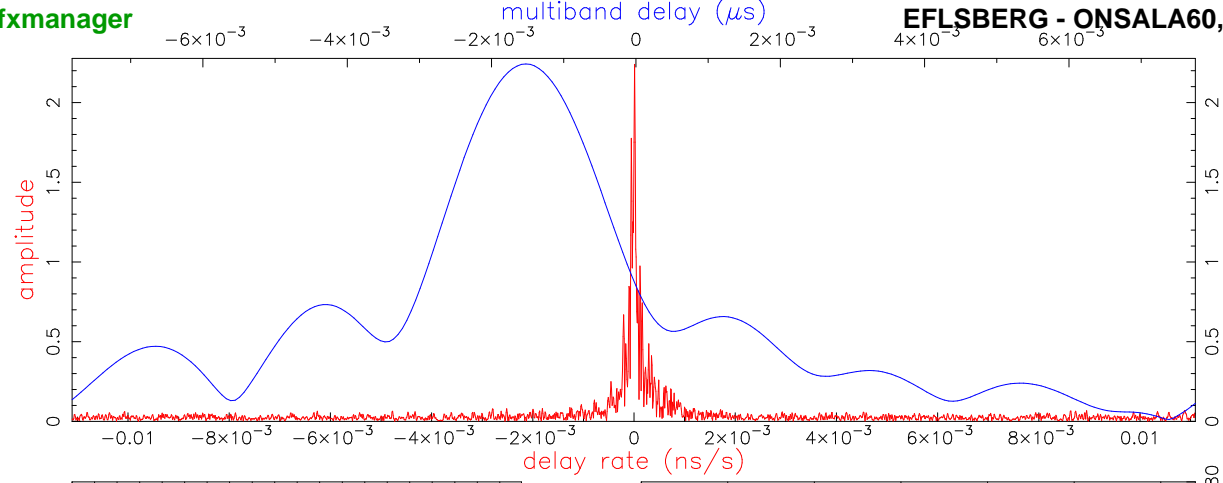


Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, BX

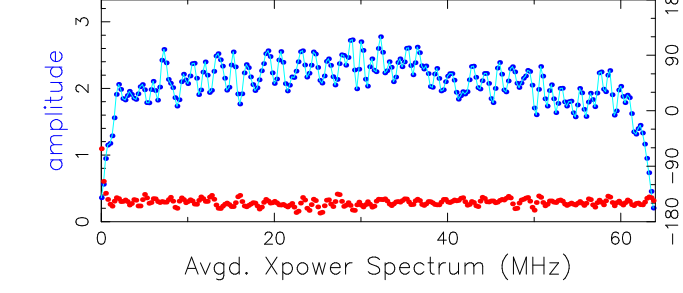
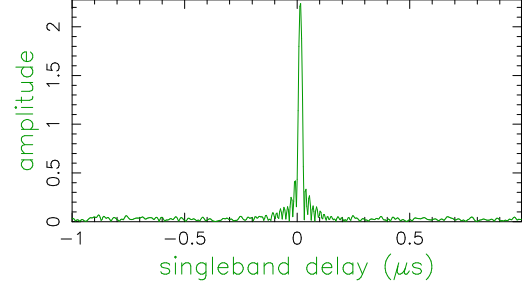
EFLSBERG - ONSALA60, fgroup W, pol RR



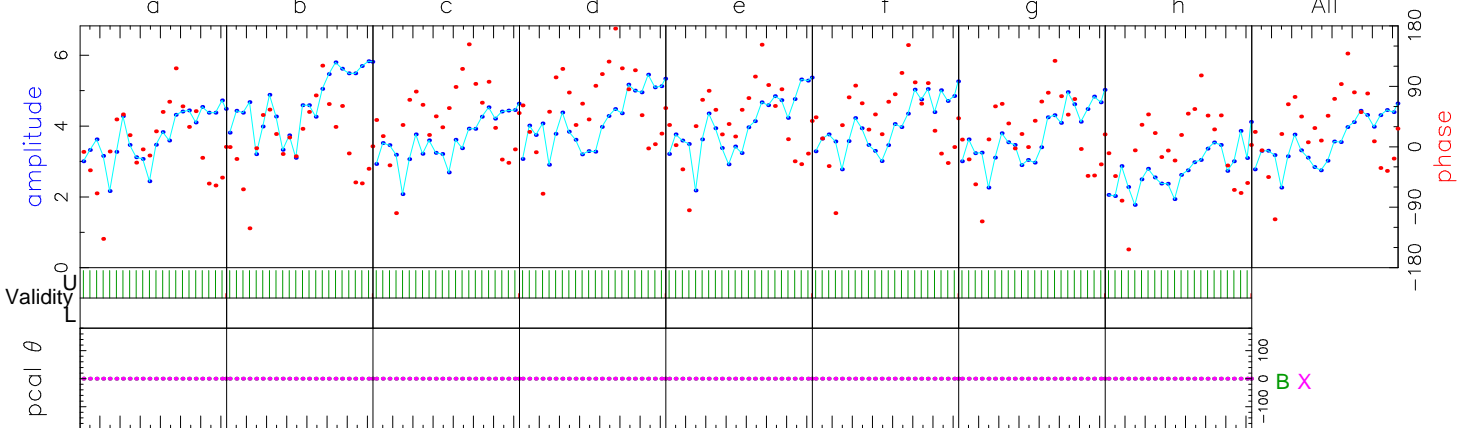
Fringe quality 3

SNR 127.6
 Int time 419.800
 Amp 2.277
 Phase 30.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.013957
 MBD -0.001580
 Fringe rate (Hz)
 0.001346
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512

Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081807
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	5.8	10.8	44.8	64.7	38.4	47.4	21.7	2.7	Phase	30.5
	2.3	2.9	2.3	2.6	2.5	2.6	2.3	1.7	Ampl.	2.4
	260.2	260.7	261.1	260.6	260.4	260.8	260.4	259.1	Sbd box	260.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	

Group delay (usec)(sbd)	7.48172493642E+01	Apriori delay (usec)	7.48032046209E+01	Resid mbdelay (usec)	-1.58026E-03	+/-	8.5E-06
Sband delay (usec)	7.48171611209E+01	Apriori clock (usec)	-3.8354401E+01	Resid sbdelay (usec)	1.39565E-02	+/-	6.8E-05
Phase delay (usec)	7.48032055856E+01	Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	9.64674E-07	+/-	2.8E-08
Delay rate (us/s)	-9.85420049175E-02	Apriori rate (us/s)	-9.85420202207E-02	Resid rate (us/s)	1.53032E-08	+/-	1.2E-10
Total phase (deg)	323.7	Apriori accel (us/s/s)	-5.89239123196E-06	Resid phase (deg)	30.5	+/-	0.9

B: az 290.9 el 39.2 pa 52.6 X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) 762.353 -903.428 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/BX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/BX.W.17.1JFPMR

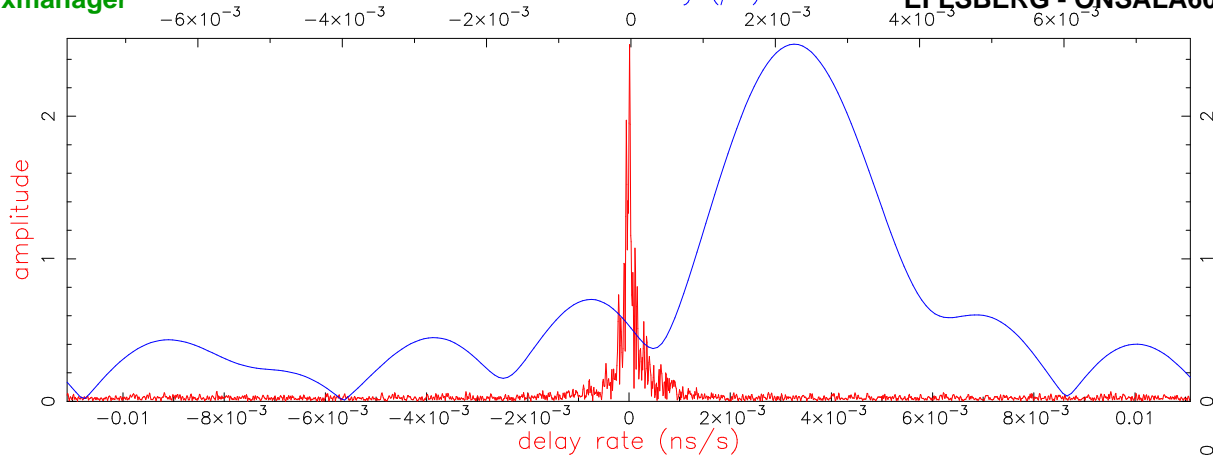
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, BX

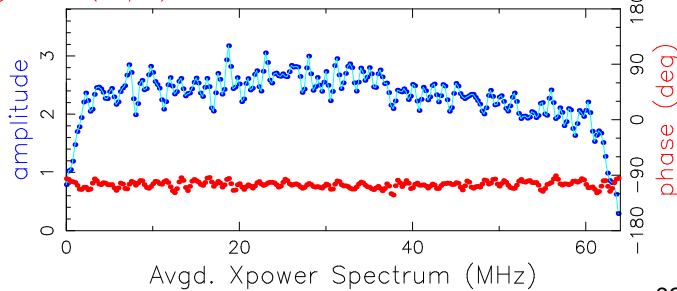
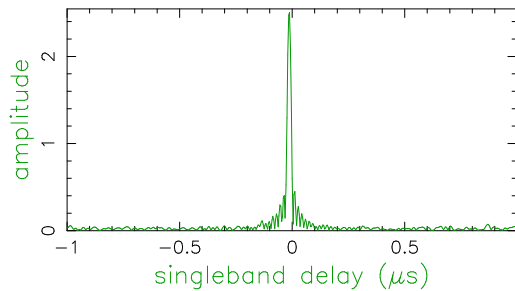
EFLSBERG - ONSALA60, fgroup W, pol LL

multiband delay (μ s)



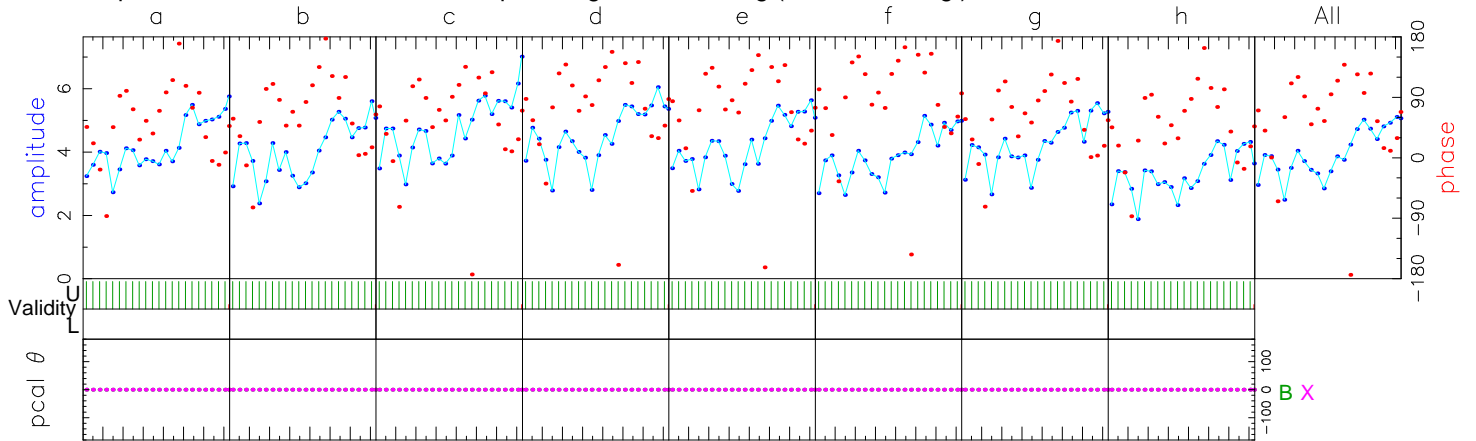
Fringe quality 4

SNR 142.7
 Int time 419.800
 Amp 2.546
 Phase 75.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.013412
 MBD 0.002211
 Fringe rate (Hz)
 0.001332
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081804
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	53.8	67.7	73.4	93.0	89.4	105.0	64.5	52.3		75.4
	2.7	2.5	3.0	2.9	2.7	2.5	2.7	2.1		2.6
	253.9	253.3	253.9	253.7	253.7	253.3	253.3	252.4		253.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		APs used
X	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
B	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
										Tracks
Group delay (usec)(sbd)	7.47897908330E+01		Apriori delay (usec)		7.48032046209E+01		Resid mbdelay (usec)		2.21121E-03	+/- 7.6E-06
Sband delay (usec)	7.47897926209E+01		Apriori clock (usec)		-3.8354401E+01		Resid sbdelay (usec)		-1.34120E-02	+/- 6.0E-05
Phase delay (usec)	7.48032070025E+01		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		2.38167E-06	+/- 2.5E-08
Delay rate (us/s)	-9.85420050716E-02		Apriori rate (us/s)		-9.85420202207E-02		Resid rate (us/s)		1.51491E-08	+/- 1.0E-10
Total phase (deg)	8.6		Apriori accel (us/s/s)		-5.89239123196E-06		Resid phase (deg)		75.4	+/- 0.8

ph/seg (deg) 54.2 1.9 Amplitude 2.546 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.8 3.4 Search (2048X32) 2.374 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.7 1.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 10.5 2.0 Inc. seg. avg. 3.939 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 2.624 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 290.9 el 39.2 pa 52.6 X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) 762.353 -903.428 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/BX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/BX.W.3.1JFPMR

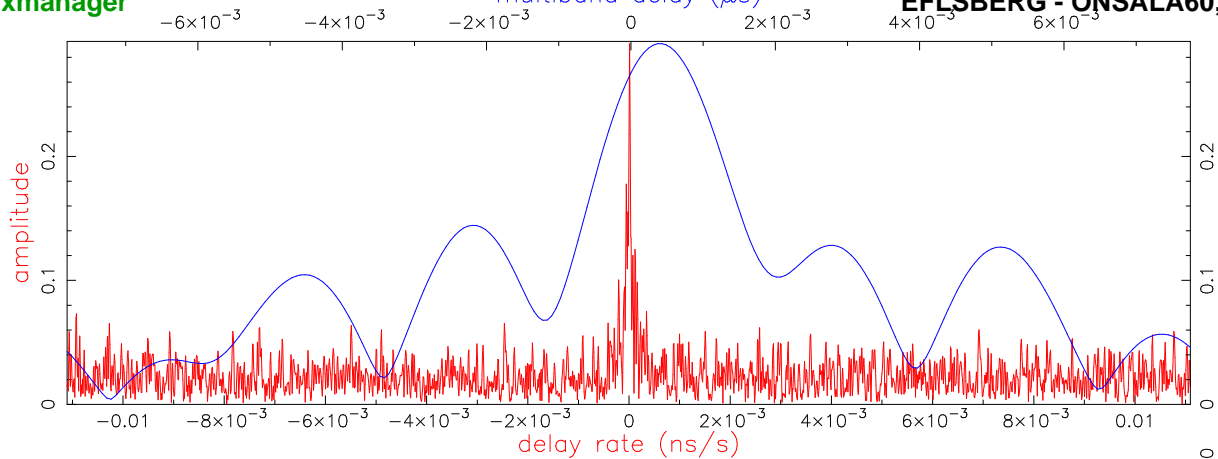
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, BX

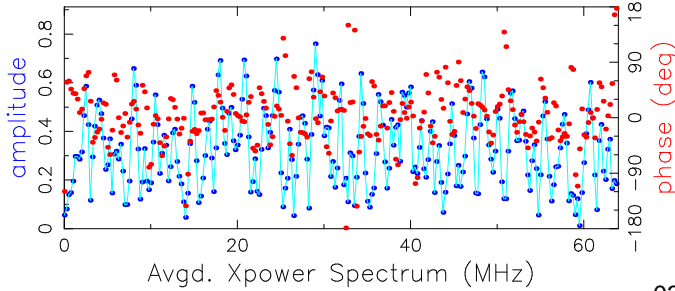
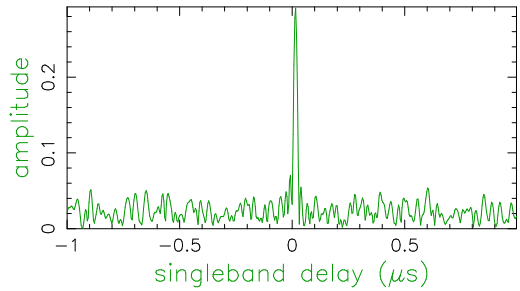
EFLSBERG - ONSALA60, fgroup W, pol LR

multiband delay (μ s)



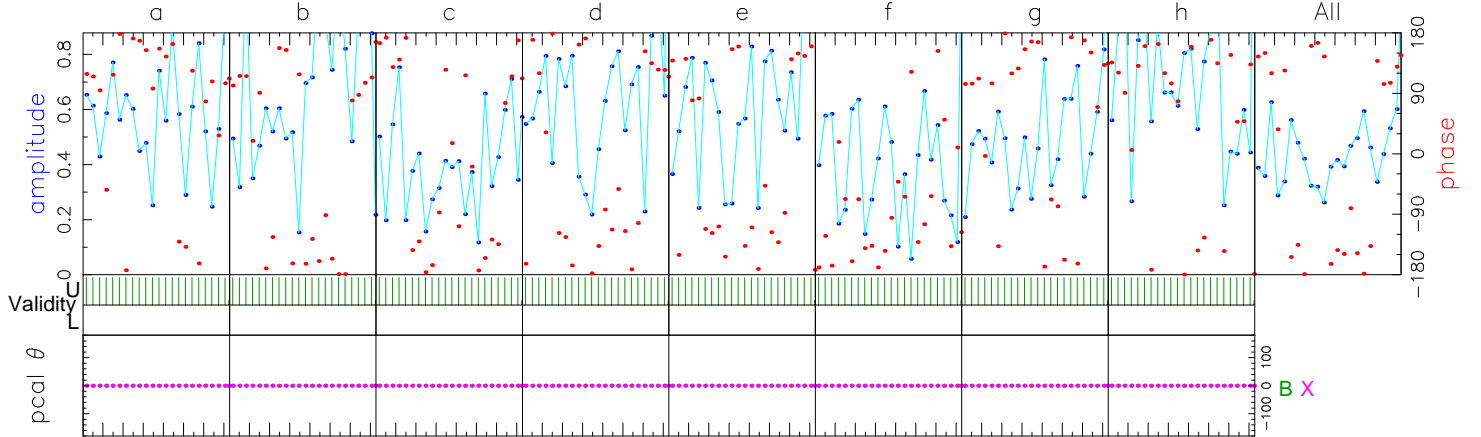
Fringe quality 8

SNR 16.4
 Int time 419.800
 Amp 0.293
 Phase 168.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.014612
 MBD 0.000377
 Fringe rate (Hz) 0.001383
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081810
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	143.6	160.1	169.5	-166.5	-163.5	-125.2	159.0	141.1	Phase	168.9
	0.4	0.4	0.2	0.3	0.3	0.2	0.3	0.5	Ampl.	0.3
	261.3	261.8	260.1	262.3	260.9	259.8	260.4	260.6	Sbd box	260.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	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)	7.48192070205E+01		Apriori delay (usec)		7.48032046209E+01		Resid mbdelay (usec)		3.77400E-04	+/- 6.6E-05
Sband delay (usec)	7.48178166209E+01		Apriori clock (usec)		-3.8354401E+01		Resid sbdelay (usec)		1.46120E-02	+/- 5.2E-04
Phase delay (usec)	7.48032099563E+01		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		5.33543E-06	+/- 2.2E-07
Delay rate (us/s)	-9.85420044927E-02		Apriori rate (us/s)		-9.85420202207E-02		Resid rate (us/s)		1.57280E-08	+/- 9.1E-10
Total phase (deg)	102.1		Apriori accel (us/s/s)		-5.89239123196E-06		Resid phase (deg)		168.9	+/- 7.0

	RMS	Theor.	Amplitude	0.293 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.4	16.7	Search (2048X32)	0.274	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	61.7	29.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	34.9	9.9	Inc. seg. avg.	0.418	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	32.2	17.2	Inc. frq. avg.	0.325	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

B: az 290.9 el 39.2 pa 52.6 X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) 762.353 -903.428 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/BX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/BX.W.32.1JFPMR

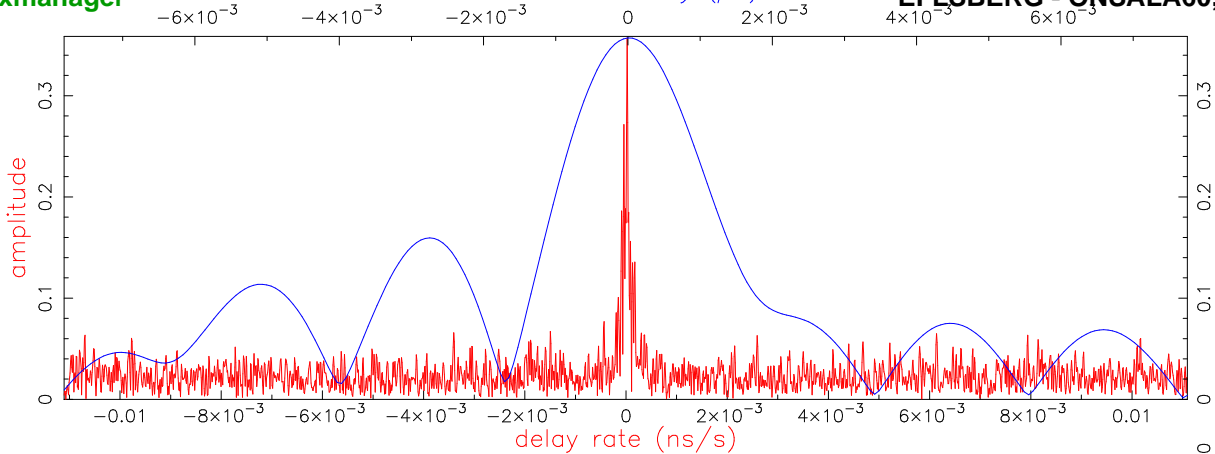
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, BX

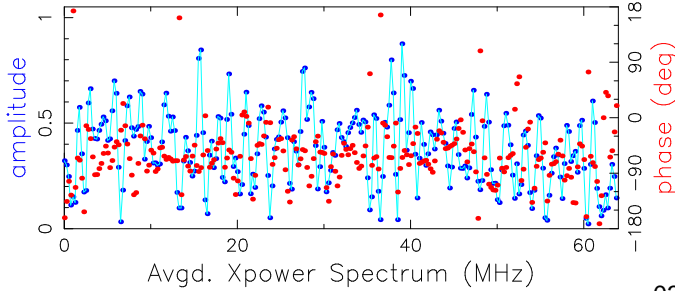
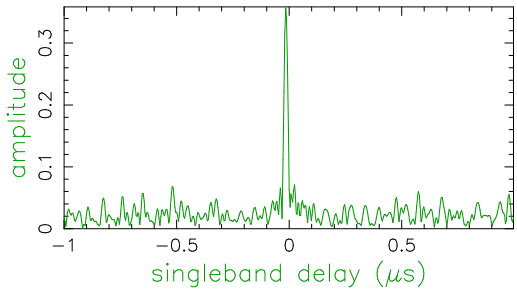
EFLSBERG - ONSALA60, fgroup W, pol RL

multiband delay (μ s)



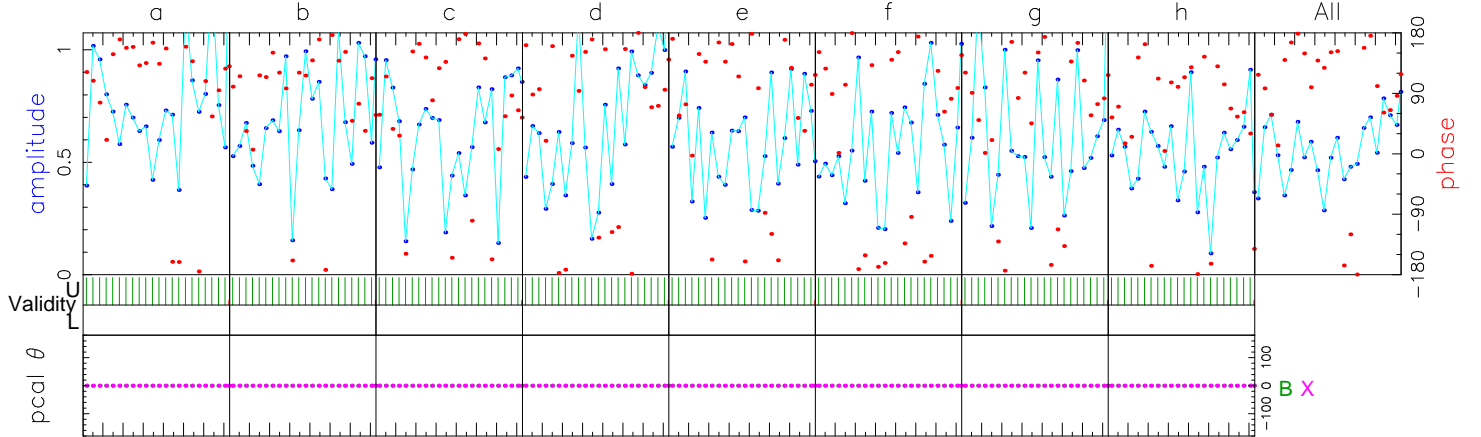
Fringe quality 9

SNR 20.1
 Int time 419.800
 Amp 0.359
 Phase 126.4
 PFD 0.0e+00
 Delays (μ s)
 SBD -0.014770
 MBD 0.000044
 Fringe rate (Hz) 0.001440
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



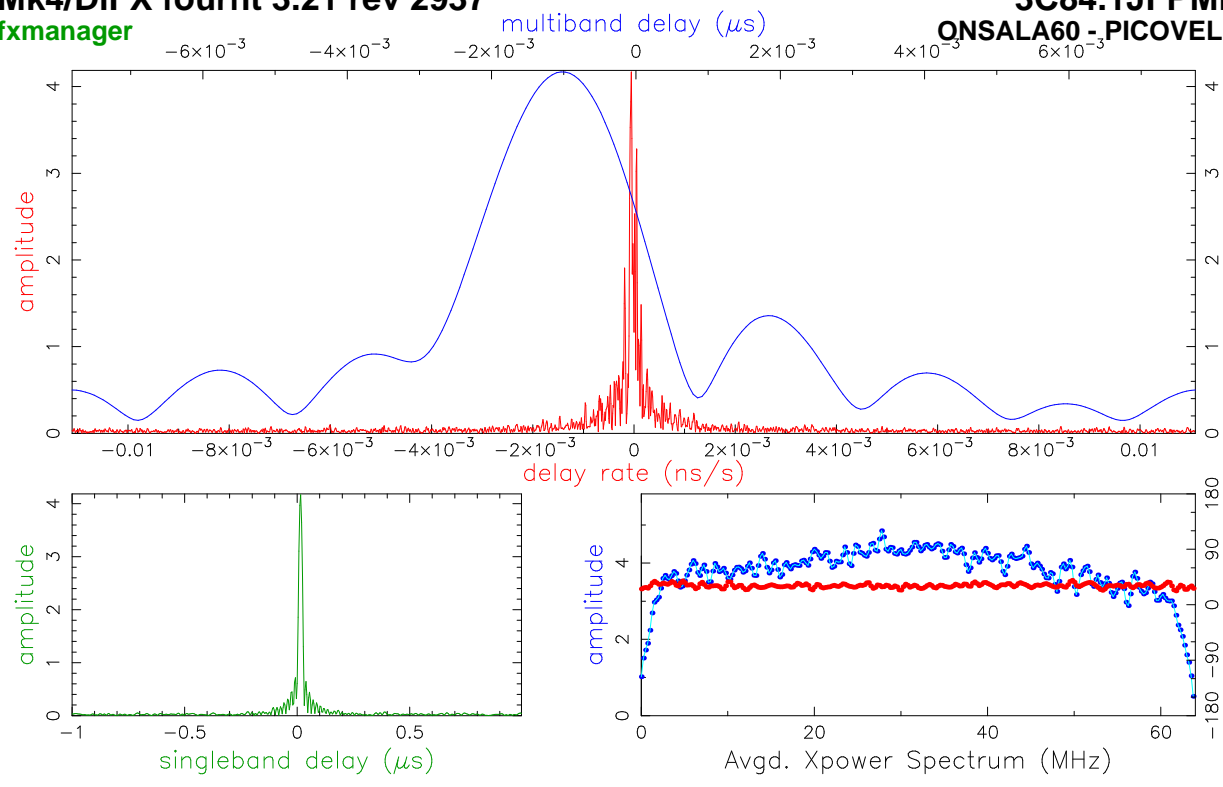
Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081814
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



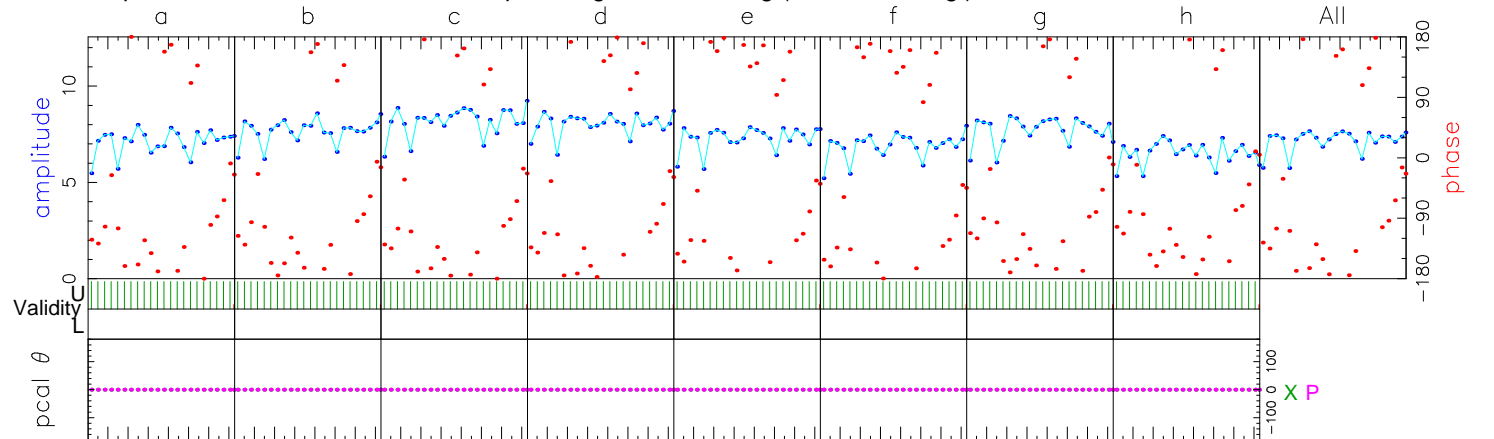
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	131.3	112.4	117.7	134.6	139.0	161.5	124.8	94.4	Phase	126.4
	0.6	0.5	0.3	0.4	0.3	0.3	0.3	0.3	Ampl.	0.4
	252.8	252.9	253.8	253.0	253.4	253.7	253.3	252.2	Sbd box	253.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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)	7.47876234513E+01		Apriori delay (usec)		7.48032046209E+01		Resid mbdelay (usec)		4.38304E-05	+/- 5.4E-05
Sband delay (usec)	7.47884346209E+01		Apriori clock (usec)		-3.8354401E+01		Resid sbdelay (usec)		-1.47700E-02	+/- 4.3E-04
Phase delay (usec)	7.48032086131E+01		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		3.99224E-06	+/- 1.8E-07
Delay rate (us/s)	-9.85420038403E-02		Apriori rate (us/s)		-9.85420202207E-02		Resid rate (us/s)		1.63804E-08	+/- 7.4E-10
Total phase (deg)	59.6		Apriori accel (us/s/s)		-5.89239123196E-06		Resid phase (deg)		126.4	+/- 5.7

ph/seg (deg) 52.0 13.7 Search (2048X32) 0.334 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.2 23.9 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 8.1 Inc. seg. avg. 0.540 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.8 14.1 Inc. frq. avg. 0.371 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 290.9 el 39.2 pa 52.6 X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) 762.353 -903.428 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/BX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/BX.W.47.1JFPMR



Fringe quality 4
SNR 234.5
Int time 419.369
Amp 4.187
Phase -147.0
PFD 0.0e+00
Delays (us)
SBD 0.014740
MBD -0.001042
Fringe rate (Hz)
-0.004566
Ion TEC 0.000
Ref freq (MHz)
87940.0000
AP (sec) 0.512
Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 063001.00
Stop 063700.84
FRT 063331.00
Corr/FF/build
2021:039:075018
2021:039:081806
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-141.0	-138.3	-146.8	-153.5	-165.7	-173.9	-133.9	-123.3	Phase	-147.0
	4.1	4.4	4.8	4.6	4.2	4.0	4.5	3.9	Ampl.	4.3
	260.4	260.9	260.6	260.6	260.7	261.1	261.1	260.8	Sbd box	260.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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)	-4.52224138924E+02		Apriori delay (usec)		-4.52238721926E+02		Resid mbdelay (usec)		-1.04200E-03	+/- 4.6E-06
Sband delay (usec)	-4.52223981426E+02		Apriori clock (usec)		4.8681602E+01		Resid sbdelay (usec)		1.47405E-02	+/- 3.7E-05
Phase delay (usec)	-4.52238726569E+02		Apriori clockrate (us/s)		9.2799997E-07		Resid phdelay (usec)		-4.64322E-06	+/- 1.5E-08
Delay rate (us/s)	2.27656021161E-01		Apriori rate (us/s)		2.27656073081E-01		Resid rate (us/s)		-5.19208E-08	+/- 6.4E-11
Total phase (deg)			Apriori accel (us/s/s)		2.06149148822E-05		Resid phase (deg)		-147.0	+/- 0.5

ph/seg (deg) 59.3 1.2 Theor. Amplitude 4.187 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 72.2 2.0 Search (2048X32) 4.138 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 18.1 0.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 7.5 1.2 Inc. seg. avg. 7.159 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
X: az 288.9 el 38.8 pa 42.8 P: az 296.6 el 40.6 pa 72.2 u,v (fr/asec) -1751.865 3102.828 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/XP..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/XP.W.15.1JFPMR simultaneous interpolator

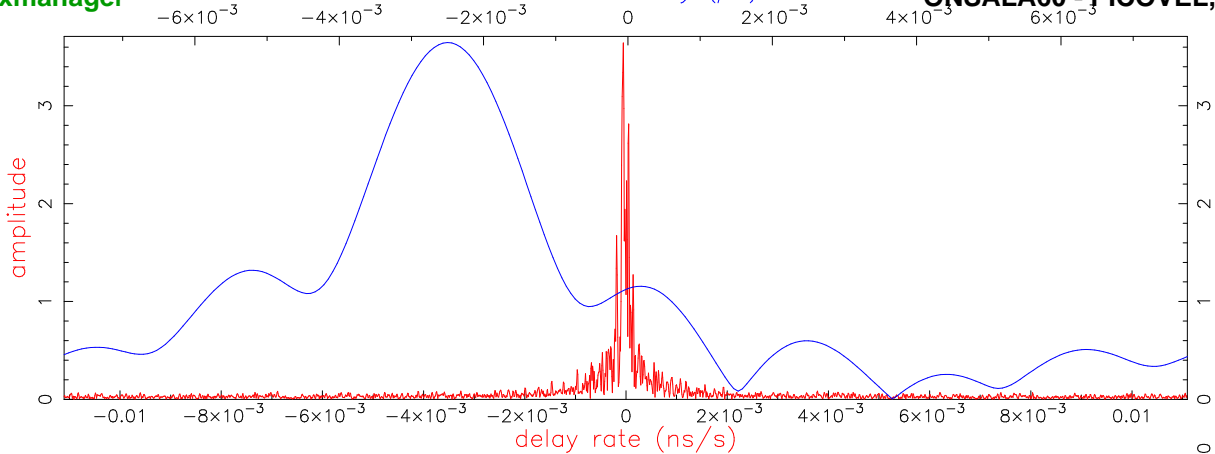
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, XP

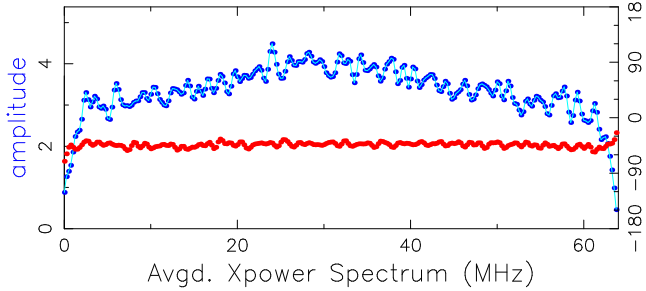
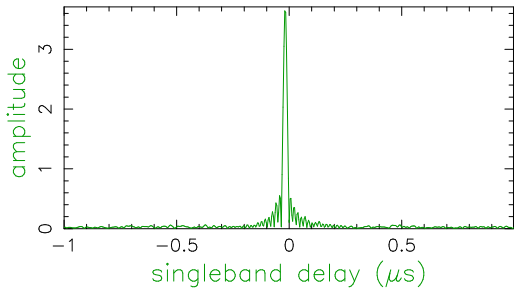
ONSALA60 - PICOVEL, fgroup W, pol RR

multiband delay (μ s)



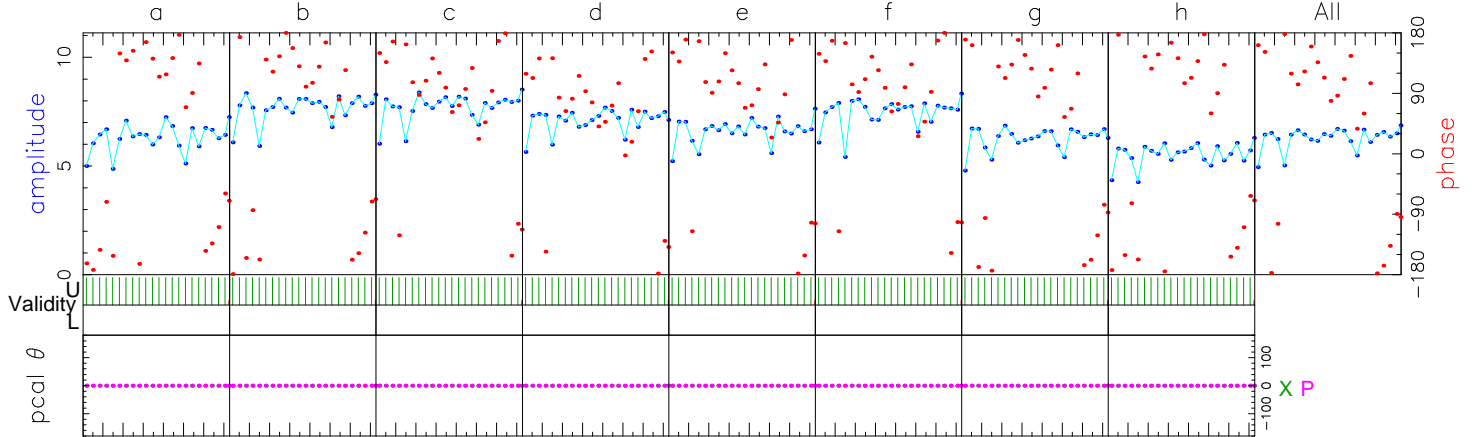
Fringe quality 3

SNR 207.7
 Int time 419.369
 Amp 3.710
 Phase 139.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.017739
 MBD -0.002445
 Fringe rate (Hz)
 -0.004549
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081809
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
X	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-4.52256791955E+02								Resid mbdelay (usec)	-2.44503E-03 +/- 5.2E-06
Sband delay (usec)	-4.52256460426E+02								Resid sbdelay (usec)	-1.77385E-02 +/- 4.1E-05
Phase delay (usec)	-4.52238717513E+02								Resid phdelay (usec)	4.41251E-06 +/- 1.7E-08
Delay rate (us/s)	2.27656021358E-01								Resid rate (us/s)	-5.17230E-08 +/- 7.2E-11
Total phase (deg)		65.5							Resid phase (deg)	139.7 +/- 0.6

ph/seg (deg) 59.1 1.3 Search (2048X32) 3.613 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.9 2.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.2 0.8 Inc. seg. avg. 6.257 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 13.3 1.4 Inc. frq. avg. 3.964 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 288.9 el 38.8 pa 42.8 P: az 296.6 el 40.6 pa 72.2 u,v (fr/asec) -1751.865 3102.828 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/XP..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/XP.W.30.1JFPMR

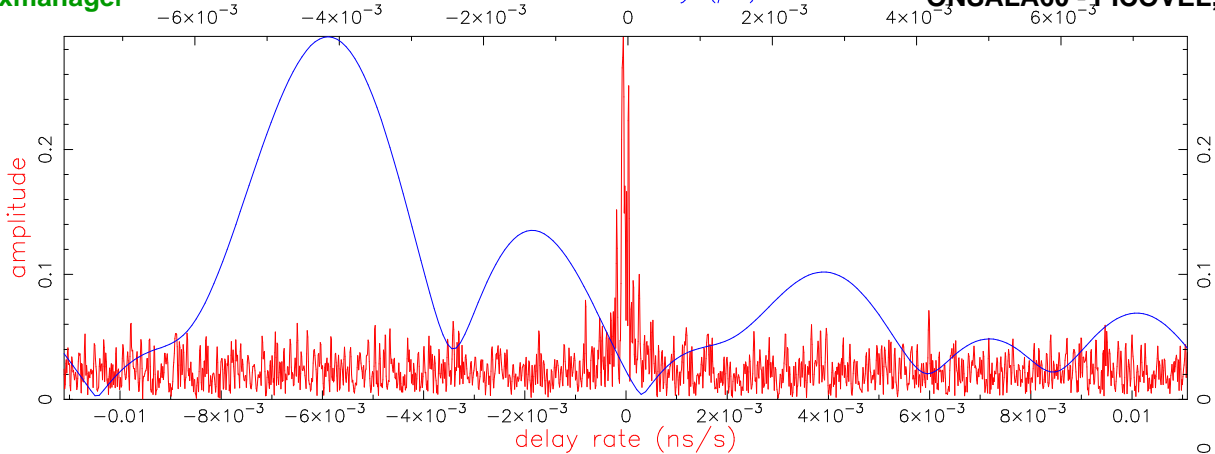
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, XP

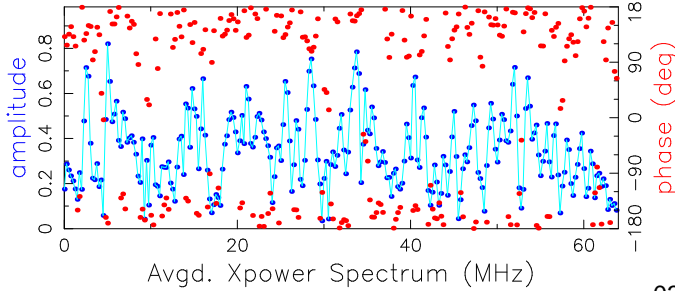
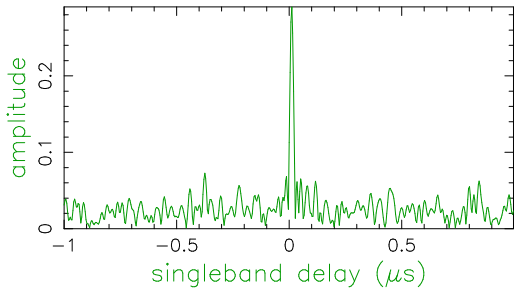
ONSALA60 - PICOVEL, fgroup W, pol LR

multiband delay (μ s)



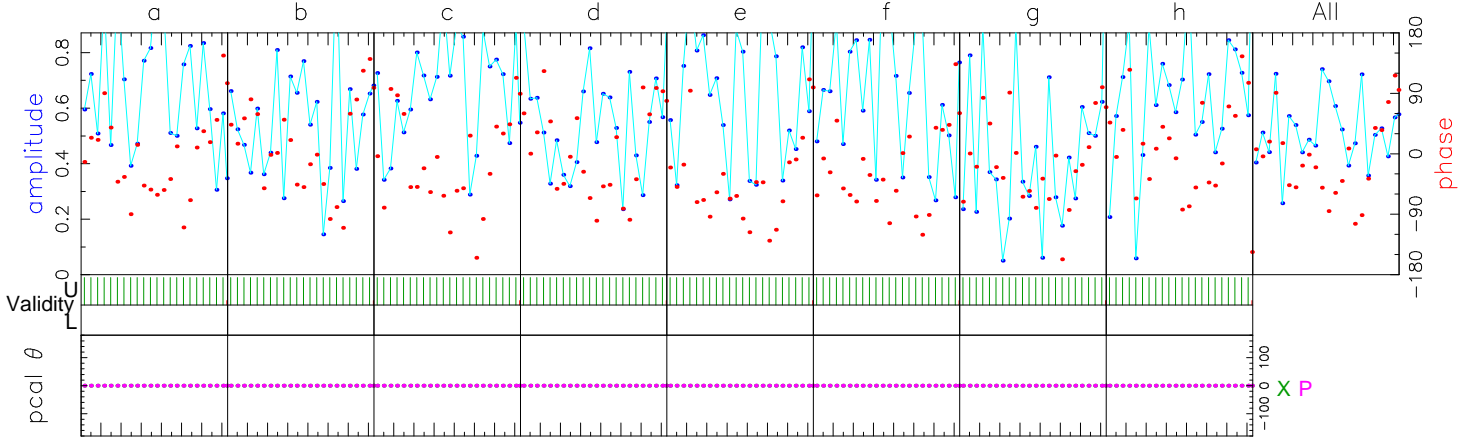
Fringe quality 8

SNR 16.3
 Int time 419.369
 Amp 0.290
 Phase -18.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.011177
 MBD -0.004173
 Fringe rate (Hz) -0.004620
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081812
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-19.9	8.7	-24.7	1.7	-54.5	-39.5	-1.9	12.0	Phase	-18.3
	0.4	0.3	0.3	0.2	0.4	0.4	0.2	0.3	Ampl.	0.3
	259.3	260.7	260.0	259.3	260.4	260.3	259.7	261.0	Sbd box	259.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.52227270299E+02		Apriori delay (usec)		-4.52238721926E+02		Resid mbdelay (usec)		-4.17337E-03	+/- 6.7E-05
Sband delay (usec)	-4.52227544426E+02		Apriori clock (usec)		4.8681602E+01		Resid sbdelay (usec)		1.11775E-02	+/- 5.3E-04
Phase delay (usec)	-4.52238722503E+02		Apriori clockrate (us/s)		9.279997E-07		Resid phdelay (usec)		-5.76661E-07	+/- 2.2E-07
Delay rate (us/s)	2.27656020546E-01		Apriori rate (us/s)		2.27656073081E-01		Resid rate (us/s)		-5.25351E-08	+/- 9.2E-10
Total phase (deg)			Apriori accel (us/s/s)		2.06149148822E-05		Resid phase (deg)		-18.3	+/- 7.0

	RMS	Theor.	Amplitude	0.290 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	57.8	16.9	Search (2048X32)	0.282	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/seg (%)	88.7	29.5	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	26.2	10.0	Inc. seg. avg.	0.496	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00
amp/frq (%)	24.3	17.4	Inc. frq. avg.	0.309				

X: az 288.9 el 38.8 pa 42.8 P: az 296.6 el 40.6 pa 72.2 u,v (fr/asec) -1751.865 3102.828 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/XP..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/XP.W.44.1JFPMR

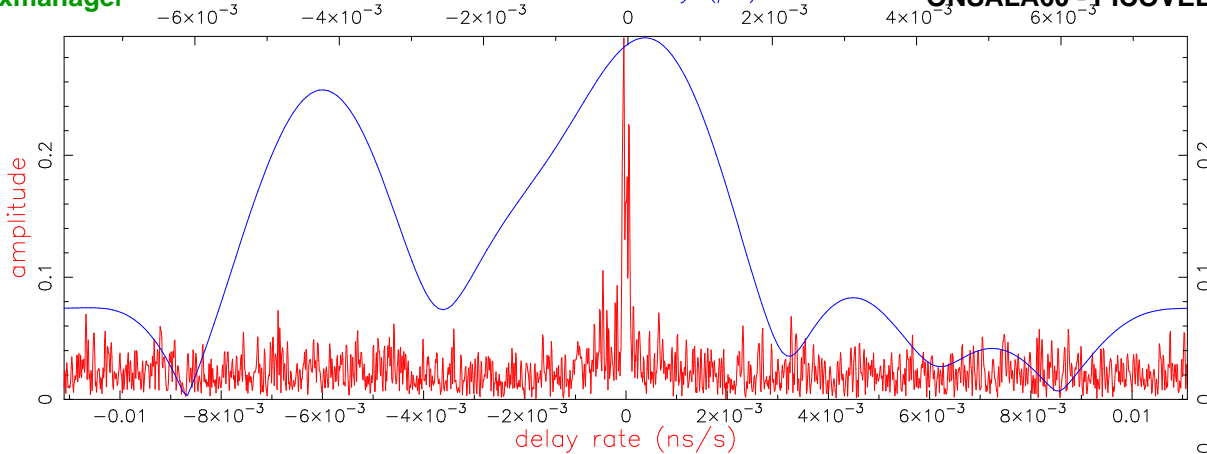
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, XP

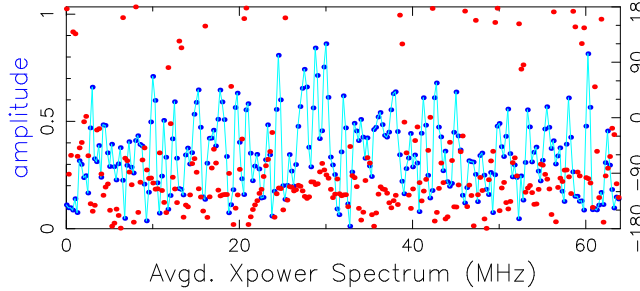
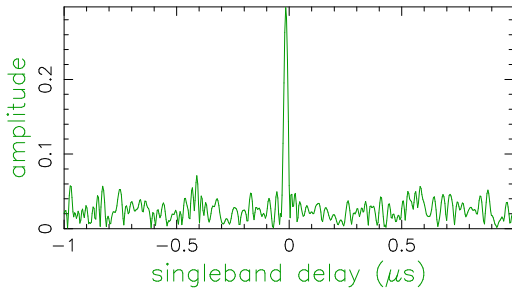
ONSALA60 - PICOVEL, fgroup W, pol RL

multiband delay (μ s)



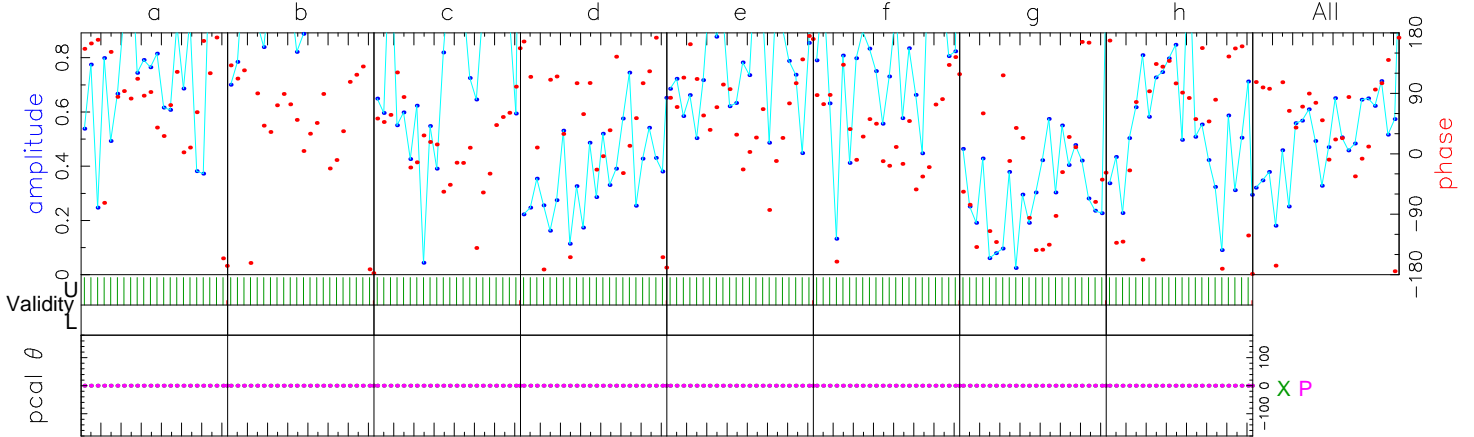
Fringe quality 7

SNR 16.6
 Int time 419.369
 Amp 0.297
 Phase 68.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.014759
 MBD 0.000259
 Fringe rate (Hz)
 -0.004245
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081815
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-4.52254087837E+02	Apriori delay (usec)	-4.52238721926E+02	Resid mbdelay (usec)	2.59089E-04	+/-	6.5E-05
Sband delay (usec)	-4.52253481176E+02	Apriori clock (usec)	4.8681602E+01	Resid sbdelay (usec)	-1.47592E-02	+/-	5.2E-04
Phase delay (usec)	-4.52238719779E+02	Apriori clockrate (us/s)	9.2799997E-07	Resid phdelay (usec)	2.14695E-06	+/-	2.2E-07
Delay rate (us/s)	2.27656024805E-01	Apriori rate (us/s)	2.27656073081E-01	Resid rate (us/s)	-4.82763E-08	+/-	9.0E-10
Total phase (deg)	-6.3	Apriori accel (us/s/s)	2.06149148822E-05	Resid phase (deg)	68.0	+/-	6.9

ph/seg (deg)	58.0	RMS	16.5	Theor.	16.5	Amplitude	0.297 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	82.6	Search (2048X32)	0.278	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	65.6	Inc. seg. avg.	0.475	Inc. frq. avg.	0.369	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	64.5	Inc. frq. avg.	0.369	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite

X: az 288.9 el 38.8 pa 42.8 P: az 296.6 el 40.6 pa 72.2 u,v (fr/asec) -1751.865 3102.828 simultaneous interpolator

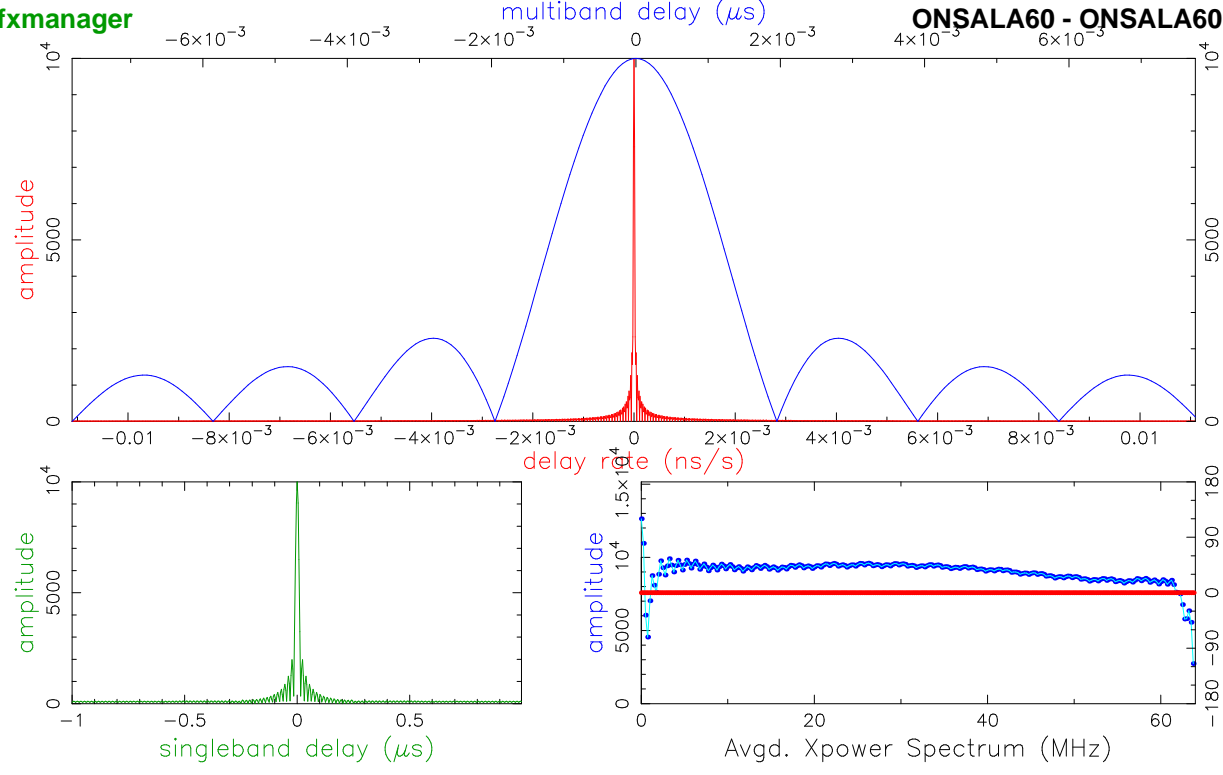
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/XP..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/XP.W.58.1JFPMR

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, XX

ONSALA60 - ONSALA60, fgroup W, pol LL

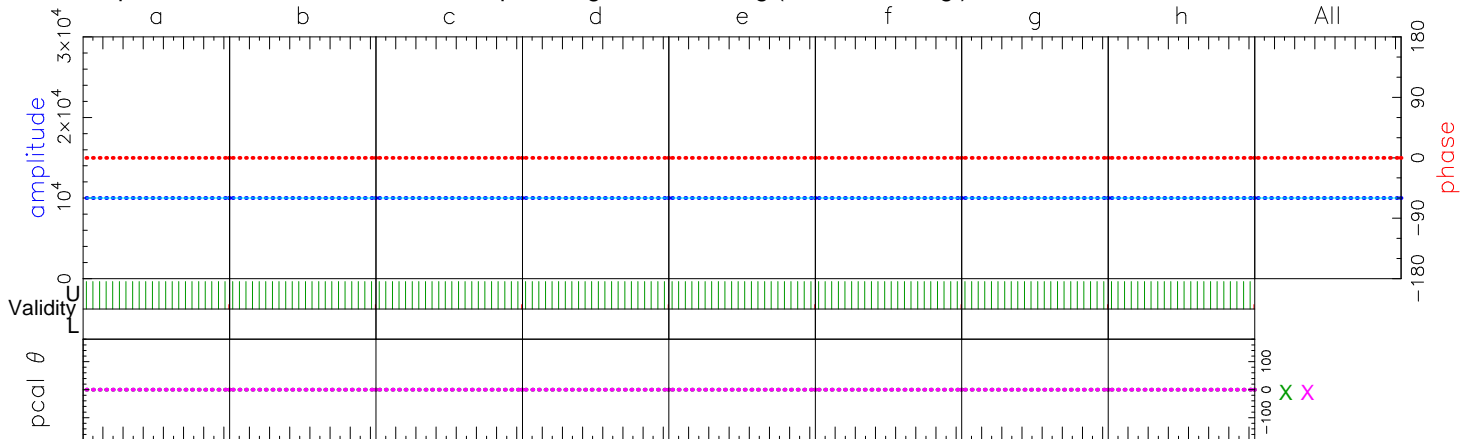


Fringe quality 9

SNR 560297.6
 Int time 419.800
 Amp 10000.001
 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) 87940.0000
 AP (sec) 0.512

Exp. c202c
 Yr:day 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081805
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0	10000.0
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	257.0	257.0
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	10000.0	10000.0
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	10000.0	10000.0
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	257.0	257.0

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 6.5E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-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 0.0 RMS Theor. Amplitude 10000.001 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 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 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

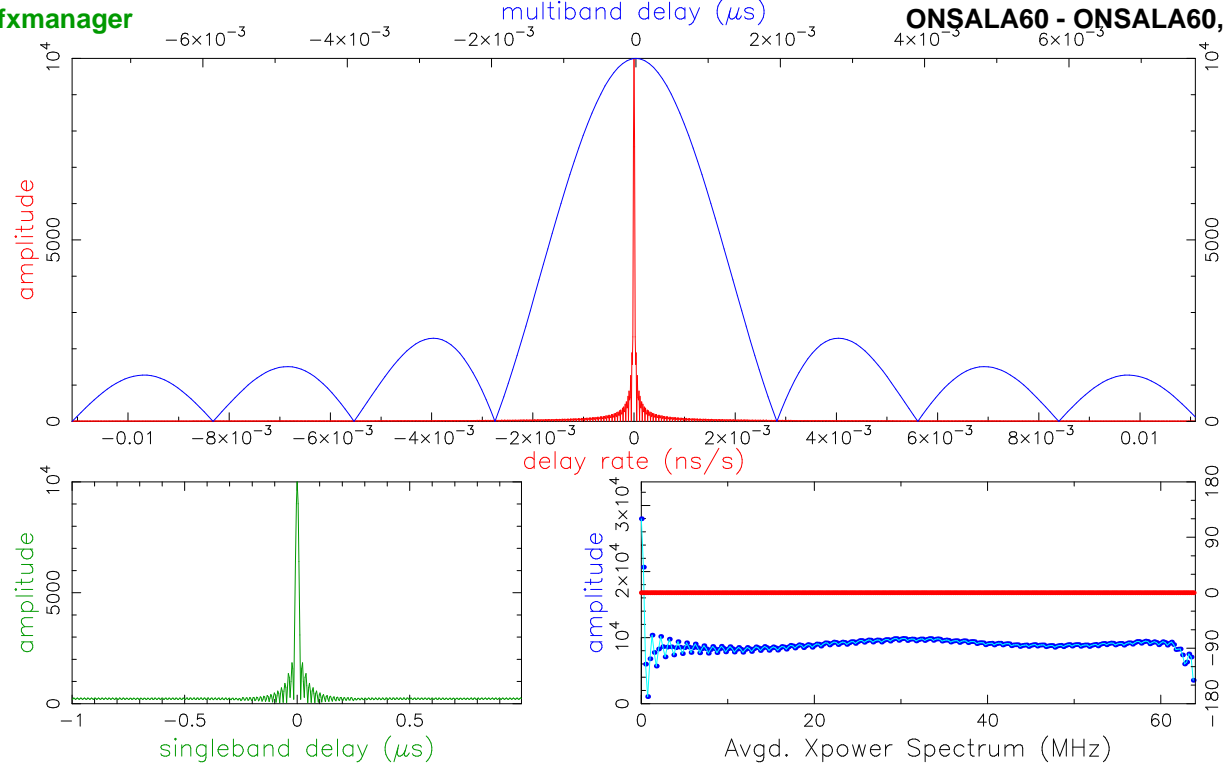
X: az 288.9 el 38.8 pa 42.8 X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/XX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/XX.W.14.1JFPMR

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, XX

ONŞALA60 - ONŞALA60, fgroup W, pol RR

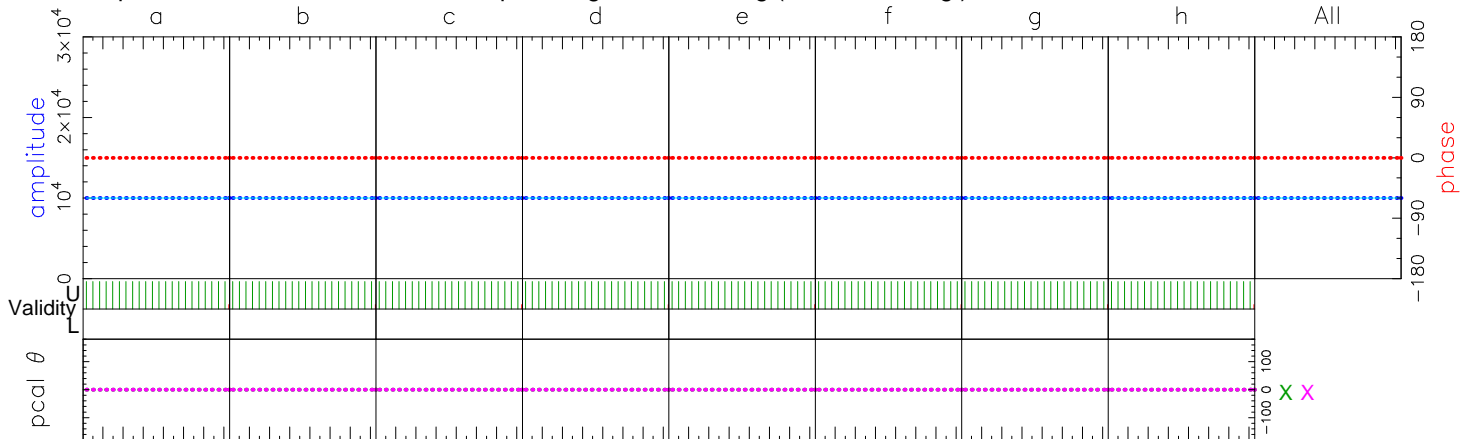


Fringe quality 9

SNR 560297.6
 Int time 419.800
 Amp 10000.001
 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)
 87940.0000
 AP (sec) 0.512

Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081808
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0	10000.0
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 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 6.5E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-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 0.0 RMS Theor. Amplitude 10000.001 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 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 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

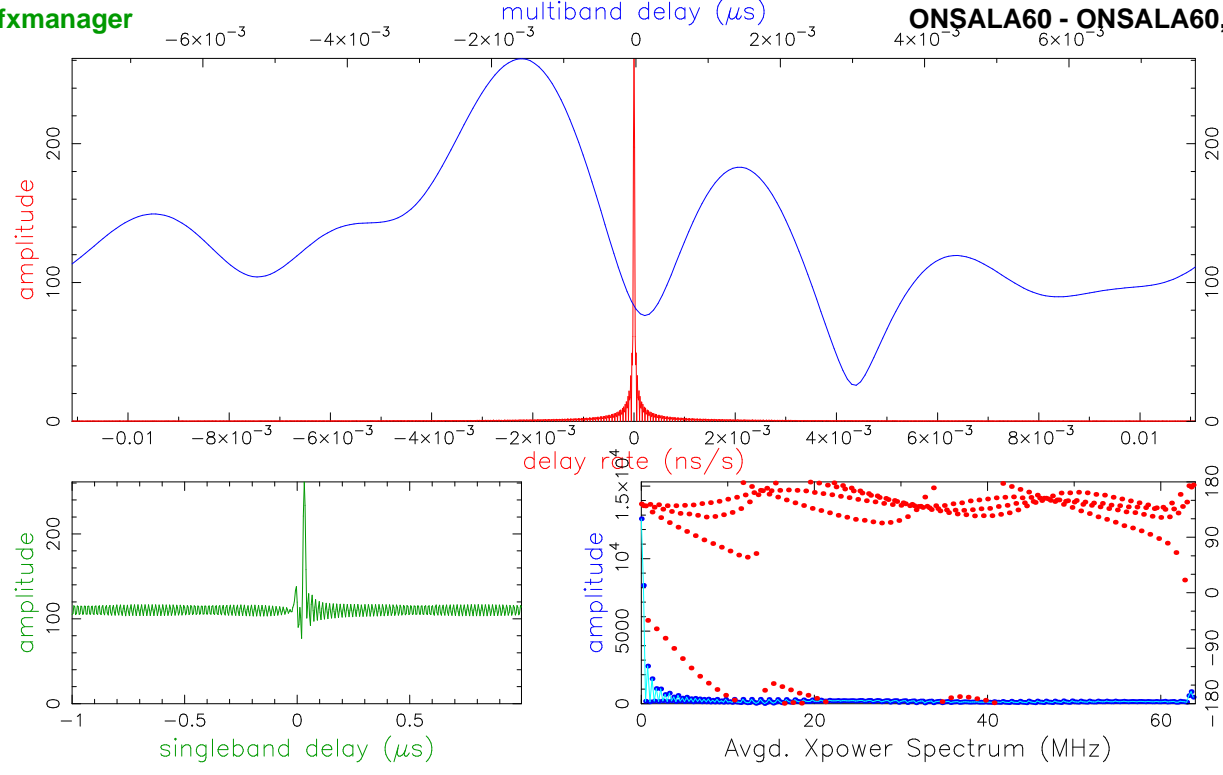
X: az 288.9 el 38.8 pa 42.8 X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/XX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/XX.W.26.1JFPMR

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, XX

ONSALA60 - ONSALA60, fgroup W, pol LR

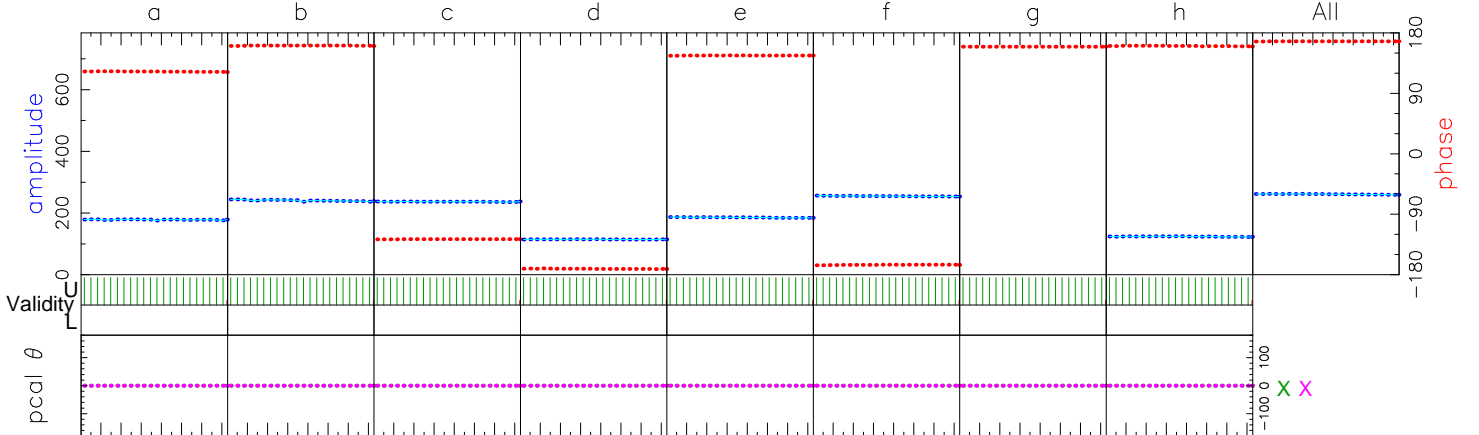


Fringe quality 5

SNR 14647.6
 Int time 419.800
 Amp 261.426
 Phase 167.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.031619
 MBD -0.001563
 Fringe rate (Hz)
 -0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512

Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081811
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	122.3	160.9	-127.1	-171.1	146.2	-165.3	159.3	160.4	Phase	167.3
	178.6	240.8	236.6	114.7	185.9	254.9	1006.4	123.9	Ampl.	292.7
	264.1	265.9	265.3	263.9	265.2	265.3	264.4	266.3	Sbd box	265.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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)	2.96872187500E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-1.56278E-03	+/- 7.4E-08
Sband delay (usec)	3.16192500000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		3.16193E-02	+/- 5.9E-07
Phase delay (usec)	5.28388044599E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		5.28388E-06	+/- 2.5E-10
Delay rate (us/s)	-3.47027253531E-12		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-3.47027E-12	+/- 1.0E-12
Total phase (deg)	167.3		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		167.3	+/- 0.0

ph/seg (deg) 0.1 0.0
 amp/seg (%) 0.4 0.0
 ph/frq (deg) 36.9 0.0
 amp/frq (%) 105.5 0.0

RMS Theor. Amplitude 261.426 +/- 0.018
 Search (2048X32) 259.708
 Interp. 0.000
 Inc. seg. avg. 261.109
 Inc. frq. avg. 292.718

Group delay (usec)(sbd) 2.96872187500E-02
 Sband delay (usec) 3.16192500000E-02
 Phase delay (usec) 5.28388044599E-06
 Delay rate (us/s) -3.47027253531E-12
 Total phase (deg) 167.3

Apriori delay (usec) 0.00000000000E+00
 Apriori clock (usec) 0.0000000E+00
 Apriori clockrate (us/s) 0.0000000E+00
 Apriori rate (us/s) 0.00000000000E+00
 Apriori accel (us/s/s) 0.00000000000E+00

Resid mbdelay (usec) -1.56278E-03
 Resid sbdelay (usec) 3.16193E-02
 Resid phdelay (usec) 5.28388E-06
 Resid rate (us/s) -3.47027E-12
 Resid phase (deg) 167.3

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

X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

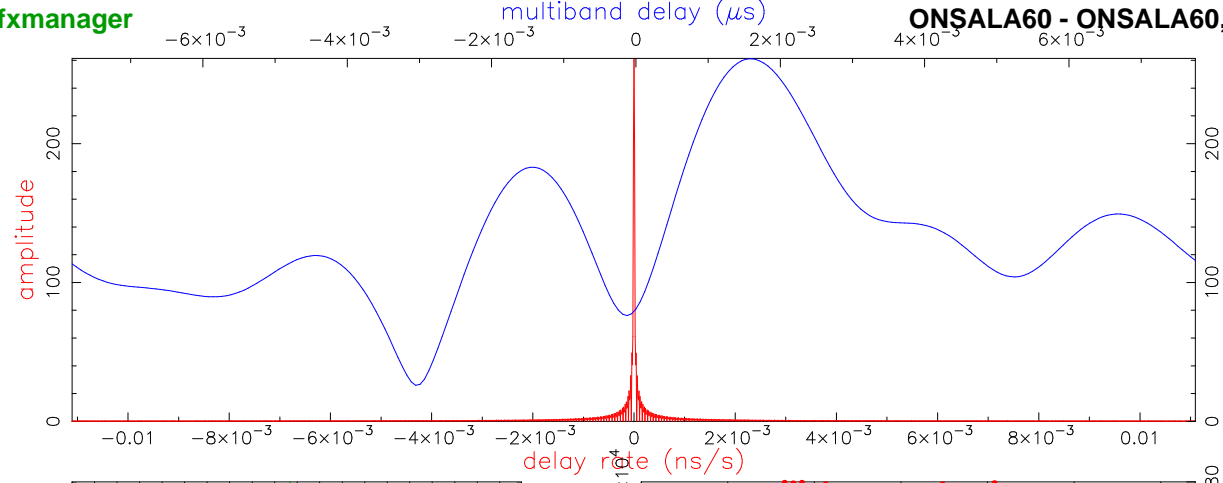
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/XX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/XX.W.39.1JFPMR

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, XX

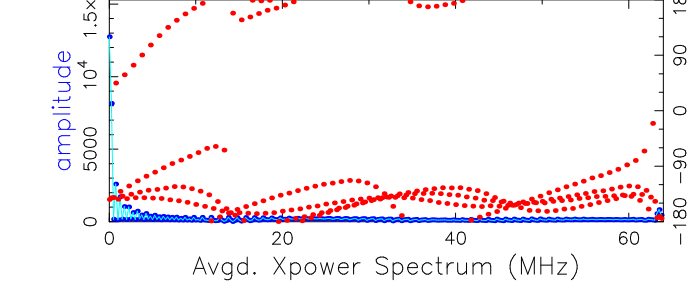
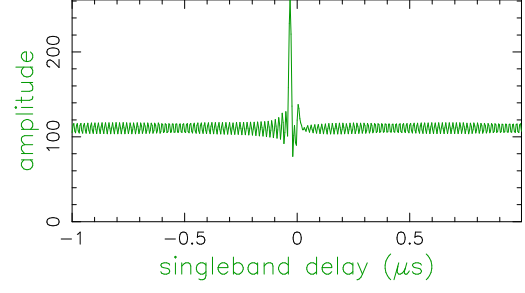
ONSALA60 - ONSALA60, fgroup W, pol RL



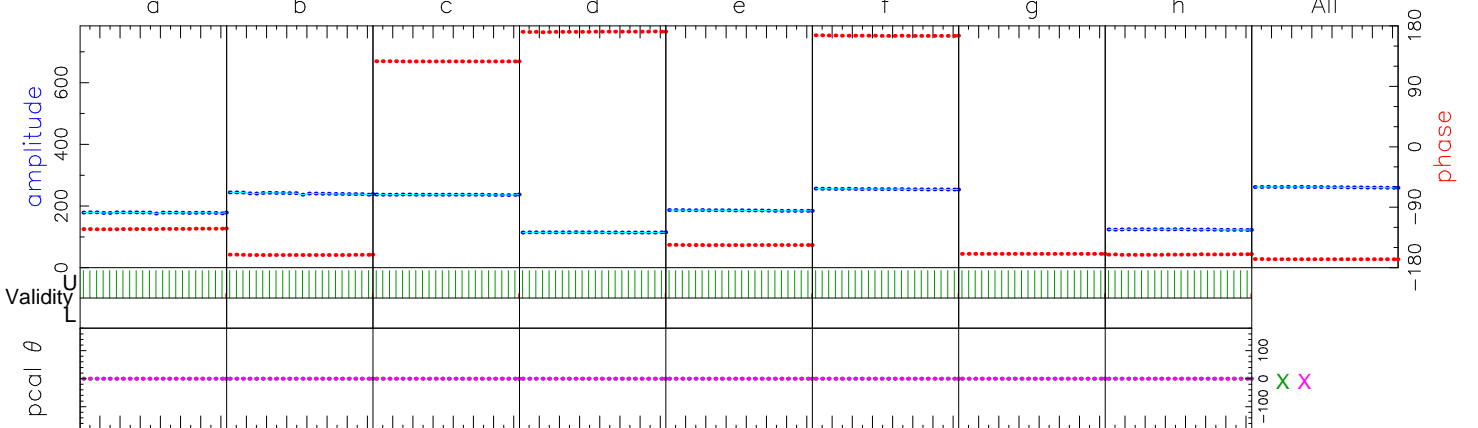
Fringe quality 5

SNR 14647.6
 Int time 419.800
 Amp 261.426
 Phase -167.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.031619
 MBD 0.001563
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512

Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081814
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-122.3	-160.9	127.1	171.1	-146.2	165.3	-159.3	-160.4	Phase	-167.3
	178.6	240.8	236.6	114.7	185.9	254.9	1006.4	123.9	Ampl.	292.7
	249.9	248.1	248.7	250.1	248.8	248.7	249.6	247.7	Sbd box	248.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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)	-2.96872187500E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		1.56278E-03	+/- 7.4E-08
Sband delay (usec)	-3.16192500000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-3.16193E-02	+/- 5.9E-07
Phase delay (usec)	-5.28388044595E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-5.28388E-06	+/- 2.5E-10
Delay rate (us/s)	3.47027253531E-12		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		3.47027E-12	+/- 1.0E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-167.3	+/- 0.0

ph/seg (deg) 0.1 0.0 Search (2048X32) 259.708 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.4 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 36.9 0.0 Inc. seg. avg. 261.109 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 105.5 0.0 Inc. frq. avg. 292.718 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 288.9 el 38.8 pa 42.8 X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/XX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/XX.W.54.1JFPMR

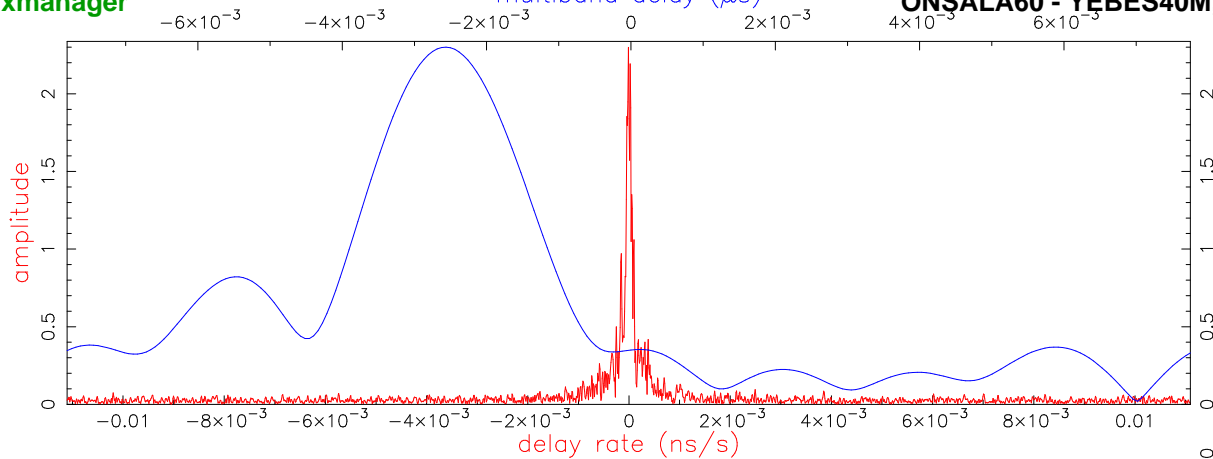
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, XY

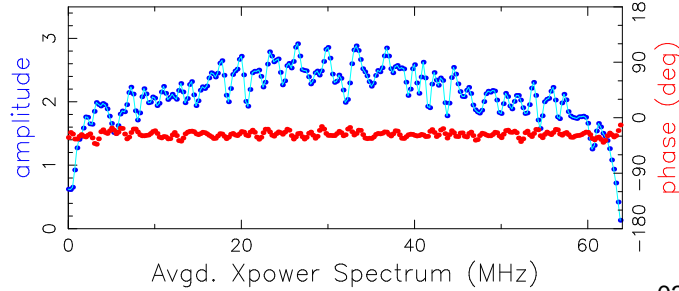
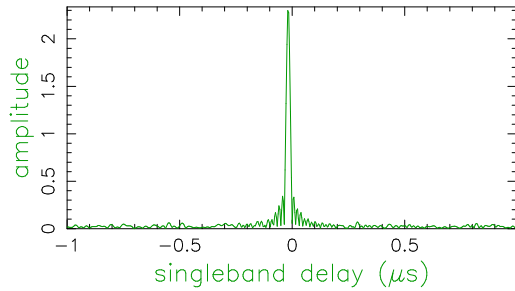
ONŞALA60 - YEŞES40M, fgroup W, pol RR

multiband delay (μ s)



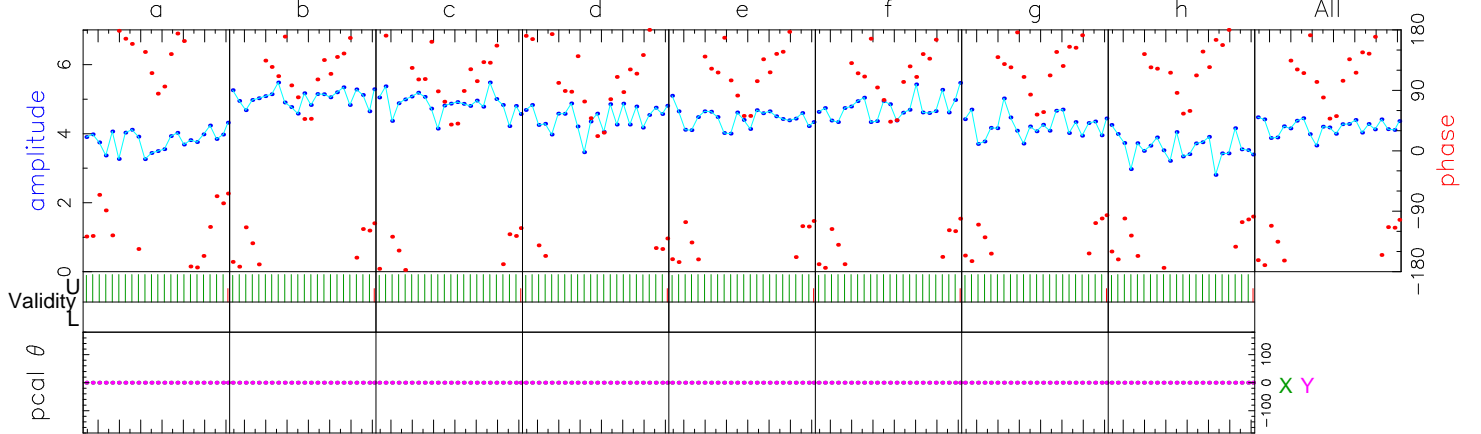
Fringe quality 4

SNR 128.1
Int time 401.723
Amp 2.337
Phase 156.3
PFD 0.0e+00
Delays (us)
SBD -0.017827
MBD -0.002522
Fringe rate (Hz)
-0.001234
Ion TEC 0.000
Ref freq (MHz)
87940.0000
AP (sec) 0.512



Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 063017.90
Stop 063700.84
FRT 063331.00
Corr/FF/build
2021:039:075018
2021:039:081808
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-160.1	154.2	142.3	129.1	157.4	150.8	162.5	167.5	Phase	156.3
	2.1	2.8	2.8	2.4	2.5	2.5	2.4	1.9	Ampl.	2.4
	252.5	251.8	252.3	252.2	252.6	252.2	252.6	252.6	Sbd box	252.4
U/L	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	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		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.21206209918E+02		Apriori delay (usec)		-8.21188062545E+02		Resid mbdelay (usec)		-2.52237E-03	+/- 8.5E-06
Sband delay (usec)	-8.21205889795E+02		Apriori clock (usec)		3.4722214E+01		Resid sbdelay (usec)		-1.78273E-02	+/- 6.7E-05
Phase delay (usec)	-8.21188057607E+02		Apriori clockrate (us/s)		4.0800002E-07		Resid phdelay (usec)		4.93807E-06	+/- 2.8E-08
Delay rate (us/s)	1.89328830511E-01		Apriori rate (us/s)		1.89328844547E-01		Resid rate (us/s)		-1.40359E-08	+/- 1.2E-10
Total phase (deg)	77.1		Apriori accel (us/s/s)		1.89934491904E-05		Resid phase (deg)		156.3	+/- 0.9

ph/seg (deg) 60.2 2.1 Search (2048X32) 2.242 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 79.5 3.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 22.5 1.3 Inc. seg. avg. 4.181 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 12.6 2.2 Inc. frq. avg. 2.422 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 288.9 el 38.8 pa 42.8 Y: az 294.0 el 41.9 pa 67.9 u,v (fr/asec) -1454.078 2668.010 simultaneous interpolator
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/XY..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/XY.W.22.1JFPMR

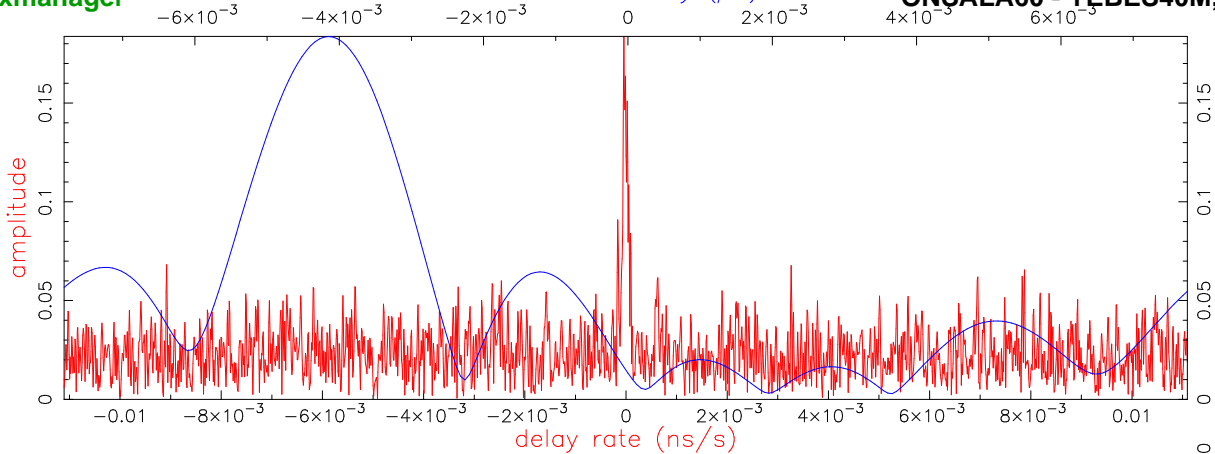
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, XY

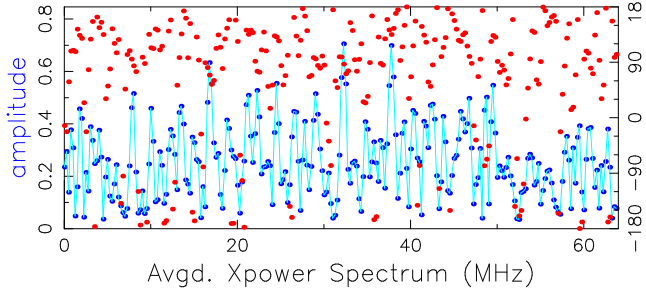
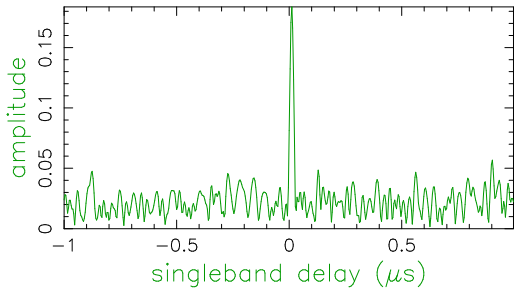
ONŞALA60 - YEŞES40M, fgroup W, pol LR

multiband delay (μ s)



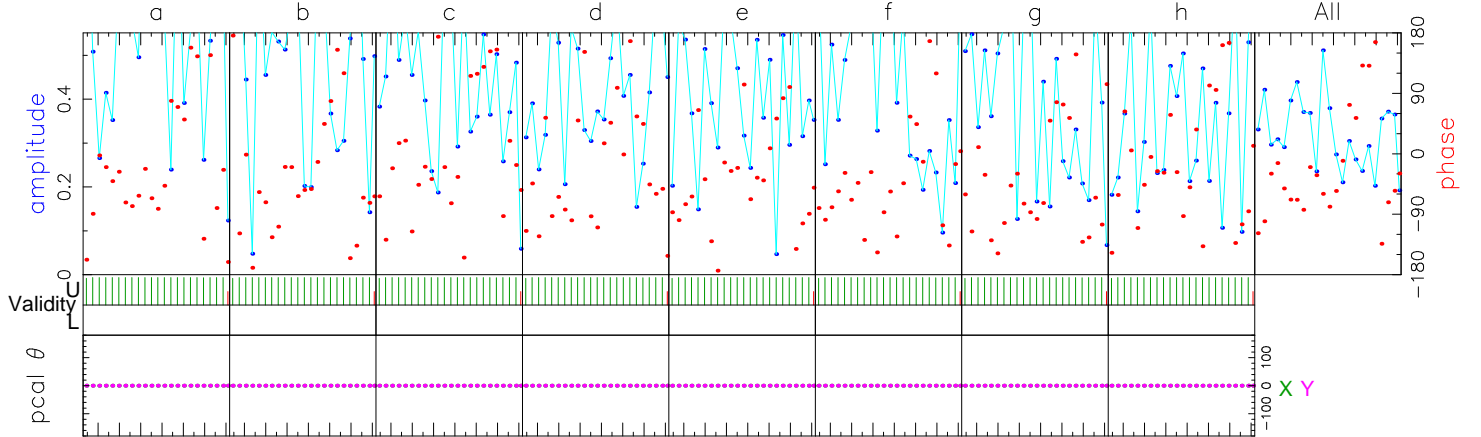
Fringe quality 9

SNR 10.1
 Int time 401.723
 Amp 0.184
 Phase -61.5
 PFD 3.2e-15
 Delays (us)
 SBD 0.011447
 MBD -0.004156
 Fringe rate (Hz)
 -0.003856
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063017.90
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081811
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-60.1	-76.9	-42.7	-52.1	-54.0	-65.0	-77.9	-38.0	Phase	-61.5
	0.2	0.2	0.1	0.1	0.2	0.3	0.2	0.1	Ampl.	0.2
	257.1	260.3	279.4	506.7	321.6	260.0	261.2	81.7	Sbd box	259.9
U/L	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.21176593692E+02		Apriori delay (usec)		-8.21188062545E+02		Resid mbdelay (usec)		-4.15615E-03	+/- 1.1E-04
Sband delay (usec)	-8.21176616045E+02		Apriori clock (usec)		3.4722214E+01		Resid sbdelay (usec)		1.14465E-02	+/- 8.6E-04
Phase delay (usec)	-8.21188064488E+02		Apriori clockrate (us/s)		4.0800002E-07		Resid phdelay (usec)		-1.94318E-06	+/- 3.6E-07
Delay rate (us/s)	1.89328800699E-01		Apriori rate (us/s)		1.89328844547E-01		Resid rate (us/s)		-4.38476E-08	+/- 1.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.89934491904E-05		Resid phase (deg)		-61.5	+/- 11.4

ph/seg (deg) 74.5 27.3 Search (2048X32) 0.179 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 88.1 47.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.2 16.1 Inc. seg. avg. 0.292 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.6 28.1 Inc. frq. avg. 0.181 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 288.9 el 38.8 pa 42.8 Y: az 294.0 el 41.9 pa 67.9 u,v (fr/asec) -1454.078 2668.010 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/XY..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/XY.W.38.1JFPMR

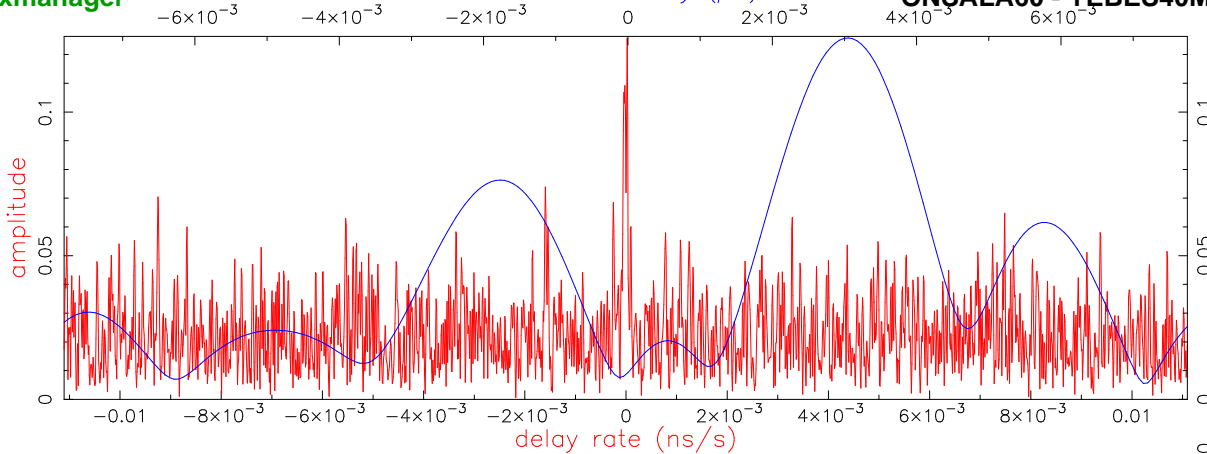
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, XY

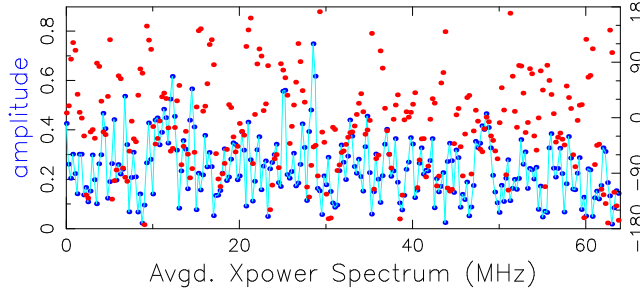
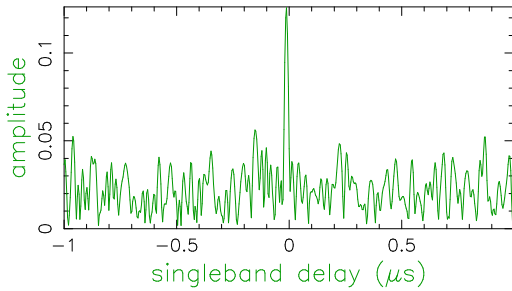
ONŞALA60 - YEŞES40M, fgroup W, pol RL

multiband delay (μ s)



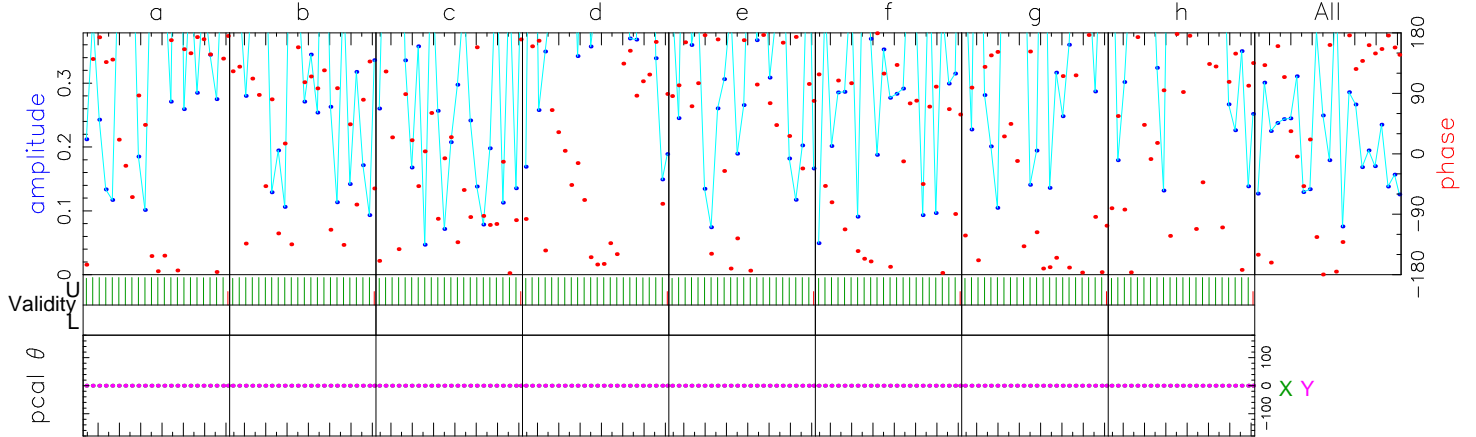
Fringe quality 0

SNR 6.9
 Int time 401.723
 Amp 0.126
 Phase 163.7
 PFD 1.3e-03
 Delays (us)
 SBD -0.012625
 MBD 0.003018
 Fringe rate (Hz)
 0.002077
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063017.90
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081814
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	174.1	141.9	-123.1	164.1	134.5	124.9	-178.4	-173.6	Phase	163.7
	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	254.0	310.5	250.6	231.8	149.8	457.3	253.3	45.9	Sbd box	253.8
U/L	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-8.21200669581E+02		Apriori delay (usec)		-8.21188062545E+02		Resid mbdelay (usec)		3.01796E-03	+/- 1.6E-04
Sband delay (usec)	-8.21200687795E+02		Apriori clock (usec)		3.4722214E+01		Resid sbdelay (usec)		-1.26253E-02	+/- 1.2E-03
Phase delay (usec)	-8.21188057375E+02		Apriori clockrate (us/s)		4.0800002E-07		Resid phdelay (usec)		5.16982E-06	+/- 5.2E-07
Delay rate (us/s)	1.89328868162E-01		Apriori rate (us/s)		1.89328844547E-01		Resid rate (us/s)		2.36152E-08	+/- 2.2E-09
Total phase (deg)	84.4		Apriori accel (us/s/s)		1.89934491904E-05		Resid phase (deg)		163.7	+/- 16.6

ph/seg (deg) 69.1 39.7 Search (2048X32) 0.124 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 102.7 69.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.0 23.4 Inc. seg. avg. 0.179 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.0 40.9 Inc. frq. avg. 0.129 Data rate (M/Samp/s): 128 Sample rate (M/Samp/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 288.9 el 38.8 pa 42.8 Y: az 294.0 el 41.9 pa 67.9 u,v (fr/asec) -1454.078 2668.010 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/XY..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/XY.W.53.1JFPMR

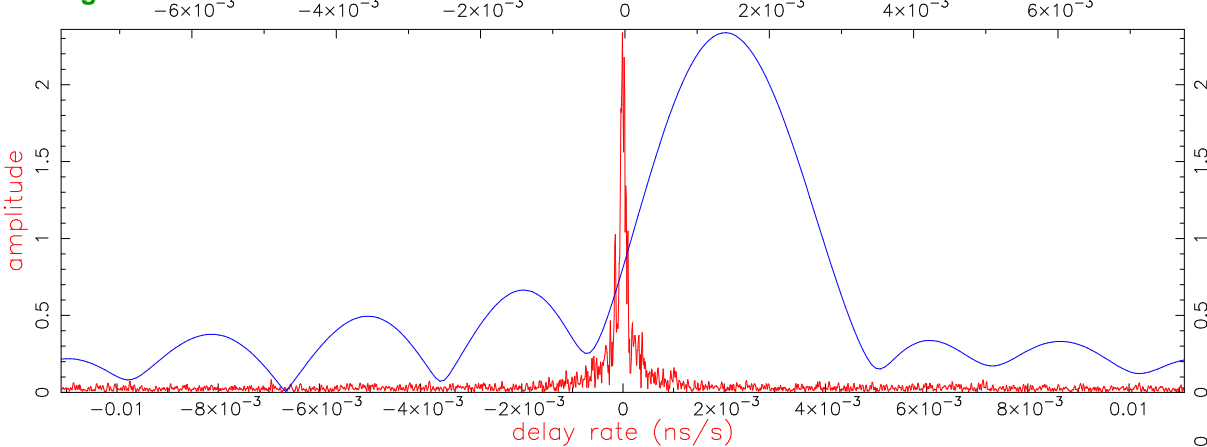
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, XY

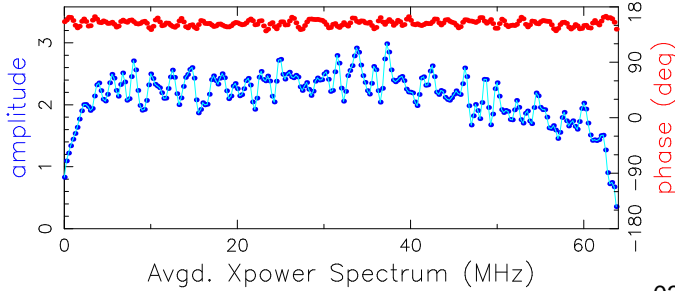
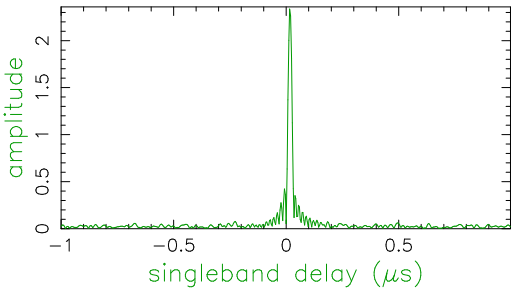
ONŞALA60 - YEBES40M, fgroup W, pol LL

multiband delay (μ s)



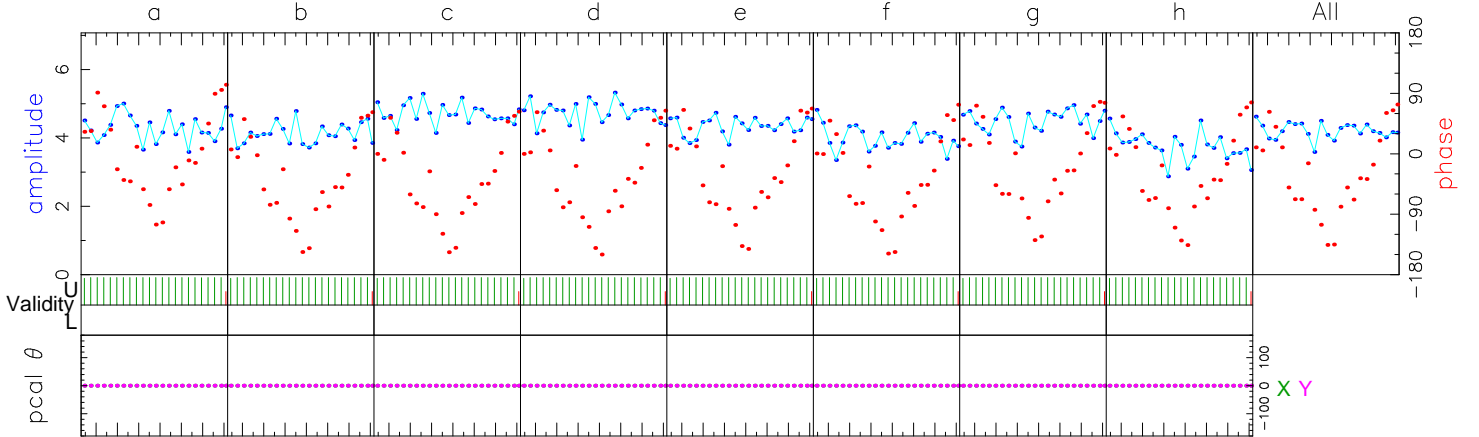
Fringe quality 4

SNR 129.3
 Int time 401.723
 Amp 2.359
 Phase -29.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.016887
 MBD 0.001424
 Fringe rate (Hz)
 -0.001272
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063017.90
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081805
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

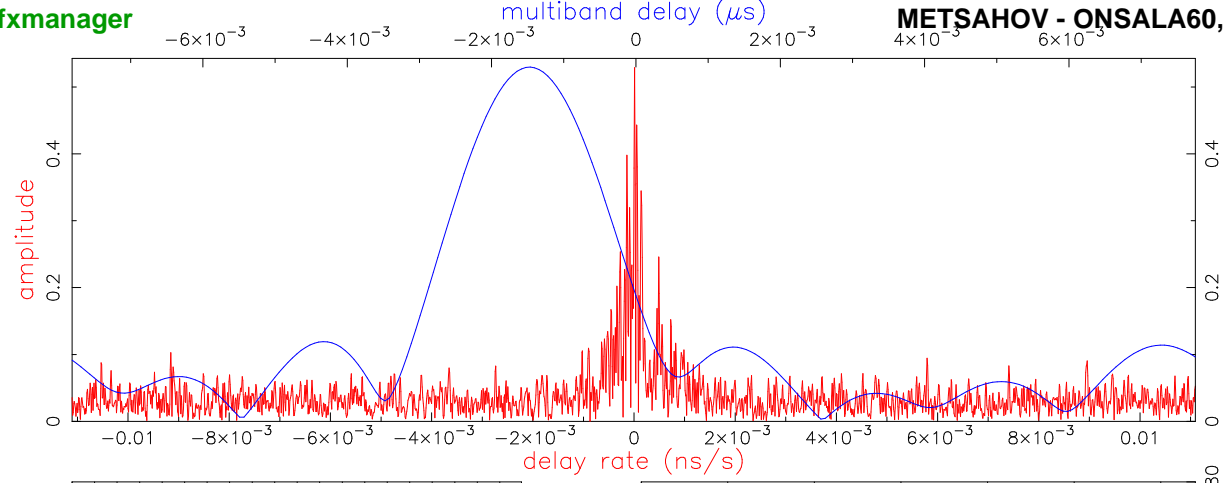
Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-3.6	-37.4	-40.1	-34.4	-30.8	-38.6	-18.5	-28.8	Phase	-29.1
	2.4	2.3	2.6	2.6	2.3	2.2	2.5	2.2	Ampl.	2.4
	261.2	261.4	261.3	261.5	261.1	261.4	261.4	260.7	Sbd box	261.3
U/L	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-8.21171013324E+02	Apriori delay (usec)	-8.21188062545E+02	Resid mbdelay (usec)	1.42422E-03	+/-	8.4E-06
Sband delay (usec)	-8.21171175795E+02	Apriori clock (usec)	3.4722214E+01	Resid sbdelay (usec)	1.68868E-02	+/-	6.7E-05
Phase delay (usec)	-8.21188063466E+02	Apriori clockrate (us/s)	4.0800002E-07	Resid phdelay (usec)	-9.20760E-07	+/-	2.8E-08
Delay rate (us/s)	1.89328830084E-01	Apriori rate (us/s)	1.89328844547E-01	Resid rate (us/s)	-1.44627E-08	+/-	1.2E-10
Total phase (deg)	-108.4	Apriori accel (us/s/s)	1.89934491904E-05	Resid phase (deg)	-29.1	+/-	0.9

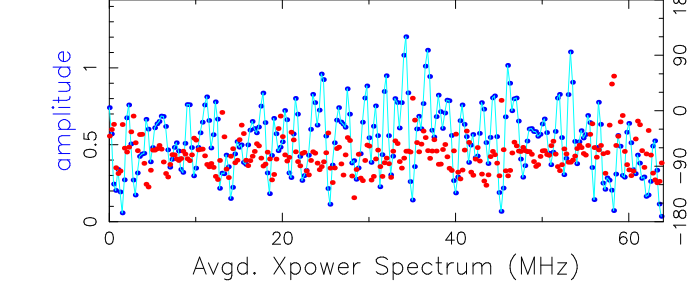
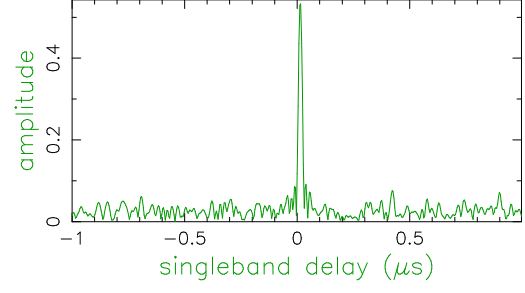
ph/seg (deg)	60.2	RMS	2.1	Theor.	2.359 +/- 0.018	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	79.2	Search (2048X32)	2.275	Amplitude	2.359 +/- 0.018	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	13.3	Inc. seg. avg.	4.211	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	7.1	Inc. frq. avg.	2.385	Inc. seg. avg.	4.211	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
X: az 288.9 el 38.8 pa 42.8		Y: az 294.0 el 41.9 pa 67.9		Inc. frq. avg.	2.385	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
Control file: cf_1234_88GHz_gmva		Input file: /Exps/c202c/v1/1234/No0057/XY..1JFPMR		u,v (fr/asec)	-1454.078 2668.010	Output file: /Exps/c202c/v1/1234/No0057/XY.W.7.1JFPMR				simultaneous interpolator	



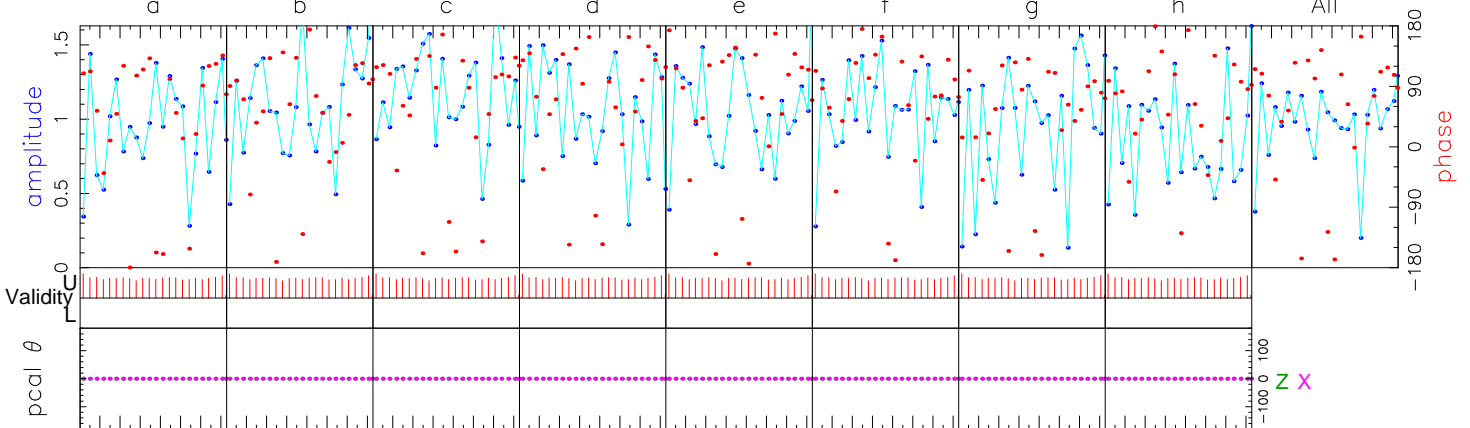
Fringe quality 7

SNR 25.8
Int time 302.272
Amp 0.543
Phase 101.7
PFD 0.0e+00
Delays (us)
SBD 0.013830
MBD -0.001411
Fringe rate (Hz) 0.001313
Ion TEC 0.000
Ref freq (MHz) 87940.0000
AP (sec) 0.512

Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 063001.00
Stop 063700.84
FRT 063331.00
Corr/FF/build
2021:039:075018
2021:039:081808
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	103.8	87.4	114.6	104.6	114.4	103.0	93.0	85.2	Phase	101.7
	0.5	0.5	0.7	0.5	0.5	0.6	0.5	0.5	Ampl.	0.5
	260.4	260.7	260.6	260.7	260.3	260.7	260.7	260.1	Sbd box	260.5
U/L	816/0	816/0	816/0	816/0	816/0	816/0	816/0	816/0	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	
									Tracks	
Group delay (usec)(sbd)	-1.50845589086E+03		Apriori delay (usec)		-1.50847010488E+03		Resid mbdelay (usec)		-1.41098E-03	+/- 4.2E-05
Sband delay (usec)	-1.50845627538E+03		Apriori clock (usec)		-4.8283699E+01		Resid sbdelay (usec)		1.38295E-02	+/- 3.3E-04
Phase delay (usec)	-1.50847010167E+03		Apriori clockrate (us/s)		-5.1200000E-07		Resid phdelay (usec)		3.21116E-06	+/- 1.4E-07
Delay rate (us/s)	4.29642313462E-02		Apriori rate (us/s)		4.29642164199E-02		Resid rate (us/s)		1.49263E-08	+/- 5.8E-10
Total phase (deg)			Apriori accel (us/s/s)		9.68122832535E-06		Resid phase (deg)		101.7	+/- 4.4

ph/seg (deg) 61.8 10.6 Search (2048X32) 0.506 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 89.2 18.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 12.2 6.3 Inc. seg. avg. 0.940 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 11.8 11.0 Inc. frq. avg. 0.535 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 295.9 el 33.9 pa 36.5 X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) -321.703 864.631 simultaneous interpolator
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/ZX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/ZX.W.23.1JFPMR

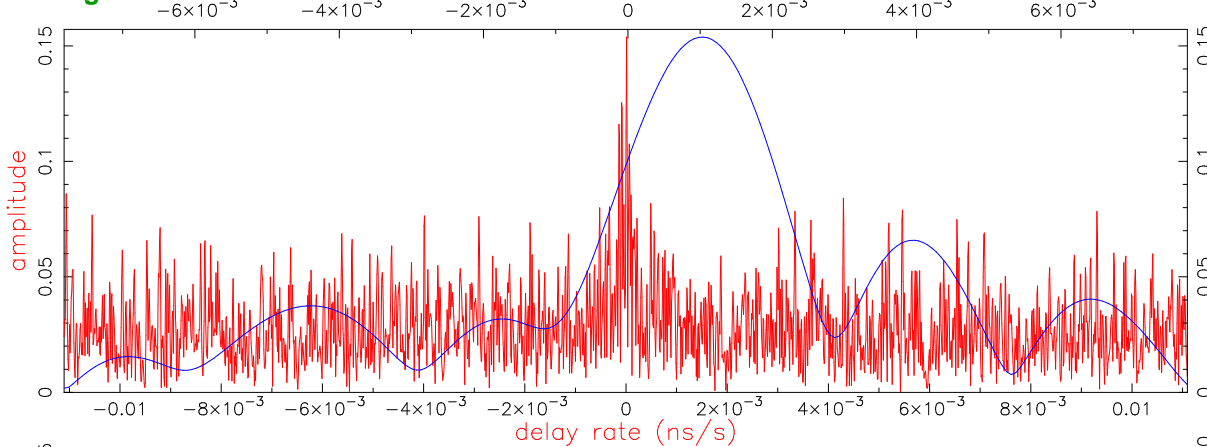
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, ZX

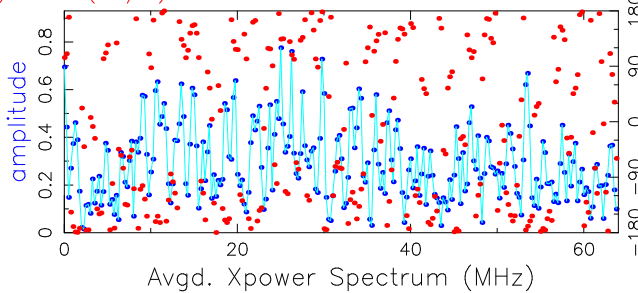
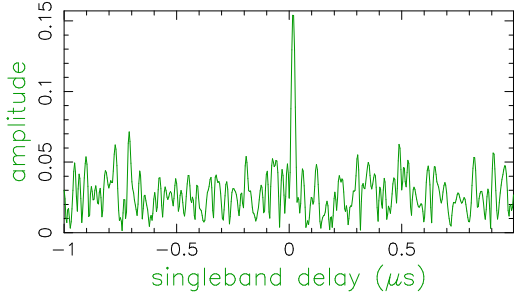
METSAHOV - ONSALA60, fgroup W, pol LR

multiband delay (μs)



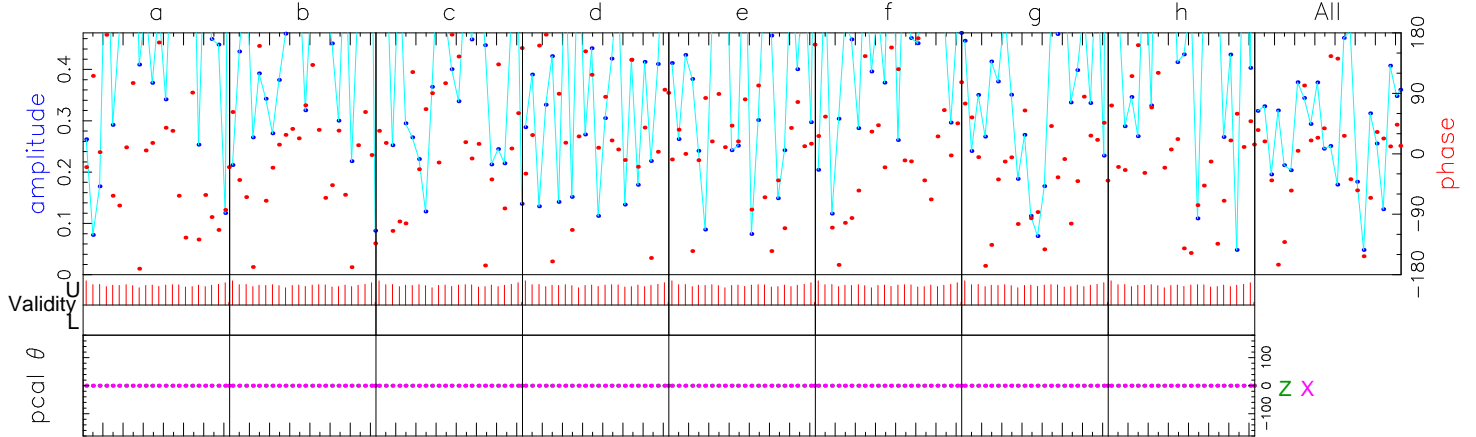
Fringe quality 9

SNR 7.5
 Int time 302.272
 Amp 0.157
 Phase 13.6
 PFD 2.5e-05
 Delays (us)
 SBD 0.017542
 MBD 0.001003
 Fringe rate (Hz) 0.001071
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081811
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-37.6	5.8	23.0	52.9	22.9	8.9	1.4	9.7	Phase	13.6
	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.2	Ampl.	0.2
	500.3	261.4	391.6	60.3	260.7	437.7	262.0	95.2	Sbd box	261.5
U/L	816/0	816/0	816/0	816/0	816/0	816/0	816/0	816/0	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)	-1.50845347692E+03		Apriori delay (usec)		-1.50847010488E+03		Resid mbdelay (usec)		1.00296E-03	+/- 1.5E-04
Sband delay (usec)	-1.50845256263E+03		Apriori clock (usec)		-4.8283699E+01		Resid sbdelay (usec)		1.75423E-02	+/- 1.2E-03
Phase delay (usec)	-1.50847010445E+03		Apriori clockrate (us/s)		-5.1200000E-07		Resid phdelay (usec)		4.31074E-07	+/- 4.8E-07
Delay rate (us/s)	4.29642285943E-02		Apriori rate (us/s)		4.29642164199E-02		Resid rate (us/s)		1.21744E-08	+/- 2.0E-09
Total phase (deg)			Apriori accel (us/s/s)		9.68122832535E-06		Resid phase (deg)		13.6	+/- 15.3

ph/seg (deg) RMS Theor. Amplitude 0.157 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.6 36.7 Search (2048X32) 0.153 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 105.9 64.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.7 21.7 Inc. seg. avg. 0.238 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 295.9 el 33.9 pa 36.5 X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) -321.703 864.631 ion window (TEC) 0.00 0.00
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/ZX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/ZX.W.37.1JFPMR simultaneous interpolator

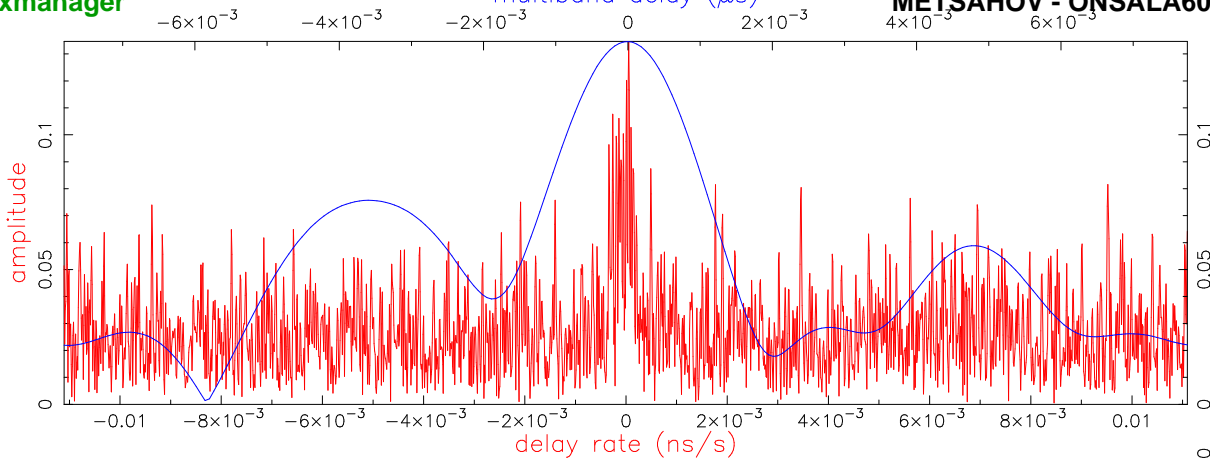
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1JFPMR, No0057, ZX

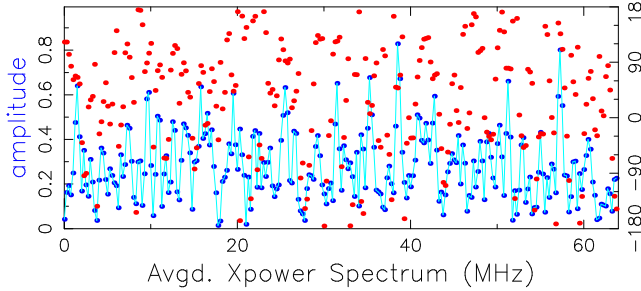
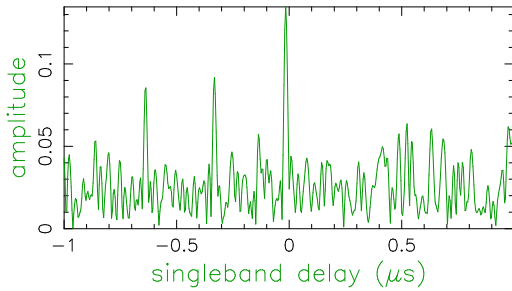
METSAHOV - ONSALA60, fgroup W, pol RL

multiband delay (μ s)



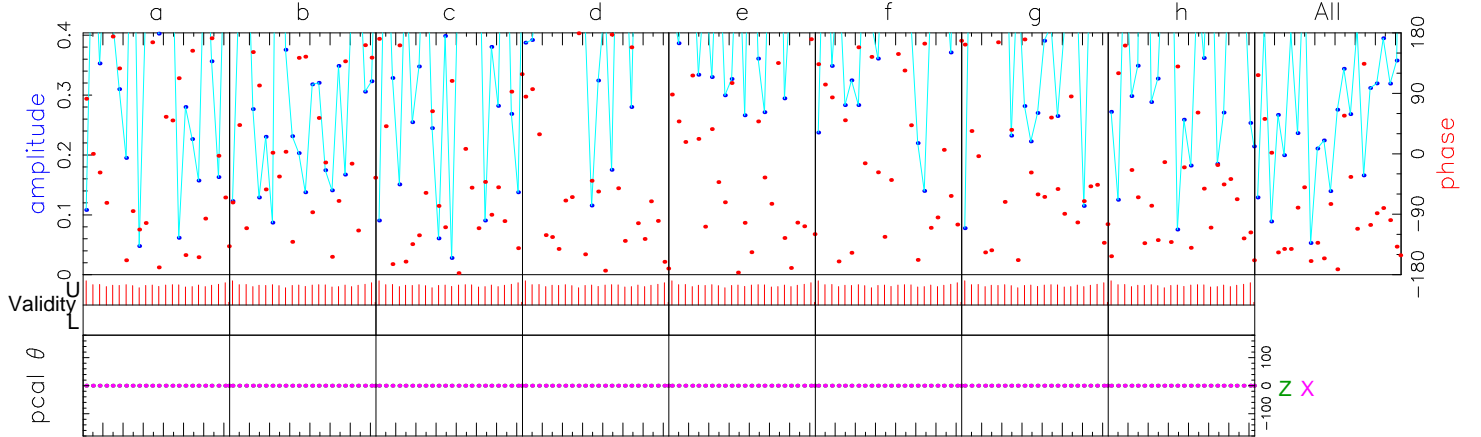
Fringe quality 0

SNR 6.4
 Int time 302.272
 Amp 0.135
 Phase -108.0
 PFD 4.1e-02
 Delays (us)
 SBD -0.015384
 MBD -0.000000
 Fringe rate (Hz)
 0.005212
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 063001.00
 Stop 063700.84
 FRT 063331.00
 Corr/FF/build
 2021:039:075018
 2021:039:081814
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

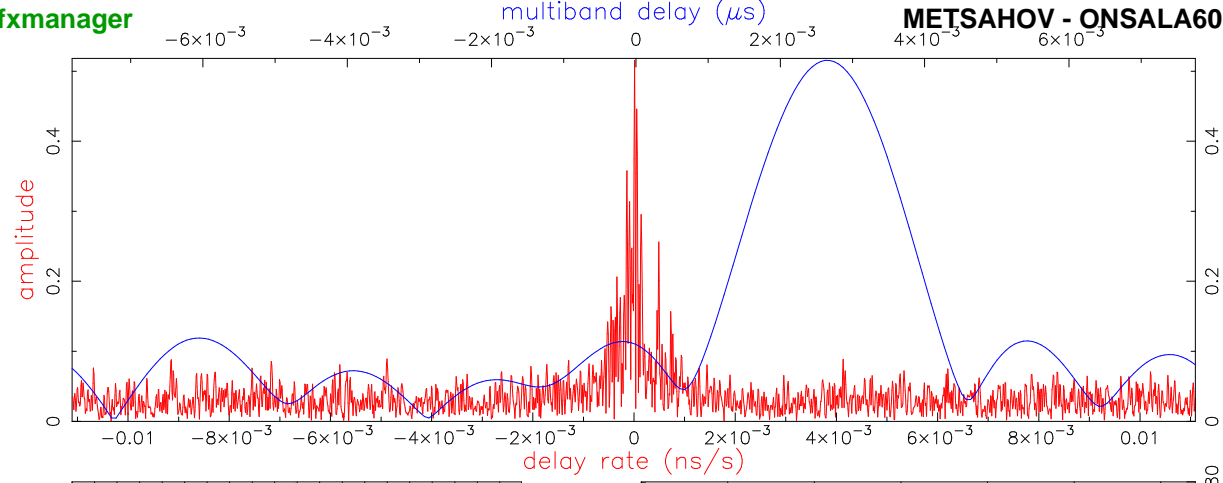


	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-110.4	-59.9	-97.7	-118.5	-141.5	-177.7	-86.0	-96.8	Phase	-108.0
	0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.2	Ampl.	0.1
	316.2	237.3	170.8	253.1	173.2	159.7	463.3	253.3	Sbd box	253.1
U/L	816/0	816/0	816/0	816/0	816/0	816/0	816/0	816/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -1.50848573035E+03 Apriori delay (usec) -1.50847010488E+03 Resid mbdelay (usec) -4.70799E-07 +/- 1.7E-04
 Sband delay (usec) -1.50848548863E+03 Apriori clock (usec) -4.8283699E+01 Resid sbdelay (usec) -1.53838E-02 +/- 1.3E-03
 Phase delay (usec) -1.50847010829E+03 Apriori clockrate (us/s) -5.1200000E-07 Resid phdelay (usec) -3.41134E-06 +/- 5.7E-07
 Delay rate (us/s) 4.29642756880E-02 Apriori rate (us/s) 4.29642164199E-02 Resid rate (us/s) 5.92681E-08 +/- 2.3E-09
 Total phase (deg) -116.4 Apriori accel (us/s/s) 9.68122832535E-06 Resid phase (deg) -108.0 +/- 17.9

RMS Theor. Amplitude 0.135 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 76.0 42.8 Search (2048X32) 0.131 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 141.6 74.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 39.0 25.3 Inc. seg. avg. 0.219 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 59.5 44.2 Inc. frq. avg. 0.137 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

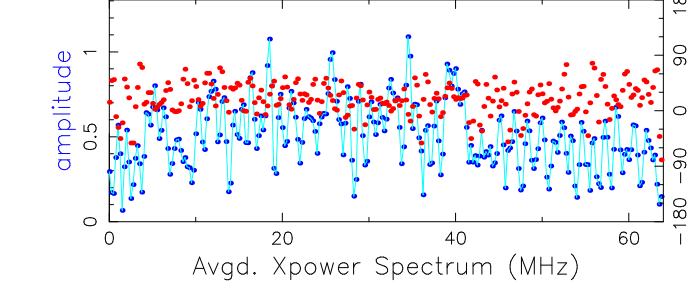
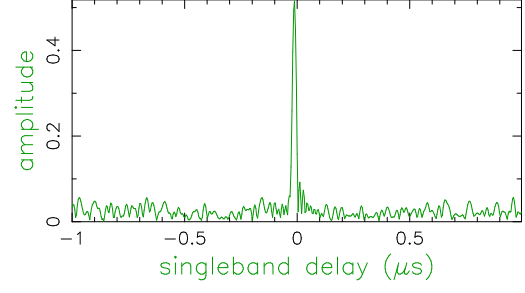
Z: az 295.9 el 33.9 pa 36.5 X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) -321.703 864.631 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/ZX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/ZX.W.51.1JFPMR



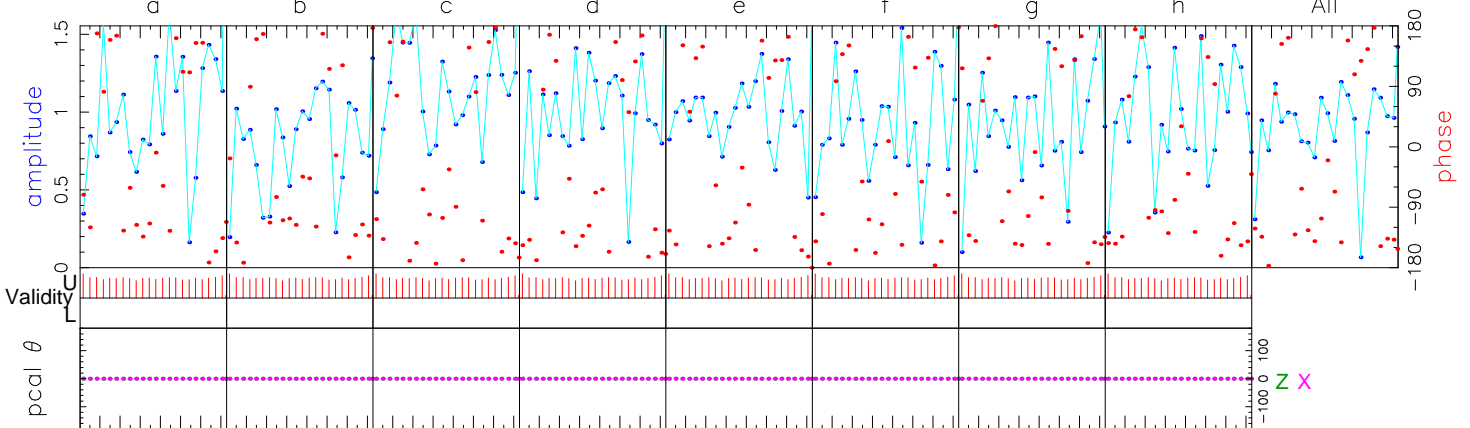
Fringe quality 7

SNR 24.6
Int time 302.272
Amp 0.518
Phase -154.6
PFD 0.0e+00
Delays (us)
SBD -0.012706
MBD 0.002622
Fringe rate (Hz) 0.001345
Ion TEC 0.000
Ref freq (MHz) 87940.0000
AP (sec) 0.512

Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 063001.00
Stop 063700.84
FRT 063331.00
Corr/FF/build
2021:039:075018
2021:039:081805
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-156.6	-137.9	-159.8	-160.5	-167.0	-151.9	-155.5	-143.4	Phase	-154.6
	0.5	0.4	0.7	0.5	0.5	0.5	0.5	0.6	Ampl.	0.5
	254.1	253.1	254.0	253.8	253.7	254.1	253.9	253.7	Sbd box	253.7
U/L	816/0	816/0	816/0	816/0	816/0	816/0	816/0	816/0	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)	-1.50848310745E+03		Apriori delay (usec)		-1.50847010488E+03		Resid mbdelay (usec)		2.62243E-03	+/- 4.4E-05
Sband delay (usec)	-1.50848281038E+03		Apriori clock (usec)		-4.8283699E+01		Resid sbdelay (usec)		-1.27055E-02	+/- 3.5E-04
Phase delay (usec)	-1.50847010977E+03		Apriori clockrate (us/s)		-5.1200000E-07		Resid phdelay (usec)		-4.88474E-06	+/- 1.5E-07
Delay rate (us/s)	4.29642317134E-02		Apriori rate (us/s)		4.29642164199E-02		Resid rate (us/s)		1.52935E-08	+/- 6.1E-10
Total phase (deg)			Apriori accel (us/s/s)		9.68122832535E-06		Resid phase (deg)		-154.6	+/- 4.7

ph/seg (deg) 60.2 11.1 Search (2048X32) 0.481 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 89.1 19.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 10.3 6.6 Inc. seg. avg. 0.879 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 13.3 11.5 Inc. frq. avg. 0.518 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 295.9 el 33.9 pa 36.5 X: az 288.9 el 38.8 pa 42.8 u,v (fr/asec) -321.703 864.631 simultaneous interpolator
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0057/ZX..1JFPMR Output file: /Exps/c202c/v1/1234/No0057/ZX.W.8.1JFPMR