9	98.3	114.9	106.8	176.5	Phase	124.7
	0.4	0.3	0.2	0.3	0.1	0.3	0.0	0.1	Ampl.	0.2
	371.9	370.8	370.0	232.0	34.0	142.4	168.6	178.9	Sbd box	6.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.93522793103E+03		Apriori delay (usec)		-4.93424388606E+03		Resid mbdelay (usec)		3.30037E-04	+/- 1.8E-04
Sband delay (usec)	-4.93522176731E+03		Apriori clock (usec)		-4.2253475E+01		Resid sbdelay (usec)		-9.77881E-01	+/- 1.4E-03
Phase delay (usec)	-4.93424388204E+03		Apriori clockrate (us/s)		-5.6999999E-07		Resid phdelay (usec)		4.02066E-06	+/- 6.1E-07
Delay rate (us/s)	1.67512257280E+00		Apriori rate (us/s)		1.67511465529E+00		Resid rate (us/s)		7.91752E-06	+/- 5.8E-09
Total phase (deg)			Apriori accel (us/s/s)		2.56287745958E-05		Resid phase (deg)		124.7	+/- 18.8

	RMS	Theor.	Amplitude	0.207 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	50.8	44.0	Search (1024X32)	0.159	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	55.6	76.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	26.7	26.6	Inc. seg. avg.	0.201	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	55.0	46.4	Inc. frq. avg.	0.193	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

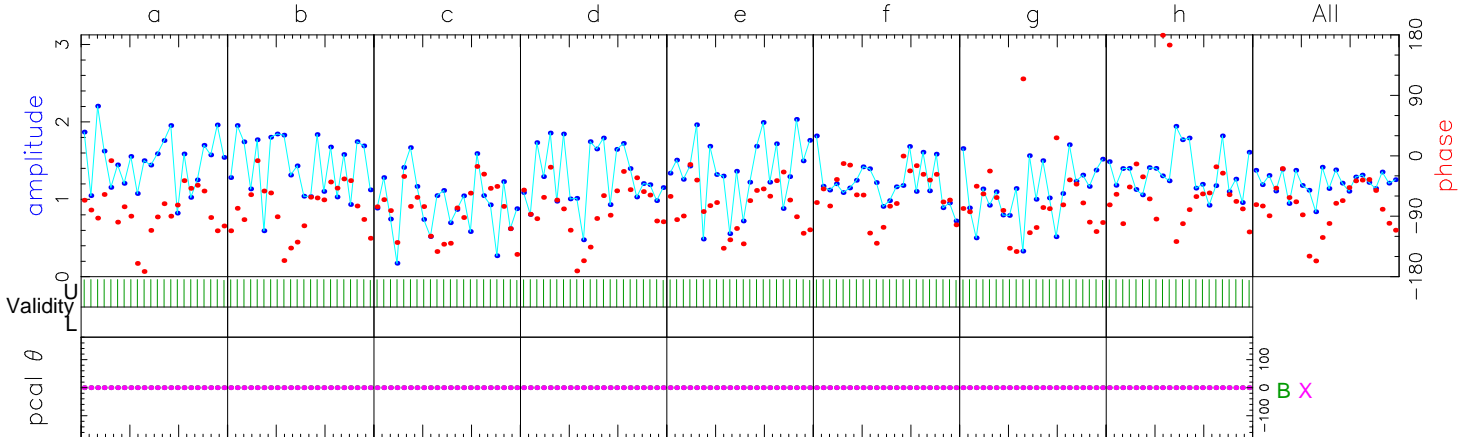
b: az 95.6 el 7.6 pa -41.7 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -9586.120 -794.581 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/bX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/bX.W.33.196Q8V



Fringe quality 8
SNR 38.2
Int time 179.931
Amp 1.042
Phase -74.1
PFD 0.0e+00
Delays (us)
SBD 0.017807
MBD 0.001968
Fringe rate (Hz) 0.001041
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153438
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



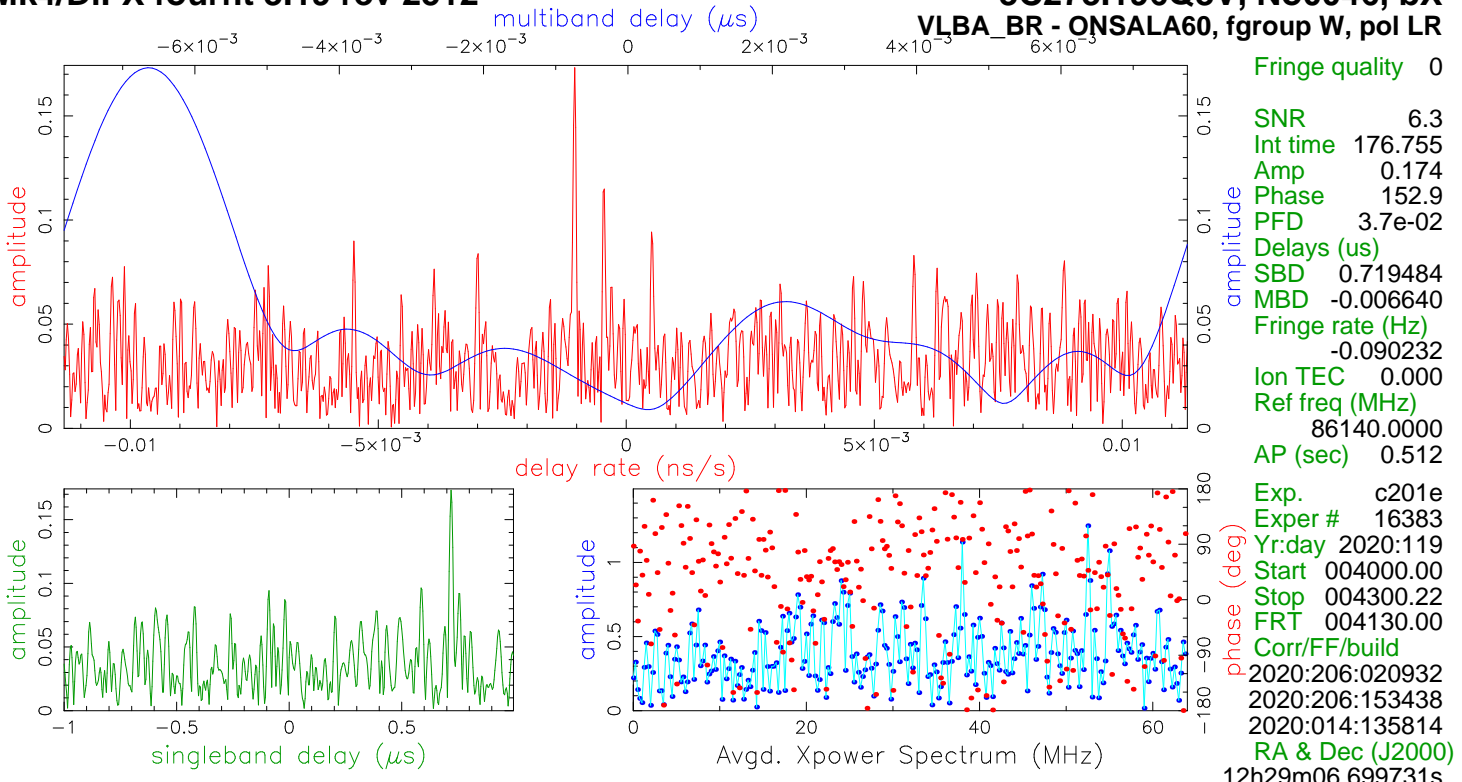
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-82.9	-77.9	-75.8	-72.5	-73.6	-53.0	-79.9	-75.0	Phase	-74.1
	1.3	1.1	0.7	1.1	1.2	1.0	0.9	1.0	Ampl.	1.0
	261.7	261.3	261.2	261.8	261.7	262.0	261.0	261.1	Sbd box	261.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.10782411487E+03	Apriori delay (usec)	2.10780652223E+03	Resid mbdelay (usec)	1.96764E-03	+/-	2.8E-05
Sband delay (usec)	2.10782432948E+03	Apriori clock (usec)	-2.7818235E+01	Resid sbdelay (usec)	1.78073E-02	+/-	2.3E-04
Phase delay (usec)	2.10780651984E+03	Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	-2.38843E-06	+/-	9.7E-08
Delay rate (us/s)	-5.97915429480E-02	Apriori rate (us/s)	-5.97915550275E-02	Resid rate (us/s)	1.20795E-08	+/-	9.3E-10
Total phase (deg)	222.8	Apriori accel (us/s/s)	-1.16259476494E-05	Resid phase (deg)	-74.1	+/-	3.0

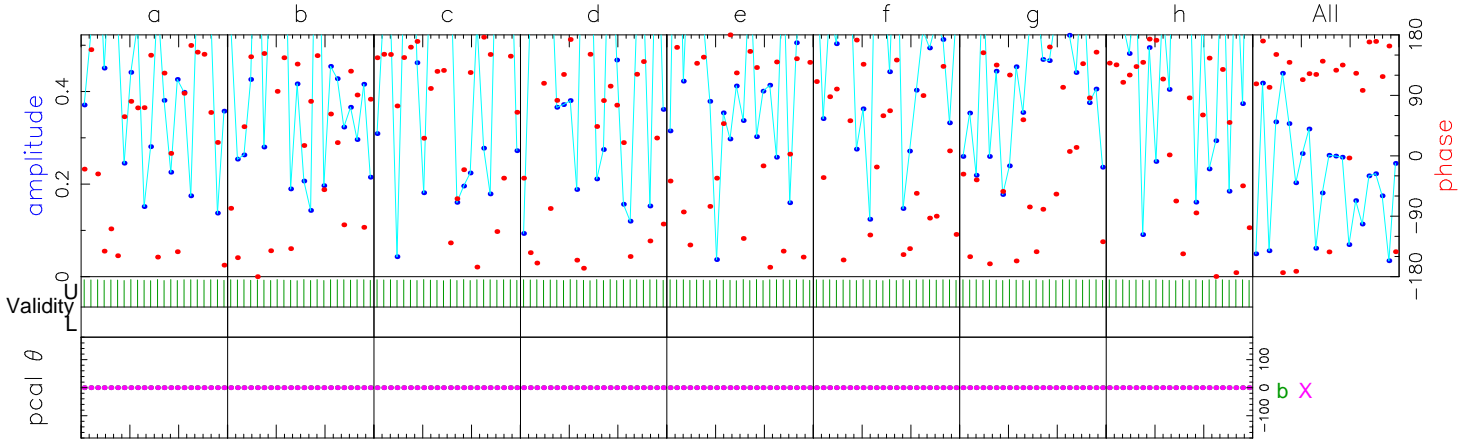
ph/seg (deg)	RMS 35.3	Theor. 7.0	Amplitude Search (1024X32)	0.977	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	22.0	12.3	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	9.8	4.2	Inc. seg. avg.	1.212	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	14.5	7.4	Inc. frq. avg.	1.031	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, bX
VLBA_BR - ONSALA60, fgroup W, pol LR

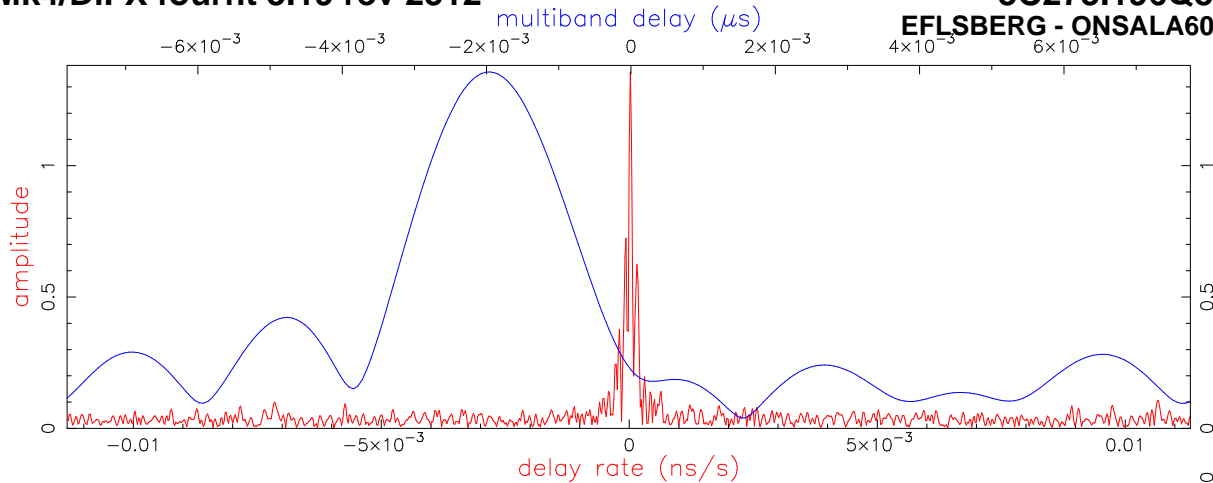


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



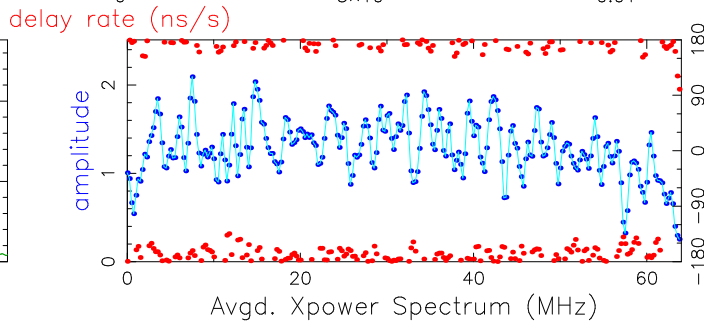
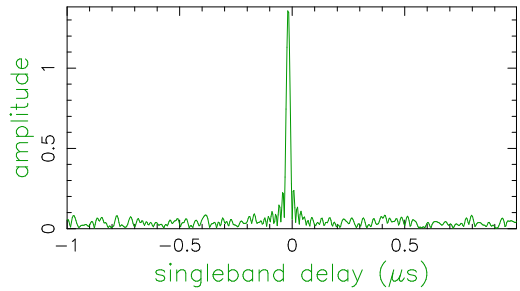
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	153.3	147.6	157.1	141.4	175.2	106.1	171.7	148.6	Phase	152.9
	0.1	0.2	0.3	0.2	0.3	0.1	0.1	0.2	Ampl.	0.2
	353.3	357.1	439.5	495.0	216.9	511.4	406.0	240.3	Sbd box	441.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.93353177590E+03		Apriori delay (usec)		-4.93424388606E+03		Resid mbdelay (usec)		-6.63983E-03	+/- 1.7E-04
Sband delay (usec)	-4.93352440181E+03		Apriori clock (usec)		-4.2253475E+01		Resid sbdelay (usec)		7.19484E-01	+/- 1.4E-03
Phase delay (usec)	-4.93424388113E+03		Apriori clockrate (us/s)		-5.6999999E-07		Resid phdelay (usec)		4.93214E-06	+/- 5.9E-07
Delay rate (us/s)	1.67511360779E+00		Apriori rate (us/s)		1.67511465529E+00		Resid rate (us/s)		-1.04750E-06	+/- 5.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.56287745958E-05		Resid phase (deg)		152.9	+/- 18.2

ph/seg (deg) 47.9 42.6 Search (1024X32) 0.168 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.5 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) 23.2 25.7 Inc. seg. avg. 0.167 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.6 44.8 Inc. frq. avg. 0.165 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 95.6 el 7.6 pa -41.7 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -9586.120 -794.581 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/bX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/bX.W.44.196Q8V



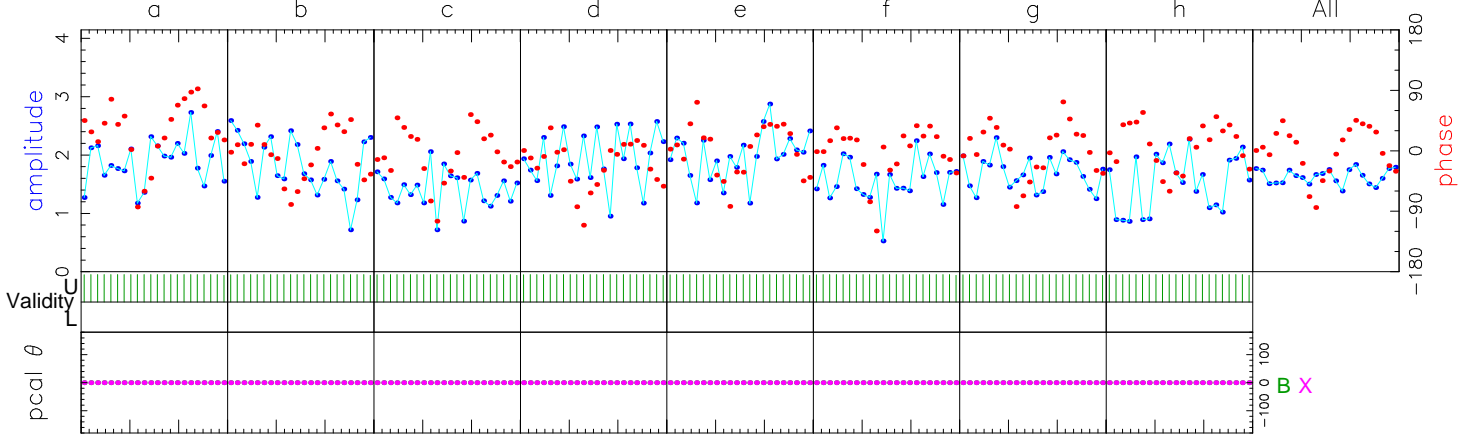
Fringe quality 5

SNR 50.7
Int time 179.931
Amp 1.382
Phase 1.2
PFD 0.0e+00
Delays (us)
SBD -0.017744
MBD -0.001916
Fringe rate (Hz)
0.000992
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c201e
Yr:day 16383
Start 2020:206:020119
Stop 2020:206:004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153439
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	2.10778898118E+03	Apriori delay (usec)	2.10780652223E+03	Resid mbdelay (usec)	-1.91604E-03	+/-	2.1E-05
Sband delay (usec)	2.10778877798E+03	Apriori clock (usec)	-2.7818235E+01	Resid sbdelay (usec)	-1.77443E-02	+/-	1.7E-04
Phase delay (usec)	2.10780652227E+03	Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	3.74405E-08	+/-	7.3E-08
Delay rate (us/s)	-5.97915435148E-02	Apriori rate (us/s)	-5.97915550275E-02	Resid rate (us/s)	1.15126E-08	+/-	7.0E-10
Total phase (deg)	298.1	Apriori accel (us/s/s)	-1.16259476494E-05	Resid phase (deg)	1.2	+/-	2.3

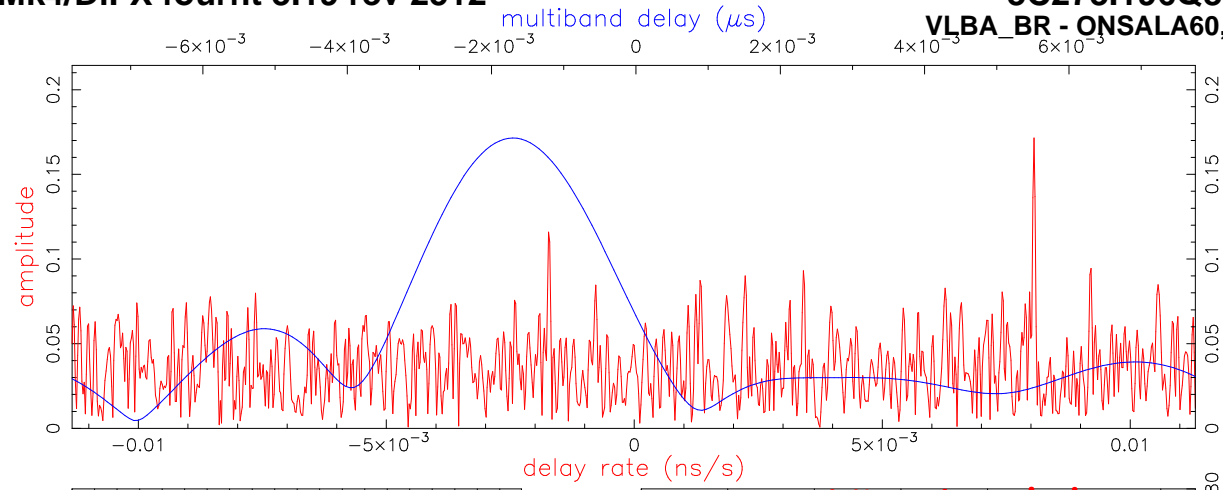
ph/seg (deg)	RMS 35.0	Theor. 5.3	Amplitude Search (1024X32)	1.293	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	20.3	9.3	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	17.6	3.2	Inc. seg. avg.	1.627	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	11.6	5.6	Inc. frq. avg.	1.405	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 234.2 el 28.0 pa 31.1 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) 336.518 -656.839 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/BX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/BX.W.53.196Q8V

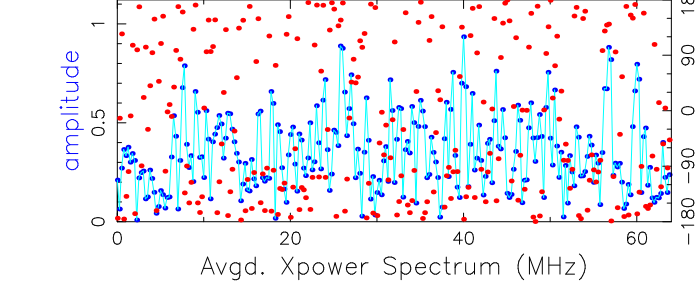
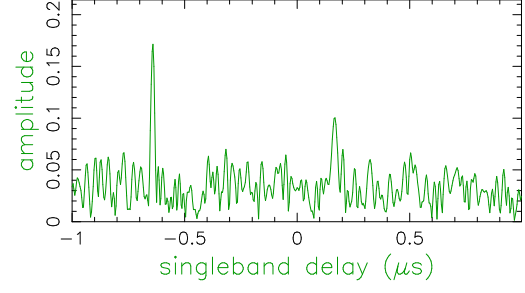
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, bX

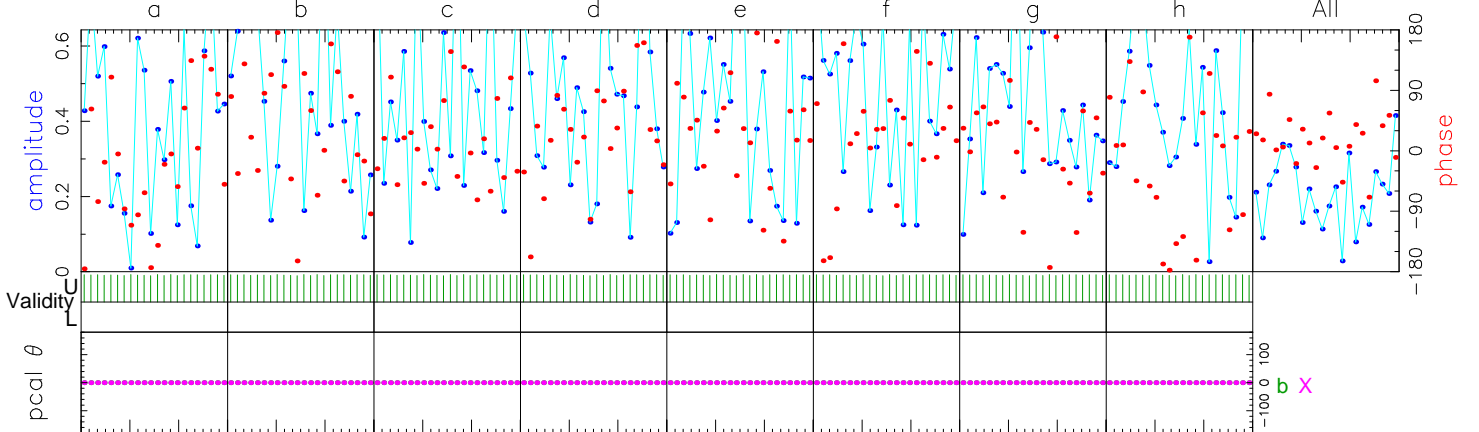
VLBA_BR - ONSALA60, fgroup W, pol RL



Fringe quality 0
 SNR 6.3
 Int time 176.755
 Amp 0.214
 Phase 20.3
 PFD 4.9e-02
 Delays (us)
 SBD -0.641583
 MBD -0.001714
 Fringe rate (Hz) 0.695529
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build 2020:206:020932
 2020:206:153440
 2020:014:135814
 RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

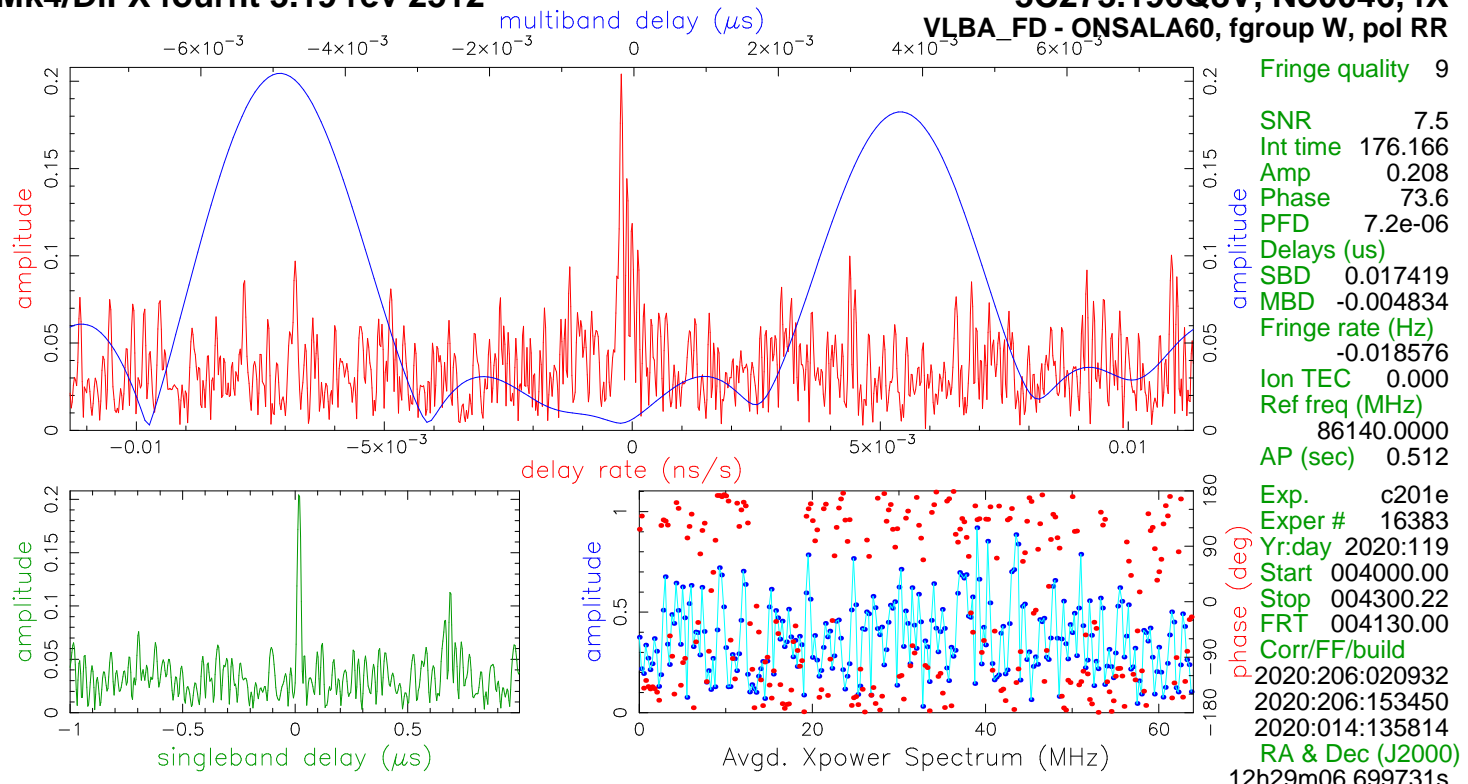


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

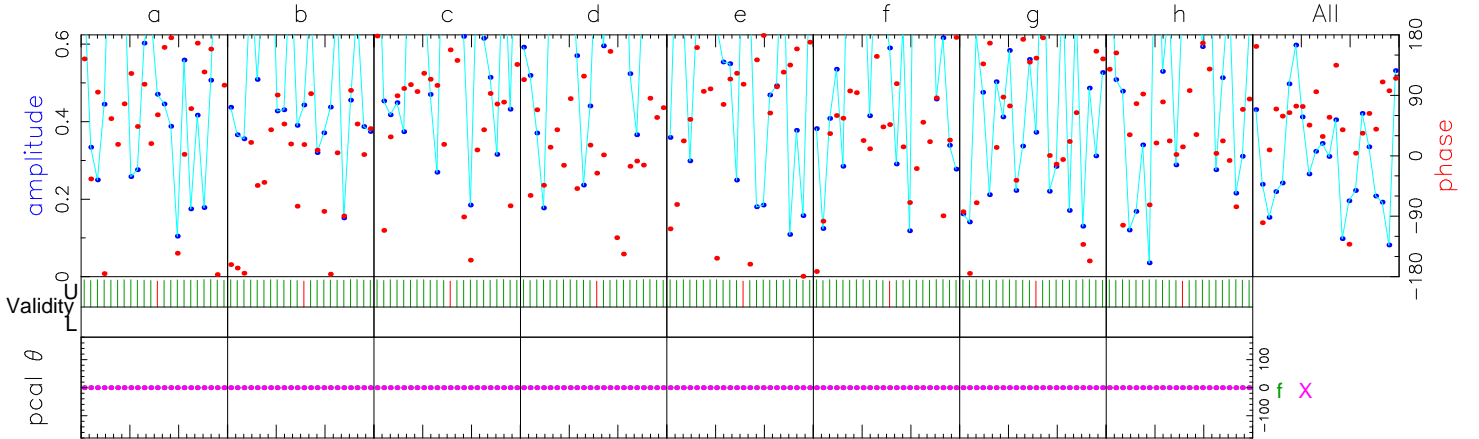


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	12.2	31.6	-7.2	42.7	31.1	29.8	16.4	-13.1		Phase 20.3
	0.1	0.2	0.3	0.3	0.2	0.3	0.3	0.1		Ampl. 0.2
	482.4	296.3	93.2	190.9	283.4	388.6	471.1	101.4		Sbd box 92.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
b	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
X	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
b	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
										Tracks
Group delay (usec)(sbd)	-4.93488622503E+03		Apriori delay (usec)		-4.93424388606E+03		Resid mbdelay (usec)		-1.71397E-03	+/- 1.7E-04
Sband delay (usec)	-4.93488546931E+03		Apriori clock (usec)		-4.2253475E+01		Resid sbdelay (usec)		-6.41583E-01	+/- 1.4E-03
Phase delay (usec)	-4.93424388541E+03		Apriori clockrate (us/s)		-5.6999999E-07		Resid phdelay (usec)		6.54223E-07	+/- 5.9E-07
Delay rate (us/s)	1.67512272968E+00		Apriori rate (us/s)		1.67511465529E+00		Resid rate (us/s)		8.07440E-06	+/- 5.7E-09
Total phase (deg)			Apriori accel (us/s/s)		2.56287745958E-05		Resid phase (deg)		20.3	+/- 18.3

ph/seg (deg) 38.8 42.9 Search (1024X32) 0.166 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.1 74.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.5 25.9 Inc. seg. avg. 0.204 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 46.3 45.1 Inc. frq. avg. 0.203 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 95.6 el 7.6 pa -41.7 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -9586.120 -794.581 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/bX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/bX.W.58.196Q8V

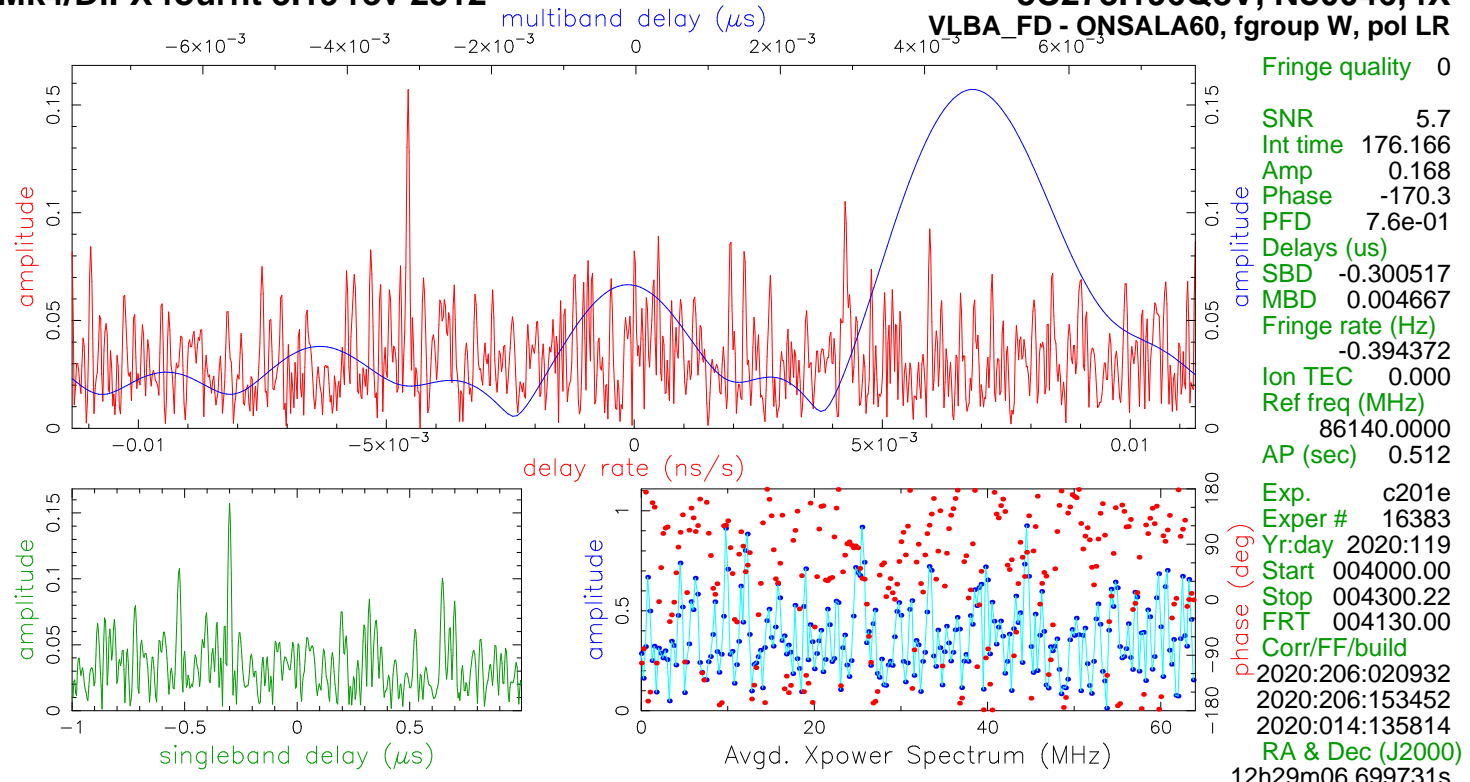


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

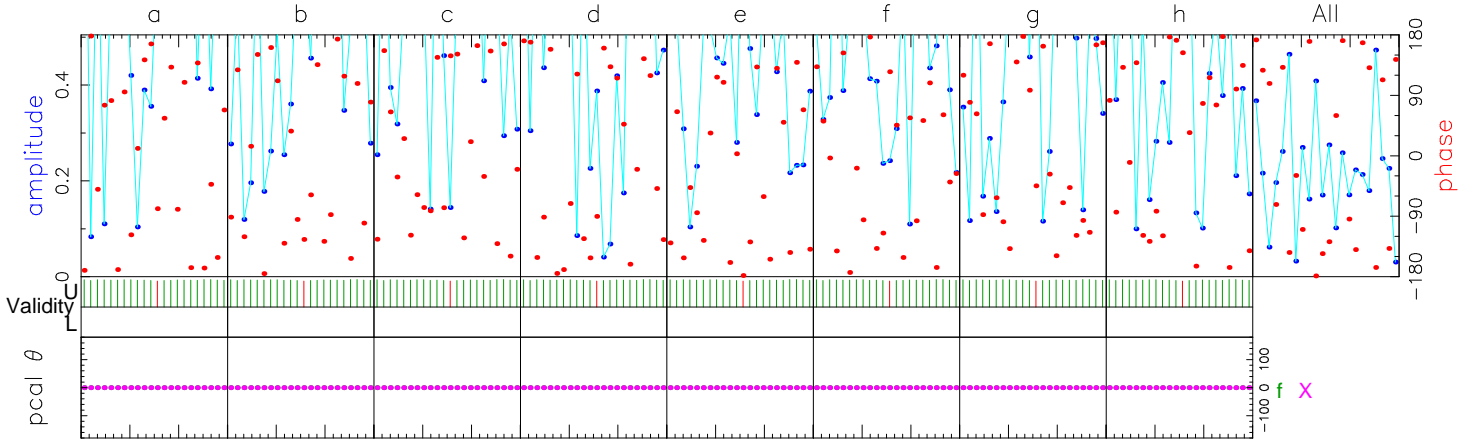


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	101.8	23.8	102.1	23.8	126.9	47.8	120.8	61.0	Phase	73.6
	0.3	0.2	0.3	0.2	0.3	0.4	0.1	0.3	Ampl.	0.2
	260.4	408.1	261.0	479.9	261.4	261.2	370.9	259.5	Sbd box	261.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.69854456020E+02		Apriori delay (usec)		3.69843664579E+02		Resid mbdelay (usec)		-4.83356E-03	+/- 1.4E-04
Sband delay (usec)	3.69861083579E+02		Apriori clock (usec)		-3.6916698E+01		Resid sbdelay (usec)		1.74190E-02	+/- 1.1E-03
Phase delay (usec)	3.69843666953E+02		Apriori clockrate (us/s)		-4.1900001E-07		Resid phdelay (usec)		2.37438E-06	+/- 4.9E-07
Delay rate (us/s)	1.85987984076E+00		Apriori rate (us/s)		1.85988005640E+00		Resid rate (us/s)		-2.15650E-07	+/- 4.7E-09
Total phase (deg)	169.7		Apriori accel (us/s/s)		-3.43512071145E-06		Resid phase (deg)		73.6	+/- 15.2

ph/seg (deg) 62.6 35.6 Search (1024X32) 0.202 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 80.2 62.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 45.6 21.5 Inc. seg. avg. 0.256 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.2 37.5 Inc. frq. avg. 0.240 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 101.6 el 22.3 pa -57.5 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -10660.407 -2952.827 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/fX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/fX.W.117.196Q8V

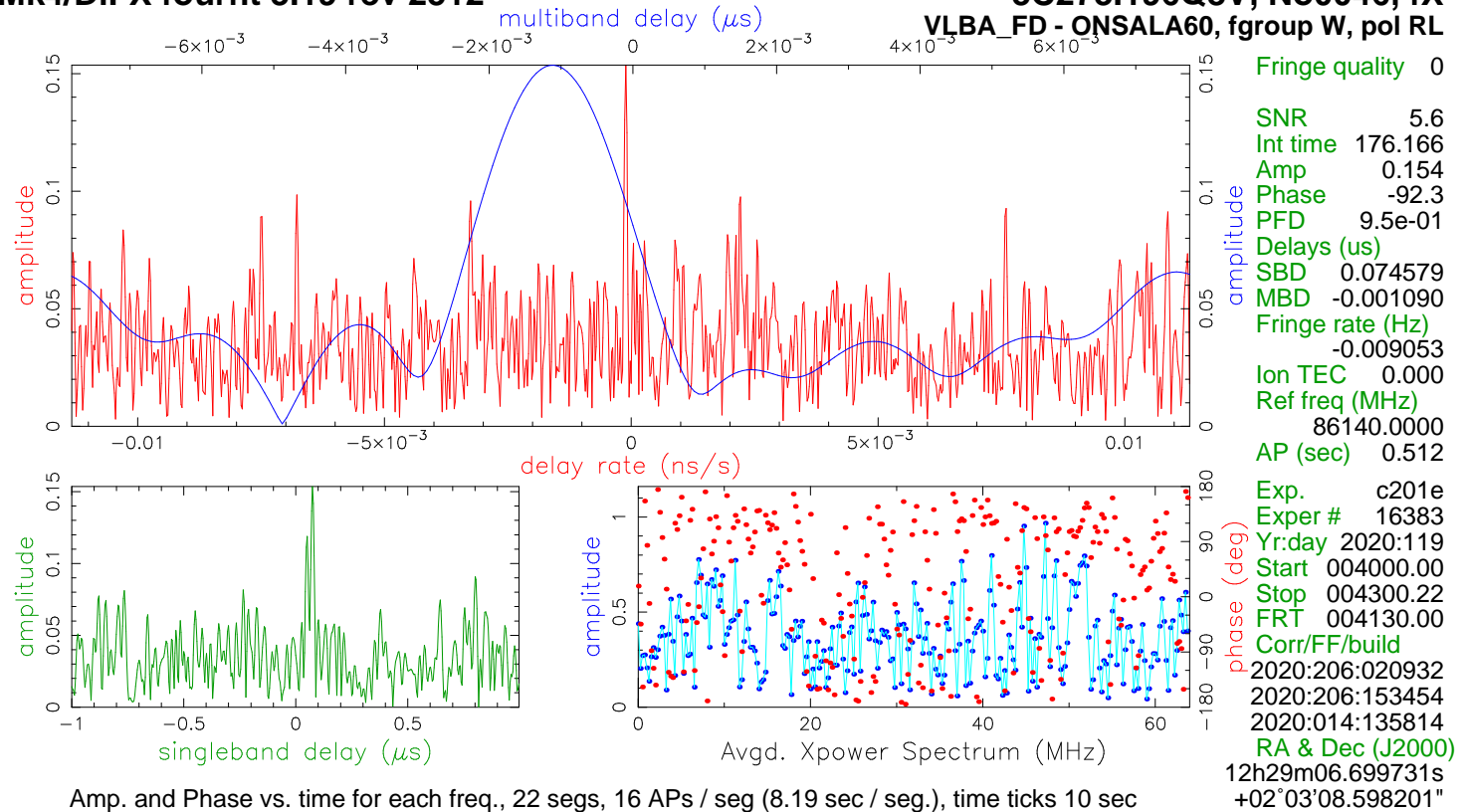


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

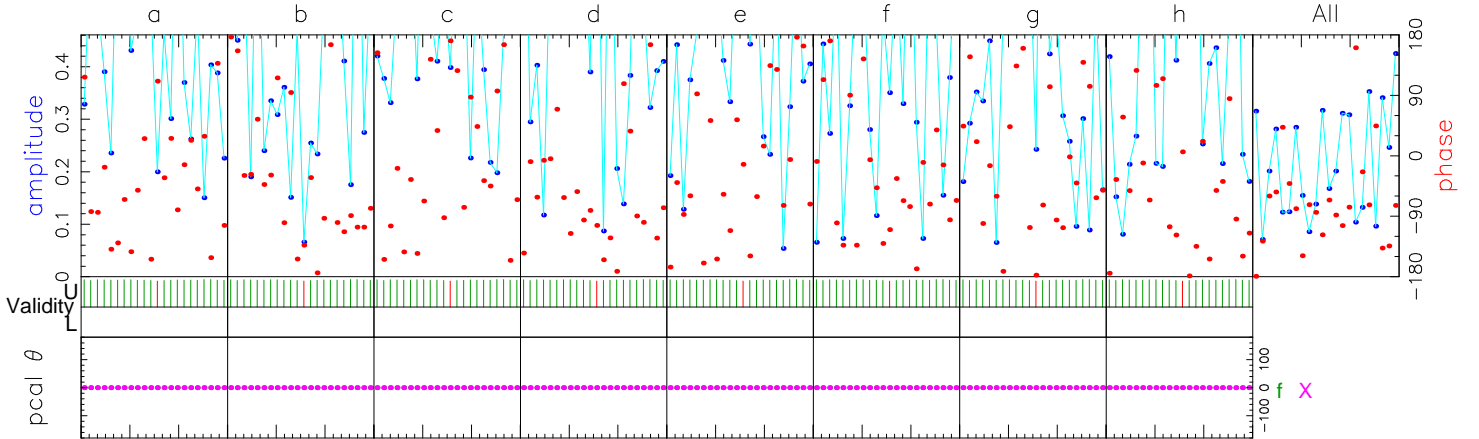


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		3.69535831457E+02			3.69843664579E+02				4.66688E-03	+/- 1.9E-04
Sband delay (usec)		3.69543147079E+02			-3.6916698E+01				-3.00517E-01	+/- 1.5E-03
Phase delay (usec)		3.69843659086E+02			-4.1900001E-07				-5.49273E-06	+/- 6.5E-07
Delay rate (us/s)		1.85987547814E+00			1.85988005640E+00				-4.57826E-06	+/- 6.2E-09
Total phase (deg)			-74.3		-3.43512071145E-06				-170.3	+/- 20.1
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000							
Bits/sample:	2x2		SampCntNorm: enabled mb window (us) -0.008 0.008							
Sample rate (MSamp/s):	128		dr window (ns/s) -0.011 0.011							
Data rate (Mb/s):	2048		ion window (TEC) 0.00 0.00							
nlags:	256		t_cohere infinite							

ph/seg (deg) 63.3 47.1 Search (1024X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 88.1 82.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.5 28.4 Inc. seg. avg. 0.182 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.1 49.6 Inc. frq. avg. 0.160 Sample rate (MSamp/s): 128 dr window (ns/s) -0.011 0.011
 f: az 101.6 el 22.3 pa -57.5 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -10660.407 -2952.827 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/fX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/fX.W.129.196Q8V simultaneous interpolator

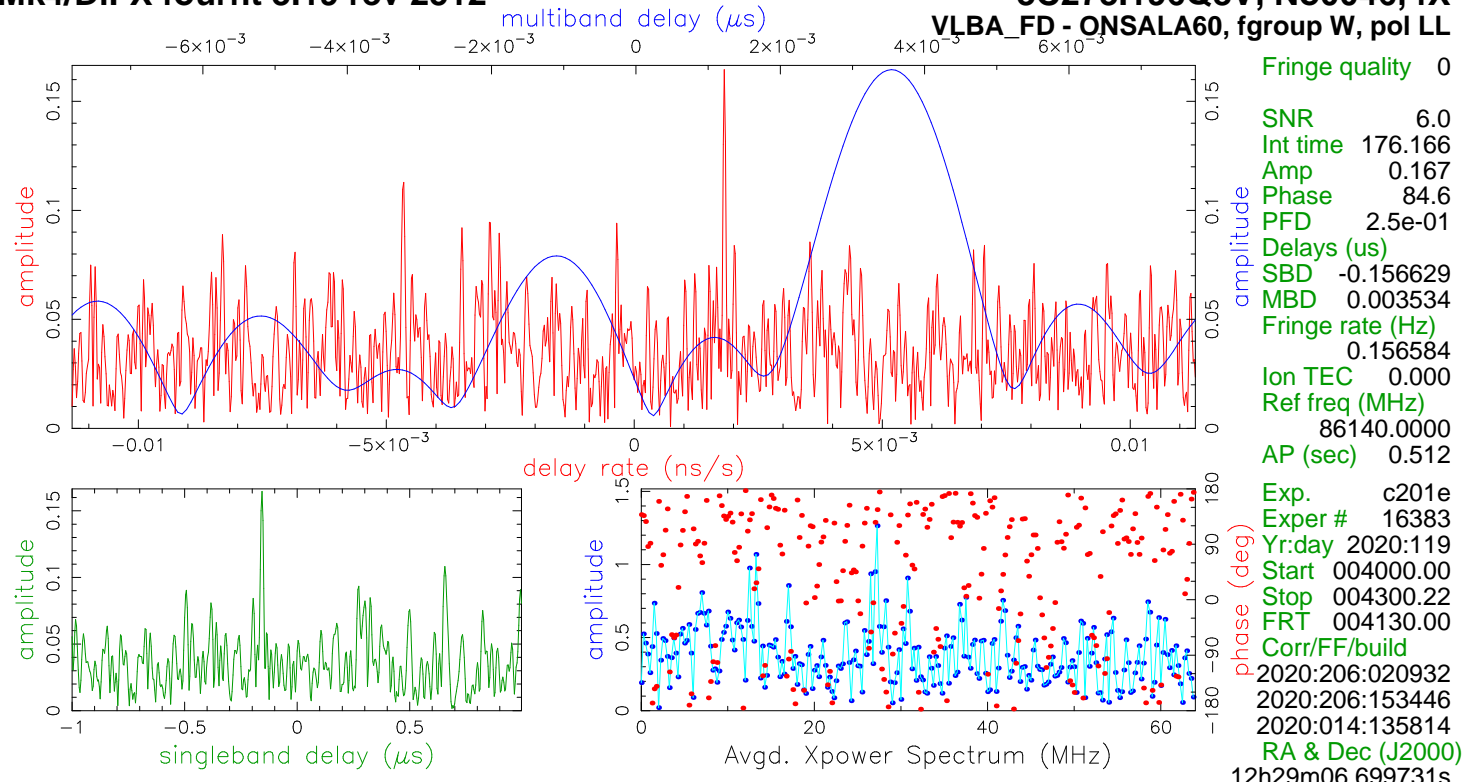


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

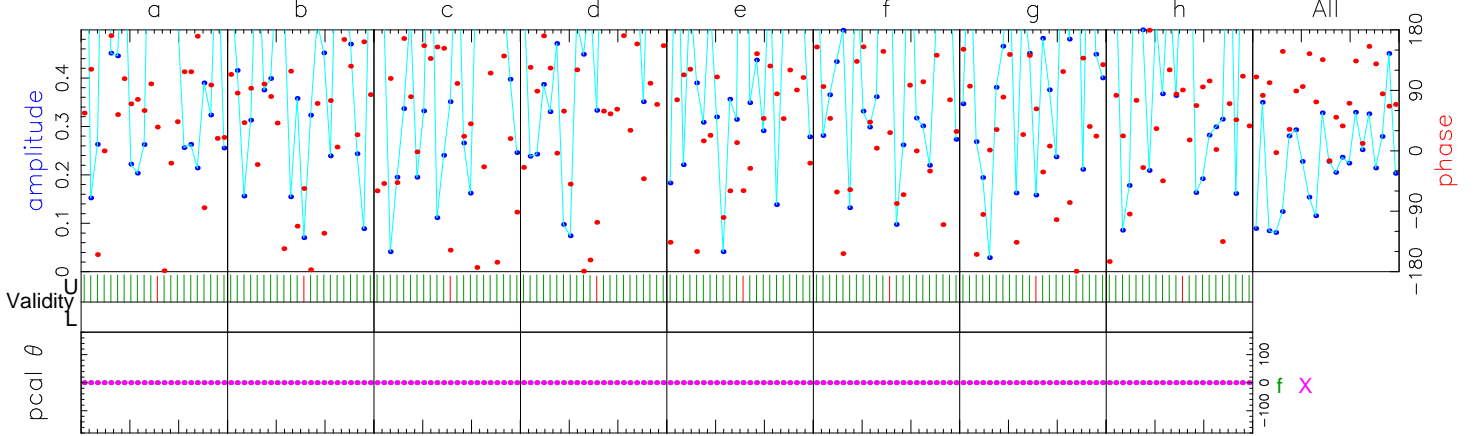


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-72.5	-111.5	-99.4	-93.1	-75.4	-88.9	-98.1	-93.2	Phase	-92.3
	0.2	0.2	0.1	0.3	0.0	0.2	0.1	0.2	Ampl.	0.1
	273.7	283.3	107.1	275.7	236.1	264.0	38.1	151.2	Sbd box	276.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		3.69920699174E+02		Apriori delay (usec)	3.69843664579E+02		Resid mbdelay (usec)	-1.09040E-03	+/-	1.9E-04
Sband delay (usec)		3.69918244079E+02		Apriori clock (usec)	-3.6916698E+01		Resid sbdelay (usec)	7.45795E-02	+/-	1.5E-03
Phase delay (usec)		3.69843661601E+02		Apriori clockrate (us/s)	-4.1900001E-07		Resid phdelay (usec)	-2.97760E-06	+/-	6.6E-07
Delay rate (us/s)		1.85987995131E+00		Apriori rate (us/s)	1.85988005640E+00		Resid rate (us/s)	-1.05096E-07	+/-	6.4E-09
Total phase (deg)			3.7	Apriori accel (us/s/s)	-3.43512071145E-06		Resid phase (deg)	-92.3	+/-	20.5

	RMS	Theor.	Amplitude	0.154 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	59.4	48.2	Search (1024X32)	0.151	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	78.2	84.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	13.8	29.1	Inc. seg. avg.	0.161	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	47.0	50.7	Inc. frq. avg.	0.139	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

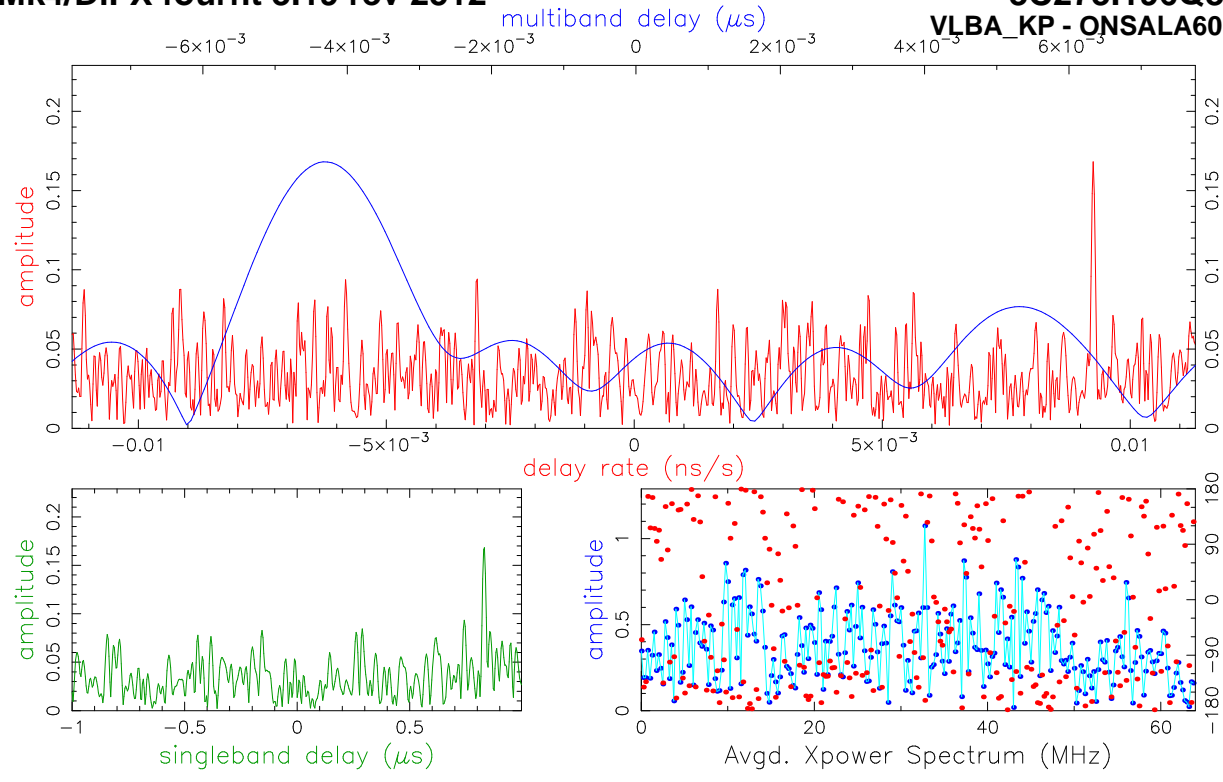


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



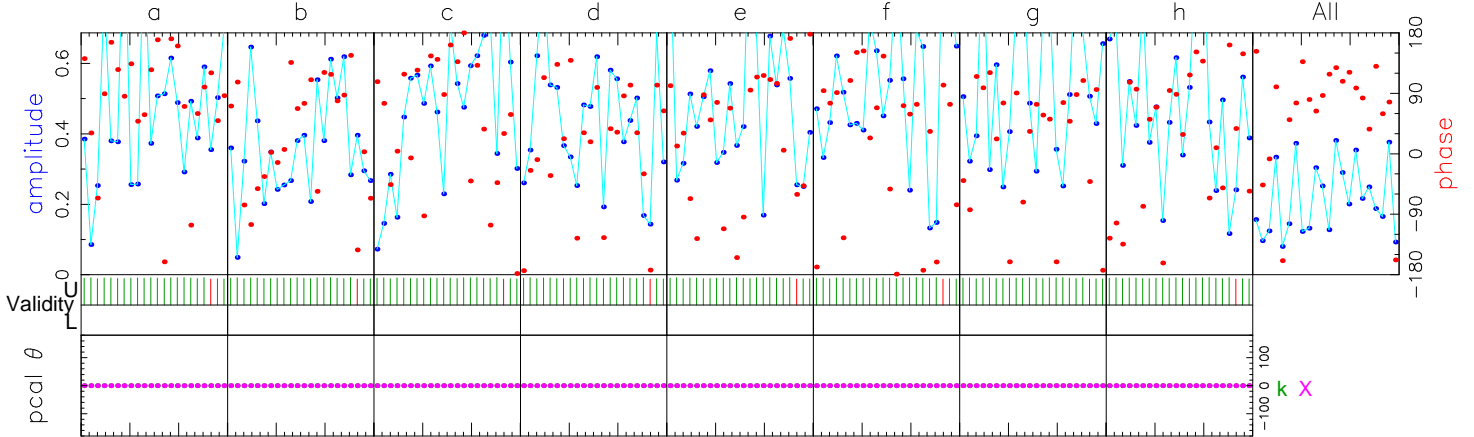
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		3.69690948775E+02			3.69843664579E+02				3.53420E-03	+/- 1.8E-04
Sband delay (usec)		3.69687035329E+02			-3.6916698E+01				-1.56629E-01	+/- 1.4E-03
Phase delay (usec)		3.69843667306E+02			-4.190001E-07				2.72694E-06	+/- 6.2E-07
Delay rate (us/s)		1.85988187419E+00			1.85988005640E+00				1.81778E-06	+/- 5.9E-09
Total phase (deg)			180.6		-3.43512071145E-06				84.6	+/- 19.2

RMS Theor. Amplitude 0.167 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 47.8 44.9 Search (1024X32) 0.163 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 69.8 78.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 27.6 27.1 Inc. seg. avg. 0.178 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 33.3 47.3 Inc. frq. avg. 0.159 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 f: az 101.6 el 22.3 pa -57.5 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -10660.407 -2952.827 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/fX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/fX.W.92.196Q8V



Fringe quality 0
 SNR 6.2
 Int time 175.805
 Amp 0.229
 Phase 92.7
 PFD 7.5e-02
 Delays (us)
 SBD 0.830362
 MBD -0.004309
 Fringe rate (Hz) 0.799362
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build 2020:206:020932
 2020:206:153448
 2020:014:135814
 RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

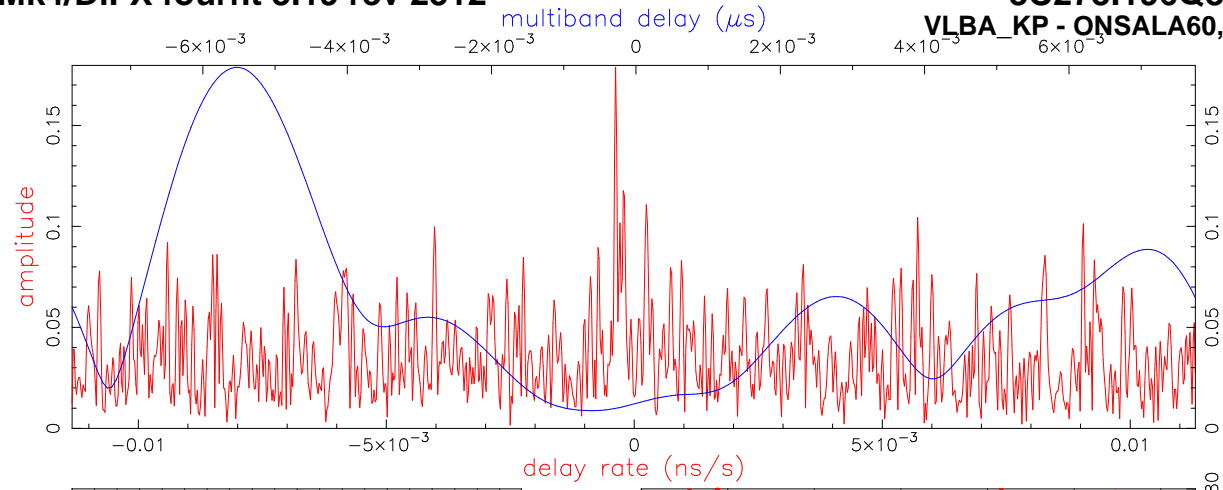


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.97493814220E+03				-1.97576195800E+03					
Sband delay (usec)	-1.97493159625E+03				-4.1178047E+01					
Phase delay (usec)	-1.97576195501E+03				-5.2260003E-07					
Delay rate (us/s)	1.90780610391E+00				1.90779682411E+00					
Total phase (deg)			70.3		9.08894727577E-06					
ph/seg (deg)	56.7	43.4			0.163					
amp/seg (%)	64.0	75.7			0.000					
ph/frq (deg)	29.9	26.2			0.226					
amp/frq (%)	42.9	45.7			0.221					
Apriori delay (usec) 0.229 +/- 0.037 Apriori clock (usec) 0.163 Apriori clockrate (us/s) 0.000 Apriori rate (us/s) 1.90779682411E+00 Apriori accel (us/s/s) 9.08894727577E-06 Resid mbdelay (usec) -4.30920E-03 +/- 1.8E-04 Resid sbdelay (usec) 8.30362E-01 +/- 1.4E-03 Resid phdelay (usec) 2.99057E-06 +/- 6.0E-07 Resid rate (us/s) 9.27979E-06 +/- 5.7E-09 Resid phase (deg) 92.7 +/- 18.5 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										
k: az 97.7 el 15.7 pa -57.3 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -10928.516 -2744.775 simultaneous interpolator Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/kX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/kX.W.108.196Q8V										

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, kX

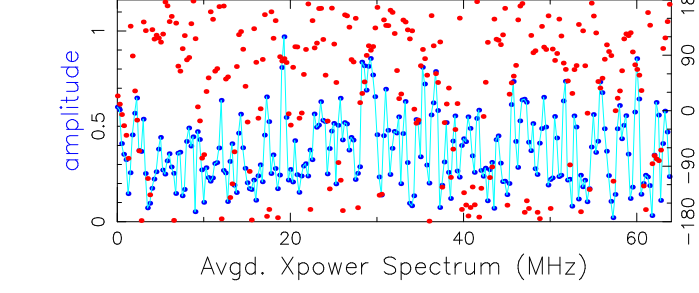
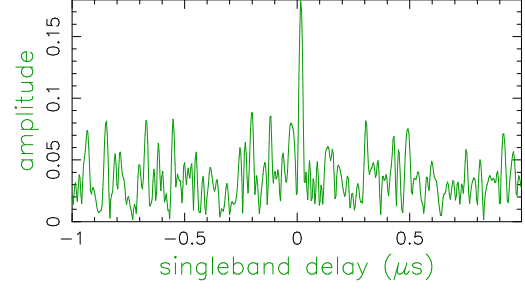
VLBA_KP - ONSALA60, fgroup W, pol RR



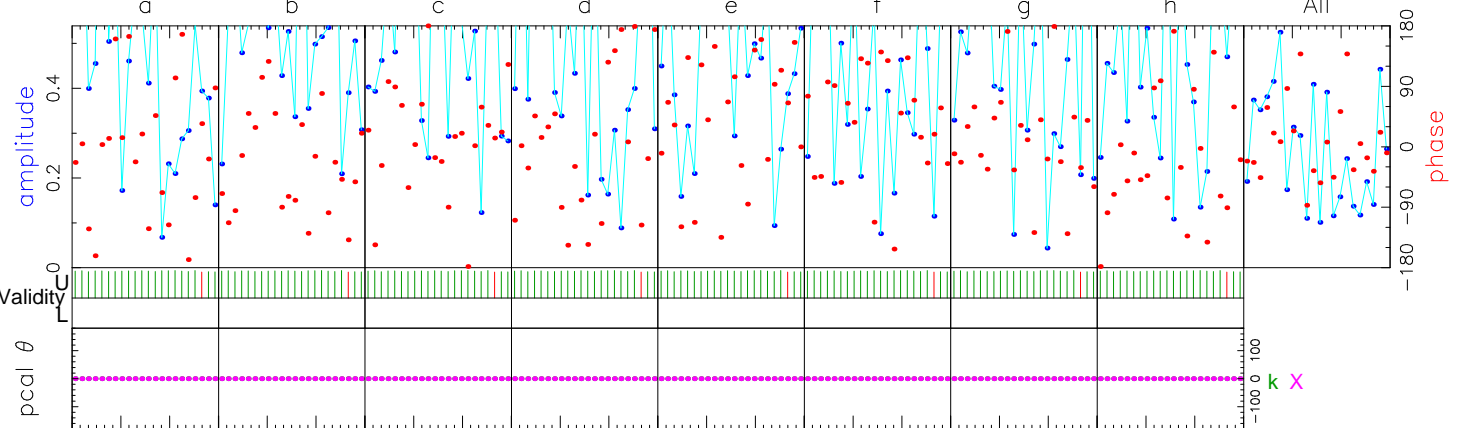
Fringe quality 0

SNR 6.5
Int time 175.805
Amp 0.180
Phase 4.6
PFD 1.0e-02
Delays (us)
SBD 0.016558
MBD -0.005524
Fringe rate (Hz)
-0.032288
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153451
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



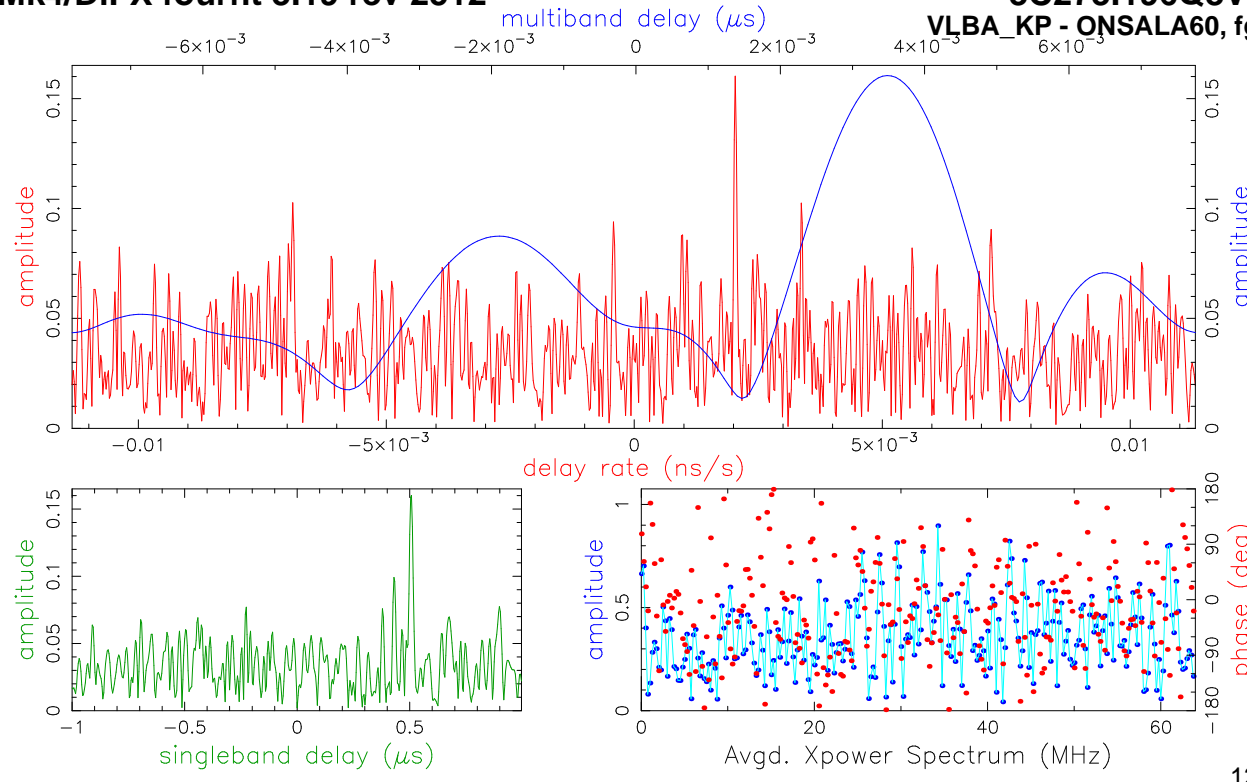
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
-4.4	-19.1	17.8	-12.3	80.4	22.8	18.2	-42.1		Phase	4.6
0.2	0.2	0.3	0.2	0.1	0.2	0.3	0.2		Ampl.	0.2
252.4	176.6	261.0	385.3	399.3	395.9	259.6	262.2		Sbd box	261.2
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
k 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
k:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
k:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
k 1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000			
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.97575185653E+03		Apriori delay (usec)	-1.97576195800E+03		Resid mbdelay (usec)	-5.52353E-03		+/-	1.7E-04
Sband delay (usec)	-1.97574540025E+03		Apriori clock (usec)	-4.1178047E+01		Resid sbdelay (usec)	1.65577E-02		+/-	1.3E-03
Phase delay (usec)	-1.97576195786E+03		Apriori clockrate (us/s)	-5.2260003E-07		Resid phdelay (usec)	1.46748E-07		+/-	5.7E-07
Delay rate (us/s)	1.90779644928E+00		Apriori rate (us/s)	1.90779682411E+00		Resid rate (us/s)	-3.74834E-07		+/-	5.5E-09
Total phase (deg)		-17.9	Apriori accel (us/s/s)	9.08894727577E-06		Resid phase (deg)	4.6		+/-	17.6

ph/seg (deg) 57.5 41.3 Search (1024X32) 0.177 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 85.0 72.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.9 24.9 Inc. seg. avg. 0.211 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.6 43.4 Inc. frq. avg. 0.188 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 97.7 el 15.7 pa -57.3 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -10928.516 -2744.775 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/kX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/kX.W.126.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, kX

VLBA_KP - ONSALA60, fgroup W, pol LR

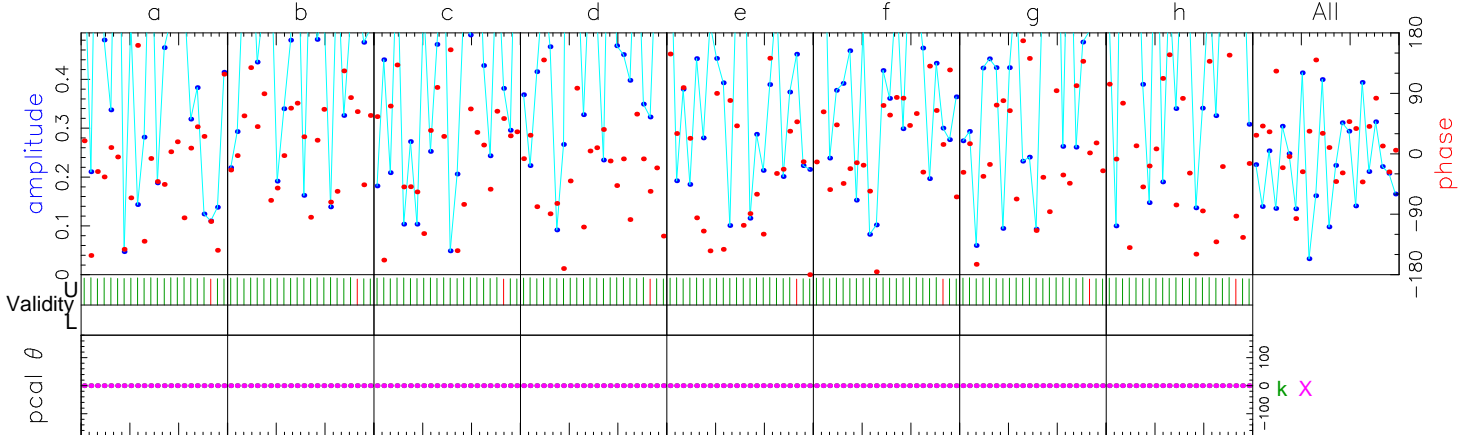


Fringe quality 0

SNR 5.9
 Int time 175.805
 Amp 0.165
 Phase 8.4
 PFD 3.6e-01
 Delays (us)
 SBD 0.506060
 MBD 0.003419
 Fringe rate (Hz)
 0.176434
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153454
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.97525853867E+03				-1.97576195800E+03				3.41934E-03	+/- 1.8E-04
Sband delay (usec)	-1.97525589775E+03				-4.1178047E+01				5.06060E-01	+/- 1.5E-03
Phase delay (usec)	-1.97576195773E+03				-5.2260003E-07				2.71977E-07	+/- 6.3E-07
Delay rate (us/s)	1.90779887234E+00				1.90779682411E+00				2.04823E-06	+/- 6.0E-09
Total phase (deg)			-14.0		9.08894727577E-06				8.4	+/- 19.4
	RMS	Theor.	Amplitude	0.165 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5			
ph/seg (deg)	53.6	45.5	Search (1024X32)	0.151	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
amp/seg (%)	73.0	79.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
ph/frq (deg)	46.7	27.4	Inc. seg. avg.	0.176	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011		
amp/frq (%)	57.1	47.9	Inc. frq. avg.	0.164	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00	

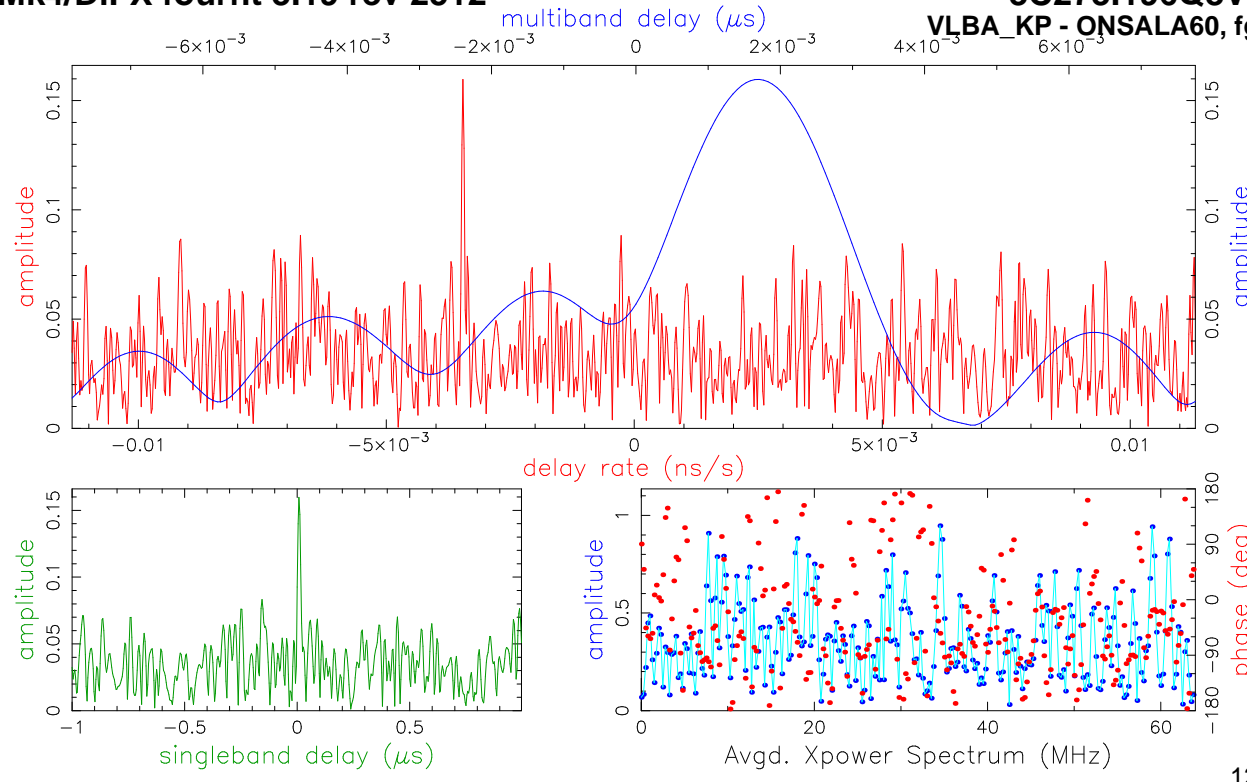
k: az 97.7 el 15.7 pa -57.3 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -10928.516 -2744.775 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/kX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/kX.W.143.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, kX

VLBA_KP - ONSALA60, fgroup W, pol RL

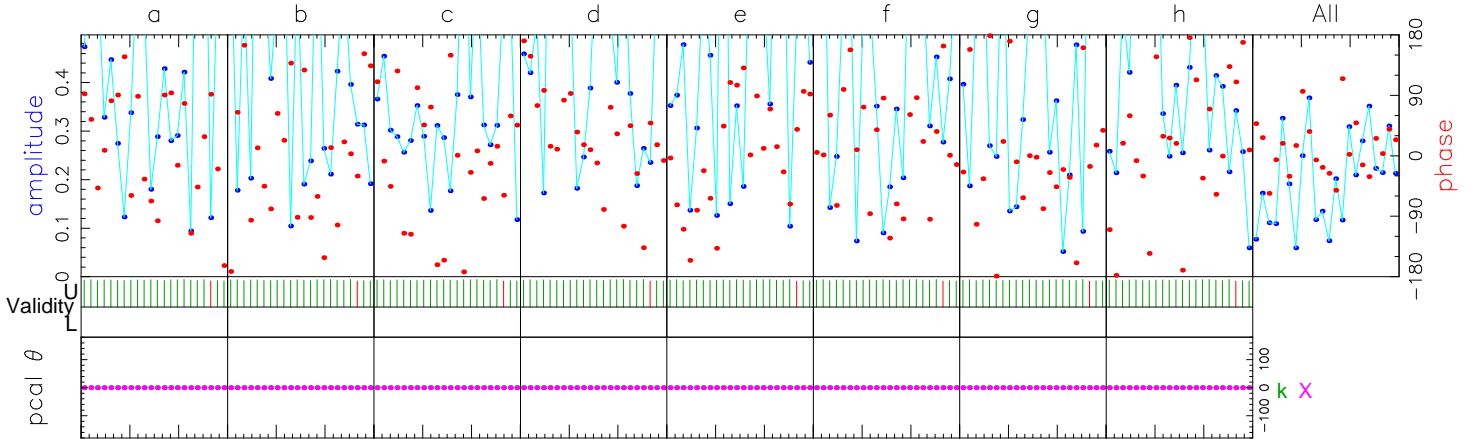


Fringe quality 0

SNR 5.8
 Int time 175.805
 Amp 0.166
 Phase 11.7
 PFD 5.7e-01
 Delays (us)
 SBD 0.008195
 MBD 0.001709
 Fringe rate (Hz)
 -0.297328
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

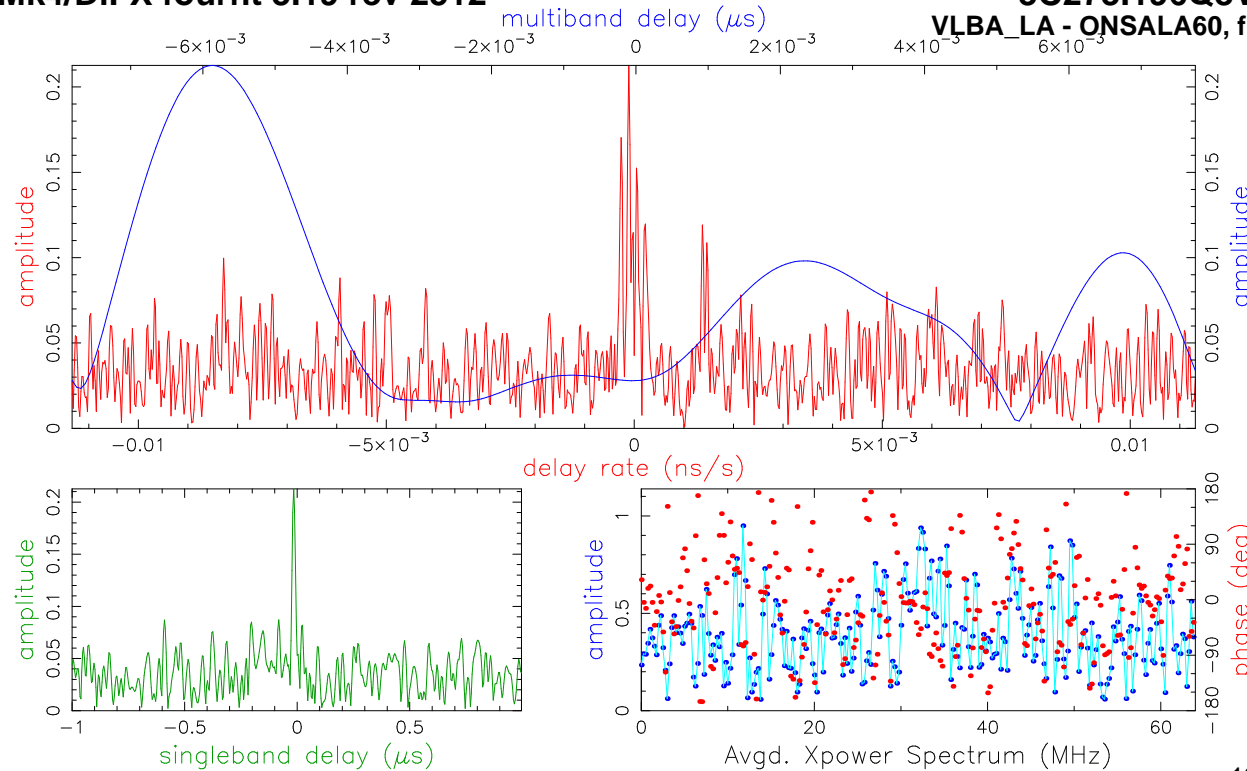
Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153456
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



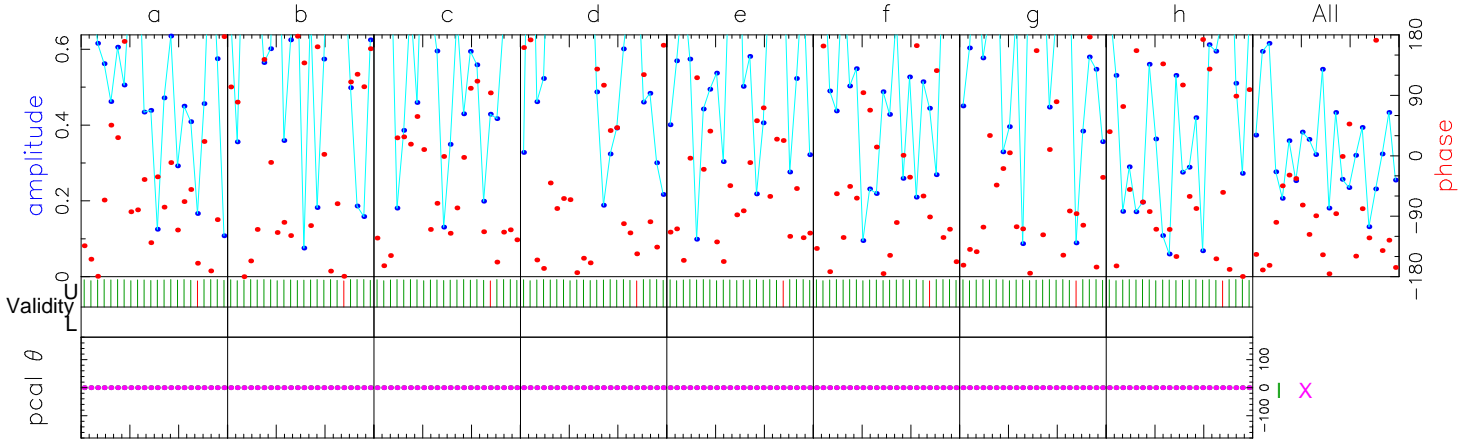
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.97576024944E+03								1.70857E-03	+/- 1.9E-04
Sband delay (usec)	-1.97575376250E+03								8.19550E-03	+/- 1.5E-03
Phase delay (usec)	-1.97576195763E+03								3.76818E-07	+/- 6.4E-07
Delay rate (us/s)	1.90779337243E+00								-3.45168E-06	+/- 6.1E-09
Total phase (deg)			-10.8						11.7	+/- 19.8
Apriori delay (usec)					-1.97576195800E+03					
Apriori clock (usec)					-4.1178047E+01					
Apriori clockrate (us/s)					-5.2260003E-07					
Apriori rate (us/s)					1.90779682411E+00					
Apriori accel (us/s/s)					9.08894727577E-06					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000							
Bits/sample:	2x2		SampCntNorm: enabled mb window (us) -0.008 0.008							
Sample rate (MSamp/s):	128		dr window (ns/s) -0.011 0.011							
Data rate (Mb/s):	2048		ion window (TEC) 0.00 0.00							
nlags:	256		t_cohere infinite							

ph/seg (deg) 41.7 46.4 Search (1024X32) 0.158 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.1 80.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.4 28.0 Inc. seg. avg. 0.157 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.2 48.8 Inc. frq. avg. 0.160 Sample rate (MSamp/s): 128 dr window (ns/s) -0.011 0.011
 k: az 97.7 el 15.7 pa -57.3 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -10928.516 -2744.775 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/kX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/kX.W.156.196Q8V



Fringe quality 9
SNR 7.7
Int time 177.110
Amp 0.213
Phase -120.0
PFD 1.7e-06
Delays (us)
SBD -0.015505
MBD -0.005872
Fringe rate (Hz)
-0.008733
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153454
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



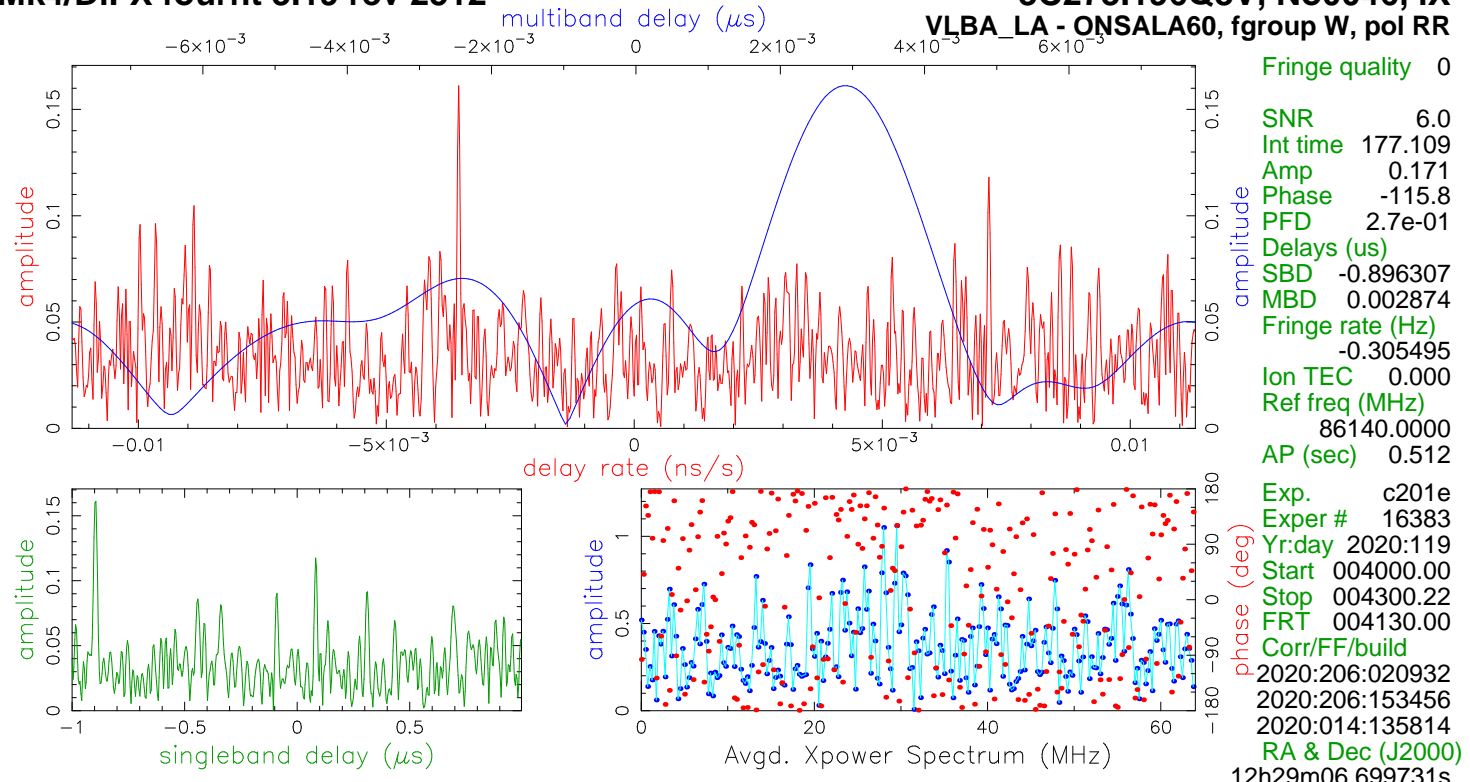
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-97.1	-160.7	-103.1	-138.0	-61.5	-119.2	-121.5	-160.7	Phase	-120.0
	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.1	Ampl.	0.2
	408.6	252.7	493.0	252.6	251.3	251.9	379.5	138.3	Sbd box	253.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.61760288435E+02		Apriori delay (usec)		-6.61738791437E+02		Resid mbdelay (usec)		-5.87200E-03	+/- 1.4E-04
Sband delay (usec)	-6.61754296437E+02		Apriori clock (usec)		-4.4572353E+01		Resid sbdelay (usec)		-1.55050E-02	+/- 1.1E-03
Phase delay (usec)	-6.61738795306E+02		Apriori clockrate (us/s)		-6.7900004E-07		Resid phdelay (usec)		-3.86934E-06	+/- 4.8E-07
Delay rate (us/s)	1.81208829892E+00		Apriori rate (us/s)		1.81208840030E+00		Resid rate (us/s)		-1.01379E-07	+/- 4.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.29595536213E-06		Resid phase (deg)		-120.0	+/- 14.8

ph/seg (deg) 62.9 34.7 Amplitude 0.213 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 83.7 60.6 Search (1024X32) 0.204 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 36.2 20.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.2 36.5 Inc. seg. avg. 0.287 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 I: az 102.1 el 19.4 pa -52.5 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -10383.436 -2273.335 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/IX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/IX.W.142.196Q8V

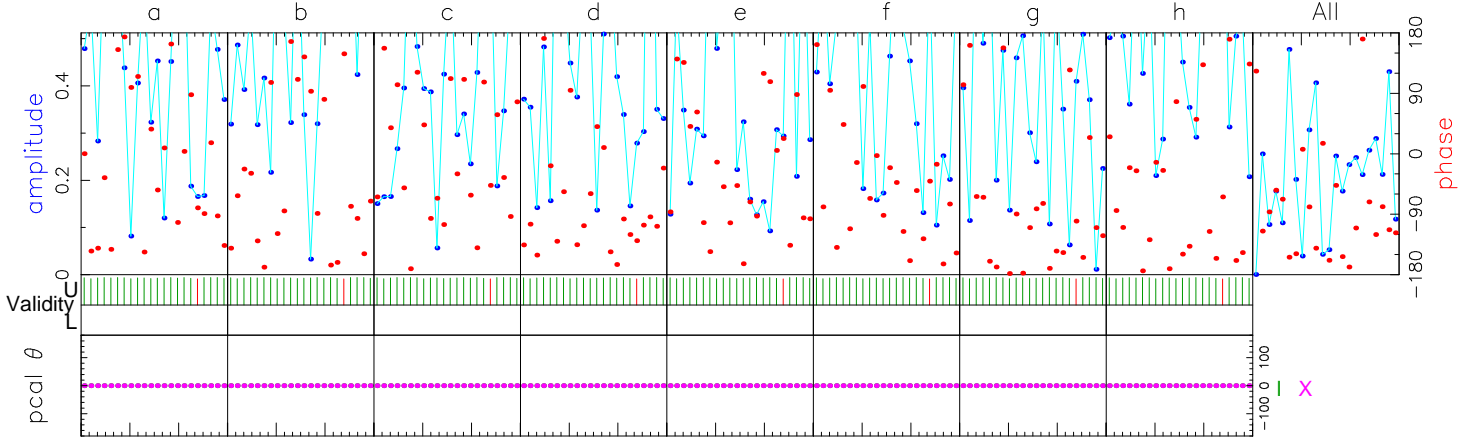
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, IX

VLBA_LA - ONSALA60, fgroup W, pol RR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

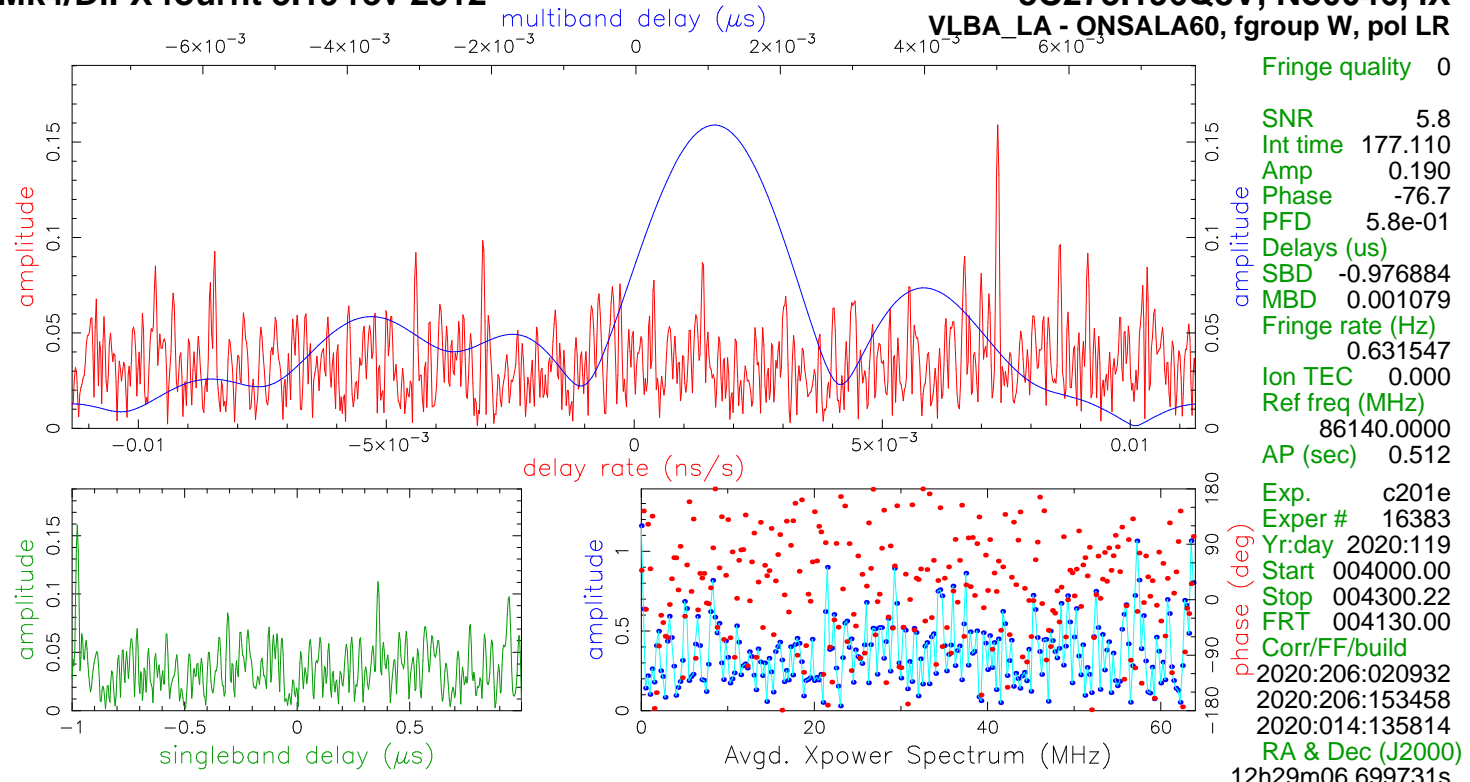


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-110.2	-136.5	129.4	-108.0	-106.8	-78.5	-127.4	-129.0	Phase	-115.8
	0.1	0.2	0.0	0.3	0.2	0.2	0.2	0.2	Ampl.	0.2
	143.7	5.1	190.9	26.7	260.9	97.2	170.1	31.8	Sbd box	27.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.62642167568E+02		Apriori delay (usec)		-6.61738791437E+02		Resid mbdelay (usec)		2.87387E-03	+/- 1.8E-04
Sband delay (usec)	-6.62635097937E+02		Apriori clock (usec)		-4.4572353E+01		Resid sbdelay (usec)		-8.96307E-01	+/- 1.4E-03
Phase delay (usec)	-6.61738795172E+02		Apriori clockrate (us/s)		-6.7900004E-07		Resid phdelay (usec)		-3.73554E-06	+/- 6.2E-07
Delay rate (us/s)	1.81208485381E+00		Apriori rate (us/s)		1.81208840030E+00		Resid rate (us/s)		-3.54649E-06	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		2.29595536213E-06		Resid phase (deg)		-115.8	+/- 19.2

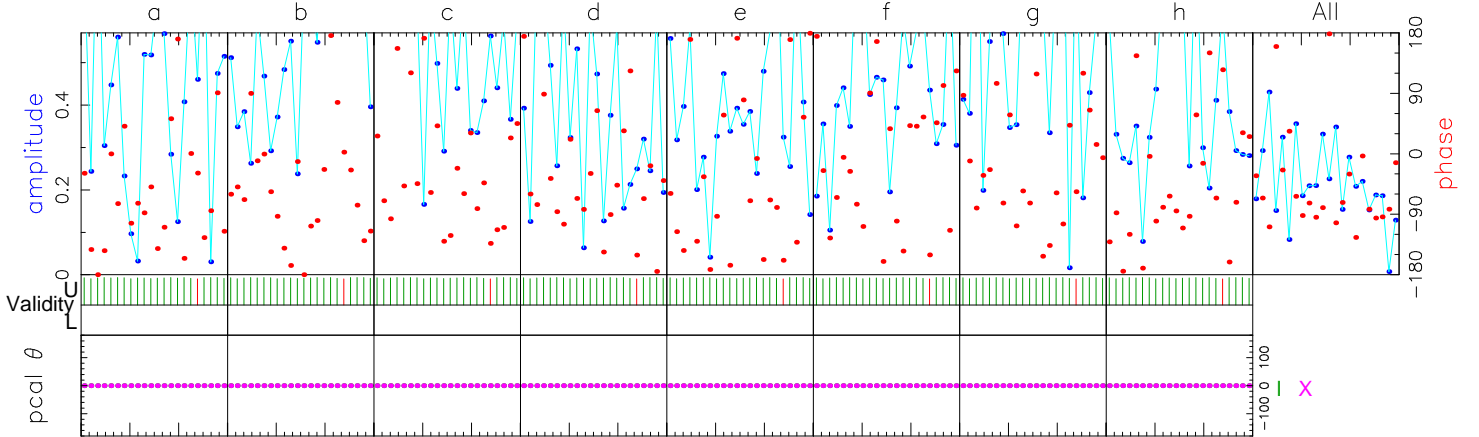
	RMS	Theor.	Amplitude	0.171 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	59.3	45.0	Search (1024X32)	0.156	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	80.9	78.6	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	50.8	27.2	Inc. seg. avg.	0.167	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	45.0	47.4	Inc. frq. avg.	0.162					

I: az 102.1 el 19.4 pa -52.5 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -10383.436 -2273.335 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/IX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/IX.W.154.196Q8V



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

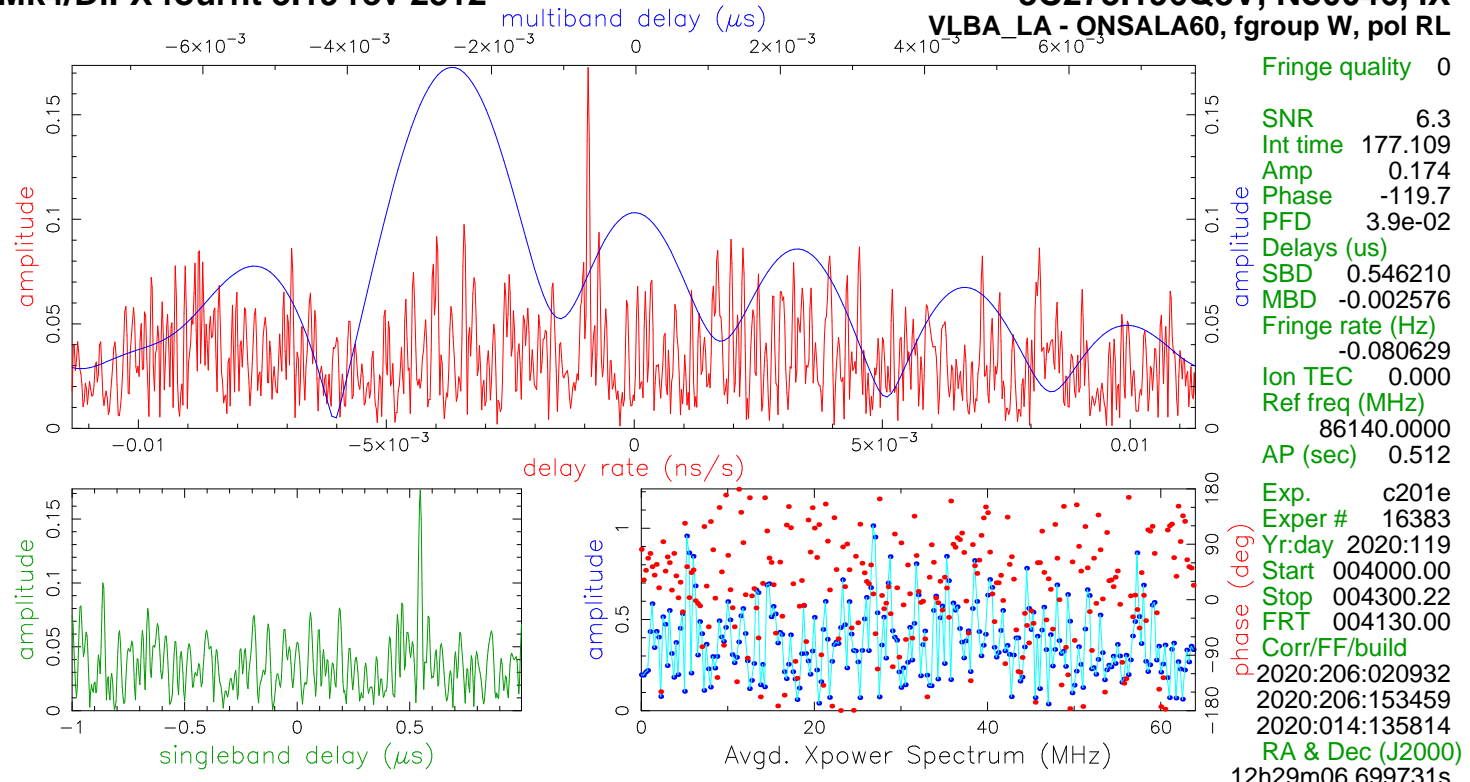


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-93.1	-72.8	-56.9	-64.7	-120.0	-84.2	-53.2	-90.7	Phase	-76.7
	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.2	Ampl.	0.2
	316.8	266.2	227.0	426.3	94.7	427.7	166.1	487.2	Sbd box	6.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.62722087753E+02		Apriori delay (usec)		-6.61738791437E+02		Resid mbdelay (usec)		1.07868E-03	+/- 1.9E-04
Sband delay (usec)	-6.62715675687E+02		Apriori clock (usec)		-4.4572353E+01		Resid sbdelay (usec)		-9.76884E-01	+/- 1.5E-03
Phase delay (usec)	-6.61738793911E+02		Apriori clockrate (us/s)		-6.7900004E-07		Resid phdelay (usec)		-2.47411E-06	+/- 6.4E-07
Delay rate (us/s)	1.81209573193E+00		Apriori rate (us/s)		1.81208840030E+00		Resid rate (us/s)		7.33163E-06	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		2.29595536213E-06		Resid phase (deg)		-76.7	+/- 19.8

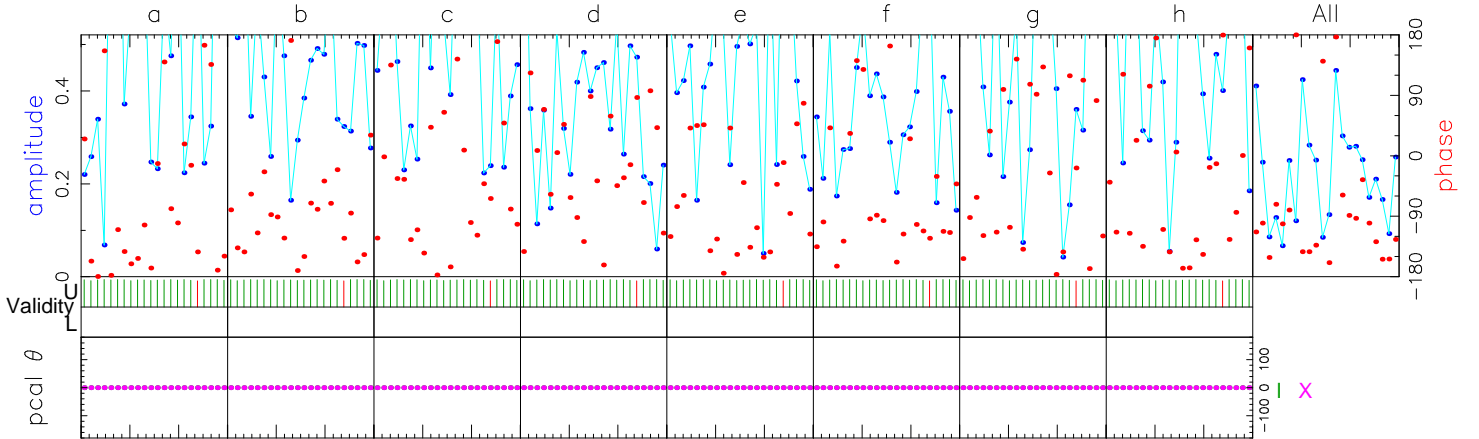
	RMS	Theor.	Amplitude	0.190 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.5	46.4	Search (1024X32)	0.158	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	71.6	81.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	24.2	28.0	Inc. seg. avg.	0.198	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	32.3	48.8	Inc. frq. avg.	0.182	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

I: az 102.1 el 19.4 pa -52.5 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -10383.436 -2273.335 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/IX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/IX.W.168.196Q8V



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-145.0	-100.4	-129.1	-39.2	-90.9	-118.7	-159.9	-119.3	Phase	-119.7
	0.4	0.3	0.1	0.1	0.2	0.2	0.1	0.2	Ampl.	0.2
	397.8	397.4	24.0	113.6	19.9	9.5	421.8	37.2	Sbd box	396.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.61194492866E+02		Apriori delay (usec)		-6.61738791437E+02		Resid mbdelay (usec)		-2.57643E-03 +/- 1.7E-04	
Sband delay (usec)	-6.61192581937E+02		Apriori clock (usec)		-4.4572353E+01		Resid sbdelay (usec)		5.46210E-01 +/- 1.4E-03	
Phase delay (usec)	-6.61738795297E+02		Apriori clockrate (us/s)		-6.7900004E-07		Resid phdelay (usec)		-3.85976E-06 +/- 5.9E-07	
Delay rate (us/s)	1.81208746428E+00		Apriori rate (us/s)		1.81208840030E+00		Resid rate (us/s)		-9.36019E-07 +/- 5.6E-09	
Total phase (deg)			Apriori accel (us/s/s)		2.29595536213E-06		Resid phase (deg)		-119.7 +/- 18.2	

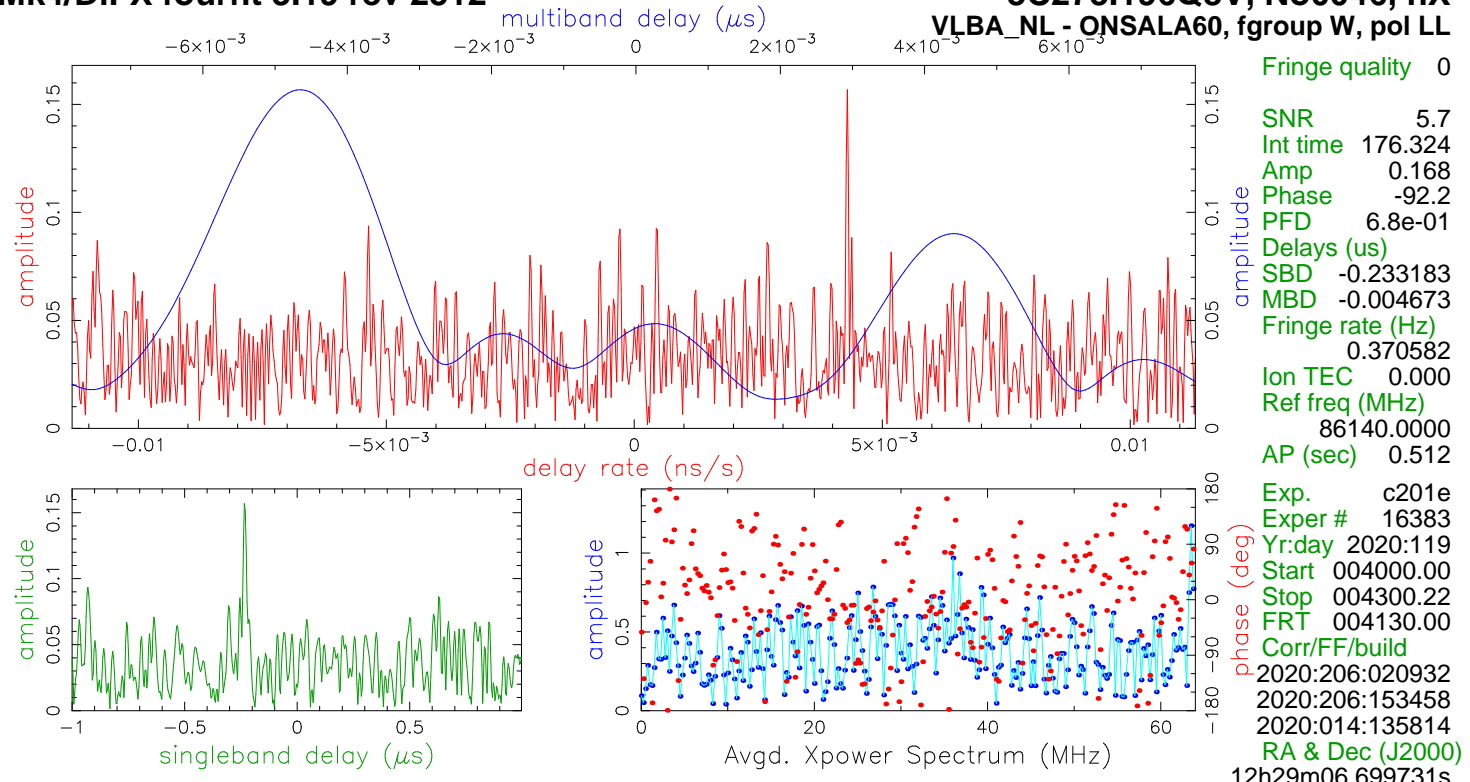
	RMS	Theor.	Amplitude	0.174 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	43.2	42.6	Search (1024X32)	0.168	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	69.2	74.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	40.9	25.7	Inc. seg. avg.	0.176	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	54.7	44.9	Inc. frq. avg.	0.175	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

I: az 102.1 el 19.4 pa -52.5 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -10383.436 -2273.335 simultaneous interpolator

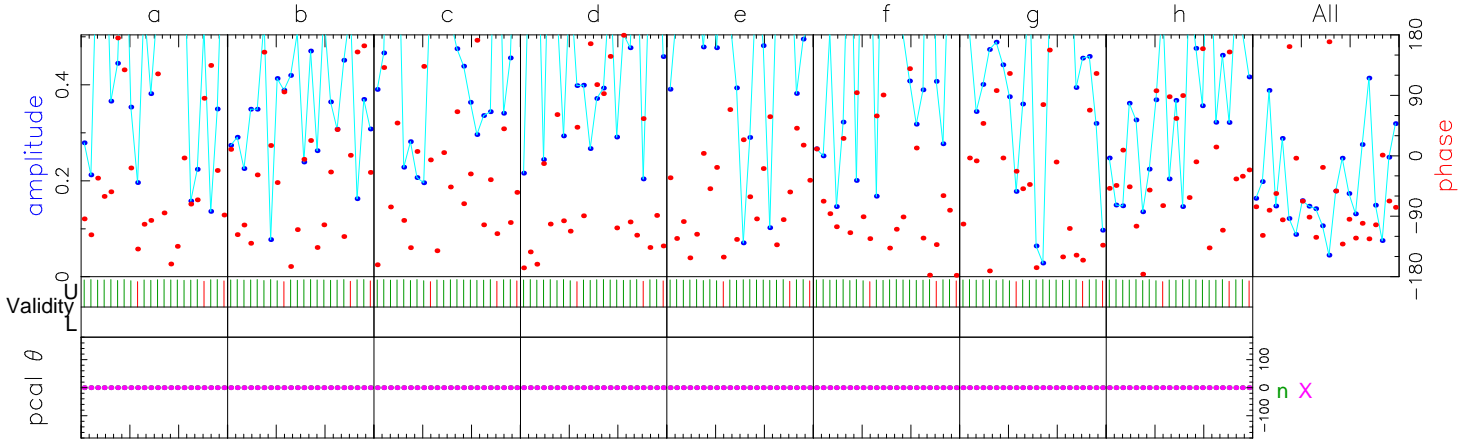
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/IX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/IX.W.179.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, nX
VLBA_NL - ONSALA60, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-91.5	-76.4	-61.0	-134.8	-76.5	-120.2	-93.8	-53.3	Phase	-92.2
	0.2	0.1	0.2	0.3	0.3	0.3	0.0	0.2	Ampl.	0.2
	87.8	54.5	27.7	194.4	419.0	197.8	20.1	225.9	Sbd box	197.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.38594729004E+03		Apriori delay (usec)	2.38618633853E+03	Resid mbdelay (usec)	-4.67349E-03	+/-	1.9E-04		
Sband delay (usec)	2.38595315578E+03		Apriori clock (usec)	-8.5029564E+00	Resid sbdelay (usec)	-2.33183E-01	+/-	1.5E-03		
Phase delay (usec)	2.38618633556E+03		Apriori clockrate (us/s)	-1.9400004E-07	Resid phdelay (usec)	-2.97347E-06	+/-	6.4E-07		
Delay rate (us/s)	1.56899646609E+00		Apriori rate (us/s)	1.56899216400E+00	Resid rate (us/s)	4.30209E-06	+/-	6.2E-09		
Total phase (deg)		-19.8	Apriori accel (us/s/s)	-1.34079108315E-05	Resid phase (deg)	-92.2	+/-	19.9		

	RMS	Theor.	Amplitude	0.168 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	49.1	46.8	Search (1024X32)	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	63.9	81.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	30.5	28.2	Inc. seg. avg.	0.152	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	48.2	49.2	Inc. frq. avg.	0.168	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

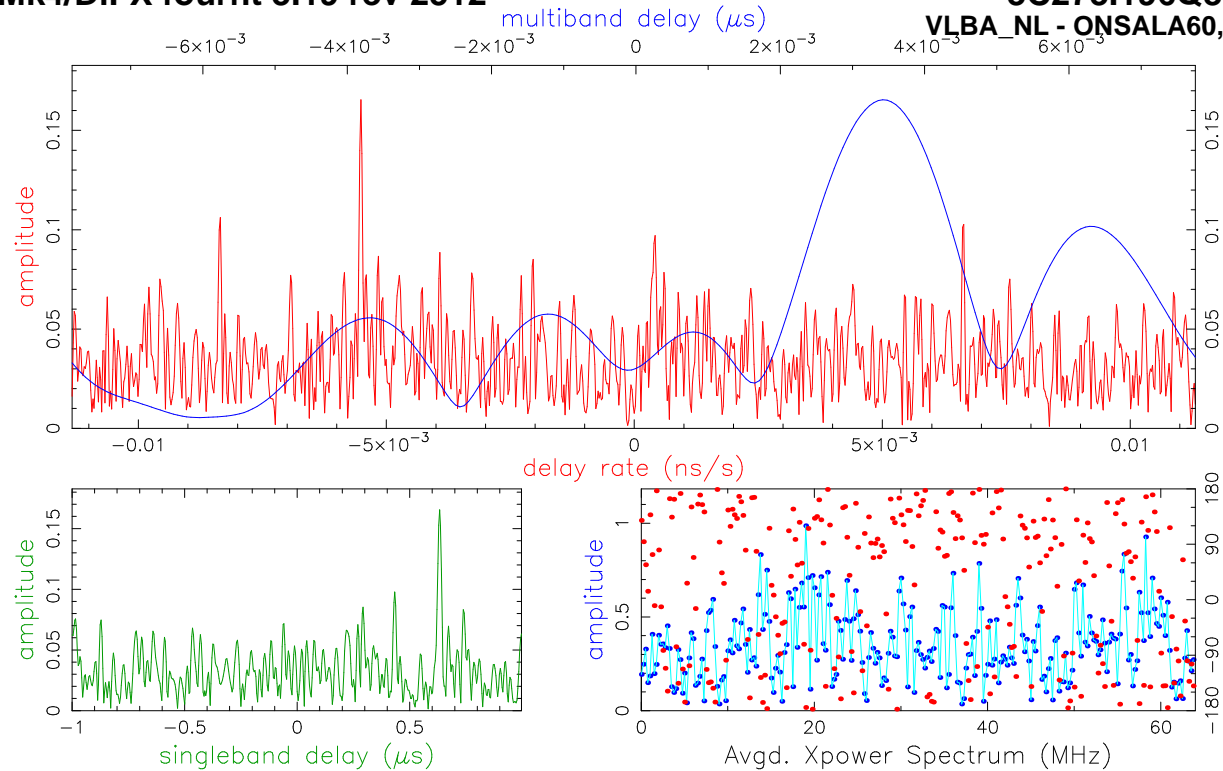
n: az 115.5 el 28.3 pa -42.4 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -8998.262 -1595.012 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/nX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/nX.W.171.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

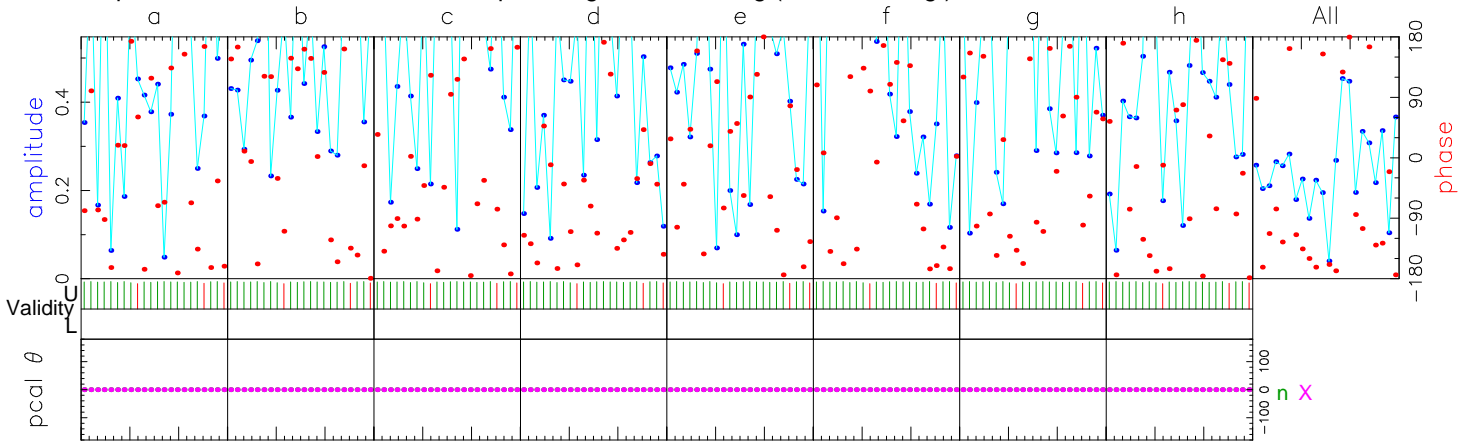
3C273.196Q8V, No0046, nX

VLBA_NL - ONSALA60, fgroup W, pol RR



Fringe quality 0
 SNR 6.0
 Int time 176.326
 Amp 0.183
 Phase -157.4
 PFD 2.2e-01
 Delays (us)
 SBD 0.632840
 MBD 0.003429
 Fringe rate (Hz) -0.476039
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153500
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



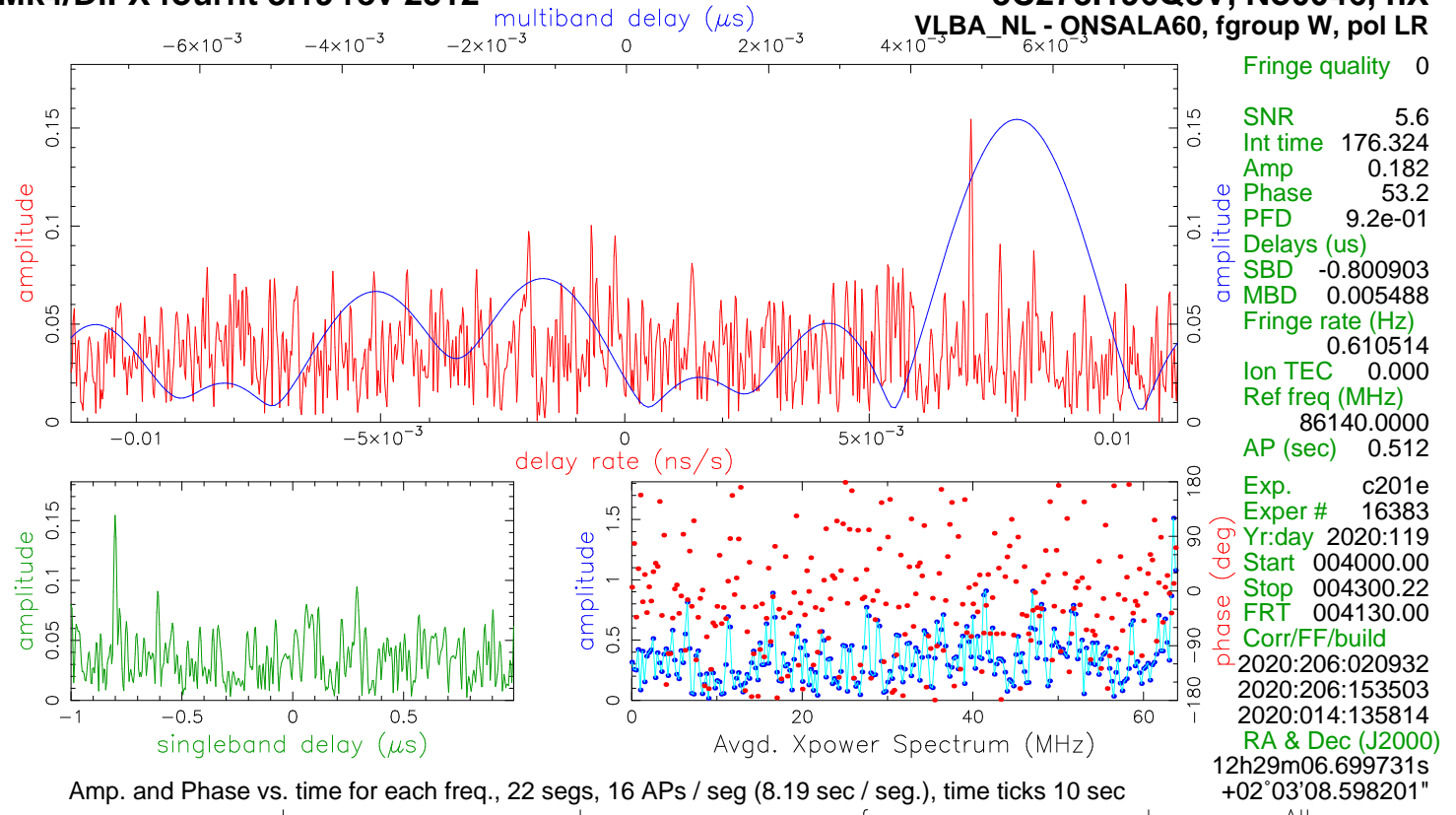
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-162.5	169.0	-124.7	-119.4	-109.7	162.2	-159.0	-159.4	Phase	-157.4
	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	348.4	138.8	3.8	322.1	297.4	439.2	97.4	372.6	Sbd box	419.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.38681476762E+03		Apriori delay (usec)		2.38618633853E+03		Resid mbdelay (usec)		3.42909E-03	+/- 1.8E-04
Sband delay (usec)	2.38681917878E+03		Apriori clock (usec)		-8.5029564E+00		Resid sbdelay (usec)		6.32840E-01	+/- 1.4E-03
Phase delay (usec)	2.38618633345E+03		Apriori clockrate (us/s)		-1.9400004E-07		Resid phdelay (usec)		-5.07625E-06	+/- 6.2E-07
Delay rate (us/s)	1.56898663767E+00		Apriori rate (us/s)		1.56899216400E+00		Resid rate (us/s)		-5.52634E-06	+/- 5.9E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.34079108315E-05		Resid phase (deg)		-157.4	+/- 19.1

	RMS	Theor.	Amplitude	0.183 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.8	44.7	Search (1024X32)	0.159	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	78.3	78.1	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	35.6	27.0	Inc. seg. avg.	0.212	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	27.7	47.1	Inc. frq. avg.	0.189	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

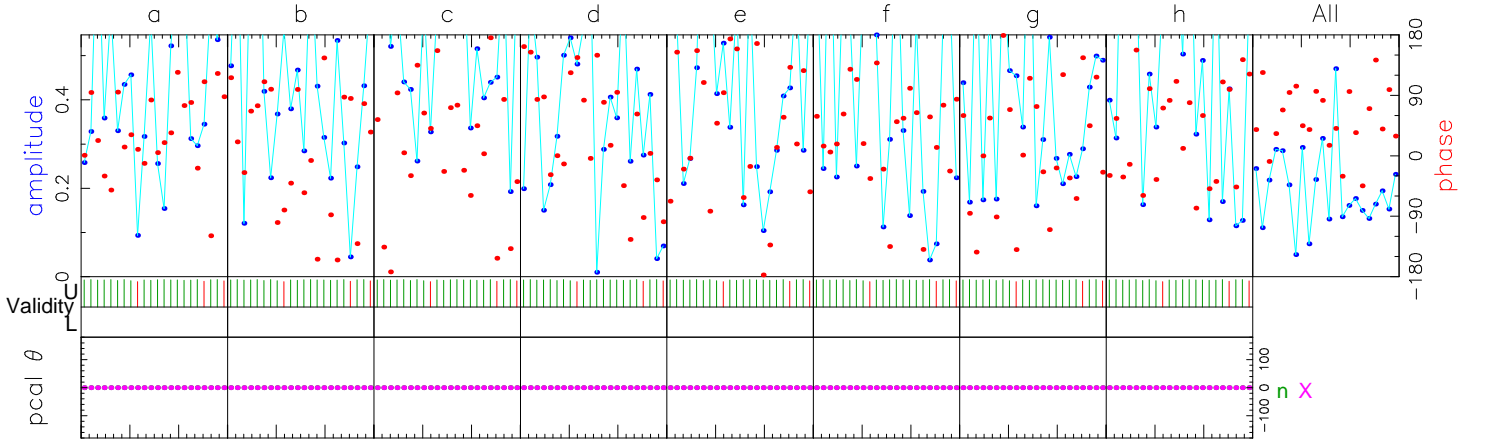
n: az 115.5 el 28.3 pa -42.4 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -8998.262 -1595.012 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/nX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/nX.W.184.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

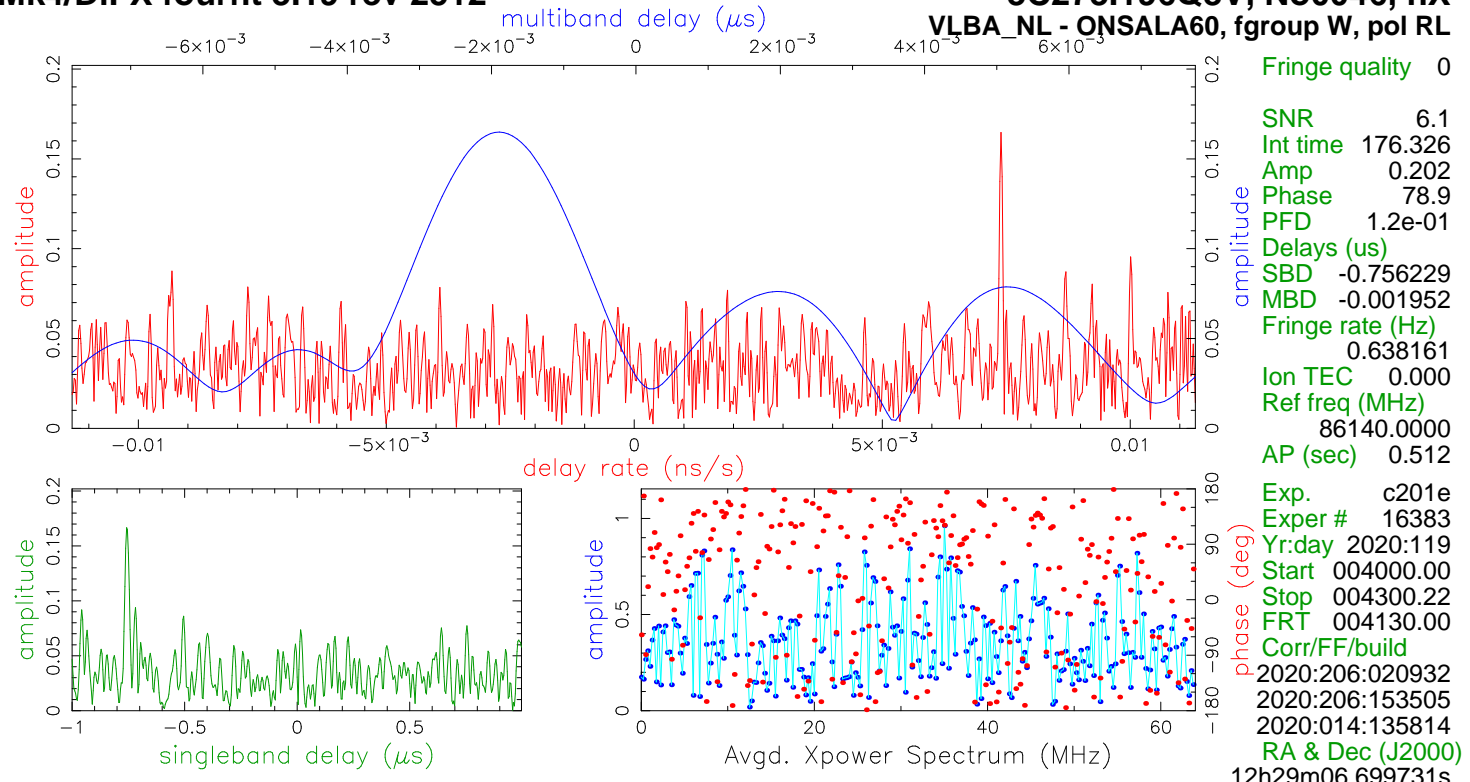
3C273.196Q8V, No0046, nX
VLBA_NL - ONSALA60, fgroup W, pol LR



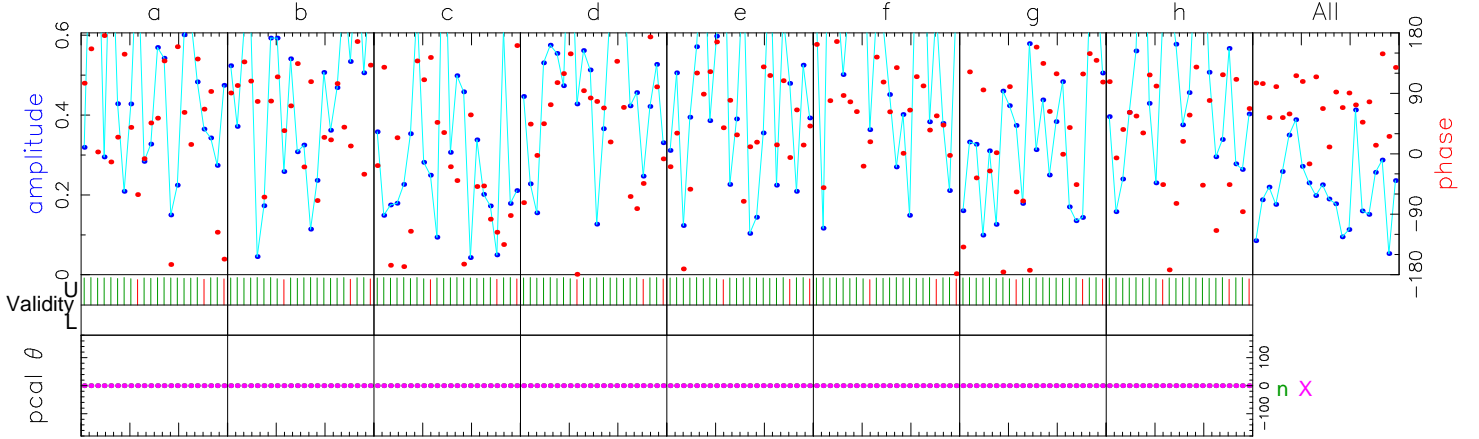
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
52.1	57.3	49.5	49.3	80.9	46.1	84.0	51.5		Phase	53.2
0.3	0.2	0.2	0.2	0.1	0.3	0.1	0.3		Ampl.	0.2
238.8	323.3	47.8	479.7	269.0	51.9	276.7	100.5		Sbd box	52.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
n	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000		PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
n	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000			
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd) 2.38537932667E+03 Apriori delay (usec) 2.38618633853E+03 Resid mbdelay (usec) 5.48814E-03 +/- 1.9E-04										
Sband delay (usec) 2.38538543528E+03 Apriori clock (usec) -8.5029564E+00 Resid sbdelay (usec) -8.00903E-01 +/- 1.5E-03										
Phase delay (usec) 2.38618634025E+03 Apriori clockrate (us/s) -1.9400004E-07 Resid phdelay (usec) 1.71410E-06 +/- 6.6E-07										
Delay rate (us/s) 1.56899925147E+00 Apriori rate (us/s) 1.56899216400E+00 Resid rate (us/s) 7.08747E-06 +/- 6.3E-09										
Total phase (deg) 125.5 Apriori accel (us/s/s) -1.34079108315E-05 Resid phase (deg) 53.2 +/- 20.4										
RMS Theor. Amplitude 0.182 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5										
ph/seg (deg) 46.7 47.9 Search (1024X32) 0.154 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000										
amp/seg (%) 66.1 83.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008										
ph/frq (deg) 17.4 28.9 Inc. seg. avg. 0.175 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011										
amp/frq (%) 48.3 50.4 Inc. frq. avg. 0.164 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00										
n: az 115.5 el 28.3 pa -42.4 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -8998.262 -1595.012 simultaneous interpolator										
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/nX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/nX.W.203.196Q8V										



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	57.2	83.0	-96.4	88.1	62.4	87.0	129.4	45.6	Phase	78.9
	0.2	0.3	0.0	0.3	0.3	0.4	0.2	0.2	Ampl.	0.2
	128.3	72.7	73.0	372.5	219.9	63.8	261.5	129.6	Sbd box	63.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.38543438620E+03		Apriori delay (usec)		2.38618633853E+03		Resid mbdelay (usec)		-1.95234E-03	+/- 1.8E-04
Sband delay (usec)	2.38543010978E+03		Apriori clock (usec)		-8.5029564E+00		Resid sbdelay (usec)		-7.56229E-01	+/- 1.4E-03
Phase delay (usec)	2.38618634108E+03		Apriori clockrate (us/s)		-1.9400004E-07		Resid phdelay (usec)		2.54406E-06	+/- 6.0E-07
Delay rate (us/s)	1.56899957242E+00		Apriori rate (us/s)		1.56899216400E+00		Resid rate (us/s)		7.40842E-06	+/- 5.8E-09
Total phase (deg)	151.3		Apriori accel (us/s/s)		-1.34079108315E-05		Resid phase (deg)		78.9	+/- 18.7

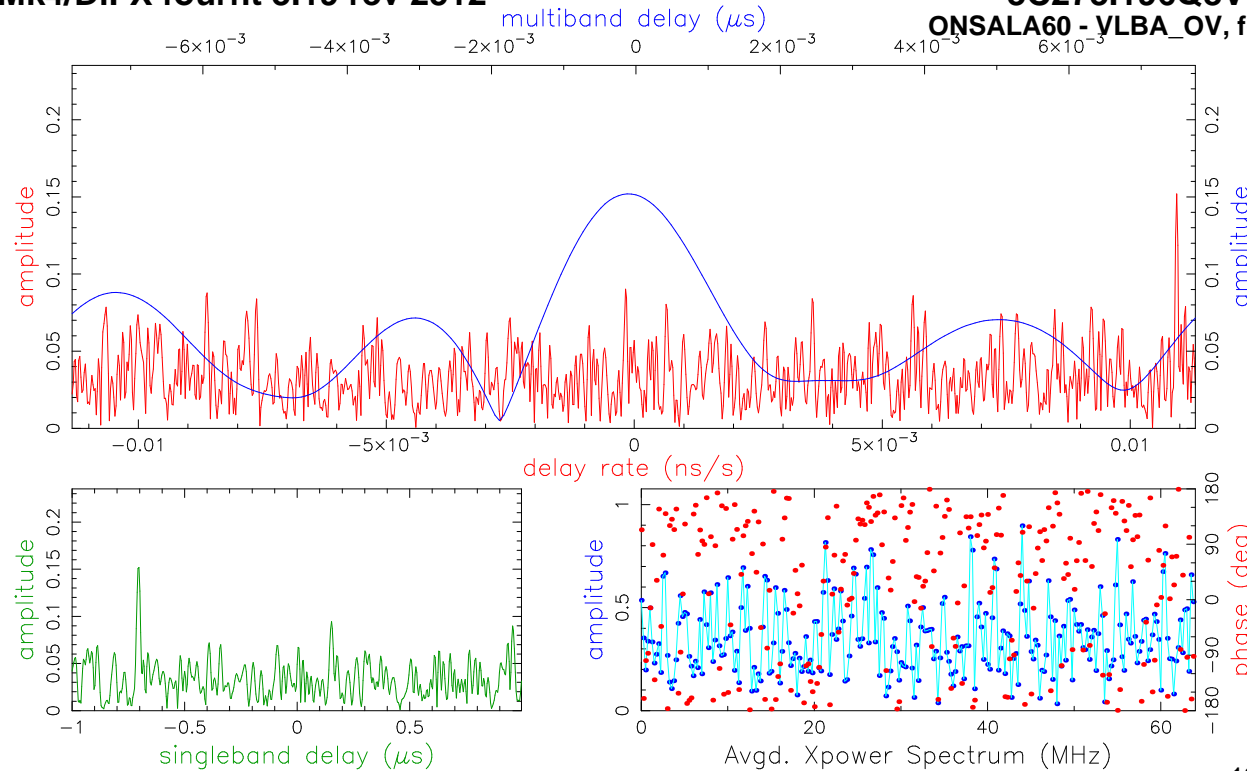
	RMS	Theor.	Amplitude	0.202 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	40.5	44.0	Search (1024X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	60.3	76.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	76.7	26.5	Inc. seg. avg.	0.199	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	51.9	46.3	Inc. frq. avg.	0.199	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

n: az 115.5 el 28.3 pa -42.4 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) -8998.262 -1595.012 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/nX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/nX.W.214.196Q8V

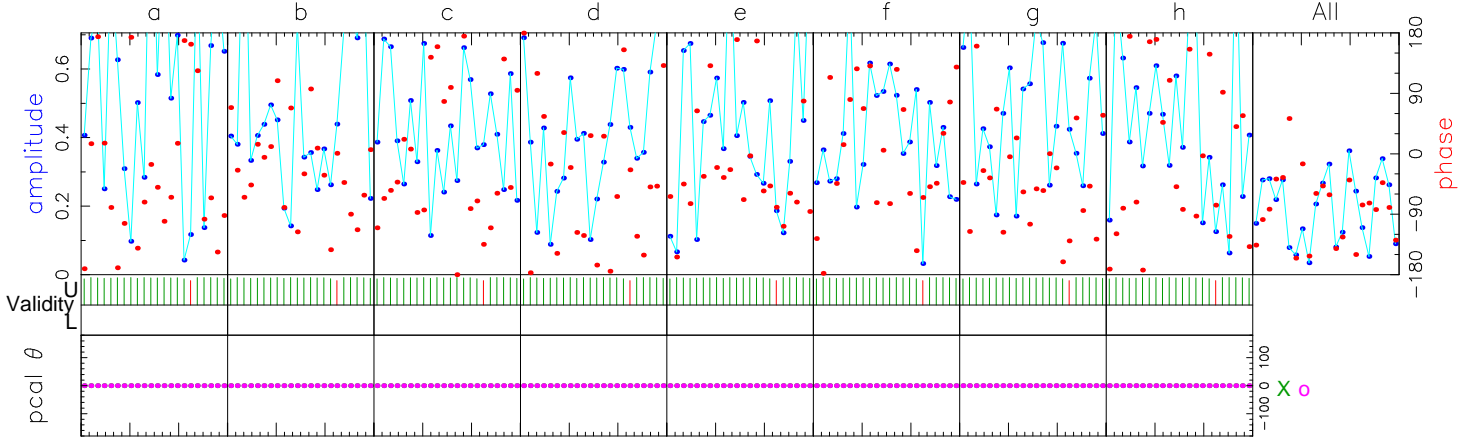
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Xo
 ONSALA60 - VLBA_OV, fgroup W, pol LL



Fringe quality 0
 SNR 5.6
 Int time 176.685
 Amp 0.235
 Phase -70.8
 PFD 9.0e-01
 Delays (us)
 SBD -0.704869
 MBD -0.000067
 Fringe rate (Hz) 0.944471
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build 2020:206:020932
 2020:206:153503
 2020:014:135814
 RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

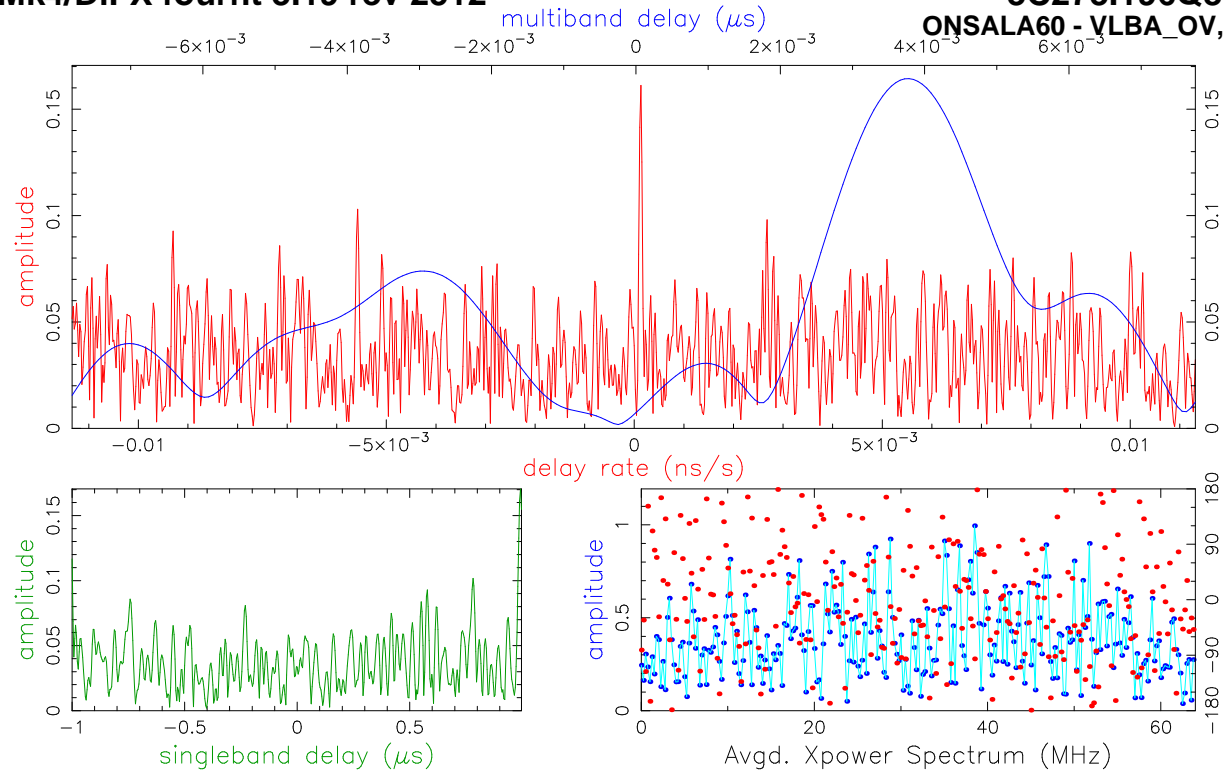


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-90.6	-44.9	-83.4	-116.5	-53.4	35.2	-65.8	-139.6	Phase	-70.8
	0.3	0.4	0.3	0.1	0.4	0.1	0.4	0.2	Ampl.	0.2
	504.0	88.3	121.8	324.0	449.1	295.8	418.8	413.7	Sbd box	76.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	4.14660265502E+03	Apriori delay (usec)	4.14730584698E+03	Resid mbdelay (usec)	-6.69546E-05	+/-	1.9E-04
Sband delay (usec)	4.14660097773E+03	Apriori clock (usec)	2.0722635E+01	Resid sbdelay (usec)	-7.04869E-01	+/-	1.5E-03
Phase delay (usec)	4.14730584469E+03	Apriori clockrate (us/s)	3.2700001E-07	Resid phdelay (usec)	-2.28241E-06	+/-	6.6E-07
Delay rate (us/s)	-1.86631261762E+00	Apriori rate (us/s)	-1.86632358199E+00	Resid rate (us/s)	1.09644E-05	+/-	6.3E-09
Total phase (deg)	166.3	Apriori accel (us/s/s)	-2.10286042018E-05	Resid phase (deg)	-70.8	+/-	20.4

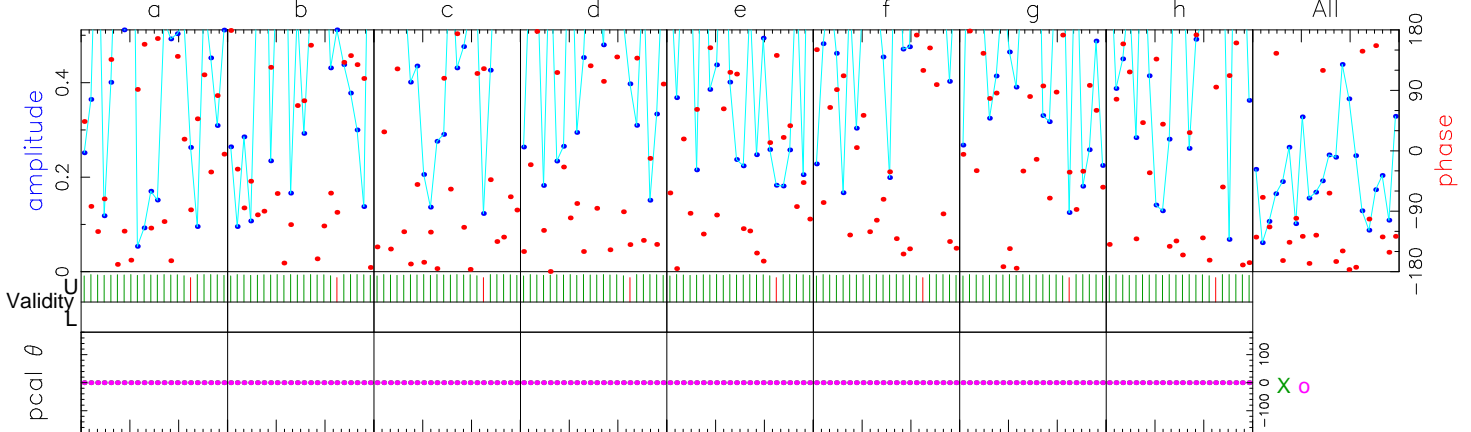
ph/seg (deg)	52.1	Theor.	47.8	Amplitude	0.235 +/- 0.042	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	70.1	Search (1024X32)	0.149	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	57.1	Inc. seg. avg.	0.220	Inc. frq. avg.	0.243	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	54.5	Inc. frq. avg.	0.243	Sample rate(MISamp/s):	128	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
				X: az 236.5 el 21.6 pa 26.8	o: az 94.9 el 9.6 pa -52.5	u,v (fr/asec)	10684.526 2042.961			ion window (TEC)	0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Xo..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Xo.W.202.196Q8V simultaneous interpolator



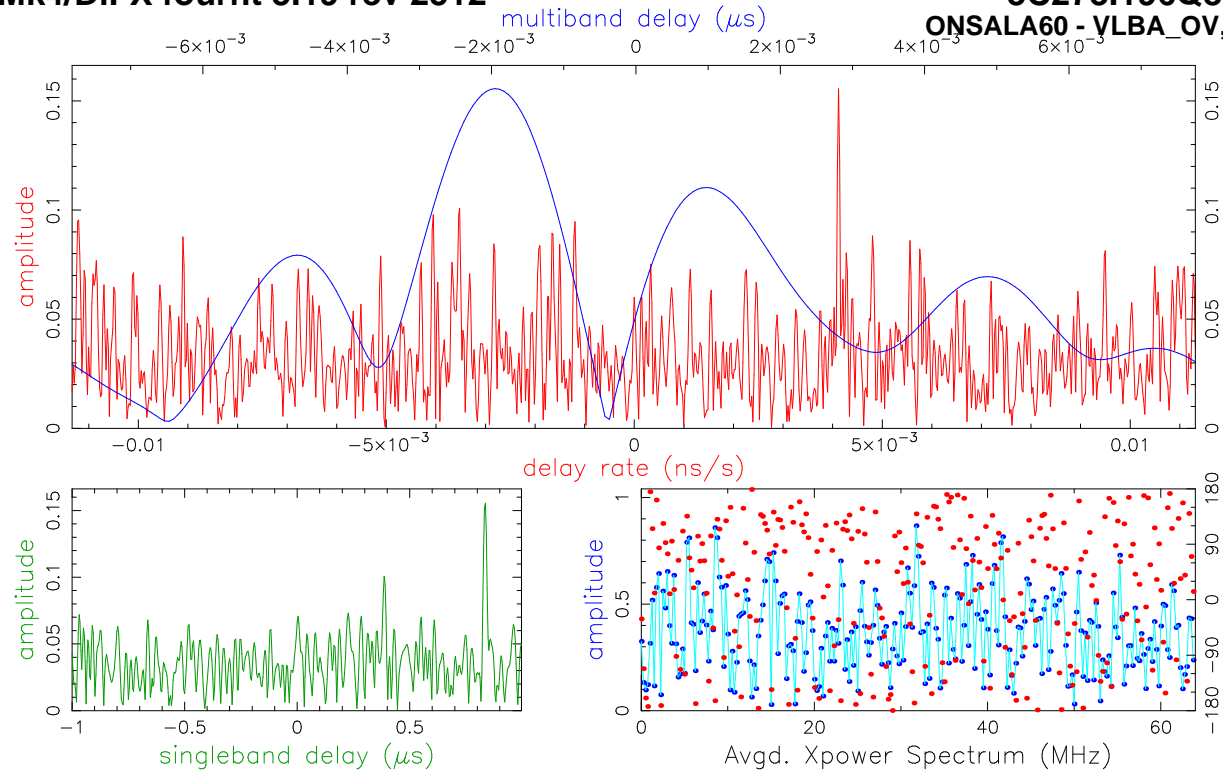
Fringe quality 0
SNR 6.2
Int time 176.685
Amp 0.171
Phase -148.9
PFD 7.3e-02
Delays (us)
SBD 0.991779
MBD 0.003988
Fringe rate (Hz)
0.011949
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153507
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



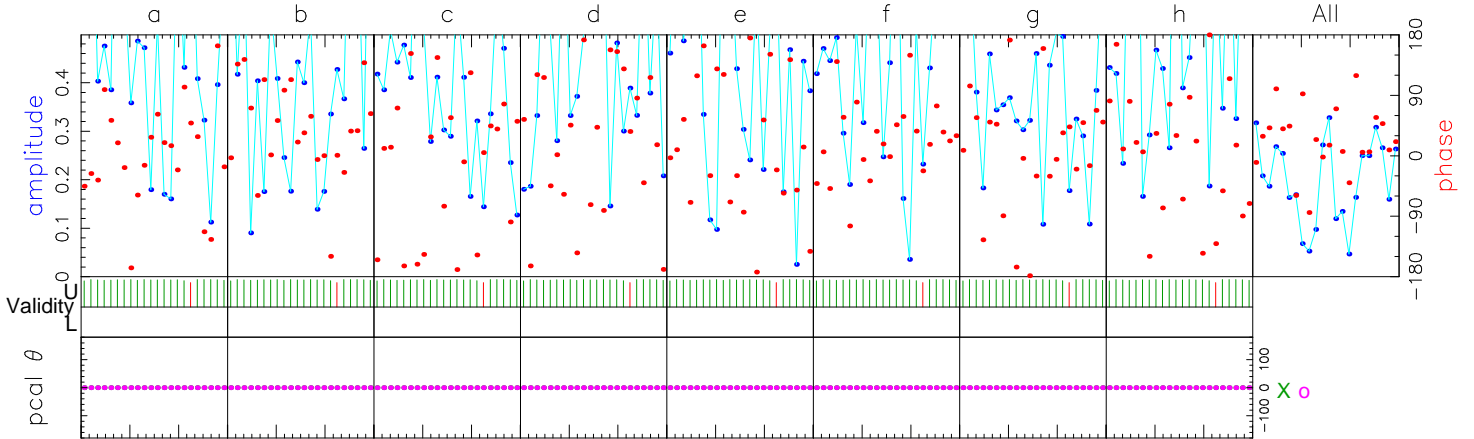
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-151.0	-142.5	-130.2	-155.4	-102.9	-159.9	84.4	-174.6	Phase	-148.9
	0.2	0.2	0.2	0.2	0.1	0.2	0.0	0.2	Ampl.	0.2
	1.4	263.1	455.4	368.2	399.4	199.5	6.4	333.3	Sbd box	510.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.14829420981E+03		Apriori delay (usec)		4.14730584698E+03		Resid mbdelay (usec)		3.98783E-03	+/- 1.8E-04
Sband delay (usec)	4.14829762573E+03		Apriori clock (usec)		2.0722635E+01		Resid sbdelay (usec)		9.91779E-01	+/- 1.4E-03
Phase delay (usec)	4.14730584218E+03		Apriori clockrate (us/s)		3.2700001E-07		Resid phdelay (usec)		-4.80106E-06	+/- 6.0E-07
Delay rate (us/s)	-1.86632344328E+00		Apriori rate (us/s)		-1.86632358199E+00		Resid rate (us/s)		1.38713E-07	+/- 5.7E-09
Total phase (deg)			88.2		Apriori accel (us/s/s)		-2.10286042018E-05		Resid phase (deg)	-148.9 +/- 18.5

ph/seg (deg) 44.6 43.3 Search (1024X32) 0.166 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 59.0 75.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 56.8 26.1 Inc. seg. avg. 0.160 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 37.1 45.6 Inc. frq. avg. 0.163 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
X: az 236.5 el 21.6 pa 26.8 o: az 94.9 el 9.6 pa -52.5 u,v (fr/asec) 10684.526 2042.961 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Xo..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Xo.W.228.196Q8V



Fringe quality 0
SNR 5.7
Int time 176.685
Amp 0.166
Phase 27.4
PFD 7.4e-01
Delays (us)
SBD 0.834535
MBD -0.001987
Fringe rate (Hz) 0.356134
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153510
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

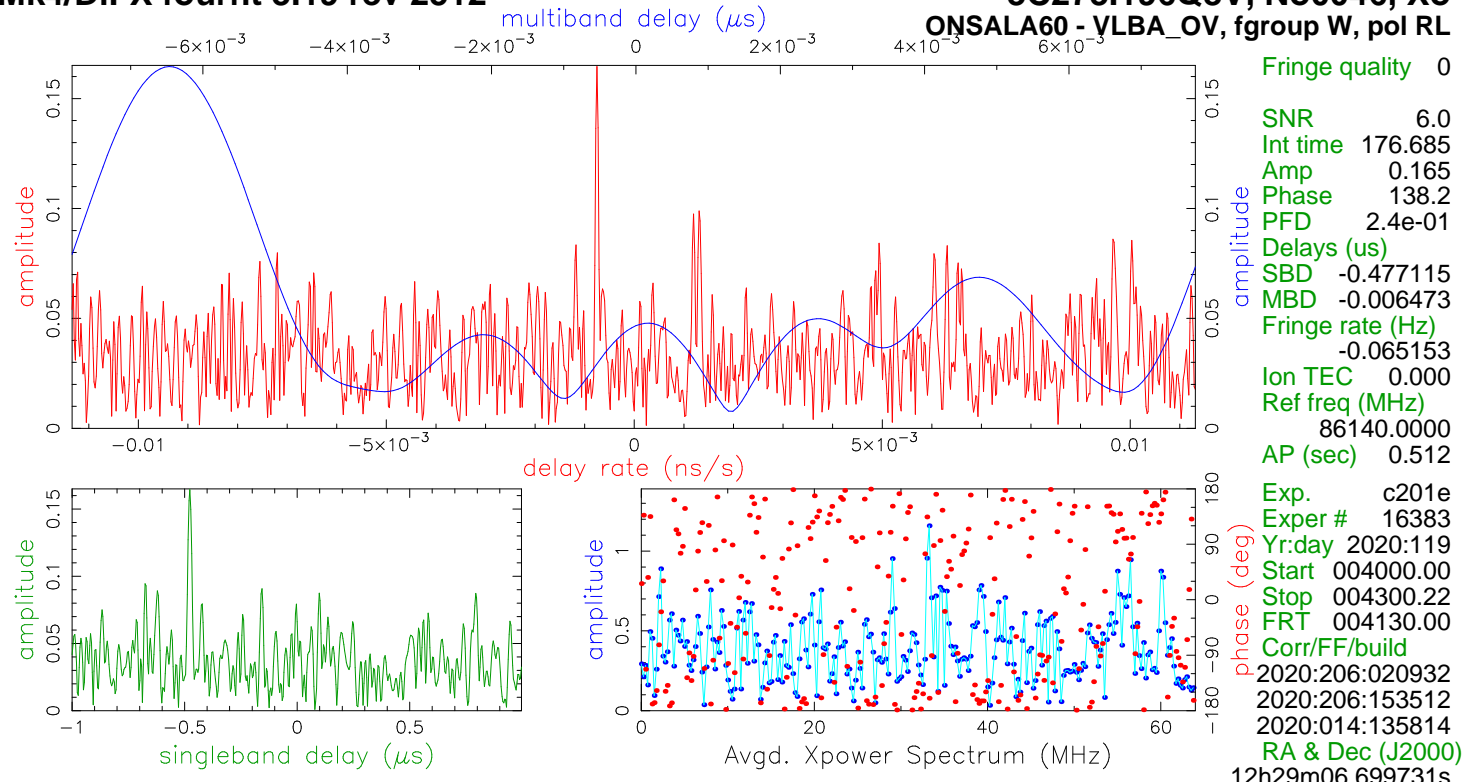


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	2.1	42.7	129.5	23.4	47.3	25.5	31.8	20.7	Phase	27.4
	0.3	0.3	0.1	0.1	0.0	0.4	0.2	0.1	Ampl.	0.2
	470.8	471.0	224.8	159.5	352.1	471.5	336.4	55.6	Sbd box	470.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	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)	4.14814760979E+03		Apriori delay (usec)		4.14730584698E+03		Resid mbdelay (usec)		-1.98718E-03	+/- 1.9E-04
Sband delay (usec)	4.14814038223E+03		Apriori clock (usec)		2.0722635E+01		Resid sbdelay (usec)		8.34535E-01	+/- 1.5E-03
Phase delay (usec)	4.14730584786E+03		Apriori clockrate (us/s)		3.2700001E-07		Resid phdelay (usec)		8.84225E-07	+/- 6.5E-07
Delay rate (us/s)	-1.86631944763E+00		Apriori rate (us/s)		-1.86632358199E+00		Resid rate (us/s)		4.13436E-06	+/- 6.2E-09
Total phase (deg)	264.5		Apriori accel (us/s/s)		-2.10286042018E-05		Resid phase (deg)		27.4	+/- 20.0

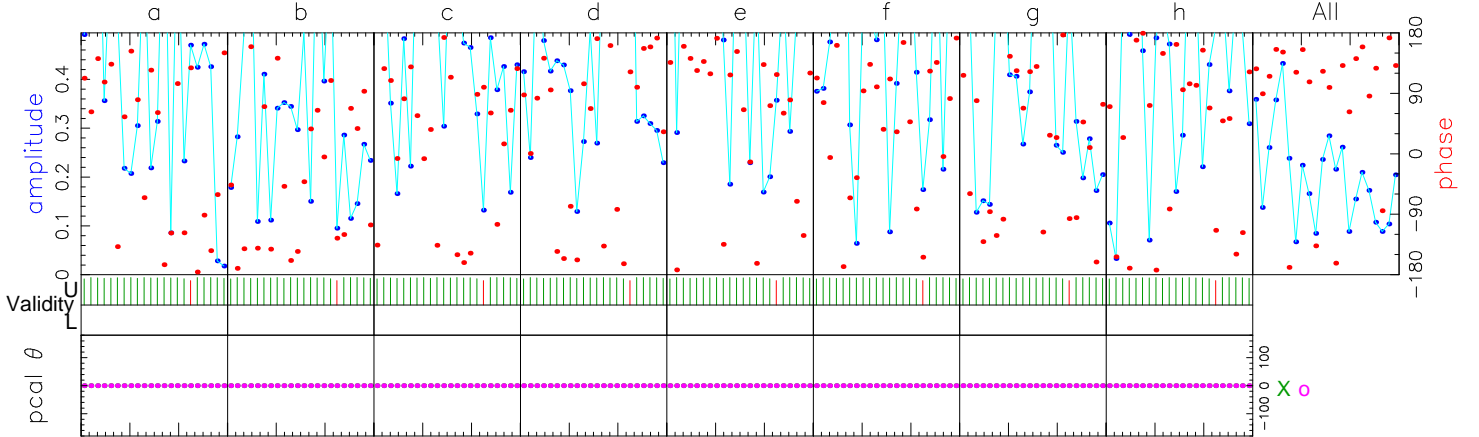
ph/seg (deg) 47.7 47.0 Search (1024X32) 0.150 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 59.4 82.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.3 28.3 Inc. seg. avg. 0.156 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 69.4 49.5 Inc. frq. avg. 0.160 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 236.5 el 21.6 pa 26.8 o: az 94.9 el 9.6 pa -52.5 u,v (fr/asec) 10684.526 2042.961 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Xo..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Xo.W.243.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Xo
 ONSALA60 - VLBA_OV, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
144.4	146.9	109.7	152.0	142.3	117.0	172.9	144.6	144.6	Phase	138.2
0.2	0.1	0.1	0.2	0.3	0.2	0.1	0.2	0.2	Ampl.	0.2
194.7	158.0	418.3	52.7	134.7	445.3	442.7	357.5	357.5	Sbd box	134.9
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000		
X W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
o W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.14683062416E+03		Apriori delay (usec)	4.14730584698E+03	Resid mbdelay (usec)	-6.47281E-03	+/-	1.8E-04		
Sband delay (usec)	4.14682873173E+03		Apriori clock (usec)	2.0722635E+01	Resid sbdelay (usec)	-4.77115E-01	+/-	1.4E-03		
Phase delay (usec)	4.14730585143E+03		Apriori clockrate (us/s)	3.2700001E-07	Resid phdelay (usec)	4.45751E-06	+/-	6.2E-07		
Delay rate (us/s)	-1.86632433835E+00		Apriori rate (us/s)	-1.86632358199E+00	Resid rate (us/s)	-7.56357E-07	+/-	5.9E-09		
Total phase (deg)		15.3	Apriori accel (us/s/s)	-2.10286042018E-05	Resid phase (deg)	138.2	+/-	19.1		

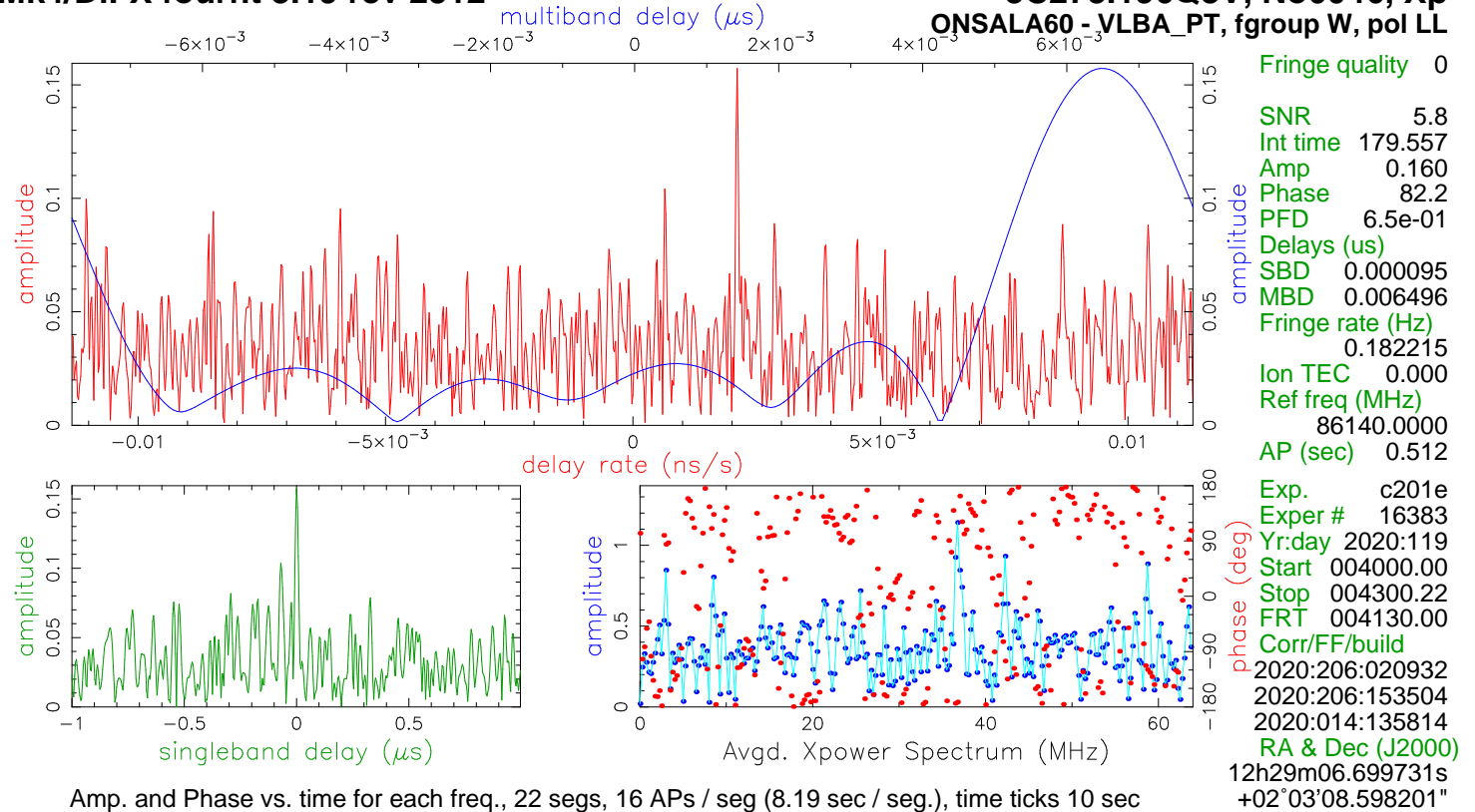
	RMS	Theor.	Amplitude	0.165 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	47.7	44.9	Search (1024X32)	0.163	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	62.6	78.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	21.7	27.1	Inc. seg. avg.	0.155	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	51.2	47.2	Inc. frq. avg.	0.154	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

X: az 236.5 el 21.6 pa 26.8 o: az 94.9 el 9.6 pa -52.5 u,v (fr/asec) 10684.526 2042.961 simultaneous interpolator

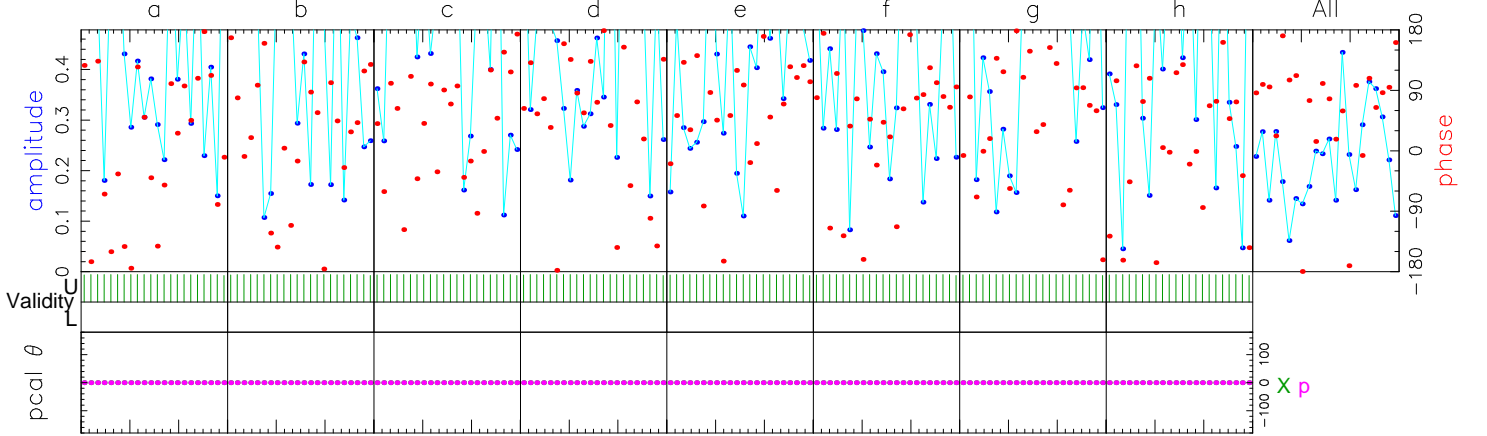
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Xo..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Xo.W.256.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Xp
ONSALA60 - VLBA_PT, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	116.1	68.6	61.7	88.5	83.5	95.1	72.1	95.7		82.2
	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	Ampl.	0.1
	386.9	275.5	19.9	427.2	259.5	44.9	107.3	212.9	Sbd box	257.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.06572365900E+03		Apriori delay (usec)		1.06571716304E+03		Resid mbdelay (usec)		6.49595E-03	+/- 1.9E-04
Sband delay (usec)	1.06571725804E+03		Apriori clock (usec)		2.3530787E+01		Resid sbdelay (usec)		9.50000E-05	+/- 1.5E-03
Phase delay (usec)	1.06571716570E+03		Apriori clockrate (us/s)		3.2400002E-07		Resid phdelay (usec)		2.65204E-06	+/- 6.4E-07
Delay rate (us/s)	-1.84895490757E+00		Apriori rate (us/s)		-1.84895702290E+00		Resid rate (us/s)		2.11534E-06	+/- 6.2E-09
Total phase (deg)	235.1		Apriori accel (us/s/s)		-4.47549307860E-06		Resid phase (deg)		82.2	+/- 19.9

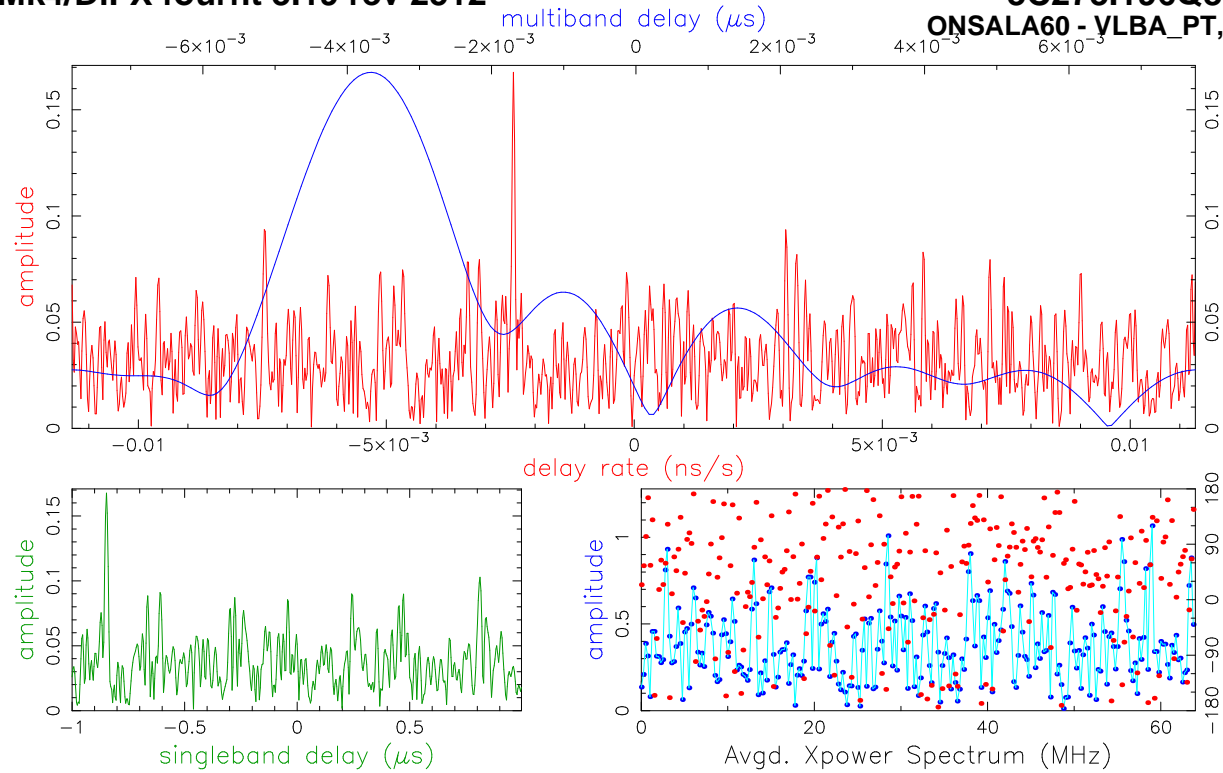
	RMS	Theor.	Amplitude	0.160 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	52.1	46.6	Search (1024X32)	0.148	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	72.6	81.4	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	19.3	28.1	Inc. seg. avg.	0.173	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	33.5	49.1	Inc. frq. avg.	0.147	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

X: az 236.5 el 21.6 pa 26.8 p: az 100.4 el 18.2 pa -54.4 u,v (fr/asec) 10593.635 2453.593 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Xp..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Xp.W.204.196Q8V

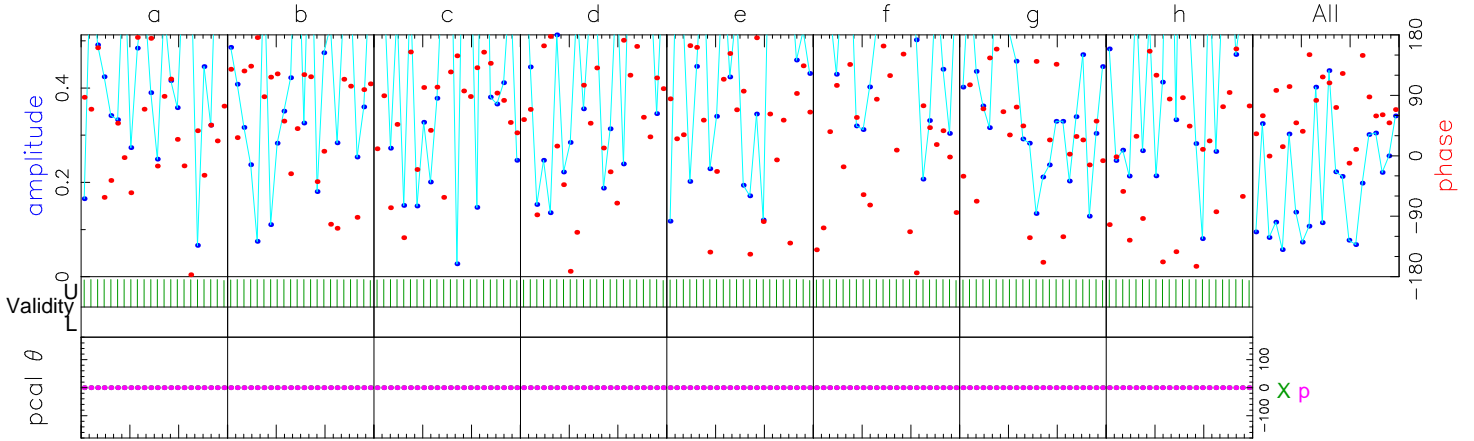
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Xp
 ONSALA60 - VLBA_PT, fgroup W, pol RR



Fringe quality 0
 SNR 6.1
 Int time 179.557
 Amp 0.171
 Phase 78.8
 PFD 1.0e-01
 Delays (us)
 SBD -0.847555
 MBD -0.003675
 Fringe rate (Hz)
 -0.210978
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153506
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



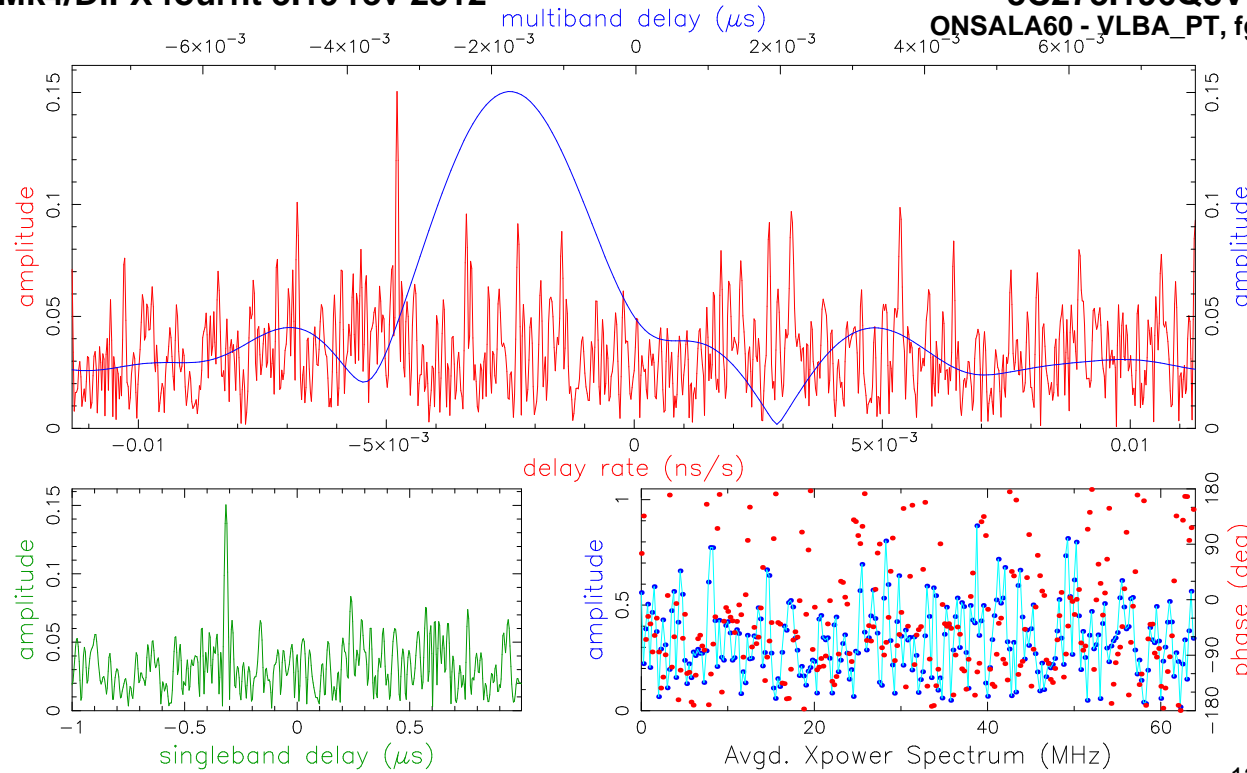
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
47.2	91.1	95.9	79.8	78.4	78.4	96.9	57.1	79.7	Phase	78.8
0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.2	Ampl.	0.2
106.0	319.9	38.7	194.7	209.8	194.2	376.1	324.0	324.0	Sbd box	40.0
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.06486973841E+03		Apriori delay (usec)	1.06571716304E+03		Resid mbdelay (usec)	-3.67464E-03	+/-	1.8E-04	
Sband delay (usec)	1.06486960804E+03		Apriori clock (usec)	2.3530787E+01		Resid sbdelay (usec)	-8.47555E-01	+/-	1.4E-03	
Phase delay (usec)	1.06571716559E+03		Apriori clockrate (us/s)	3.2400002E-07		Resid phdelay (usec)	2.54258E-06	+/-	6.0E-07	
Delay rate (us/s)	-1.84895947214E+00		Apriori rate (us/s)	-1.84895702290E+00		Resid rate (us/s)	-2.44924E-06	+/-	5.8E-09	
Total phase (deg)		231.7	Apriori accel (us/s/s)	-4.47549307860E-06		Resid phase (deg)	78.8	+/-	18.7	

	RMS	Theor.	Amplitude	0.171 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	45.6	43.7	Search (1024X32)	0.161	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	71.3	76.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	19.3	26.4	Inc. seg. avg.	0.160	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	33.9	46.0	Inc. frq. avg.	0.161	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

X: az 236.5 el 21.6 pa 26.8 p: az 100.4 el 18.2 pa -54.4 u,v (fr/asec) 10593.635 2453.593 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Xp..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Xp.W.218.196Q8V

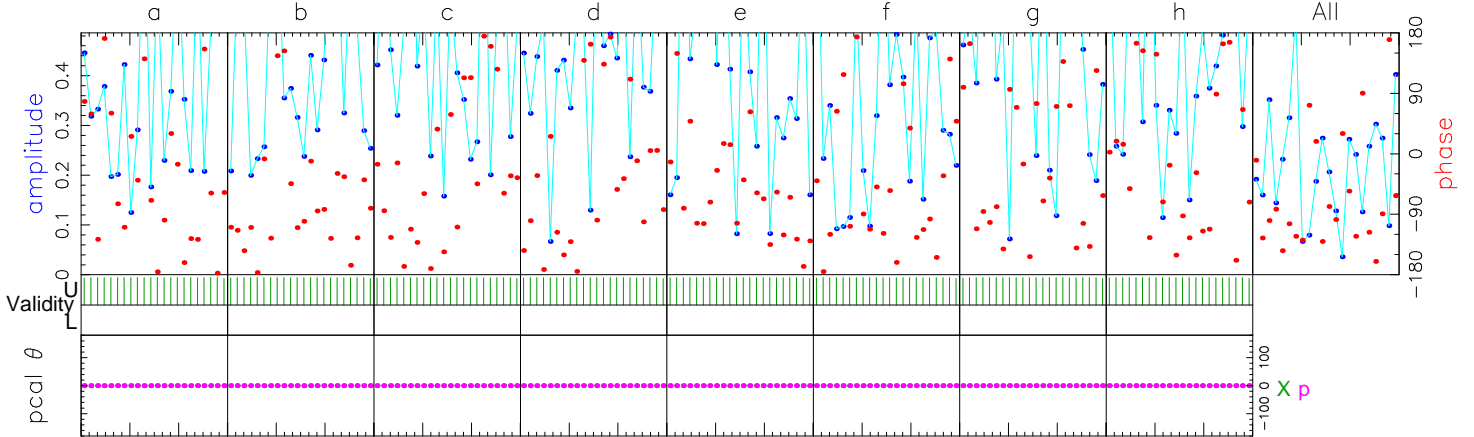
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Xp
ONSALA60 - VLBA_PT, fgroup W, pol LR



Fringe quality 0
SNR 5.5
Int time 179.557
Amp 0.162
Phase -103.1
PFD 9.9e-01
Delays (us)
SBD -0.316433
MBD -0.001748
Fringe rate (Hz)
-0.413376
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153507
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

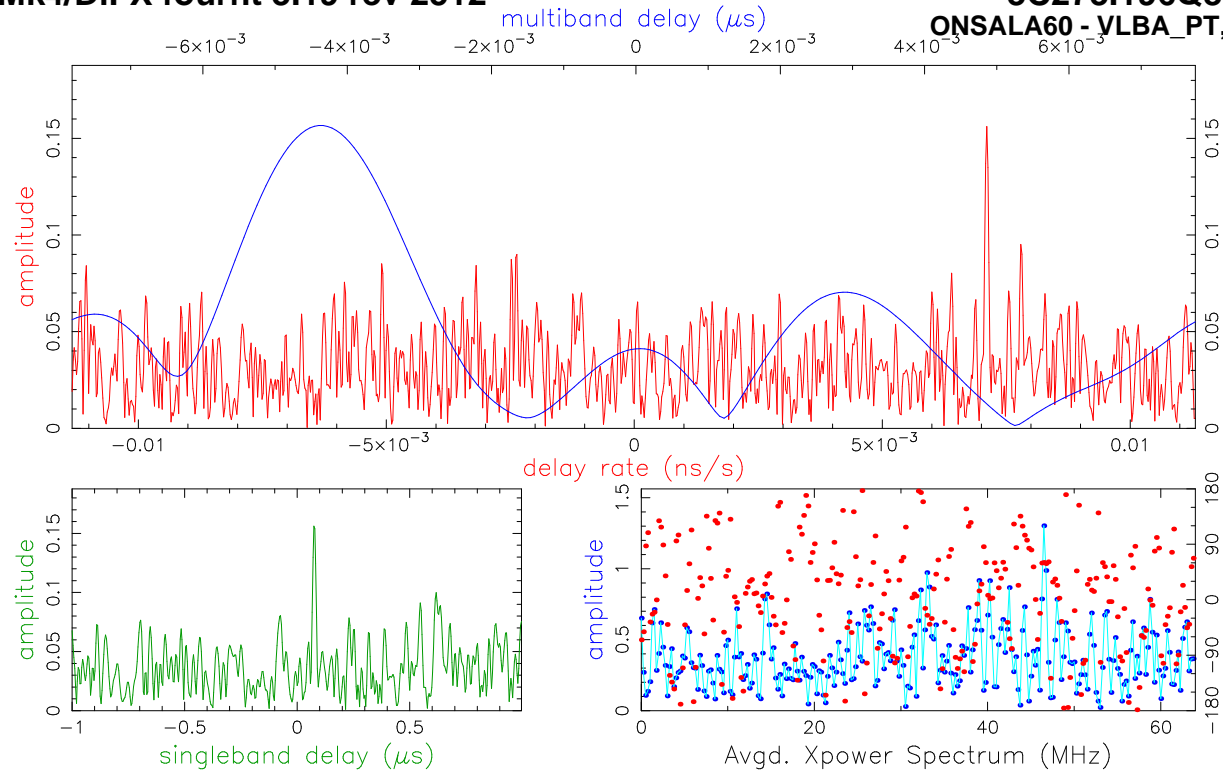


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-124.1	-108.4	-99.6	-105.3	-65.7	-114.9	-117.7	-122.8	Phase	-103.1
	0.1	0.3	0.1	0.2	0.3	0.2	0.1	0.1	Ampl.	0.2
	365.6	175.7	405.1	498.1	176.5	154.5	439.7	255.7	Sbd box	176.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.06540291455E+03		Apriori delay (usec)		1.06571716304E+03		Resid mbdelay (usec)		-1.74849E-03	+/- 2.0E-04
Sband delay (usec)	1.06540073004E+03		Apriori clock (usec)		2.3530787E+01		Resid sbdelay (usec)		-3.16433E-01	+/- 1.6E-03
Phase delay (usec)	1.06571715972E+03		Apriori clockrate (us/s)		3.2400002E-07		Resid phdelay (usec)		-3.32482E-06	+/- 6.7E-07
Delay rate (us/s)	-1.84896182179E+00		Apriori rate (us/s)		-1.84895702290E+00		Resid rate (us/s)		-4.79889E-06	+/- 6.4E-09
Total phase (deg)	49.8		Apriori accel (us/s/s)		-4.47549307860E-06		Resid phase (deg)		-103.1	+/- 20.8

RMS Theor. Amplitude 0.162 +/- 0.029
ph/seg (deg) 73.9 48.8 Search (1024X32) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 90.2 85.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 20.9 29.4 Inc. seg. avg. 0.175 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 37.1 51.3 Inc. frq. avg. 0.152 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
X: az 236.5 el 21.6 pa 26.8 p: az 100.4 el 18.2 pa -54.4 u,v (fr/asec) 10593.635 2453.593 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Xp..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Xp.W.229.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, Xp
 ONSALA60 - VLBA_PT, fgroup W, pol RL

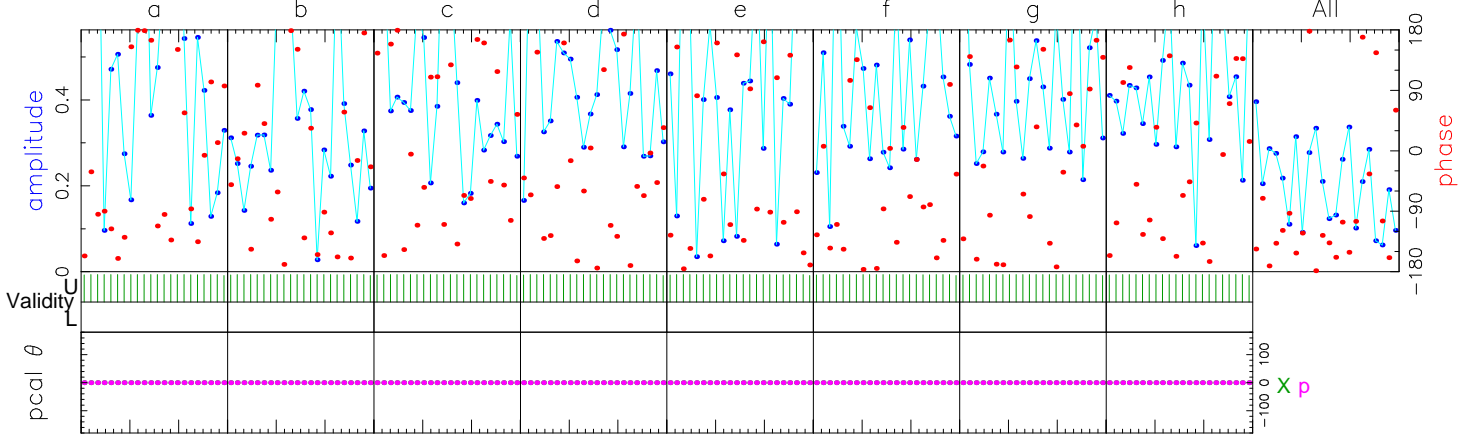


Fringe quality 0

SNR 5.8
 Int time 179.557
 Amp 0.188
 Phase -142.0
 PFD 5.3e-01
 Delays (us)
 SBD 0.075867
 MBD -0.004267
 Fringe rate (Hz) 0.612685
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build 2020:206:020932
 2020:206:153510
 2020:014:135814
 RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

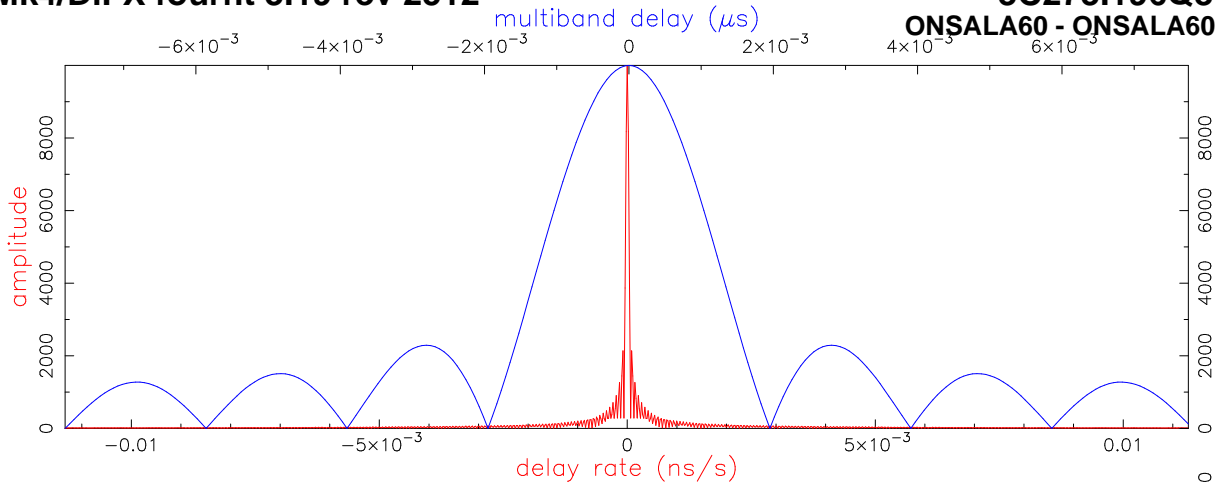


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-141.9	-142.6	-154.9	-102.4	-140.8	-120.6	171.2	-164.7	Phase	-142.0
	0.3	0.1	0.2	0.2	0.4	0.2	0.2	0.1	Ampl.	0.2
	381.3	75.1	48.4	145.1	276.8	338.0	331.7	173.0	Sbd box	276.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.06579102061E+03		Apriori delay (usec)		1.06571716304E+03		Resid mbdelay (usec)		-4.26744E-03	+/- 1.9E-04
Sband delay (usec)	1.06579303029E+03		Apriori clock (usec)		2.3530787E+01		Resid sbdelay (usec)		7.58673E-02	+/- 1.5E-03
Phase delay (usec)	1.06571715846E+03		Apriori clockrate (us/s)		3.2400002E-07		Resid phdelay (usec)		-4.58003E-06	+/- 6.4E-07
Delay rate (us/s)	-1.84894991024E+00		Apriori rate (us/s)		-1.84895702290E+00		Resid rate (us/s)		7.11266E-06	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.47549307860E-06		Resid phase (deg)		-142.0	+/- 19.7

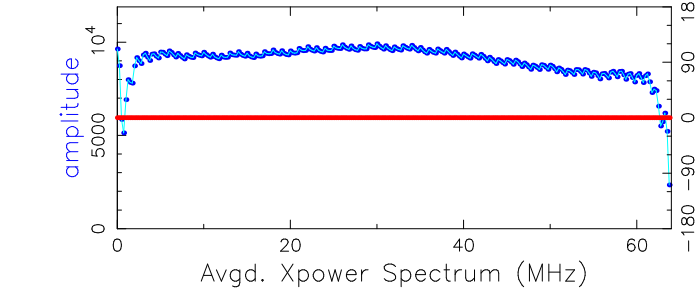
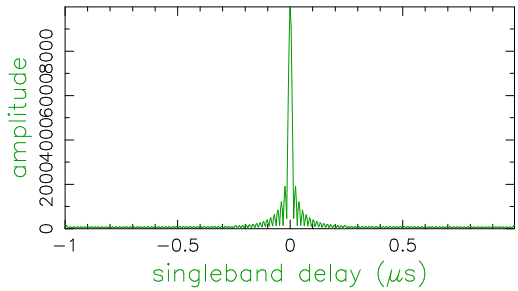
ph/seg (deg) 52.5 46.2 Amplitude 0.188 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.1 80.6 Search (1024X32) 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.6 27.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.5 48.6 Inc. seg. avg. 0.186 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 X: az 236.5 el 21.6 pa 26.8 p: az 100.4 el 18.2 pa -54.4 u,v (fr/asec) 10593.635 2453.593 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/Xp..196Q8V Output file: /Exps/c201e/v1/1234/No0046/Xp.W.245.196Q8V simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

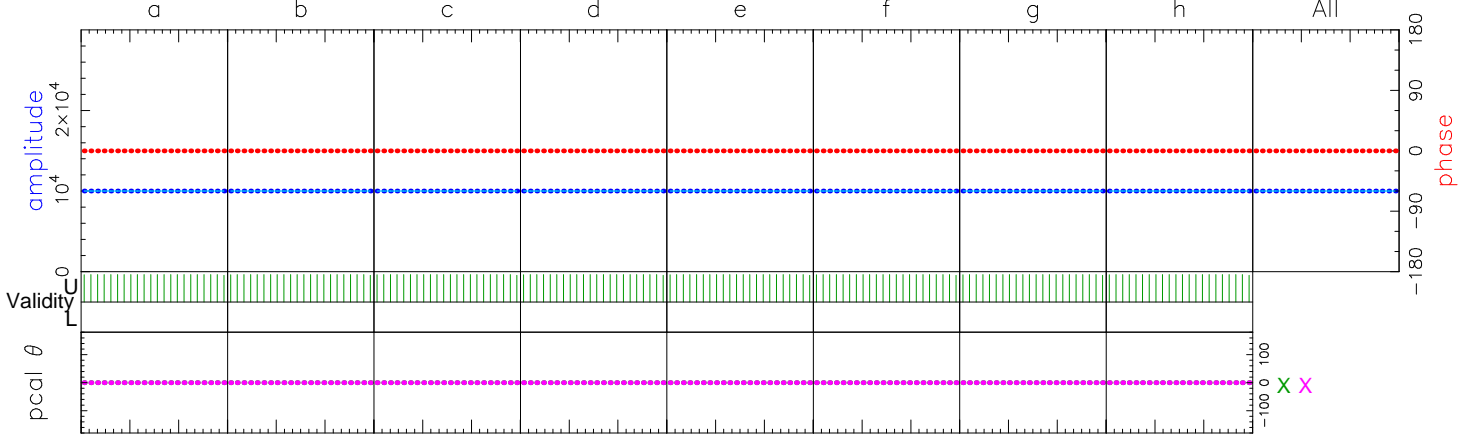
3C273.196Q8V, No0046, XX
 ONŞALA60 - ONŞALA60, fgroup W, pol LL



Fringe quality 9
 SNR 366817.5
 Int time 179.931
 Amp 9999.999
 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. c201e
 Yr:day 16383
 Start 2020:119
 Stop 2020:119
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153504
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



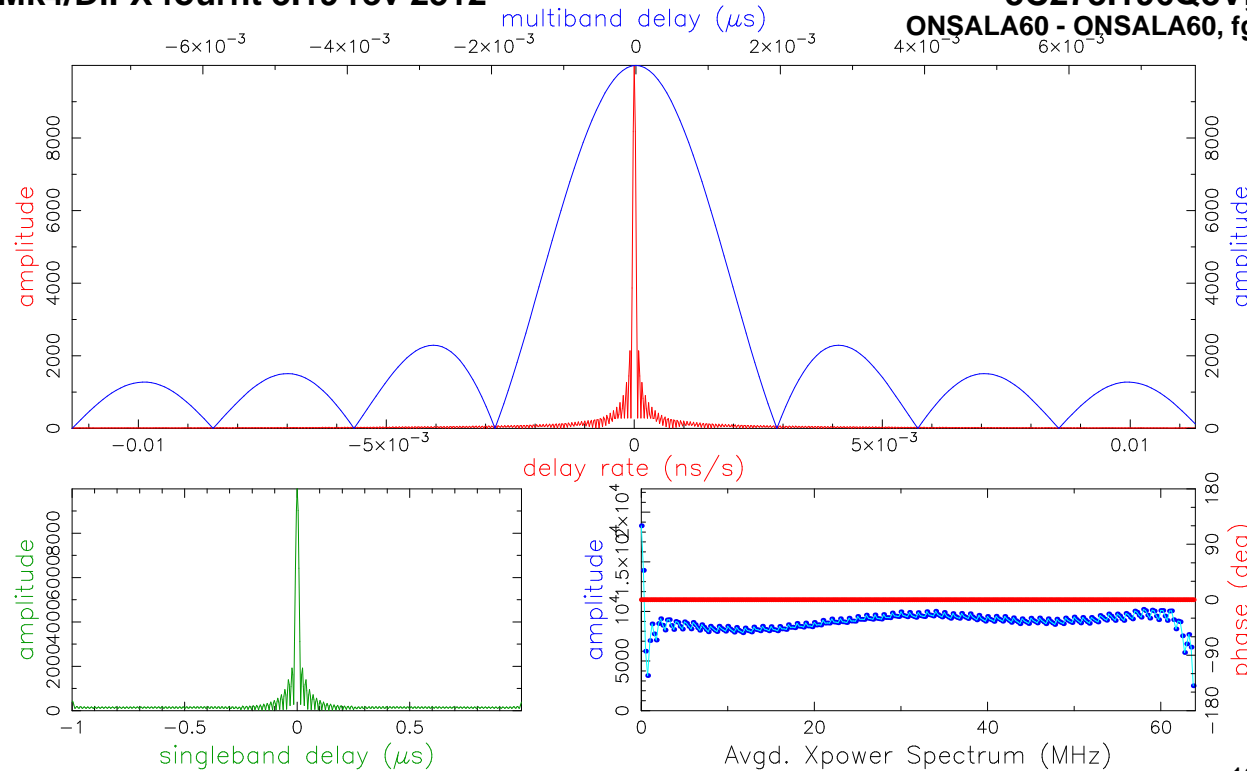
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	3.0E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.3E-08
Phase delay (usec)	-5.74822668191E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-5.74823E-20	+/-	1.0E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	9.7E-14
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

	RMS	Theor.	Amplitude	9999.999 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	0.0	0.0	Search (1024X32)	9999.999	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.	9999.999	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 236.5 el 21.6 pa 26.8 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/XX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/XX.W.205.196Q8V

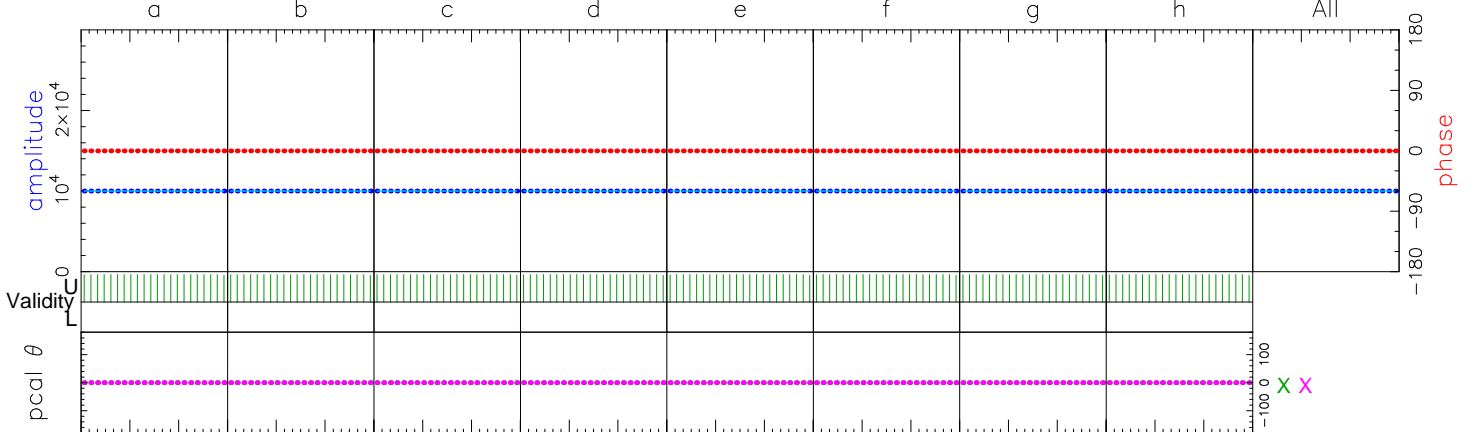


Fringe quality 9

SNR 366817.5
 Int time 179.931
 Amp 9999.999
 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. c201e
 Yr:day 16383
 Start 2020:119
 Stop 2020:206:020932
 FRT 2020:206:153506
 Corr/FF/build 2020:014:135814
 RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

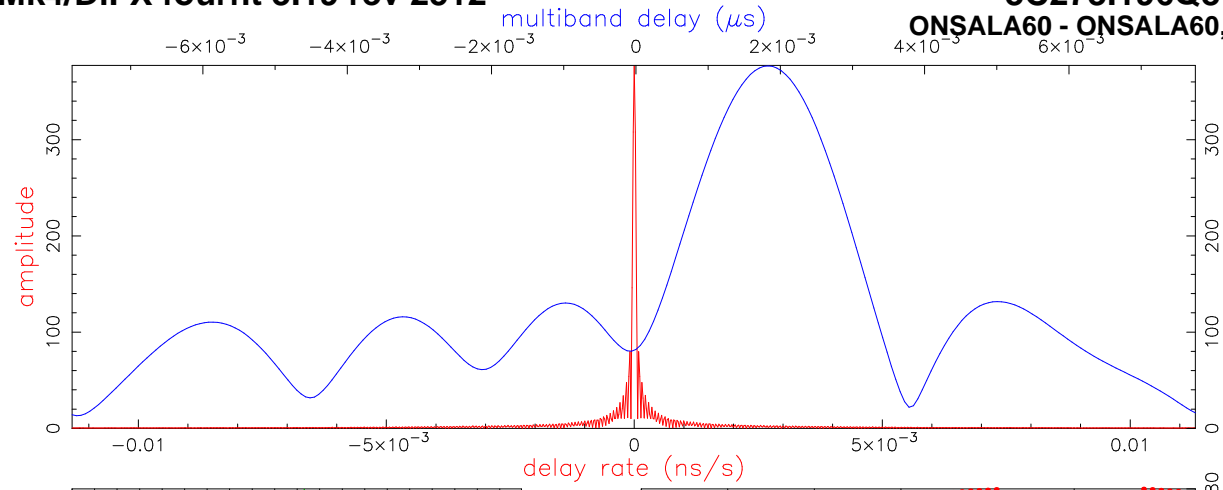
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	257.0	257.0
X	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.0	0.0
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.0	0.0
X	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
X	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	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	+/-	3.0E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.3E-08
Phase delay (usec)	-1.2858883245E-19	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.28589E-19	+/-	1.0E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	9.7E-14
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

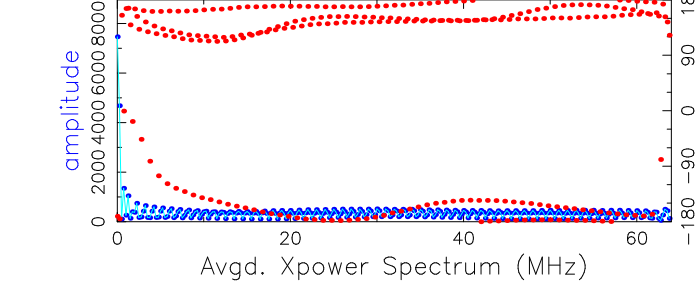
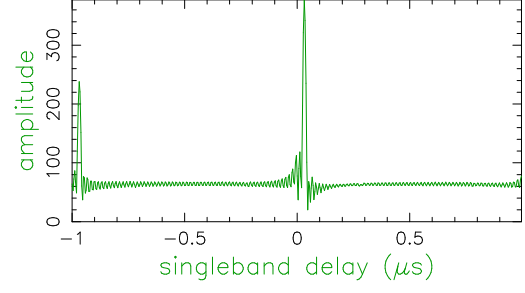
ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.999 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (1024X32)	9999.999	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	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.	9999.999	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00



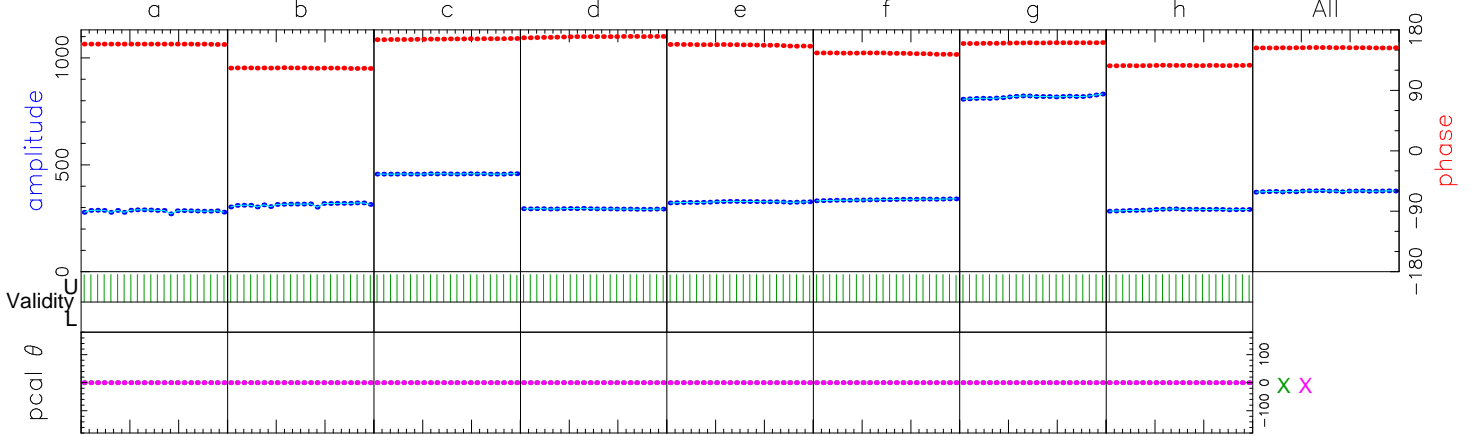
Fringe quality 6

SNR 13834.8
 Int time 179.931
 Amp 377.157
 Phase 153.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.031705
 MBD 0.001856
 Fringe rate (Hz)
 -0.000031
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153508
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

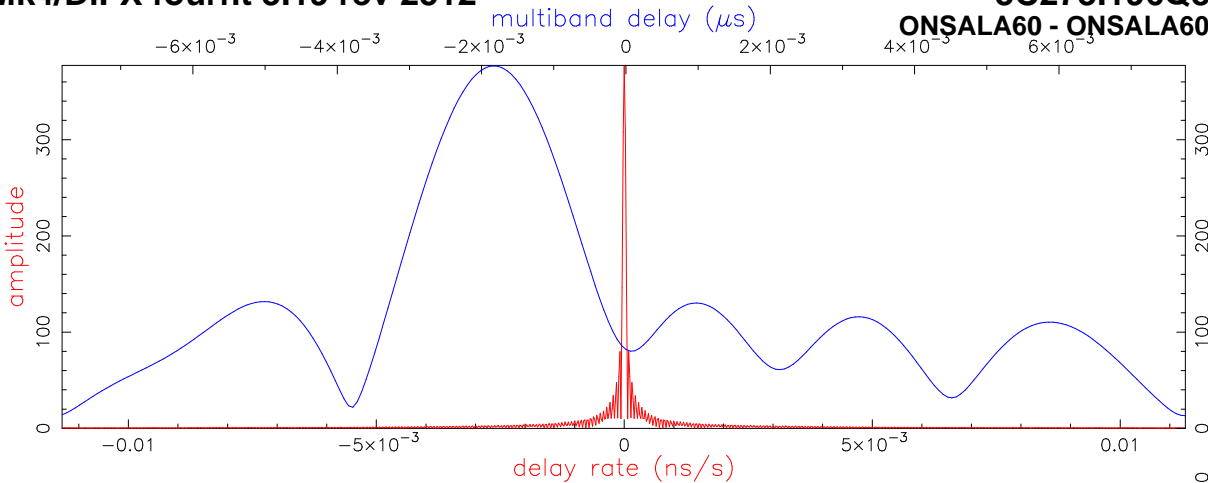


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	158.6	123.0	166.2	169.5	157.3	144.9	160.4	126.9	Phase	153.3
	284.2	314.2	457.4	294.1	326.2	336.9	817.8	289.8	Ampl.	390.1
	263.8	266.2	265.2	265.4	265.6	265.3	264.9	265.0	Sbd box	265.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.31057187500E-02		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		1.85572E-03	+/- 7.8E-08
Sband delay (usec)	3.17047500000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		3.17047E-02	+/- 6.2E-07
Phase delay (usec)	4.94222701444E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		4.94223E-06	+/- 2.7E-10
Delay rate (us/s)	-3.54278809792E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-3.54279E-10	+/- 2.6E-12
Total phase (deg)	153.3		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		153.3	+/- 0.0

RMS Theor. Amplitude 377.157 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.0 Search (1024X32) 374.338 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 19.2 0.0 Inc. seg. avg. 376.532 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 45.1 0.0 Inc. frq. avg. 390.080 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

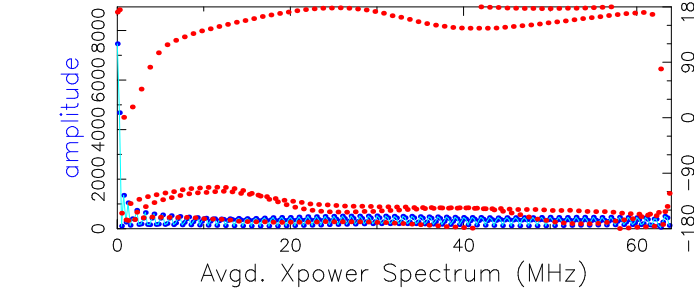
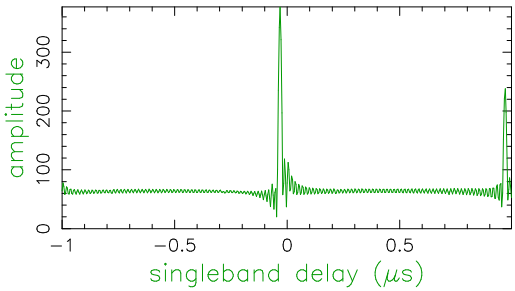
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, XX
 ONŞALA60 - ONŞALA60, fgroup W, pol RL



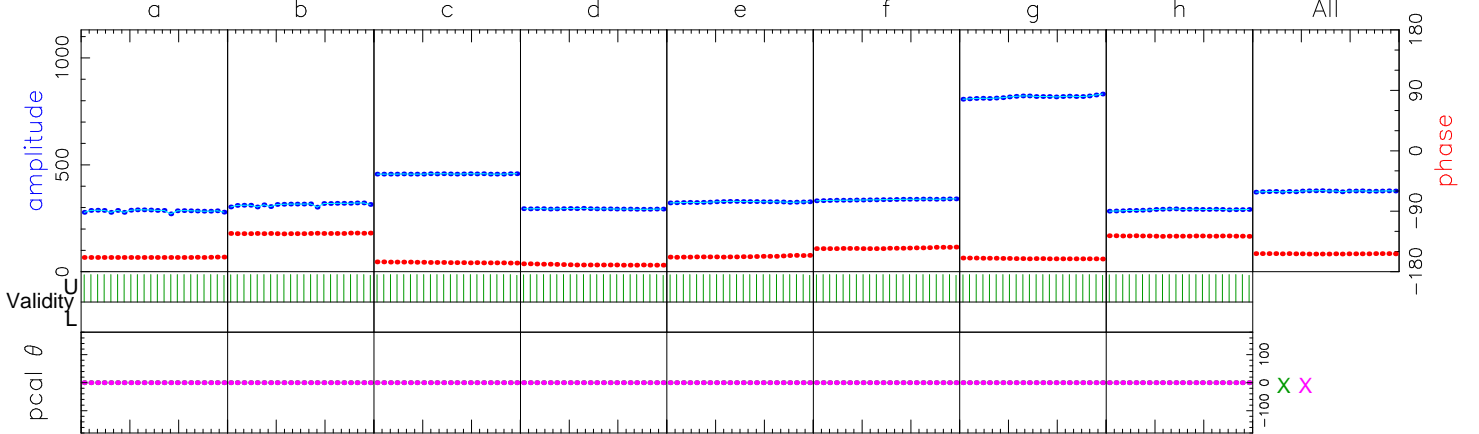
Fringe quality 6

SNR 13834.8
 Int time 179.931
 Amp 377.157
 Phase -153.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.031705
 MBD -0.001856
 Fringe rate (Hz)
 0.000031
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153510
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

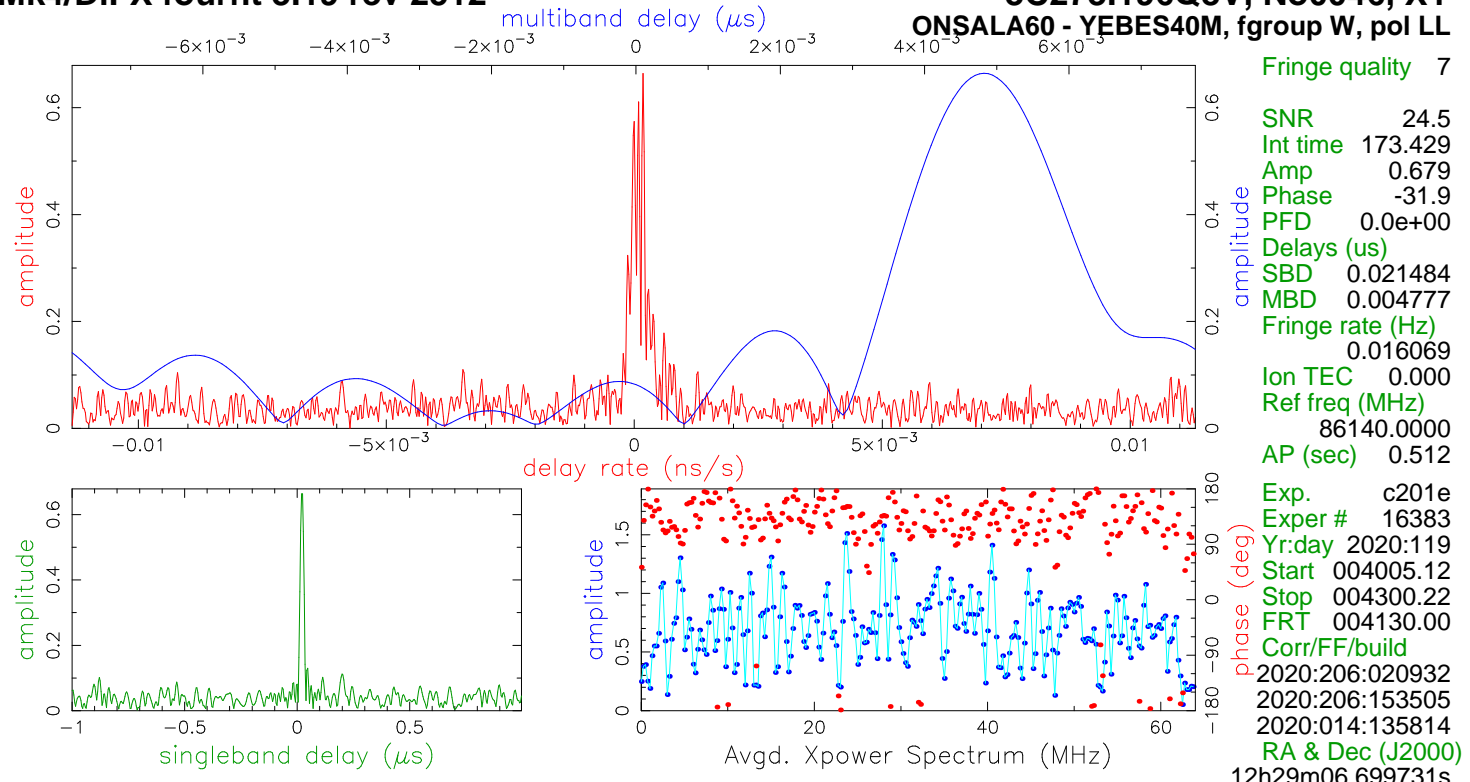


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-158.6	-123.0	-166.2	-169.5	-157.3	-144.9	-160.4	-126.9	Phase	-153.3
	284.2	314.2	457.4	294.1	326.2	336.9	817.8	289.8	Ampl.	390.1
	250.2	247.8	248.8	248.6	248.4	248.7	249.1	249.0	Sbd box	248.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.31057187500E-02		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		-1.85572E-03	+/- 7.8E-08
Sband delay (usec)	-3.17047500000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-3.17047E-02	+/- 6.2E-07
Phase delay (usec)	-4.94222701435E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.94223E-06	+/- 2.7E-10
Delay rate (us/s)	3.54278809792E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		3.54279E-10	+/- 2.6E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-153.3	+/- 0.0

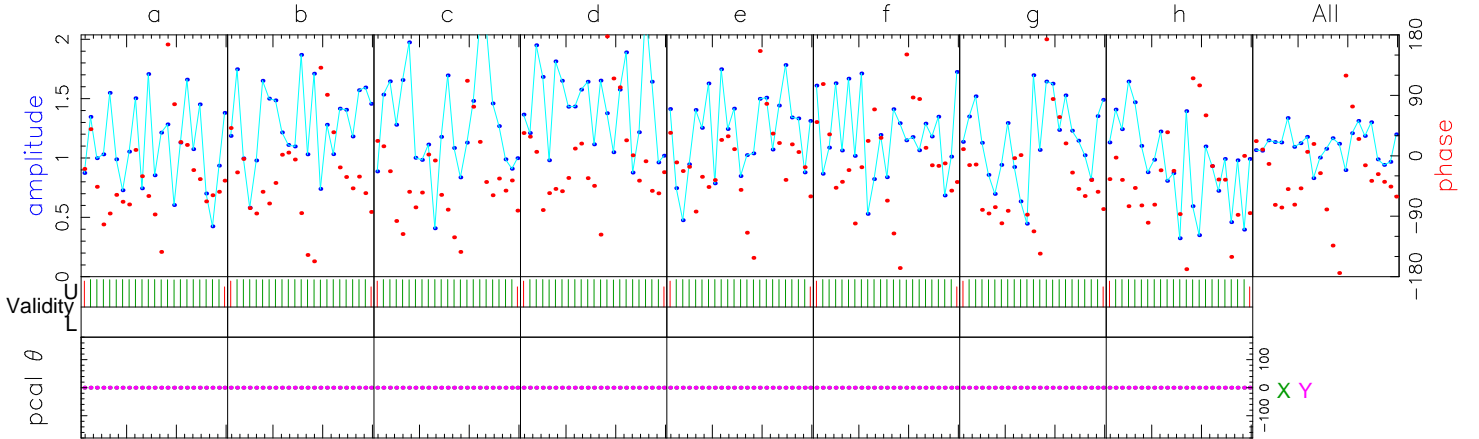
RMS Theor. Amplitude 377.157 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.0 Search (1024X32) 374.338 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 19.2 0.0 Inc. seg. avg. 376.532 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 45.1 0.0 Inc. frq. avg. 390.080 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 X: az 236.5 el 21.6 pa 26.8 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/XX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/XX.W.248.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, XY
ONŞALA60 - YEBES40M, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-42.6	-39.8	-43.4	-20.7	-8.9	-7.2	-46.8	-45.7	Phase	-31.9
	0.7	0.8	0.8	0.9	0.7	0.5	0.6	0.6	Ampl.	0.7
	262.0	262.5	262.6	263.0	262.6	262.2	262.1	261.3	Sbd box	262.5
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.70138262126E+03		Apriori delay (usec)	-5.70140302307E+03	Resid mbdelay (usec)	4.77680E-03	+/-	4.4E-05		
Sband delay (usec)	-5.70138153882E+03		Apriori clock (usec)	2.8848253E+01	Resid sbdelay (usec)	2.14843E-02	+/-	3.5E-04		
Phase delay (usec)	-5.70140302409E+03		Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	-1.02745E-06	+/-	1.5E-07		
Delay rate (us/s)	4.43923295137E-02		Apriori rate (us/s)	4.43921429633E-02	Resid rate (us/s)	1.86550E-07	+/-	1.5E-09		
Total phase (deg)		-178.4	Apriori accel (us/s/s)	3.12071047597E-05	Resid phase (deg)	-31.9	+/-	4.7		

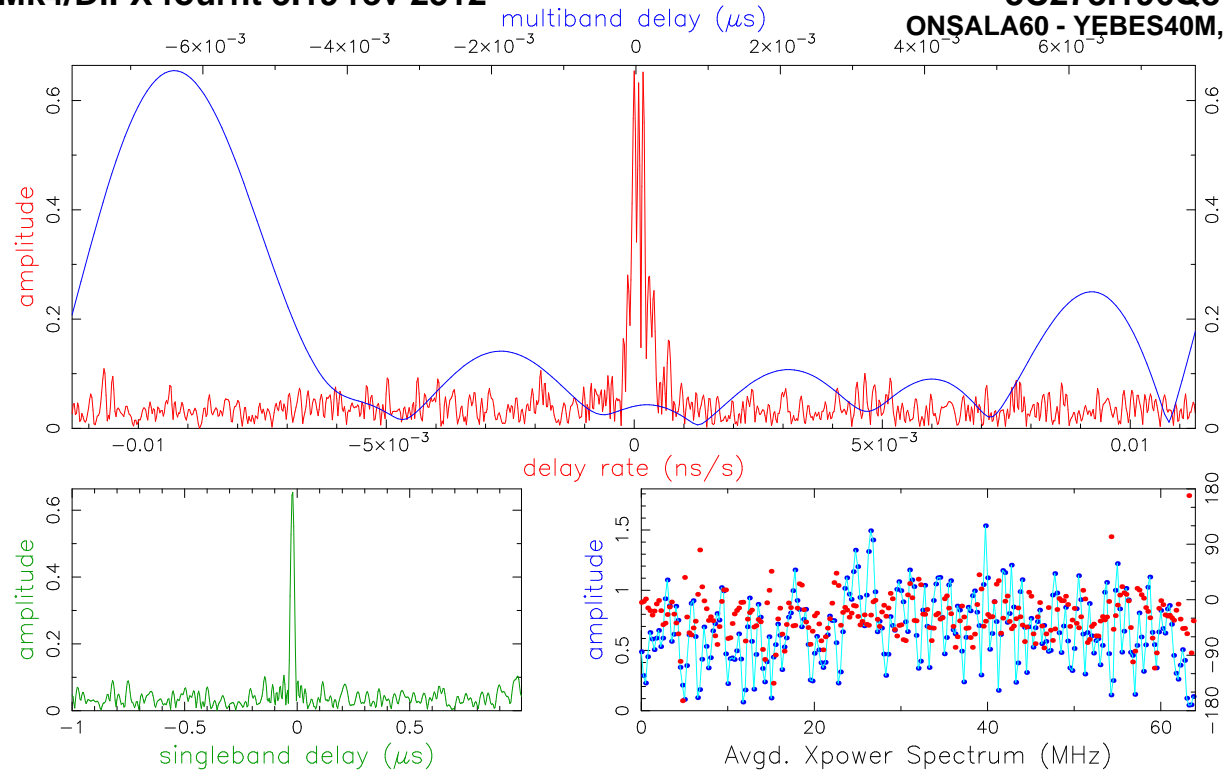
	RMS	Theor.	Amplitude	0.679 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	61.5	11.2	Search (1024X32)	0.633	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	65.7	19.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	18.2	6.6	Inc. seg. avg.	1.086	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	16.7	11.6	Inc. frq. avg.	0.684	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

X: az 236.5 el 21.6 pa 26.8 Y: az 229.4 el 39.6 pa 35.3 u,v (fr/asec) -237.975 1791.273 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/XY..196Q8V Output file: /Exps/c201e/v1/1234/No0046/XY.W.211.196Q8V

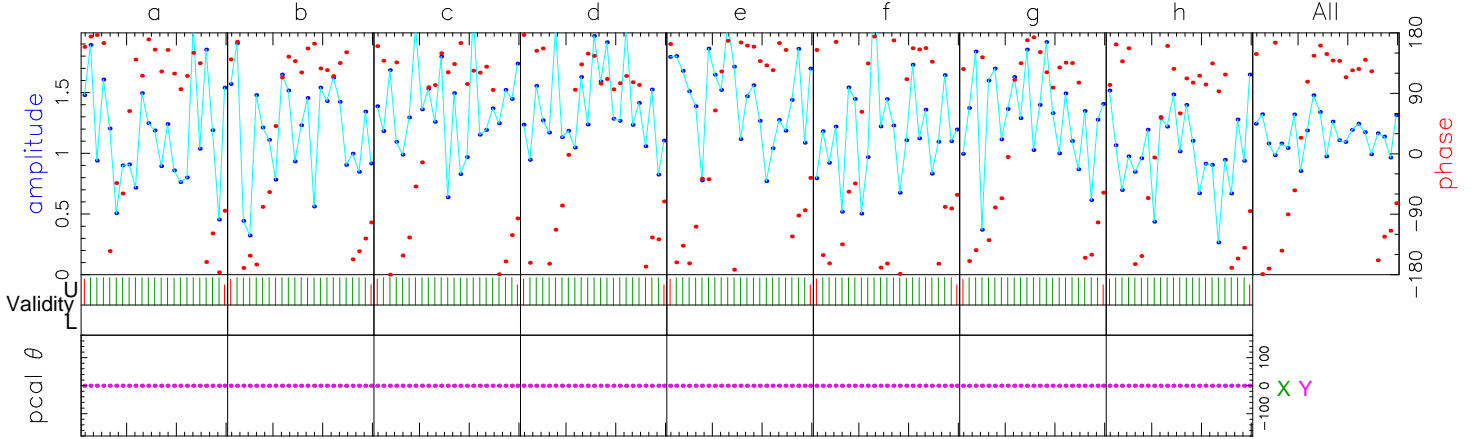
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, XY
 ONŞALA60 - YEŞES40M, fgroup W, pol RR



Fringe quality 9
 SNR 23.9
 Int time 173.429
 Amp 0.664
 Phase 163.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.021179
 MBD -0.006454
 Fringe rate (Hz)
 0.000449
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004005.12
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153507
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

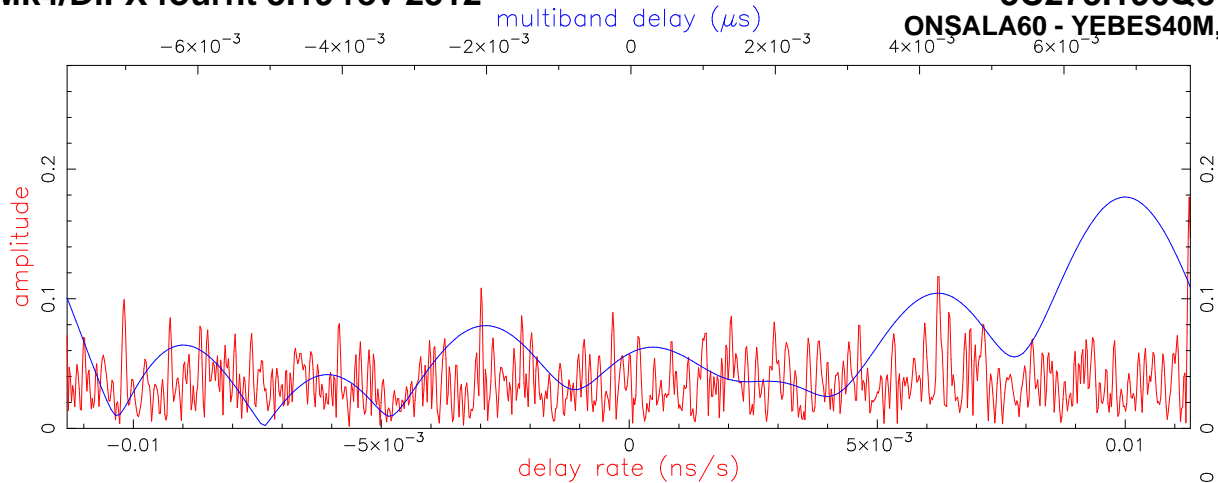


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		-5.70142510257E+03			-5.70140302307E+03				-6.45450E-03	+/- 4.5E-05
Sband delay (usec)		-5.70142420232E+03			2.8848253E+01				-2.11792E-02	+/- 3.6E-04
Phase delay (usec)		-5.70140301778E+03			3.0800002E-07				5.28271E-06	+/- 1.5E-07
Delay rate (us/s)		4.43921481782E-02			4.43921429633E-02				5.21498E-09	+/- 1.5E-09
Total phase (deg)			17.3		3.12071047597E-05				163.8	+/- 4.8
ph/seg (deg)	63.7	11.5								
amp/seg (%)	76.8	20.0								
ph/frq (deg)	19.1	6.8								
amp/frq (%)	12.3	11.8								
X: az 236.5 el 21.6 pa 26.8										
Y: az 229.4 el 39.6 pa 35.3										
u,v (fr/asec)					-237.975	1791.273				
Control file: cf_1234_gmva										
Input file: /Exps/c201e/v1/1234/No0046/XY..196Q8V										
Output file: /Exps/c201e/v1/1234/No0046/XY.W.225.196Q8V										

simultaneous interpolator

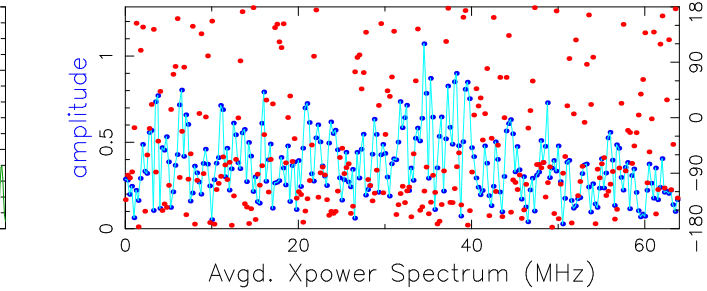
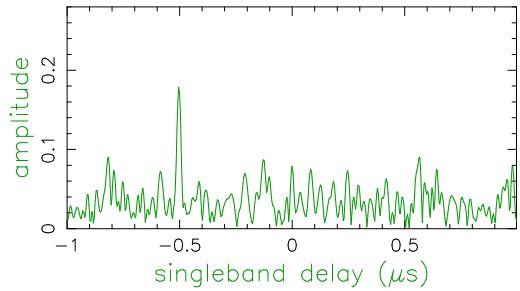
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, XY
 ONŞALA60 - YEŞES40M, fgroup W, pol LR



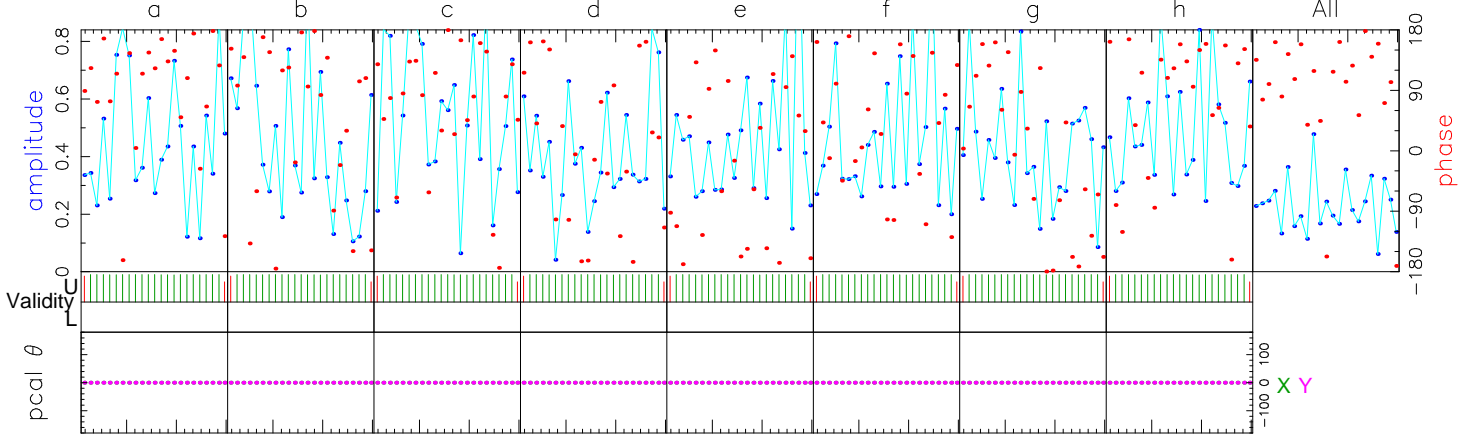
Fringe quality 0

SNR 6.4
 Int time 173.429
 Amp 0.280
 Phase 121.2
 PFD 1.7e-02
 Delays (us)
 SBD -0.503268
 MBD 0.006884
 Fringe rate (Hz)
 0.974070
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c201e
 Yr:day # 16383
 Start 2020:119
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153509
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

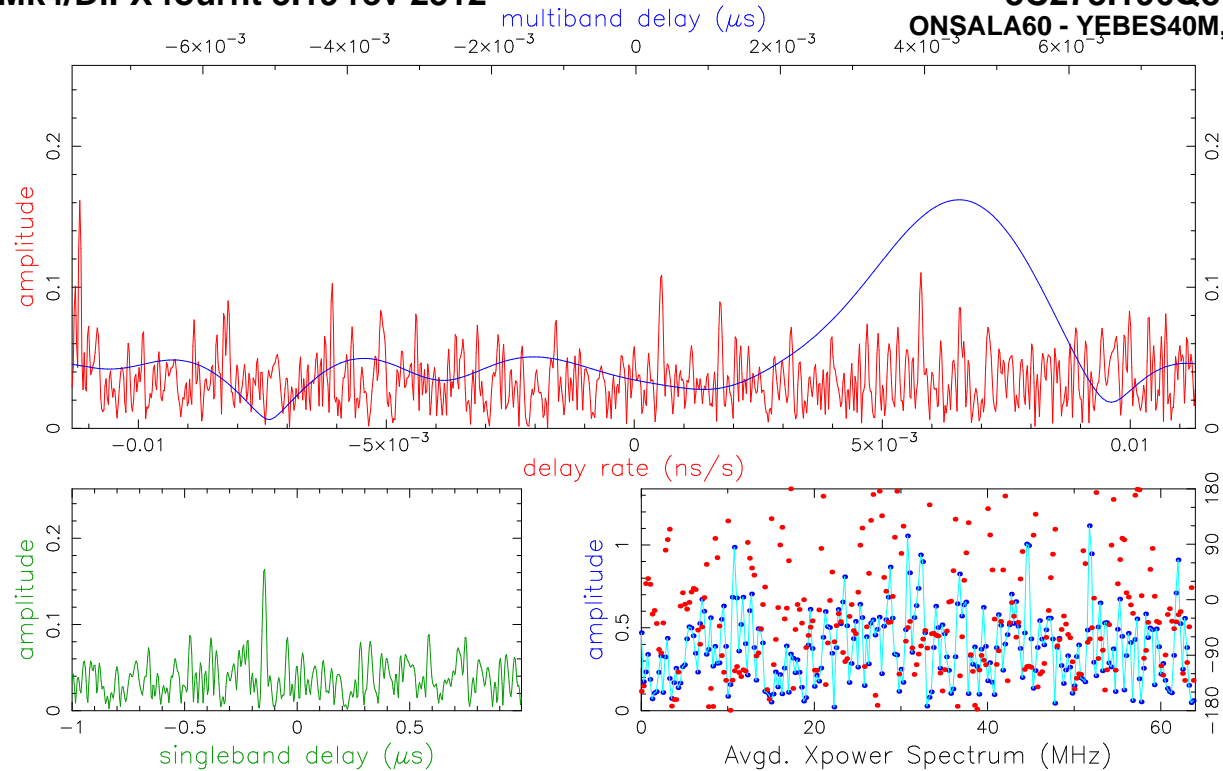


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec)(sbd)	-5.70191176363E+03	Apriori delay (usec)	-5.70140302307E+03	Resid mbdelay (usec)	6.88444E-03	+/-	1.7E-04
Sband delay (usec)	-5.70190629157E+03	Apriori clock (usec)	2.8848253E+01	Resid sbdelay (usec)	-5.03268E-01	+/-	1.3E-03
Phase delay (usec)	-5.70140301916E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	3.90952E-06	+/-	5.7E-07
Delay rate (us/s)	4.44034509491E-02	Apriori rate (us/s)	4.43921429633E-02	Resid rate (us/s)	1.13080E-05	+/-	5.7E-09
Total phase (deg)	-25.3	Apriori accel (us/s/s)	3.12071047597E-05	Resid phase (deg)	121.2	+/-	17.8

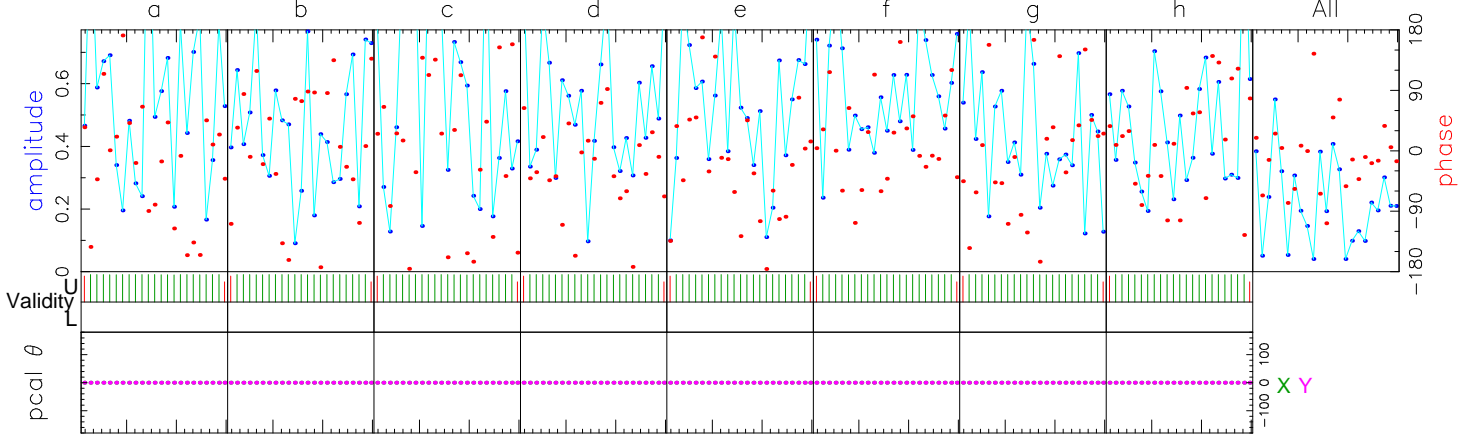
ph/seg (deg)	44.7	Theor.	42.7	Amplitude	0.280 +/- 0.044	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	59.6	Search (1024X32)	0.175	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	29.5	Inc. seg. avg.	0.284	Inc. frq. avg.	0.268	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	55.5	Inc. frq. avg.	0.268			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

X: az 236.5 el 21.6 pa 26.8 Y: az 229.4 el 39.6 pa 35.3 u,v (fr/asec) -237.975 1791.273 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/XY..196Q8V Output file: /Exps/c201e/v1/1234/No0046/XY.W.240.196Q8V



Fringe quality 0
SNR 6.0
Int time 173.429
Amp 0.257
Phase -0.0
PFD 2.6e-01
Delays (us)
SBD -0.146169
MBD 0.004583
Fringe rate (Hz)
-0.963720
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201e
Exper # 16383
Yr:day 2020:119
Start 004005.12
Stop 004300.22
FRT 004130.00
Corr/FF/build
2020:206:020932
2020:206:153511
2020:014:135814
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

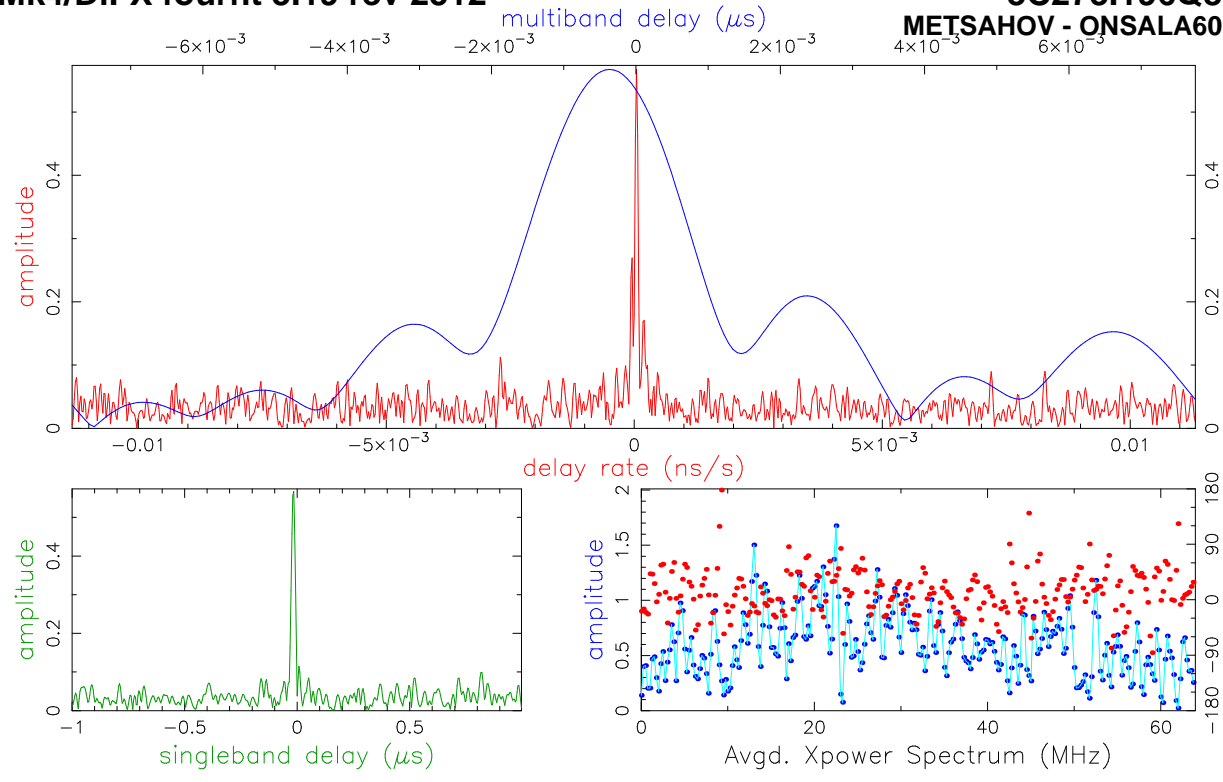


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-37.2	43.6	61.6	-3.9	-17.3	3.9	-37.4	6.0	Phase	-0.0
	0.2	0.2	0.2	0.4	0.3	0.5	0.2	0.2	Ampl.	0.3
	255.7	78.2	405.8	39.6	329.6	298.8	316.7	339.0	Sbd box	219.6
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.70155469026E+03		Apriori delay (usec)		-5.70140302307E+03		Resid mbdelay (usec)		4.58280E-03	+/- 1.8E-04
Sband delay (usec)	-5.70154919232E+03		Apriori clock (usec)		2.8848253E+01		Resid sbdelay (usec)		-1.46169E-01	+/- 1.4E-03
Phase delay (usec)	-5.70140302307E+03		Apriori clockrate (us/s)		3.0800002E-07		Resid phdelay (usec)		-9.12979E-10	+/- 6.2E-07
Delay rate (us/s)	4.43809551346E-02		Apriori rate (us/s)		4.43921429633E-02		Resid rate (us/s)		-1.11878E-05	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		3.12071047597E-05		Resid phase (deg)		-0.0	+/- 19.2

ph/seg (deg) 54.2 46.0 Search (1024X32) 0.158 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 86.6 80.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.4 27.1 Inc. seg. avg. 0.260 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.3 47.3 Inc. frq. avg. 0.257 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 236.5 el 21.6 pa 26.8 Y: az 229.4 el 39.6 pa 35.3 u,v (fr/asec) -237.975 1791.273 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/XY..196Q8V Output file: /Exps/c201e/v1/1234/No0046/XY.W.254.196Q8V

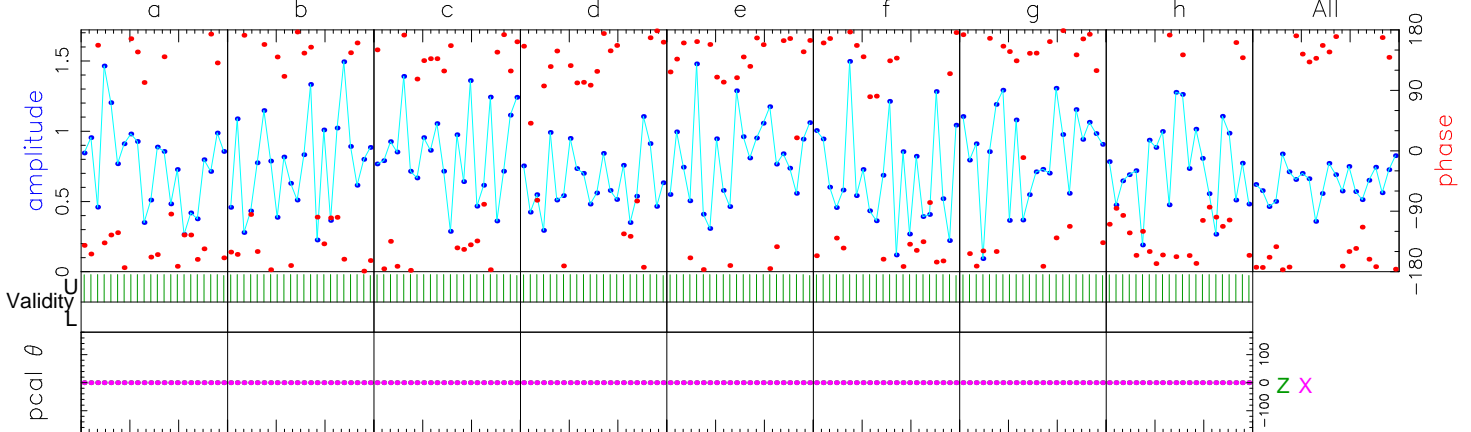
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, ZX
 METSAHOV - ONSALA60, fgroup W, pol LL



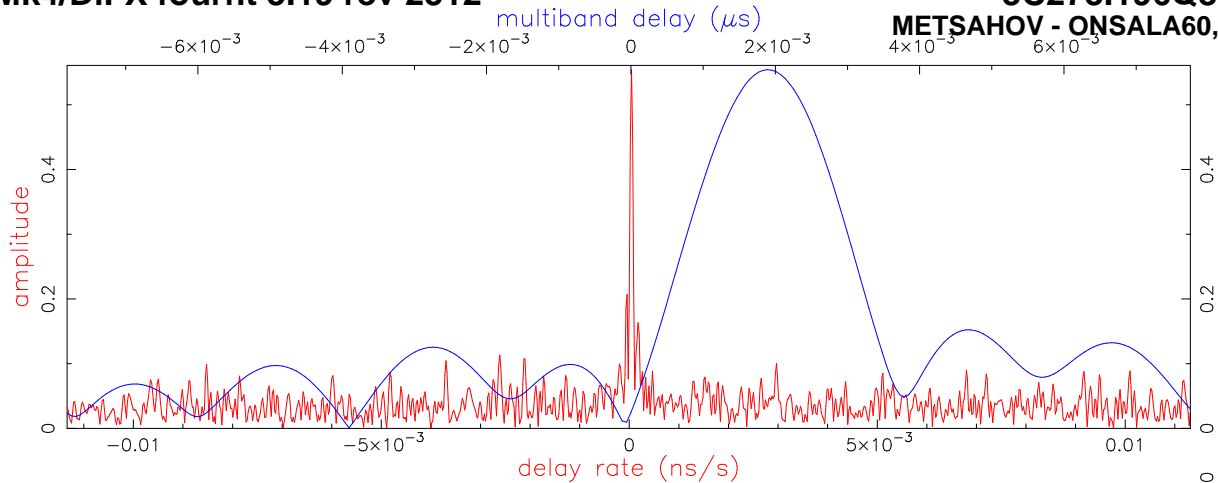
Fringe quality 9
 SNR 21.0
 Int time 179.615
 Amp 0.574
 Phase 178.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.017078
 MBD -0.000399
 Fringe rate (Hz)
 0.003433
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153506
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-164.4	-174.0	172.5	154.8	151.9	179.7	175.2	-145.7	Phase	178.9
	0.6	0.6	0.7	0.4	0.7	0.5	0.7	0.6	Ampl.	0.6
	252.6	252.1	253.0	251.9	253.4	252.7	253.1	253.6	Sbd box	252.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.52215360985E+03		Apriori delay (usec)		-2.52213758564E+03		Resid mbdelay (usec)		-3.99213E-04	+/- 5.2E-05
Sband delay (usec)	-2.52215466389E+03		Apriori clock (usec)		-4.0955044E+01		Resid sbdelay (usec)		-1.70783E-02	+/- 4.1E-04
Phase delay (usec)	-2.52213757987E+03		Apriori clockrate (us/s)		-5.1200000E-07		Resid phdelay (usec)		5.76890E-06	+/- 1.8E-07
Delay rate (us/s)	-3.92712169447E-02		Apriori rate (us/s)		-3.92712568011E-02		Resid rate (us/s)		3.98564E-08	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		1.32907141177E-05		Resid phase (deg)		178.9	+/- 5.4

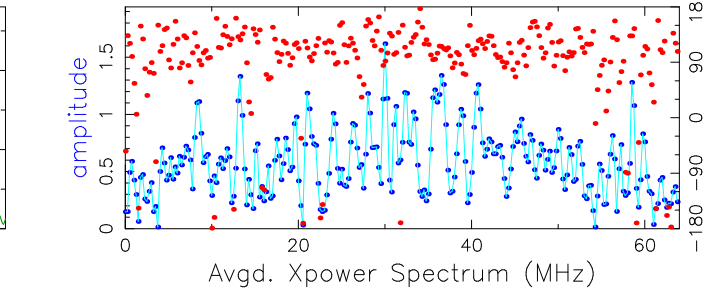
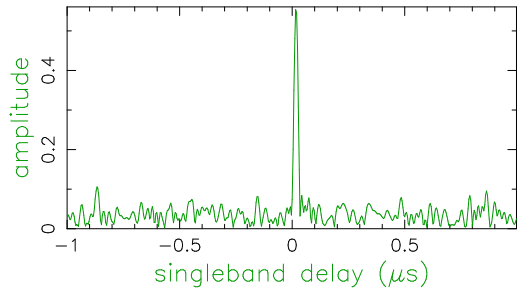
ph/seg (deg) 28.7 12.8 Search (1024X32) 0.559 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 23.3 22.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.2 7.7 Inc. seg. avg. 0.622 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 15.1 13.4 Inc. frq. avg. 0.594 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 247.3 el 14.6 pa 27.3 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) 231.894 261.991 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/ZX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/ZX.W.223.196Q8V



Fringe quality 9

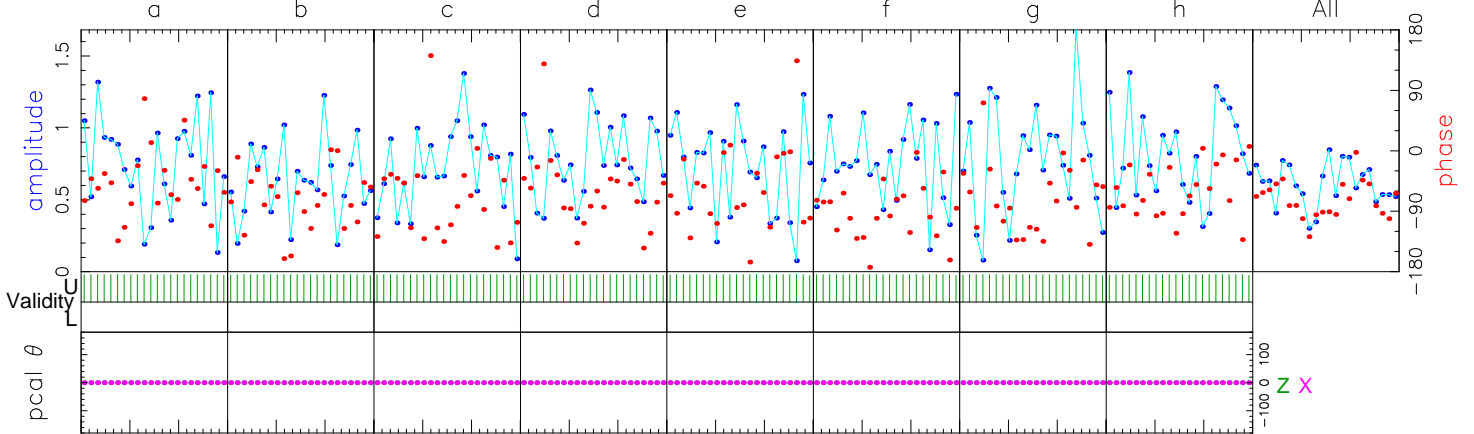
SNR 20.5
 Int time 179.615
 Amp 0.561
 Phase -70.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.017164
 MBD 0.001919
 Fringe rate (Hz) 0.003673
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2020:206:020932
 2020:206:153508
 2020:014:135814
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-58.6	-75.9	-77.6	-63.6	-66.5	-92.1	-77.2	-56.9	Phase	-70.6
	0.6	0.5	0.5	0.6	0.5	0.6	0.6	0.6	Ampl.	0.6
	261.1	261.2	261.3	261.5	261.6	261.6	261.4	261.7	Sbd box	261.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.52212004201E+03	Apriori delay (usec)	-2.52213758564E+03	Resid mbdelay (usec)	1.91863E-03	+/-	5.3E-05
Sband delay (usec)	-2.52212042139E+03	Apriori clock (usec)	-4.0955044E+01	Resid sbdelay (usec)	1.71643E-02	+/-	4.2E-04
Phase delay (usec)	-2.52213758792E+03	Apriori clockrate (us/s)	-5.1200000E-07	Resid phdelay (usec)	-2.27820E-06	+/-	1.8E-07
Delay rate (us/s)	-3.92712141657E-02	Apriori rate (us/s)	-3.92712568011E-02	Resid rate (us/s)	4.26353E-08	+/-	1.7E-09
Total phase (deg)	-296.4	Apriori accel (us/s/s)	1.32907141177E-05	Resid phase (deg)	-70.6	+/-	5.6

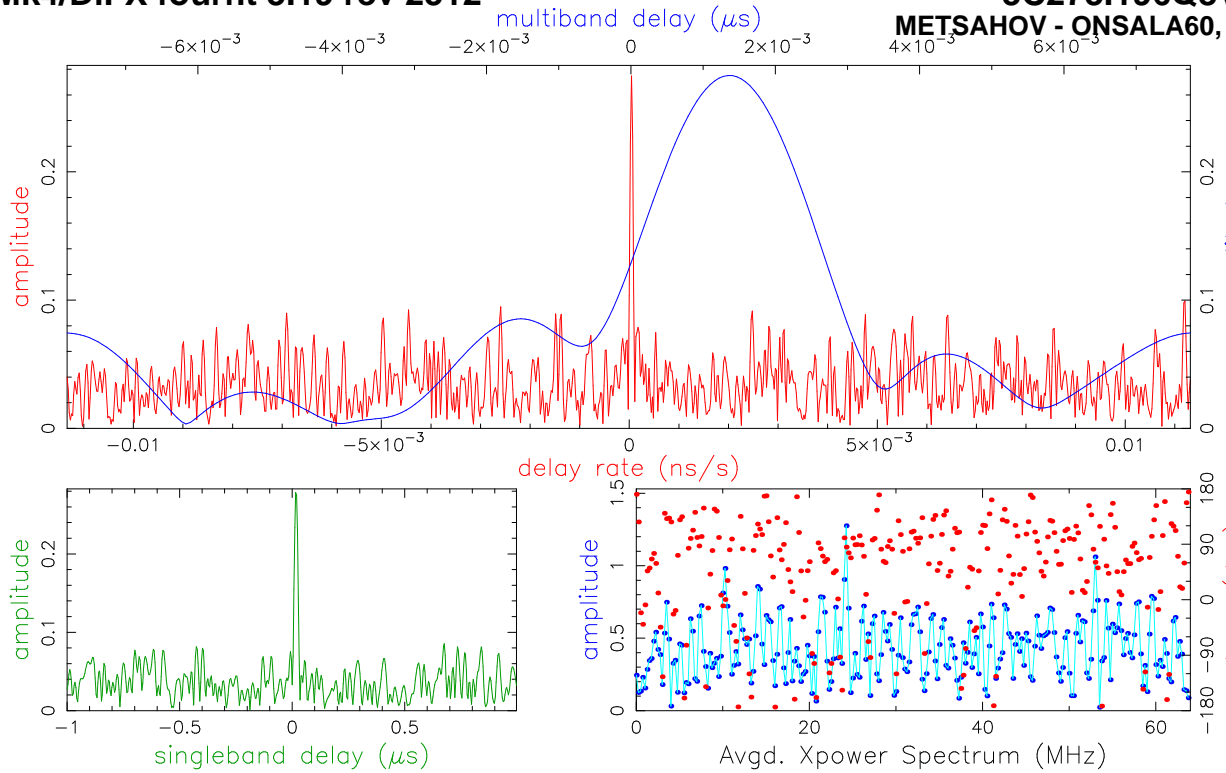
ph/seg (deg)	26.8	RMS	13.1	Theor.	13.1	Amplitude	0.561 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	27.3	Search (1024X32)	0.552	Inc. seg. avg.	0.594	Inc. frq. avg.	0.560	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	12.8	Interp.	0.000	Inc. seg. avg.	0.594	Inc. frq. avg.	0.560	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	10.7	Inc. seg. avg.	0.594	Inc. frq. avg.	0.560	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 247.3 el 14.6 pa 27.3 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) 231.894 261.991 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/ZX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/ZX.W.236.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, ZX
 METSAHOV - ONSALA60, fgroup W, pol LR

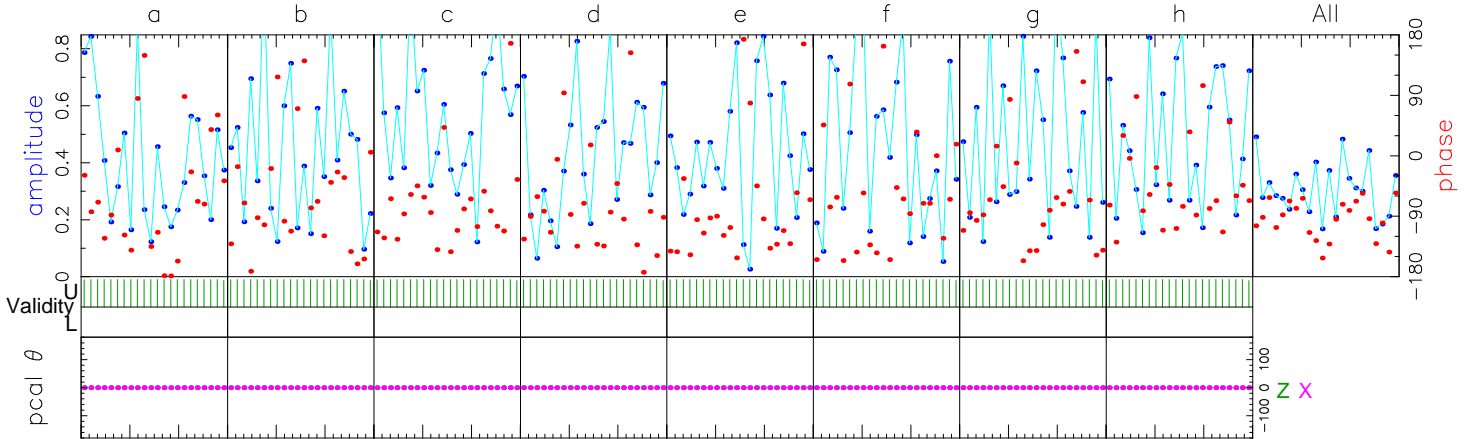


Fringe quality 9

SNR 10.4
 Int time 179.615
 Amp 0.283
 Phase -91.3
 PFD 7.3e-17
 Delays (us)
 SBD 0.017305
 MBD 0.001309
 Fringe rate (Hz) 0.003426
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c201e
 Exper # 16383
 Yr:day 2020:119
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build 2020:206:020932
 2020:206:153510
 2020:014:135814
 RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

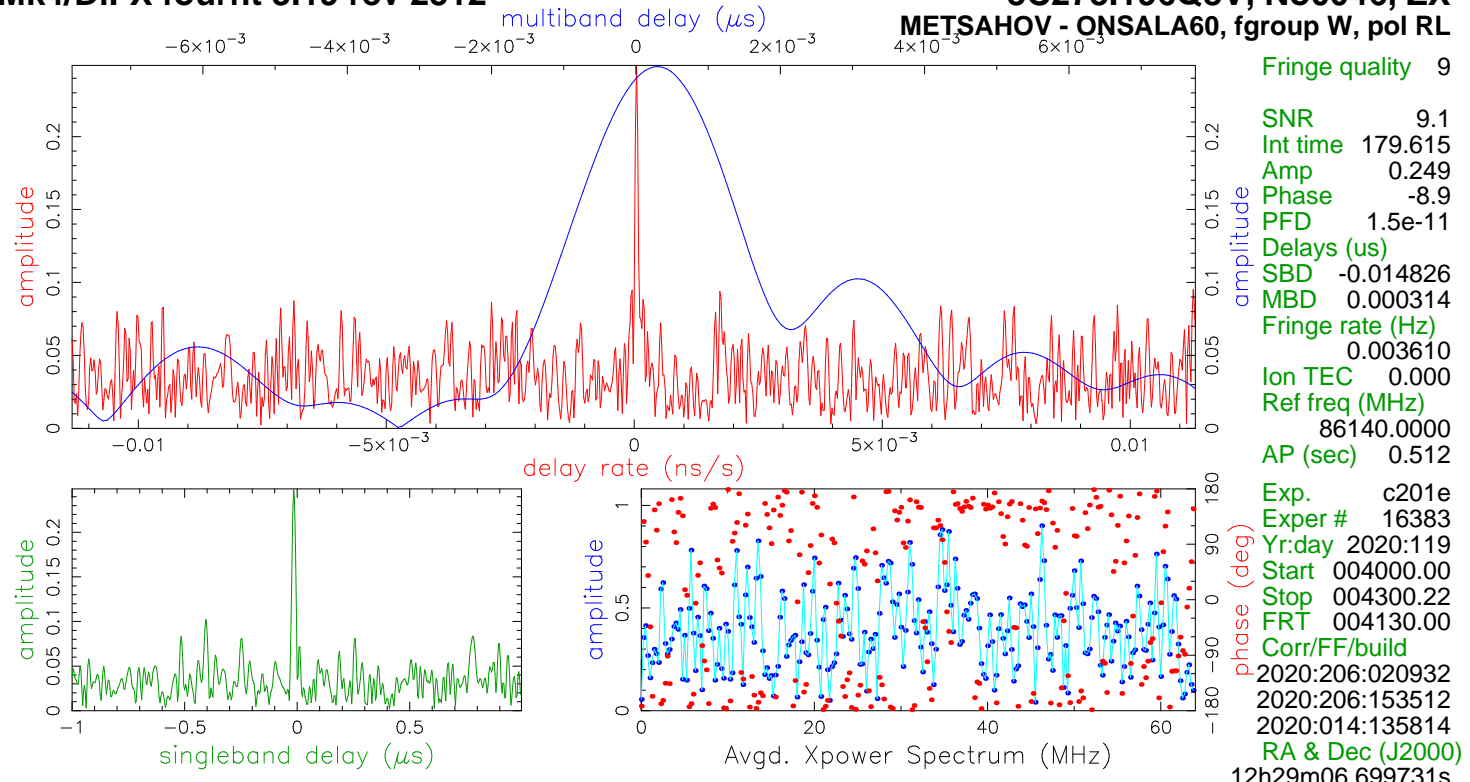


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-66.4	-91.0	-87.0	-114.4	-113.2	-81.2	-97.9	-64.1	Phase	-91.3
	0.1	0.3	0.4	0.3	0.3	0.2	0.3	0.3	Ampl.	0.3
	445.0	261.3	261.1	261.4	262.0	33.2	261.5	261.5	Sbd box	261.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.52212065141E+03		Apriori delay (usec)		-2.52213758564E+03		Resid mbdelay (usec)		1.30922E-03	+/- 1.0E-04
Sband delay (usec)	-2.52212028039E+03		Apriori clock (usec)		-4.0955044E+01		Resid sbdelay (usec)		1.73052E-02	+/- 8.3E-04
Phase delay (usec)	-2.52213758858E+03		Apriori clockrate (us/s)		-5.1200000E-07		Resid phdelay (usec)		-2.94529E-06	+/- 3.6E-07
Delay rate (us/s)	-3.92712170255E-02		Apriori rate (us/s)		-3.92712568011E-02		Resid rate (us/s)		3.97756E-08	+/- 3.4E-09
Total phase (deg)			Apriori accel (us/s/s)		1.32907141177E-05		Resid phase (deg)		-91.3	+/- 11.0

ph/seg (deg) 28.4 25.9 Search (1024X32) 0.272 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 33.8 45.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.6 15.6 Inc. seg. avg. 0.278 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 28.0 27.3 Inc. frq. avg. 0.278 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 247.3 el 14.6 pa 27.3 X: az 236.5 el 21.6 pa 26.8 u,v (fr/asec) 231.894 261.991 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/ZX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/ZX.W.247.196Q8V

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196Q8V, No0046, ZX
 METSAHOV - ONSALA60, fgroup W, pol RL



Fringe quality 9

SNR 9.1

Int time 179.615

Amp 0.249

Phase -8.9

PFD 1.5e-11

Delays (us)

SBD -0.014826

MBD 0.000314

Fringe rate (Hz)

0.003610

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201e

Exper # 16383

Yr:day 2020:119

Start 004000.00

Stop 004300.22

FRT 004130.00

Corr/FF/build

2020:206:020932

2020:206:153512

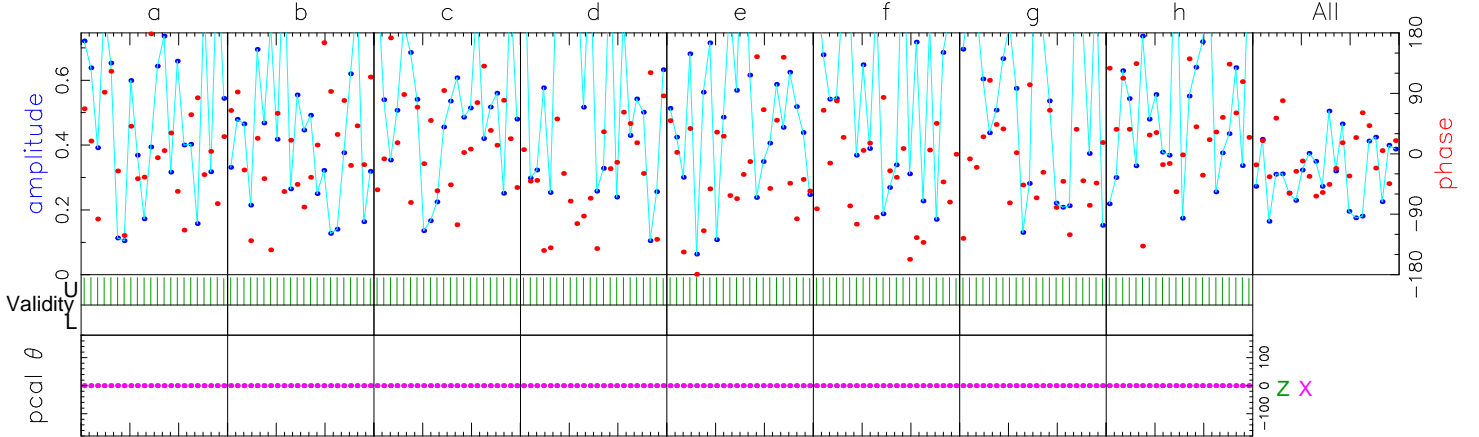
2020:014:135814

RA & Dec (J2000)

12h29m06.699731s

+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	4.5	-3.5	13.4	-26.3	-28.2	-27.7	-19.0	33.4		-8.9		
	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3		0.3		
	168.0	153.0	397.6	253.9	253.7	252.7	253.9	491.9		253.2		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0				
Z	1000	1000	1000	1000	1000	1000	1000	1000				
X	1000	1000	1000	1000	1000	1000	1000	1000				
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
Z	1000	1000	1000	1000	1000	1000	1000	1000				
X	1000	1000	1000	1000	1000	1000	1000	1000				
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
									Chan ids			
									Tracks			
									Tracks			
Group delay (usec)(sbd)	-2.52215289620E+03		Apriori delay (usec)		-2.52213758564E+03		Resid mbdelay (usec)		3.14443E-04	+/- 1.2E-04		
Sband delay (usec)	-2.52215241164E+03		Apriori clock (usec)		-4.0955044E+01		Resid sbdelay (usec)		-1.48260E-02	+/- 9.4E-04		
Phase delay (usec)	-2.52213758593E+03		Apriori clockrate (us/s)		-5.1200000E-07		Resid phdelay (usec)		-2.86434E-07	+/- 4.1E-07		
Delay rate (us/s)	-3.92712148870E-02		Apriori rate (us/s)		-3.92712568011E-02		Resid rate (us/s)		4.19140E-08	+/- 3.9E-09		
Total phase (deg)			Apriori accel (us/s/s)		1.32907141177E-05		Resid phase (deg)		-8.9	+/- 12.6		
	RMS	Theor.	Amplitude	0.249 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	40.2	29.5	Search (1024X32)	0.244		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	47.5	51.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	24.6	17.8	Inc. seg. avg.	0.280		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	20.4	31.0	Inc. frq. avg.	0.254		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
Z: az 247.3 el 14.6 pa 27.3	X: az 236.5 el 21.6 pa 26.8		u, v (fr/asec) 231.894 261.991						simultaneous interpolator			
Control file: cf_1234_gmva Input file: /Exps/c201e/v1/1234/No0046/ZX..196Q8V Output file: /Exps/c201e/v1/1234/No0046/ZX.W.259.196Q8V												