

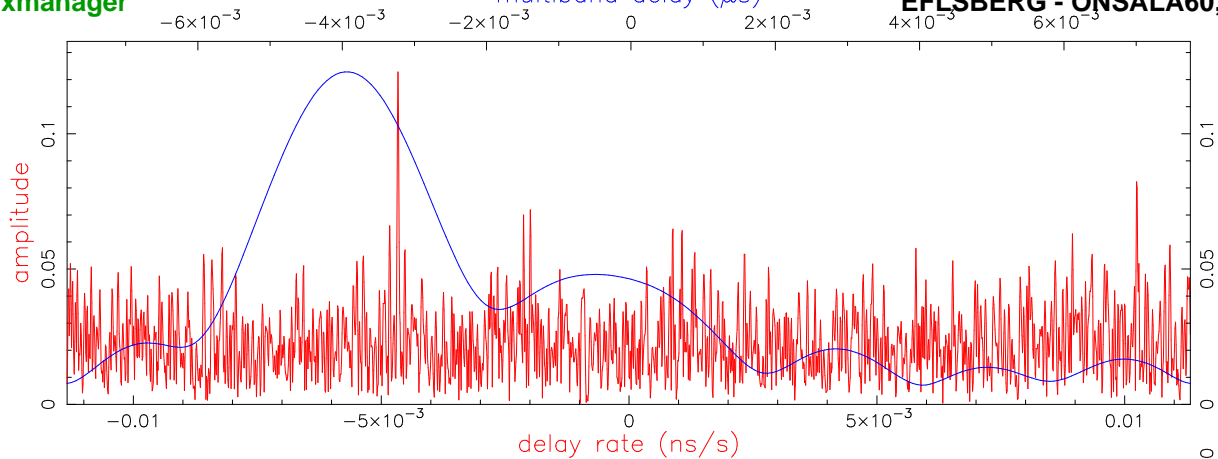
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1VDP, No0283, BX

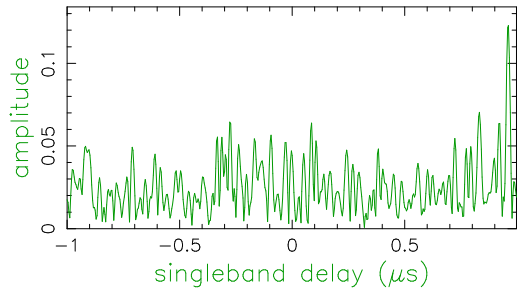
EFLSBERG - ONSALA60, fgroup W, pol LR

multiband delay (μs)

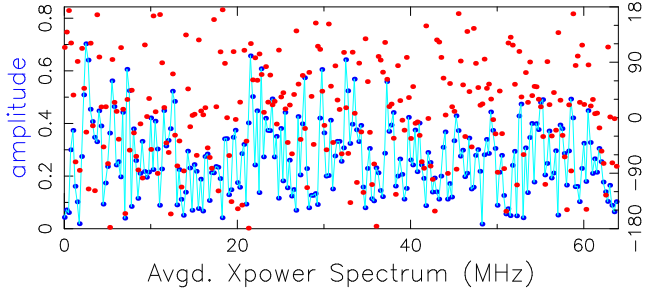


Fringe quality 0

SNR 6.5
 Int time 359.533
 Amp 0.134
 Phase -40.3
 PFD 2.5e-02
 Delays (us)
 SBD 0.959233
 MBD -0.003960
 Fringe rate (Hz)
 -0.402219
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

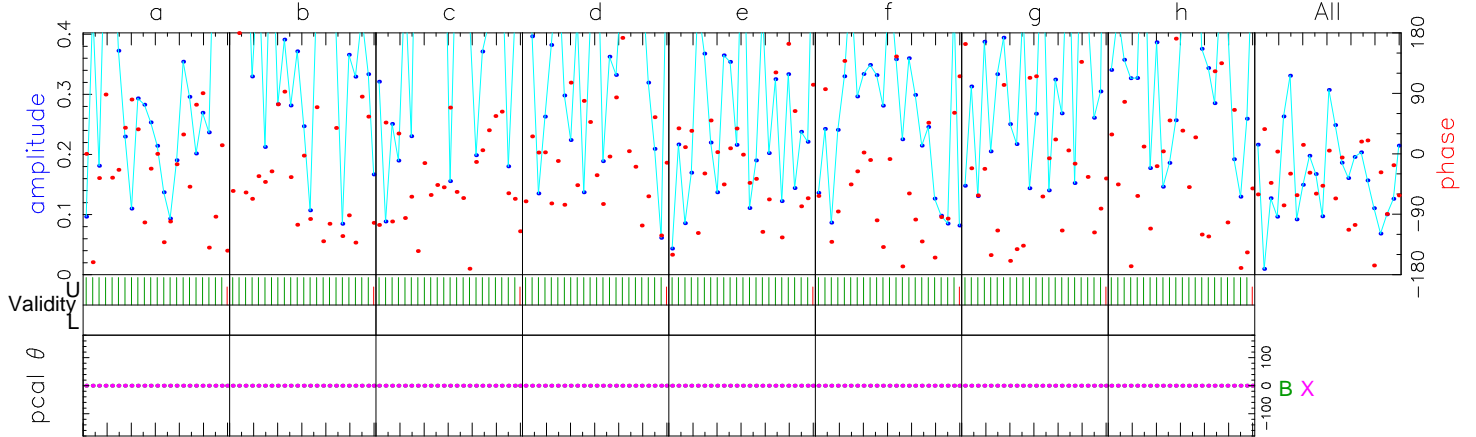


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041006
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-21.0	-59.1	-55.4	-23.7	-21.1	-52.4	-62.4	-23.9	Phase	-40.3
	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	217.3	469.2	502.3	503.0	417.6	432.7	361.9	95.6	Sbd box	502.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-7.17261774430E+02	Apriori delay (usec)	-7.18226564719E+02	Resid mbdelay (usec)	-3.95971E-03	+/-	1.7E-04
Sband delay (usec)	-7.17267332219E+02	Apriori clock (usec)	-3.8294720E+01	Resid sbdelay (usec)	9.59233E-01	+/-	1.3E-03
Phase delay (usec)	-7.18226566019E+02	Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	-1.29995E-06	+/-	5.7E-07
Delay rate (us/s)	-1.25353736807E-01	Apriori rate (us/s)	-1.25349067447E-01	Resid rate (us/s)	-4.66936E-06	+/-	2.7E-09
Total phase (deg)	-142.9	Apriori accel (us/s/s)	-1.67523006427E-06	Resid phase (deg)	-40.3	+/-	17.7

ph/seg (deg)	48.6	Theor.	42.4	Amplitude	0.134 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	69.1		74.0	Search (2048X32)	0.120	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	20.4		25.0	Inc. seg. avg.	0.140	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	44.2		43.6	Inc. frq. avg.	0.126	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 308.0 el 23.2 pa 41.8 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) 958.556 -591.281 simultaneous interpolator

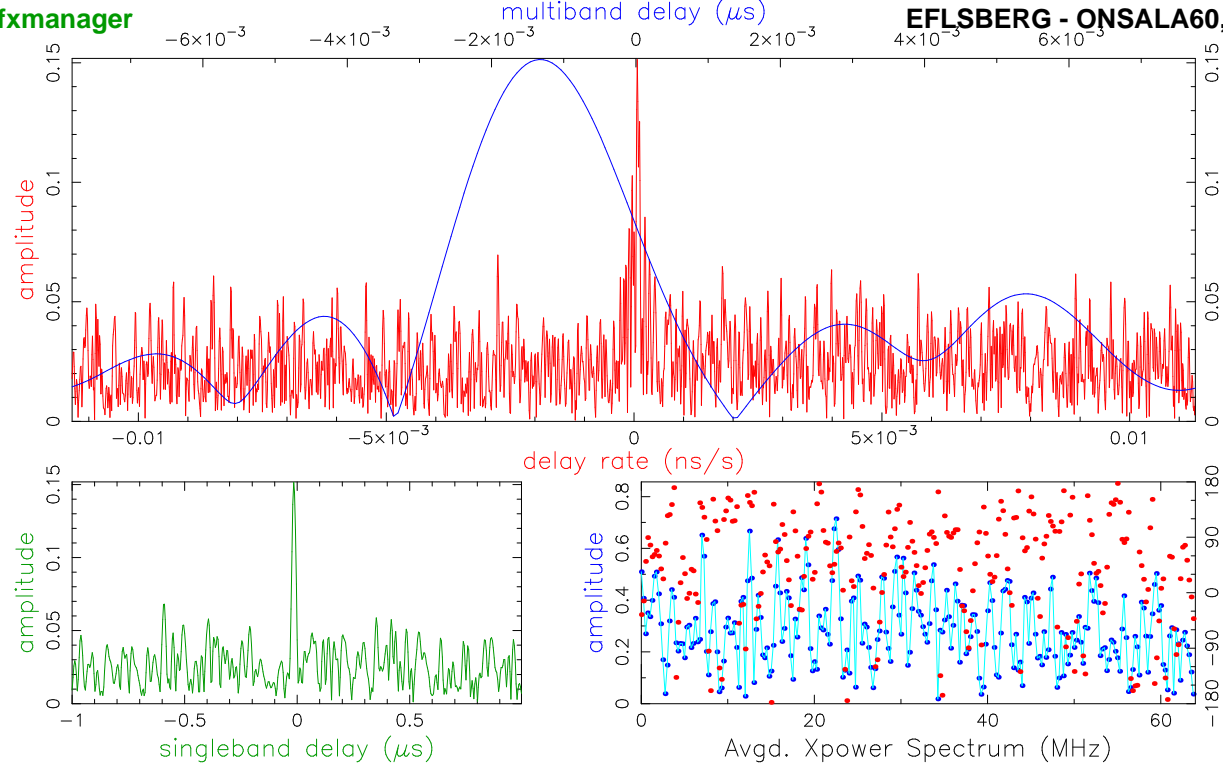
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/BX..11VDPDU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/BX.W.117.11VDPDU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, BX

EFLSBERG - ONSALA60, fgroup W, pol RL

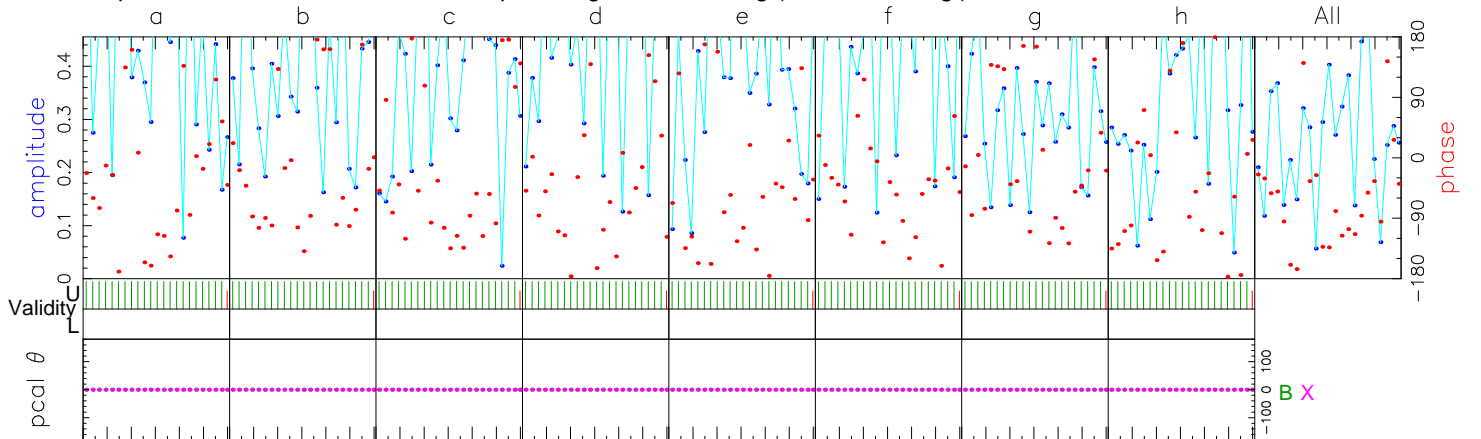


Fringe quality 9

SNR 7.9
 Int time 359.533
 Amp 0.152
 Phase -83.1
 PFD 1.2e-06
 Delays (us)
 SBD -0.014838
 MBD -0.001321
 Fringe rate (Hz) 0.005565
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041010
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-87.8	-79.1	-98.5	-69.7	-106.6	-50.9	-69.5	-124.1	Phase	-83.1
	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	Ampl.	0.2
	45.5	251.9	479.8	291.6	358.1	253.1	334.9	310.2	Sbd box	253.2
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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)	-7.18243510966E+02		Apriori delay (usec)		-7.18226564719E+02		Resid mbdelay (usec)		-1.32125E-03	+/- 1.4E-04
Sband delay (usec)	-7.18241402469E+02		Apriori clock (usec)		-3.8294720E+01		Resid sbdelay (usec)		-1.48378E-02	+/- 1.1E-03
Phase delay (usec)	-7.18226567400E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-2.68102E-06	+/- 4.7E-07
Delay rate (us/s)	-1.25349002840E-01		Apriori rate (us/s)		-1.25349067447E-01		Resid rate (us/s)		6.46070E-08	+/- 2.3E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.67523006427E-06		Resid phase (deg)		-83.1	+/- 14.6

ph/seg (deg) 62.0 34.9 Search (2048X32) 0.150 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 108.6 60.9 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 20.6 Inc. seg. avg. 0.224 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.2 35.9 Inc. frq. avg. 0.154 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 308.0 el 23.2 pa 41.8 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) 958.556 -591.281 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/BX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/BX.W.137.11VDPU

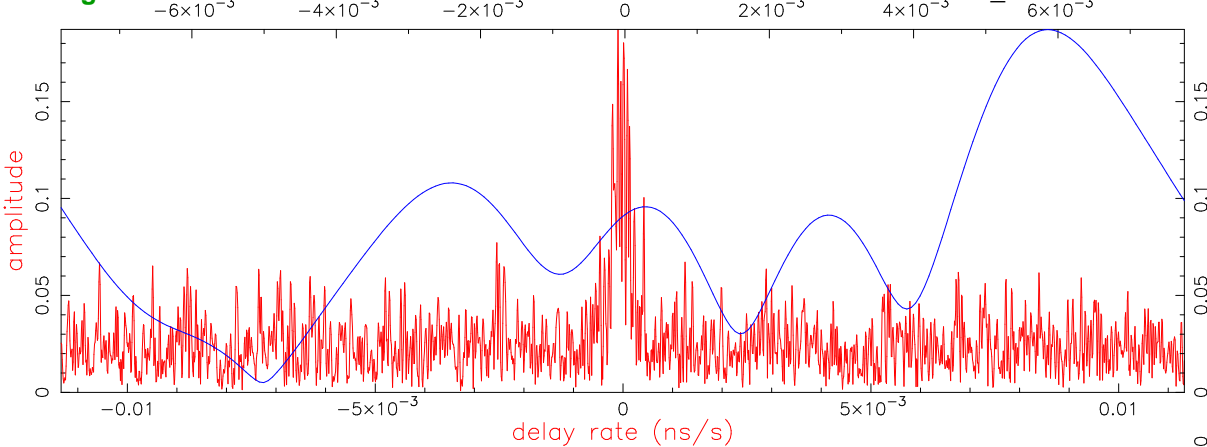
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, bX

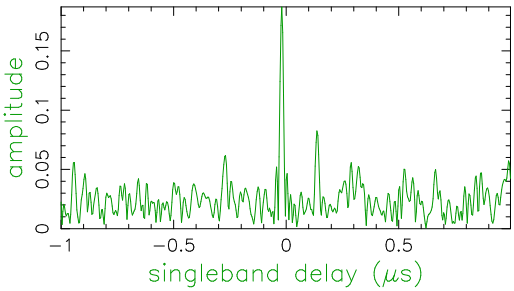
VLBA_BR - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

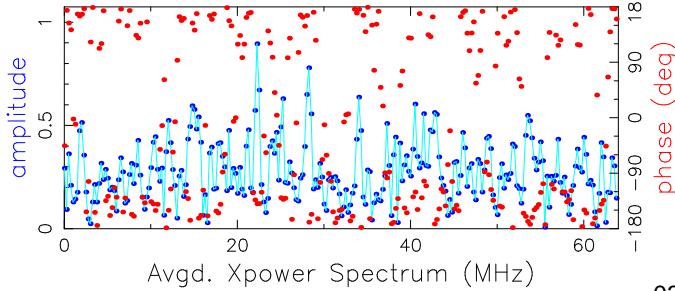


Fringe quality 9

SNR 9.7
 Int time 359.897
 Amp 0.187
 Phase -104.8
 PFD 1.1e-13
 Delays (us)
 SBD -0.019857
 MBD 0.005856
 Fringe rate (Hz)
 -0.008645
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

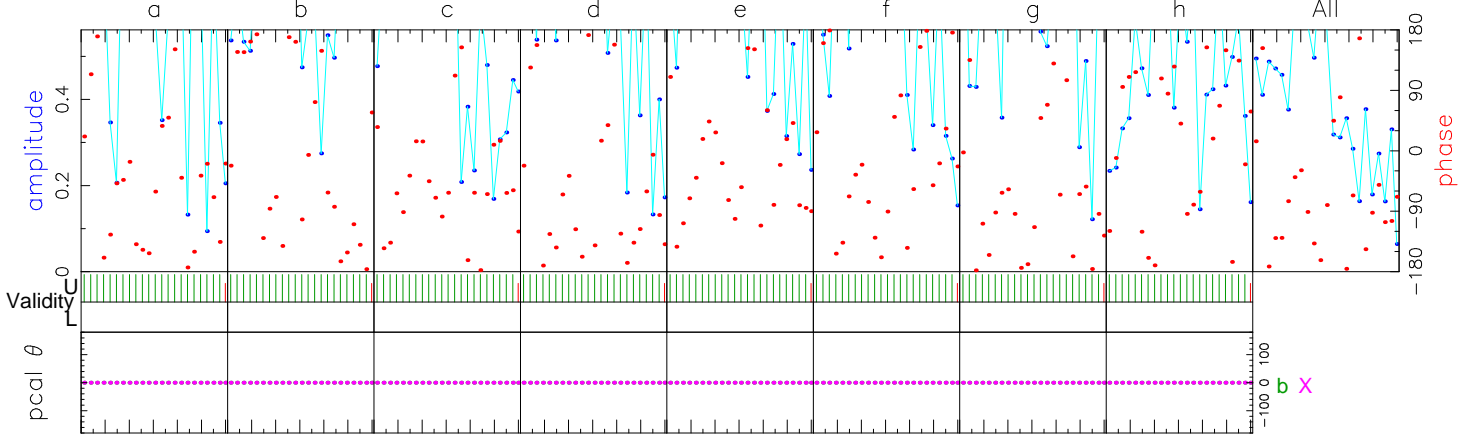


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:040946
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-108.9	-146.6	-62.9	-120.8	-45.9	-95.1	-118.3	128.4	Phase	-104.8
	0.2	0.4	0.3	0.3	0.3	0.2	0.3	0.1	Ampl.	0.2
	252.0	251.7	251.8	251.2	251.9	250.6	250.8	294.8	Sbd box	251.9
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.14603468322E+04	Apriori delay (usec)	1.14603722258E+04	Resid mbdelay (usec)	5.85640E-03	+/-	1.1E-04
Sband delay (usec)	1.14603523686E+04	Apriori clock (usec)	-5.0092682E+01	Resid sbdelay (usec)	-1.98573E-02	+/-	8.9E-04
Phase delay (usec)	1.14603722225E+04	Apriori clockrate (us/s)	-5.2800001E-07	Resid phdelay (usec)	-3.37963E-06	+/-	3.8E-07
Delay rate (us/s)	8.70282659573E-01	Apriori rate (us/s)	8.70282759929E-01	Resid rate (us/s)	-1.00355E-07	+/-	1.8E-09
Total phase (deg)	87.2	Apriori accel (us/s/s)	-6.85412109184E-05	Resid phase (deg)	-104.8	+/-	11.8

ph/seg (deg)	RMS 72.6	Theor. 28.3	Amplitude Search (2048X32)	0.187	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	147.1	49.4	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)	62.7	16.7	Inc. seg. avg.	0.362	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	52.2	29.1	Inc. frq. avg.	0.246	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

b: az 104.6 el 73.1 pa -59.5 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -6745.194 -5381.500 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/bX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/bX.W.18.11VDPU

Mk4/DiFX fourfit 3.21 rev 2937

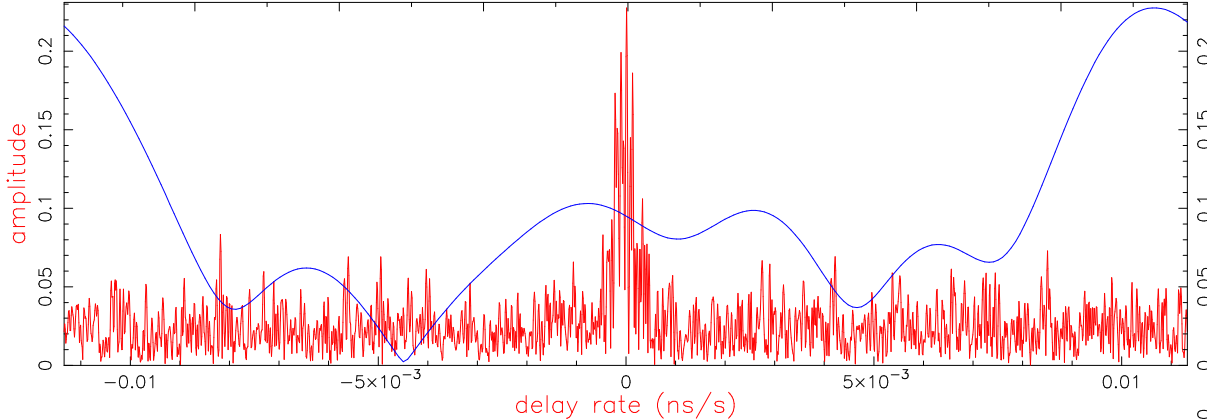
fxmanager

3C84.1IVDPU, No0283, bX

VLBA_BR - ONSALA60, fgroup W, pol RR

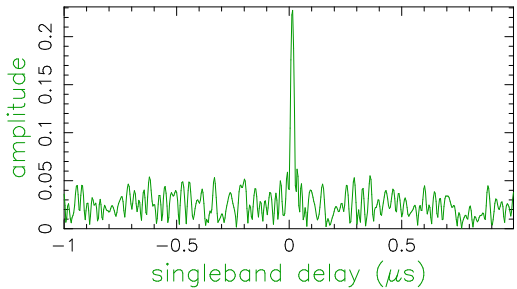
multiband delay (μ s)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}



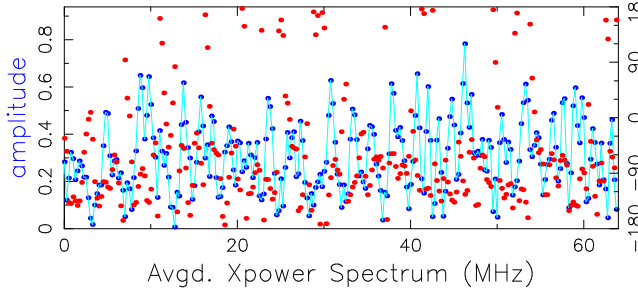
Fringe quality 9

SNR 12.0
 Int time 359.897
 Amp 0.231
 Phase -21.2
 PFD 2.1e-24
 Delays (us)
 SBD 0.014096
 MBD 0.007245
 Fringe rate (Hz) 0.000978
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



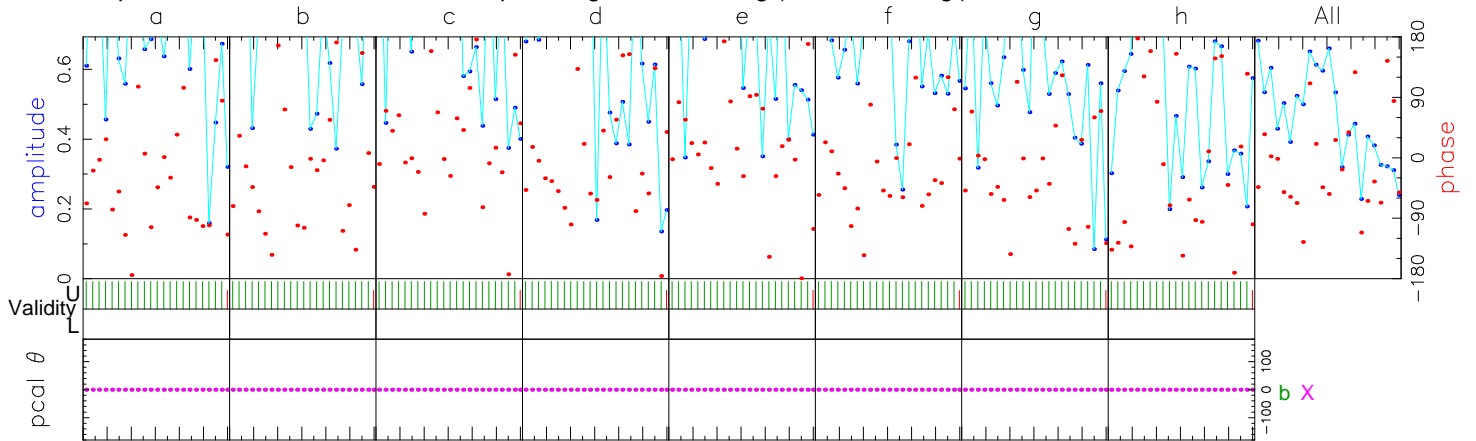
singleband delay (μ s)

delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:040950
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-43.9	-57.9	13.8	-35.7	25.4	-24.8	-25.2	-158.3	Phase	-21.2
	0.2	0.3	0.4	0.3	0.3	0.4	0.2	0.2	Ampl.	0.3
	136.0	260.5	260.8	260.2	259.9	259.9	258.9	257.5	Sbd box	260.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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)	1.14603794710E+04	Apriori delay (usec)	1.14603722258E+04	Resid mbdelay (usec)	7.24518E-03	+/-	9.1E-05
Sband delay (usec)	1.14603863213E+04	Apriori clock (usec)	-5.0092682E+01	Resid sbdelay (usec)	1.40955E-02	+/-	7.2E-04
Phase delay (usec)	1.14603722252E+04	Apriori clockrate (us/s)	-5.2800001E-07	Resid phdelay (usec)	-6.82758E-07	+/-	3.1E-07
Delay rate (us/s)	8.70282771283E-01	Apriori rate (us/s)	8.70282759929E-01	Resid rate (us/s)	1.13546E-08	+/-	1.5E-09
Total phase (deg)	170.8	Apriori accel (us/s/s)	-6.85412109184E-05	Resid phase (deg)	-21.2	+/-	9.6

ph/seg (deg)	RMS 72.7	Theor. 22.9	Amplitude Search (2048X32)	0.231 +/- 0.019	0.228	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	116.0	40.0	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	63.7	13.5	Inc. seg. avg.	0.430	0.430	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	46.6	23.6	Inc. frq. avg.	0.289	0.289	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 104.6 el 73.1 pa -59.5 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -6745.194 -5381.500 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/bX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/bX.W.38.11VDPU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

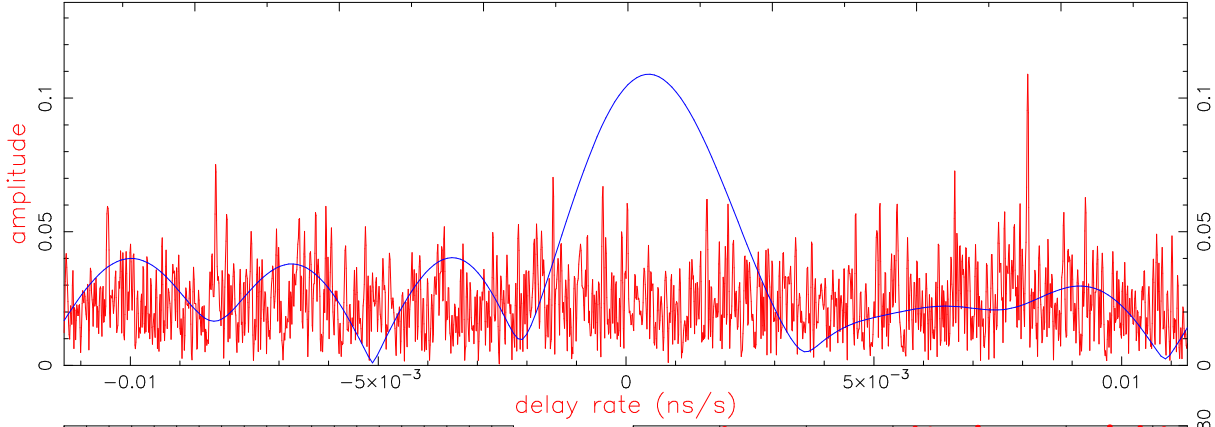
3C84.1IVDPU, No0283, bX

VLBA_BR - ONSALA60, fgroup W, pol LR

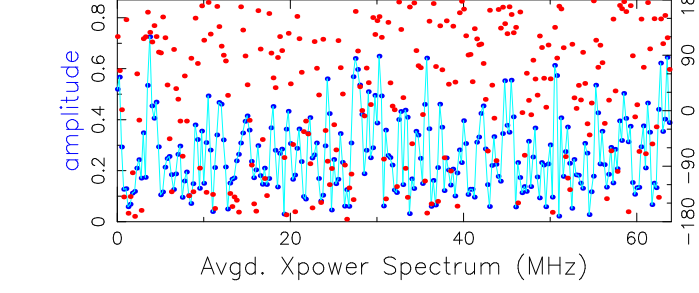
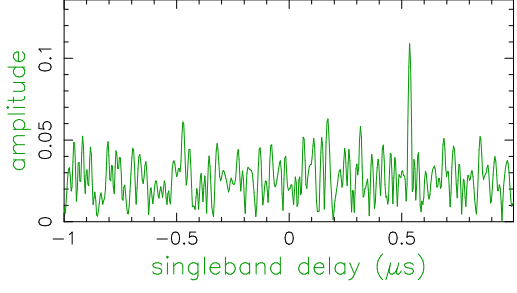
multiband delay (μ s)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

Fringe quality 0

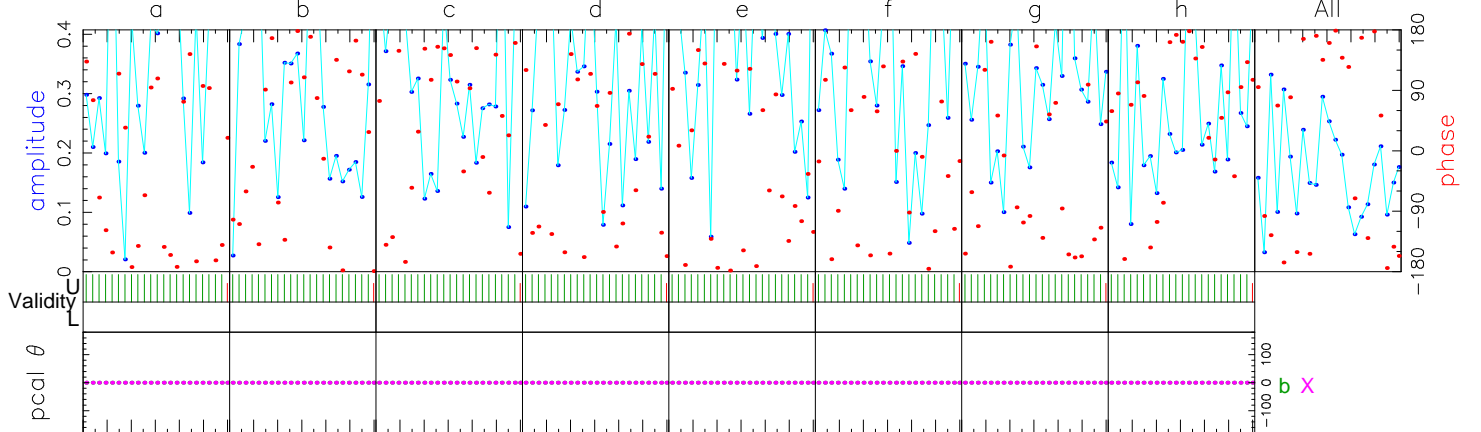


SNR 5.7
 Int time 359.897
 Amp 0.136
 Phase 169.7
 PFD 9.8e-01
 Delays (us)
 SBD 0.535370
 MBD 0.000293
 Fringe rate (Hz)
 0.698919
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:040953
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.14609037690E+04	Apriori delay (usec)	1.14603722258E+04	Resid mbdelay (usec)	2.93190E-04	+/-	1.9E-04
Sband delay (usec)	1.14609075958E+04	Apriori clock (usec)	-5.0092682E+01	Resid sbdelay (usec)	5.35370E-01	+/-	1.5E-03
Phase delay (usec)	1.14603722313E+04	Apriori clockrate (us/s)	-5.2800001E-07	Resid phdelay (usec)	5.47217E-06	+/-	6.5E-07
Delay rate (us/s)	8.70290873689E-01	Apriori rate (us/s)	8.70282759929E-01	Resid rate (us/s)	8.11376E-06	+/-	3.1E-09
Total phase (deg)	1.7	Apriori accel (us/s/s)	-6.85412109184E-05	Resid phase (deg)	169.7	+/-	20.3

ph/seg (deg)	59.4	RMS	59.4	Theor.	48.6	Amplitude	0.136 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	91.1		91.1		84.8	Search (2048X32)	0.106	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	25.3		25.3		28.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	28.9		28.9		50.0	Inc. seg. avg.	0.156	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	0.130	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 104.6 el 73.1 pa -59.5 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -6745.194 -5381.500 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/bX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/bX.W.56.11VDPU

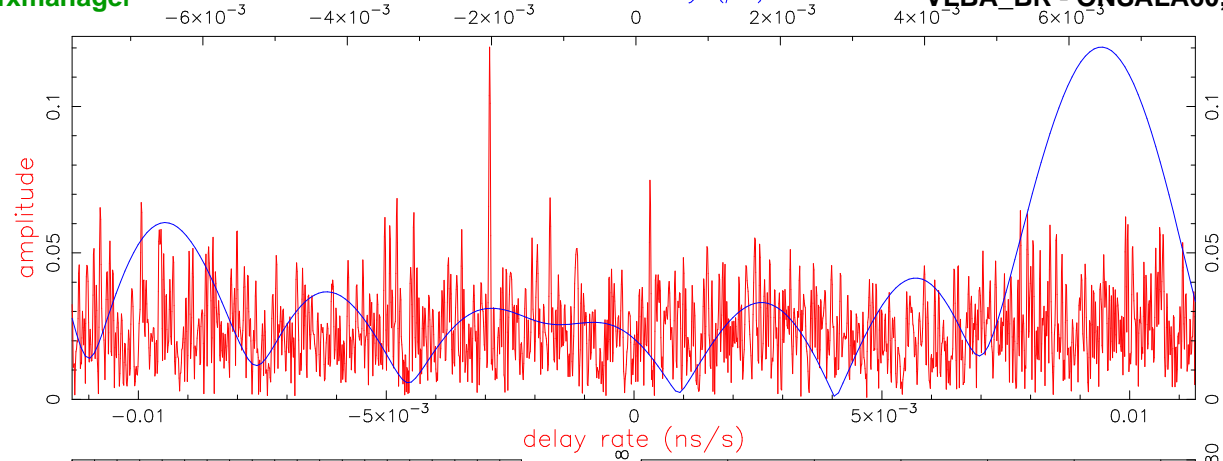
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

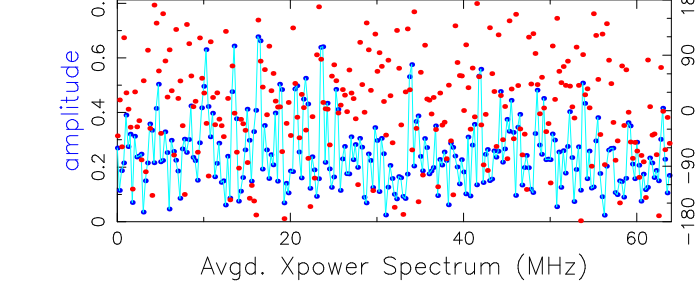
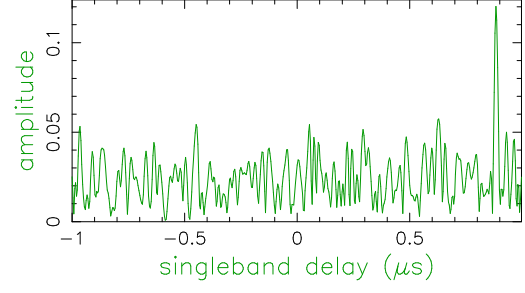
3C84.1IVDPU, No0283, bX

VLBA_BR - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

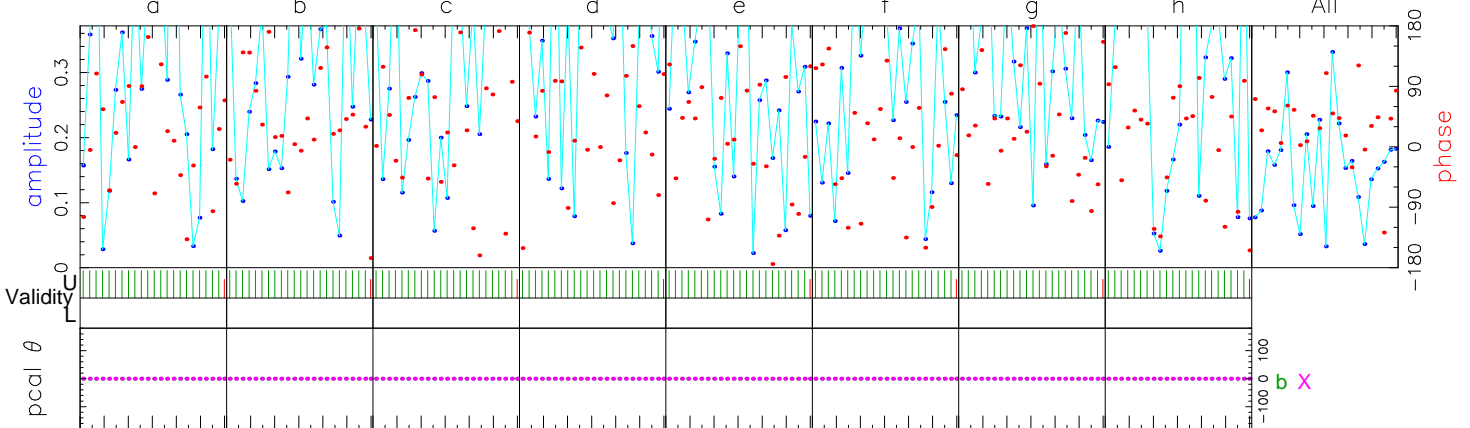


Fringe quality 0
 SNR 6.3
 Int time 359.897
 Amp 0.124
 Phase 39.2
 PFD 1.0e-01
 Delays (us)
 SBD 0.883443
 MBD 0.006460
 Fringe rate (Hz)
 -0.251182
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:040956
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
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)	1.14612536857E+04	Apriori delay (usec)	1.14603722258E+04	Resid mbdelay (usec)	6.45982E-03	+/-	1.7E-04
Sband delay (usec)	1.14612556688E+04	Apriori clock (usec)	-5.0092682E+01	Resid sbdelay (usec)	8.83443E-01	+/-	1.4E-03
Phase delay (usec)	1.14603722271E+04	Apriori clockrate (us/s)	-5.2800001E-07	Resid phdelay (usec)	1.26539E-06	+/-	5.9E-07
Delay rate (us/s)	8.70279843949E-01	Apriori rate (us/s)	8.70282759929E-01	Resid rate (us/s)	-2.91598E-06	+/-	2.8E-09
Total phase (deg)	231.3	Apriori accel (us/s/s)	-6.85412109184E-05	Resid phase (deg)	39.2	+/-	18.3

ph/seg (deg)	49.0	Theor.	43.9	Amplitude	0.124 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.5	Search (2048X32)	0.114	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	11.4	Inc. seg. avg.	0.121	Inc. frq. avg.	0.114	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	41.3	Inc. frq. avg.	0.114			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 104.6 el 73.1 pa -59.5 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -6745.194 -5381.500 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/bX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/bX.W.75.1IVDPU

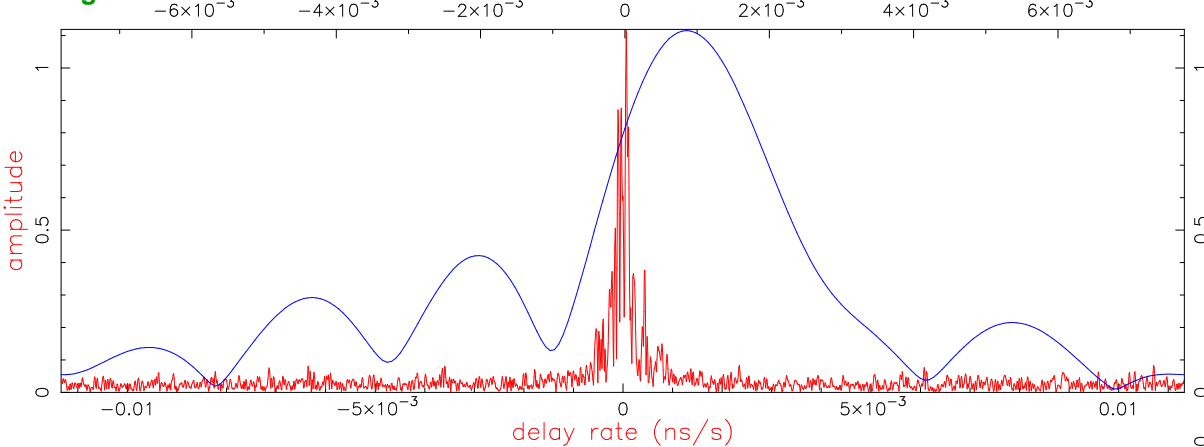
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1VDP, No0283, BX

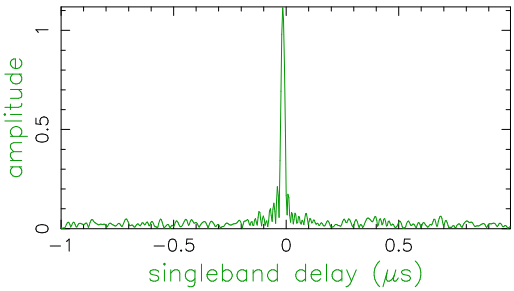
EFLSBERG - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

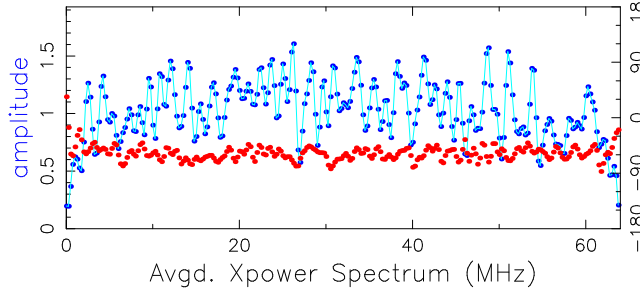


Fringe quality 3

SNR 58.0
 Int time 359.533
 Amp 1.119
 Phase 120.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.014845
 MBD 0.000874
 Fringe rate (Hz)
 0.005902
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

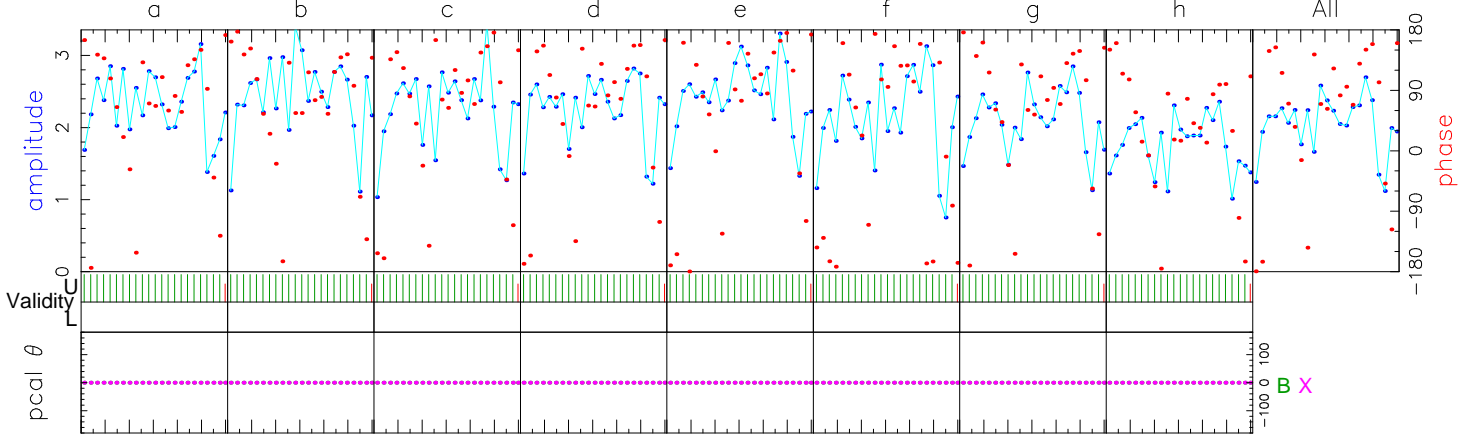


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:040958
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	112.7	108.5	124.1	124.5	135.3	157.3	116.0	66.3	Phase	120.3
	1.3	1.3	1.2	1.2	1.3	1.2	1.2	0.9	Ampl.	1.2
	253.7	252.9	253.3	253.1	253.6	253.1	252.8	251.9	Sbd box	253.2
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-7.18241315560E+02	Apriori delay (usec)	-7.18226564719E+02	Resid mbdelay (usec)	8.74159E-04	+/-	1.9E-05
Sband delay (usec)	-7.18241409969E+02	Apriori clock (usec)	-3.8294720E+01	Resid sbdelay (usec)	-1.48453E-02	+/-	1.5E-04
Phase delay (usec)	-7.18226560839E+02	Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	3.87952E-06	+/-	6.4E-08
Delay rate (us/s)	-1.25348998926E-01	Apriori rate (us/s)	-1.25349067447E-01	Resid rate (us/s)	6.85218E-08	+/-	3.1E-10
Total phase (deg)		Apriori accel (us/s/s)	-1.67523006427E-06	Resid phase (deg)	120.3	+/-	2.0

ph/seg (deg)	68.6	Theor.	4.7	Amplitude	1.119 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	90.3		8.3	Search (2048X32)	1.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	28.2		2.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	14.3		4.9	Inc. seg. avg.	2.042	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	1.200	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

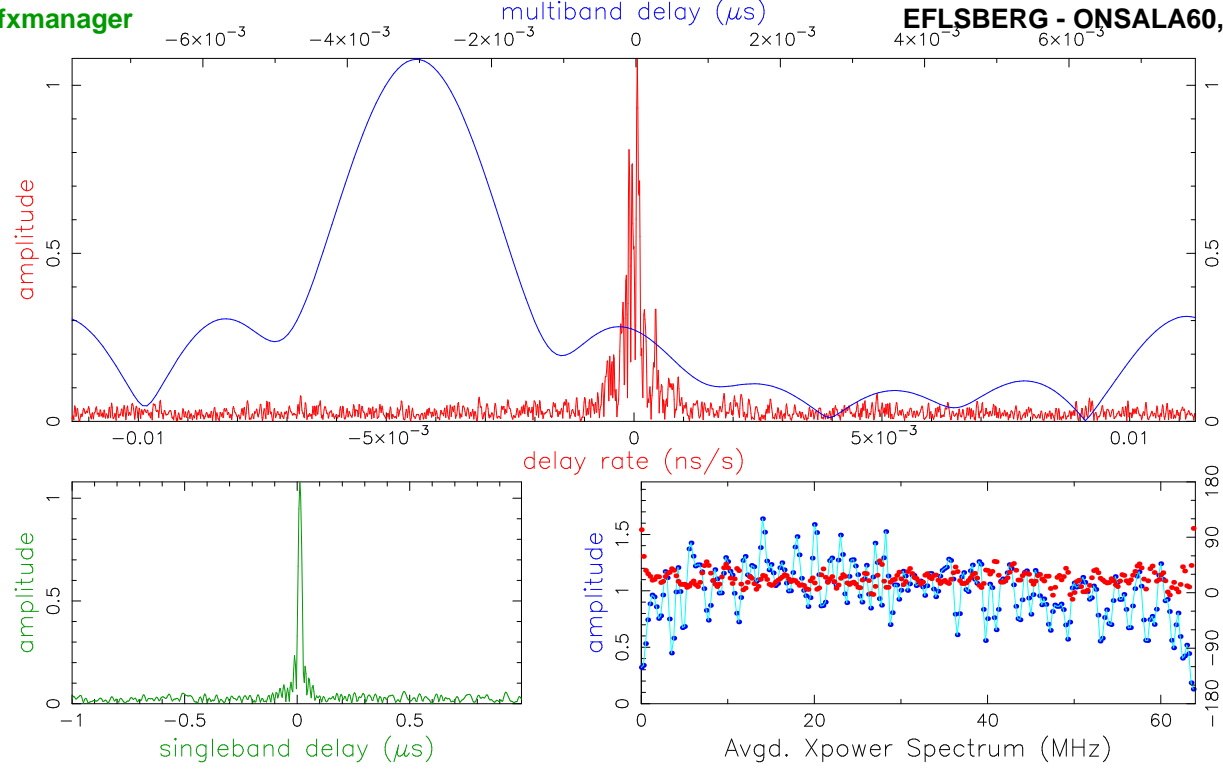
B: az 308.0 el 23.2 pa 41.8 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) 958.556 -591.281 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/BX..11VDPD Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/BX.W.81.11VDPD

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, BX

EFLSBERG - ONSALA60, fgroup W, pol RR

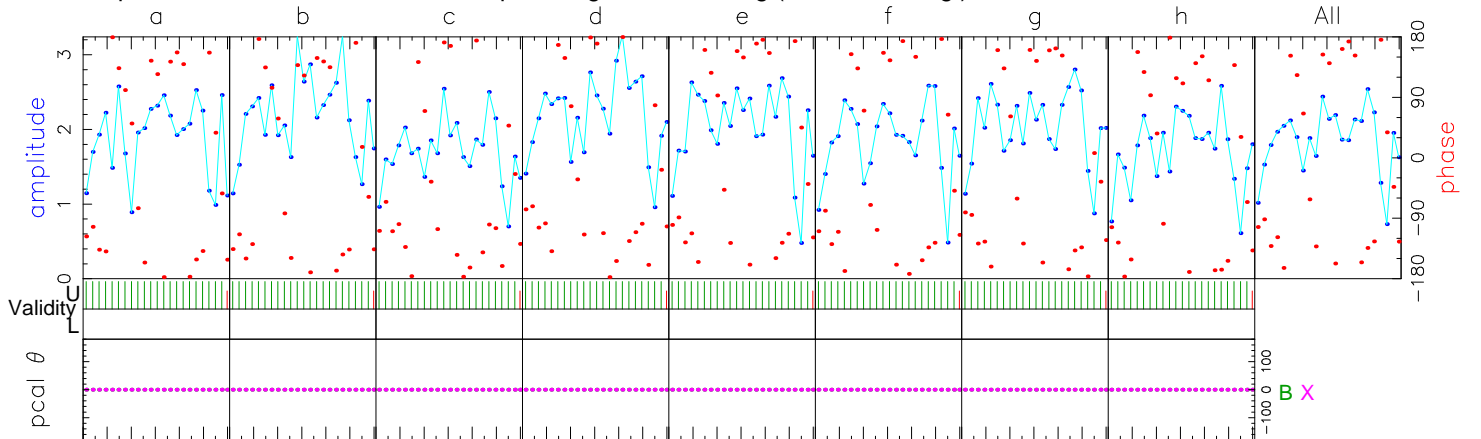


Fringe quality 4

SNR 56.0
 Int time 359.533
 Amp 1.080
 Phase -161.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.012406
 MBD -0.003017
 Fringe rate (Hz) 0.005951
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041003
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-176.6	-179.5	-137.3	-135.8	-154.6	-156.7	-158.0	166.1	Phase	-161.0
	1.1	1.2	1.0	1.3	1.2	1.1	1.2	1.0	Ampl.	1.1
	259.7	260.5	260.7	260.0	260.0	260.5	260.2	258.7	Sbd box	260.2
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-7.18213957029E+02		Apriori delay (usec)		-7.18226564719E+02		Resid mbdelay (usec)		-3.01731E-03	+/- 1.9E-05
Sband delay (usec)	-7.18214158969E+02		Apriori clock (usec)		-3.8294720E+01		Resid sbdelay (usec)		1.24058E-02	+/- 1.5E-04
Phase delay (usec)	-7.18226569909E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-5.19069E-06	+/- 6.6E-08
Delay rate (us/s)	-1.25348998357E-01		Apriori rate (us/s)		-1.25349067447E-01		Resid rate (us/s)		6.90900E-08	+/- 3.2E-10
Total phase (deg)			Apriori accel (us/s/s)		-1.67523006427E-06		Resid phase (deg)		-161.0	+/- 2.0

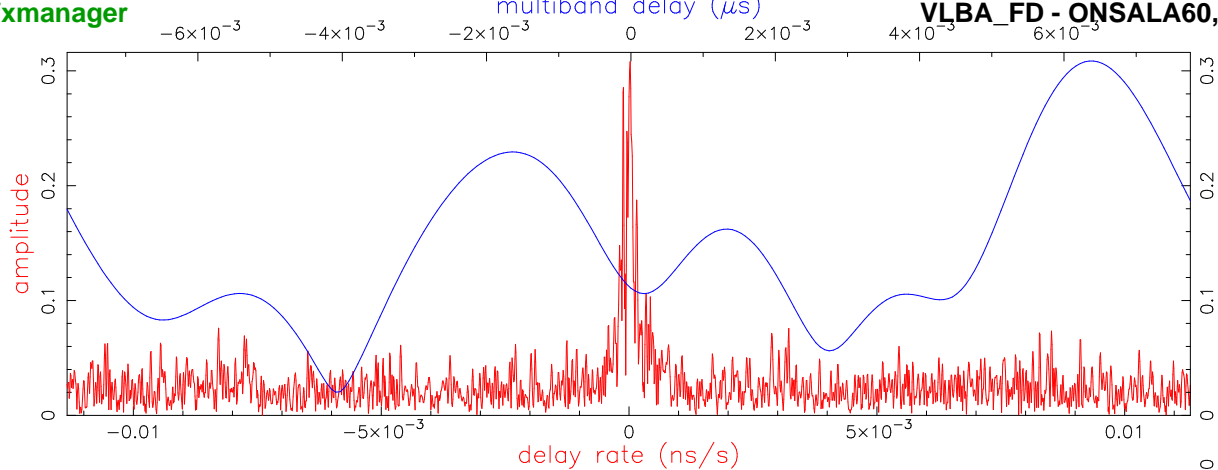
ph/seg (deg) 66.6 4.9 Search (2048X32) 1.061 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 81.3 8.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.1 2.9 Inc. seg. avg. 1.842 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 10.9 5.1 Inc. frq. avg. 1.136 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 308.0 el 23.2 pa 41.8 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) 958.556 -591.281 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/BX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/BX.W.99.1IVDPU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

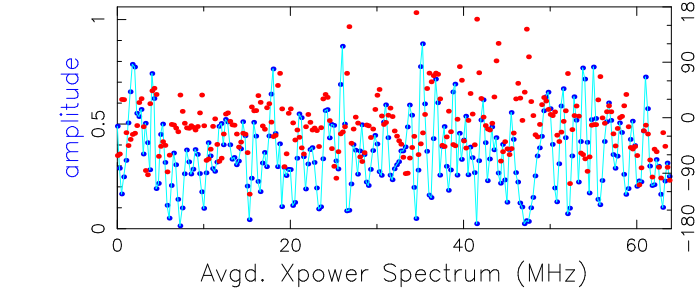
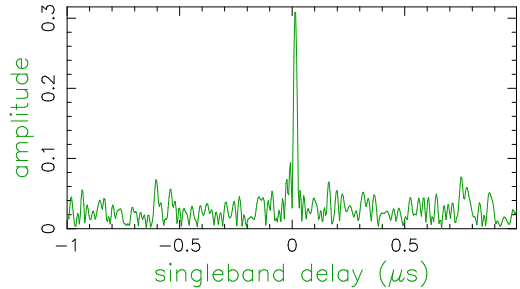
3C84.11VDPU, No0283, fX

VLBA_FD - ONSALA60, fgroup W, pol RR



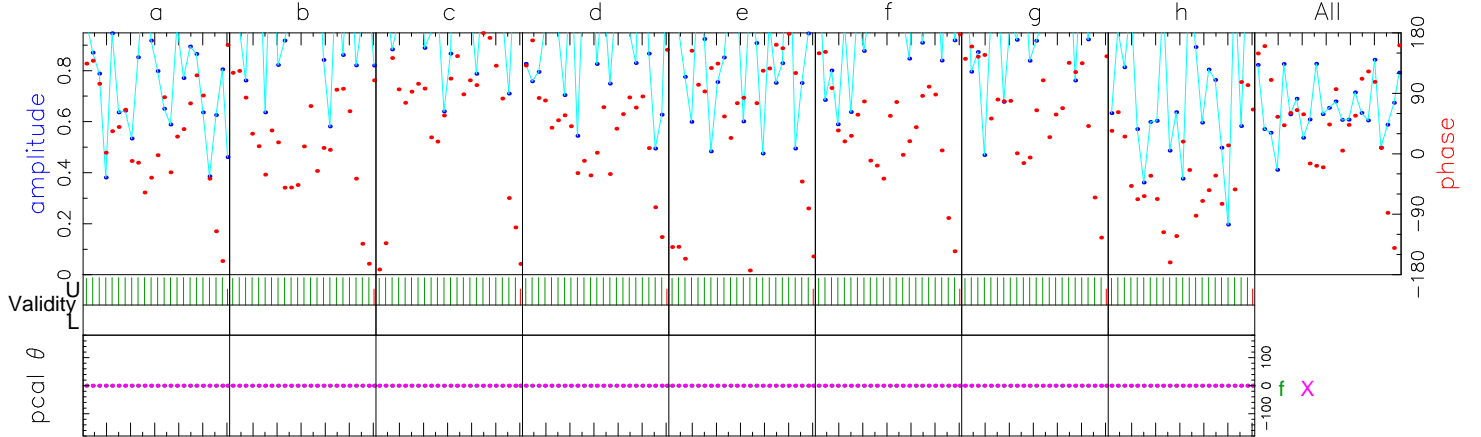
Fringe quality 7

SNR 16.4
 Int time 357.814
 Amp 0.316
 Phase 65.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.013652
 MBD 0.006467
 Fringe rate (Hz) 0.002333
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083001.54
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041005
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.18909790580E+04			1.18909725915E+04				6.46651E-03	+/- 6.6E-05
Sband delay (usec)		1.18909862440E+04			-4.0480614E+01				1.36525E-02	+/- 5.3E-04
Phase delay (usec)		1.18909725936E+04			-1.2800004E-07				2.11211E-06	+/- 2.3E-07
Delay rate (us/s)		6.85464484855E-01			6.85464457772E-01				2.70825E-08	+/- 1.1E-09
Total phase (deg)			76.4		-8.83781357672E-05				65.5	+/- 7.0
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
Chan ids										
Tracks										
Chan ids										
Tracks										
PC period (AP's) 5, 5										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
simultaneous interpolator										

Mk4/DiFX fourfit 3.21 rev 2937

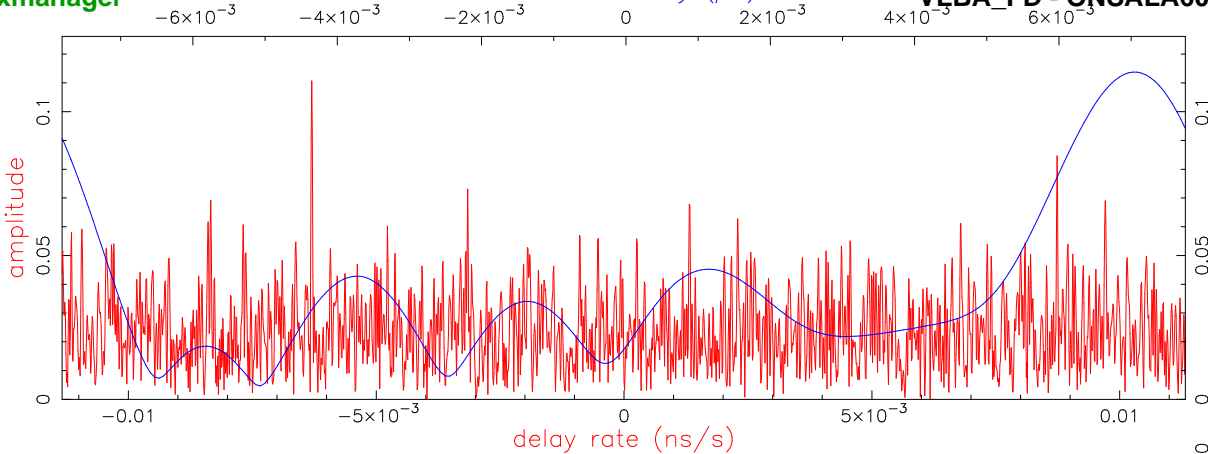
fxmanager

3C84.1IVDPU, No0283, fX

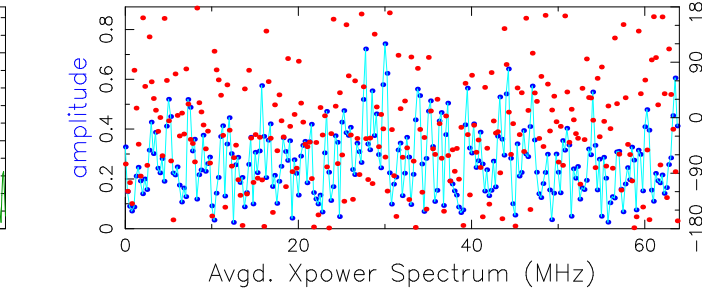
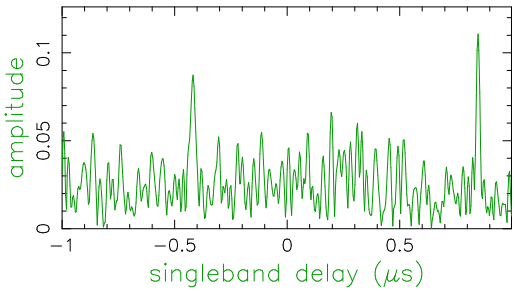
VLBA_FD - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

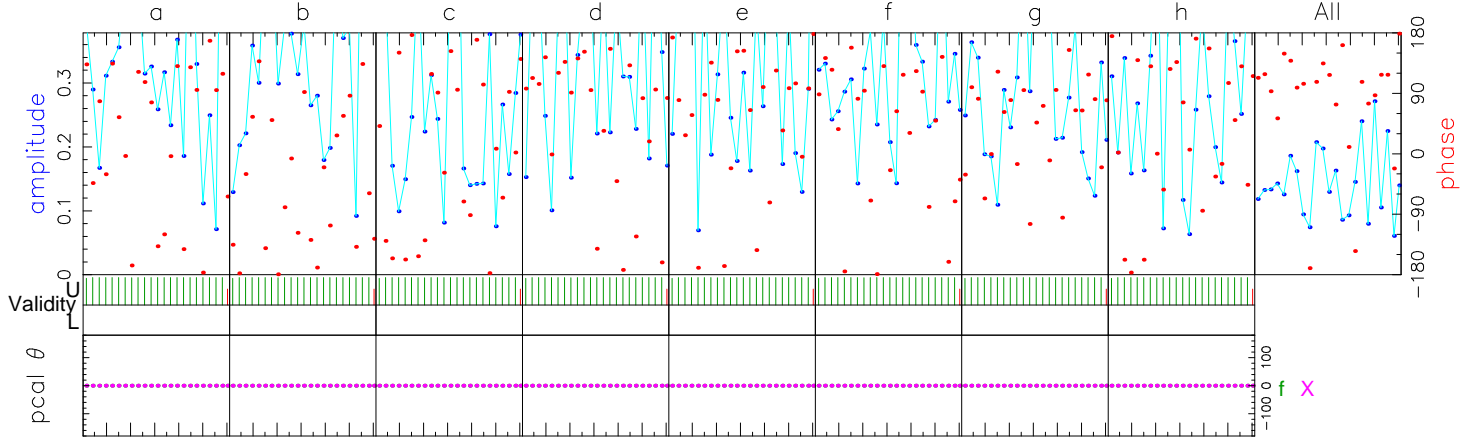


SNR 5.7
 Int time 357.814
 Amp 0.126
 Phase 111.8
 PFD 9.2e-01
 Delays (us)
 SBD 0.847605
 MBD -0.008301
 Fringe rate (Hz)
 -0.543689
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083001.54
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041008
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0		
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)	1.18918236657E+04	Apriori delay (usec)	1.18909725915E+04	Resid mbdelay (usec)	-8.30078E-03	+/-	1.9E-04
Sband delay (usec)	1.18918201965E+04	Apriori clock (usec)	-4.0480614E+01	Resid sbdelay (usec)	8.47605E-01	+/-	1.5E-03
Phase delay (usec)	1.18909725951E+04	Apriori clockrate (us/s)	-1.2800004E-07	Resid phdelay (usec)	3.60669E-06	+/-	6.5E-07
Delay rate (us/s)	6.85458146087E-01	Apriori rate (us/s)	6.85464457772E-01	Resid rate (us/s)	-6.31169E-06	+/-	3.1E-09
Total phase (deg)	122.7	Apriori accel (us/s/s)	-8.83781357672E-05	Resid phase (deg)	111.8	+/-	20.0

ph/seg (deg)	51.8	Theor.	48.0	Search (2048X32)	0.112	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	58.3		83.8	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)	32.6		28.3	Inc. seg. avg.	0.122	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	47.4		49.4	Inc. frq. avg.	0.126	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 23.3 el 77.9 pa -151.6 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -5351.306 -8330.634 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/fX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/fX.W.127.1IVDPU

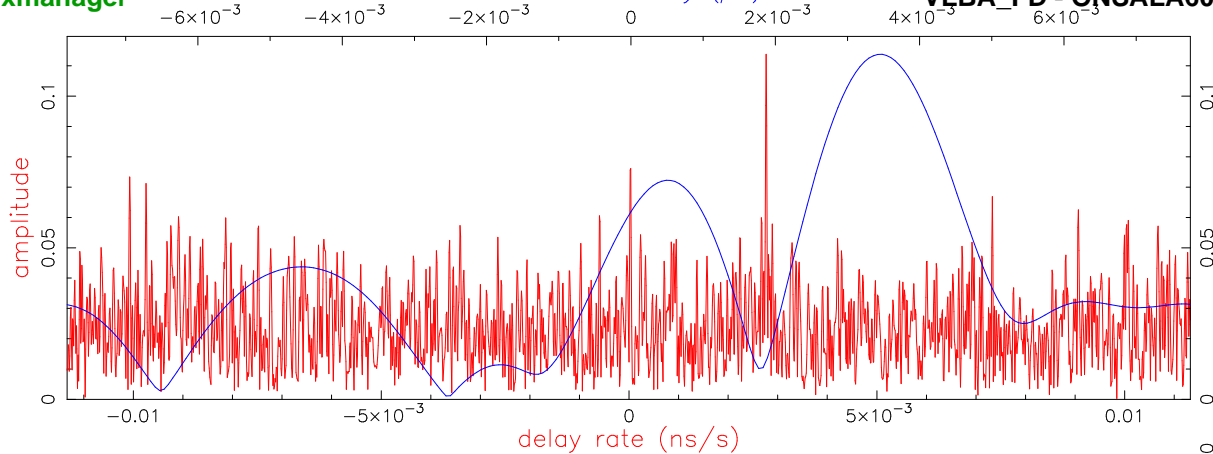
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11VDPU, No0283, fX

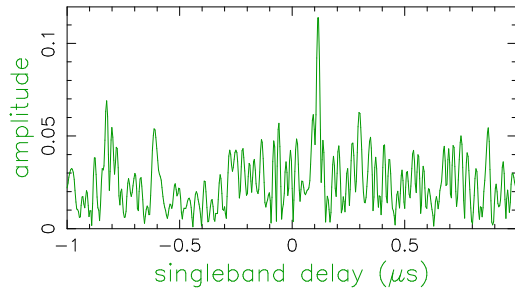
VLBA_FD - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

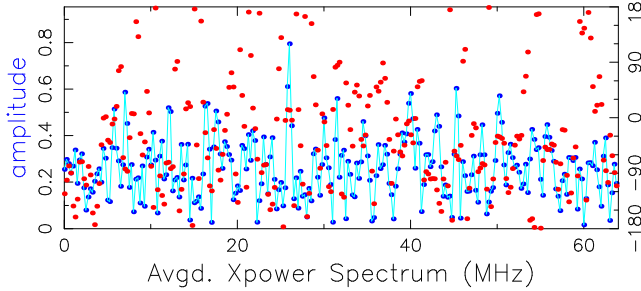


Fringe quality 0

SNR 6.0
 Int time 357.814
 Amp 0.120
 Phase 154.2
 PFD 3.3e-01
 Delays (us)
 SBD 0.115262
 MBD 0.003472
 Fringe rate (Hz)
 0.238819
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

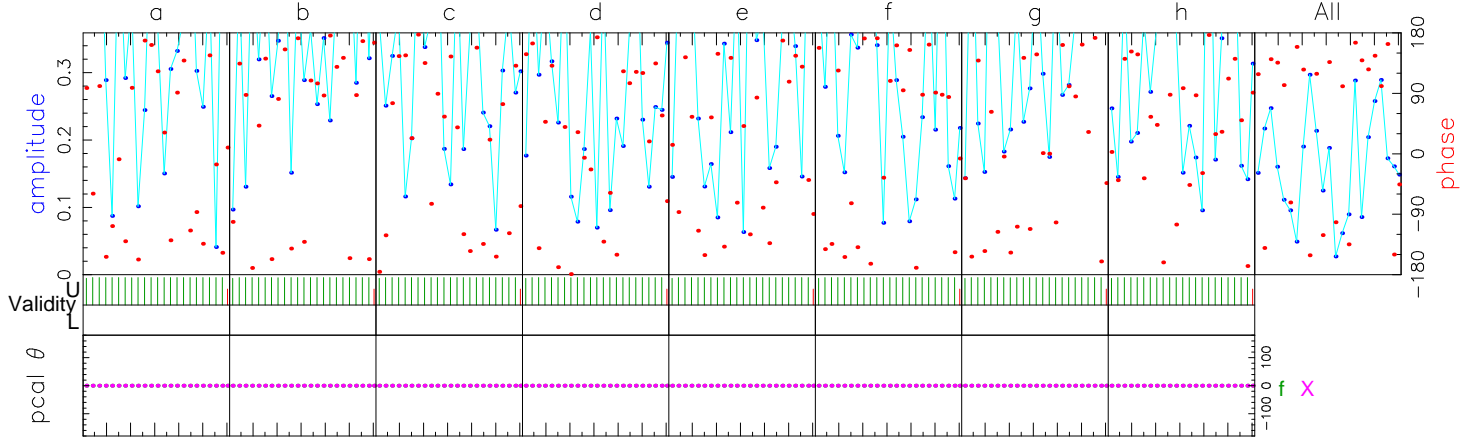


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083001.54
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041012
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.18910854381E+04	Apriori delay (usec)	1.18909725915E+04	Resid mbdelay (usec)	3.47165E-03	+/-	1.8E-04
Sband delay (usec)	1.18910878532E+04	Apriori clock (usec)	-4.0480614E+01	Resid sbdelay (usec)	1.15262E-01	+/-	1.4E-03
Phase delay (usec)	1.18909725965E+04	Apriori clockrate (us/s)	-1.2800004E-07	Resid phdelay (usec)	4.97326E-06	+/-	6.1E-07
Delay rate (us/s)	6.85467230226E-01	Apriori rate (us/s)	6.85464457772E-01	Resid rate (us/s)	2.77245E-06	+/-	3.0E-09
Total phase (deg)	165.1	Apriori accel (us/s/s)	-8.83781357672E-05	Resid phase (deg)	154.2	+/-	19.0

ph/seg (deg)	59.6	RMS	59.6	Theor.	45.5	Amplitude	0.120 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	79.1	59.6	79.4	Search (2048X32)	0.110	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	36.6	79.1	26.8	Inc. seg. avg.	0.130	Inc. frq. avg.	0.115	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	50.1	79.1	46.8	Inc. frq. avg.	0.115	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
												ion window (TEC)	0.00 0.00

f: az 23.3 el 77.9 pa -151.6 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -5351.306 -8330.634 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/fX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/fX.W.146.11VDPU

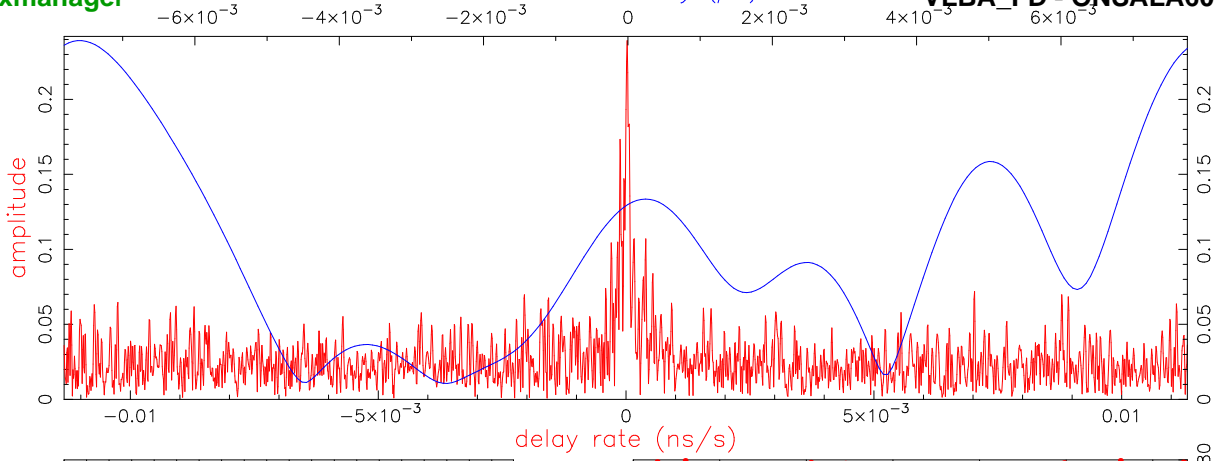
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, fX

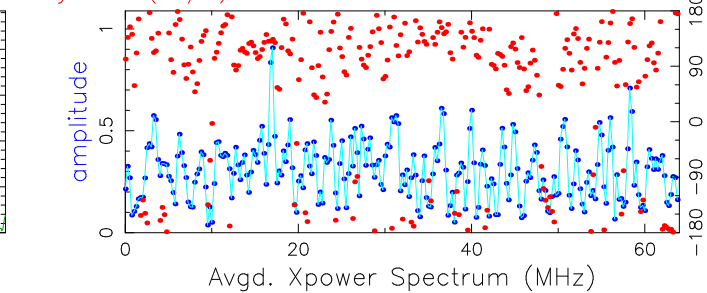
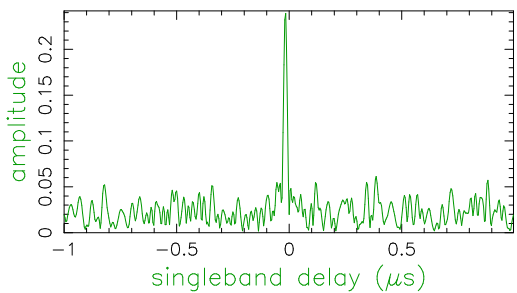
VLBA_FD - ONSALA60, fgroup W, pol LL

multiband delay (μ s)



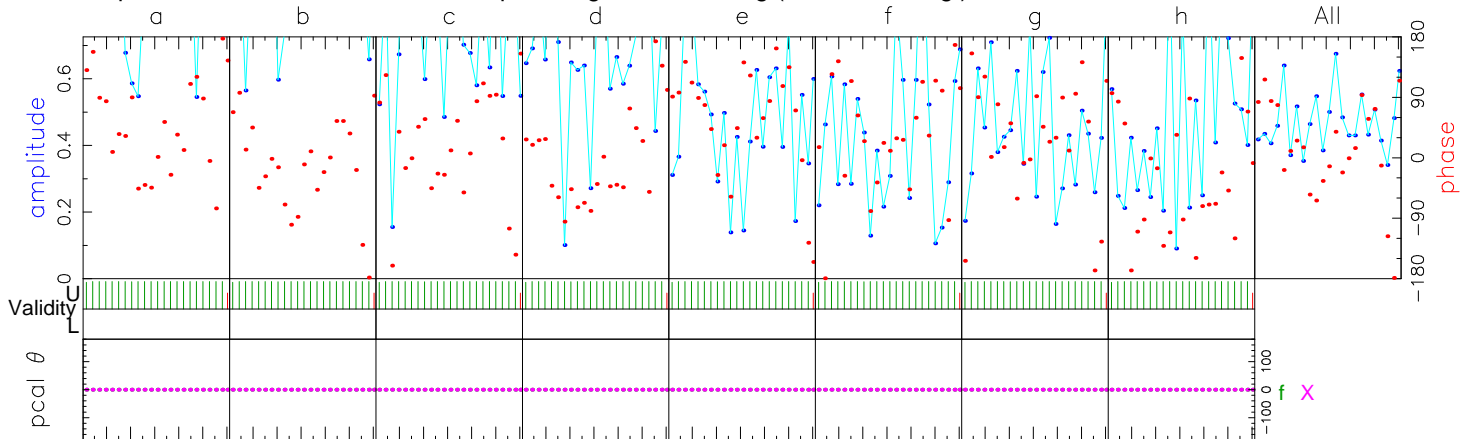
Fringe quality 9

SNR 12.5
 Int time 357.814
 Amp 0.242
 Phase 25.3
 PFD 3.1e-27
 Delays (us)
 SBD -0.016978
 MBD -0.007610
 Fringe rate (Hz)
 0.002060
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083001.54
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041001
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	45.2	-1.8	33.5	-11.4	91.6	62.8	51.1	-73.1	Phase	25.3
	0.4	0.5	0.3	0.4	0.3	0.2	0.2	0.2	Ampl.	0.3
	252.6	251.9	253.0	252.6	252.7	251.5	251.4	250.5	Sbd box	252.7
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0	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	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)	1.18909493560E+04		Apriori delay (usec)		1.18909725915E+04		Resid mbdelay (usec)		-7.61046E-03	+/- 8.7E-05
Sband delay (usec)	1.18909556140E+04		Apriori clock (usec)		-4.0480614E+01		Resid sbdelay (usec)		-1.69775E-02	+/- 6.9E-04
Phase delay (usec)	1.18909725923E+04		Apriori clockrate (us/s)		-1.2800004E-07		Resid phdelay (usec)		8.17468E-07	+/- 3.0E-07
Delay rate (us/s)	6.85464481690E-01		Apriori rate (us/s)		6.85464457772E-01		Resid rate (us/s)		2.39174E-08	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-8.83781357672E-05		Resid phase (deg)		25.3	+/- 9.2

ph/seg (deg) 66.9 21.9 Search (2048X32) 0.236 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 100.6 38.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.8 12.9 Inc. seg. avg. 0.438 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 54.5 22.6 Inc. frq. avg. 0.307 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 23.3 el 77.9 pa -151.6 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -5351.306 -8330.634 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/fX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/fX.W.89.1IVDPU

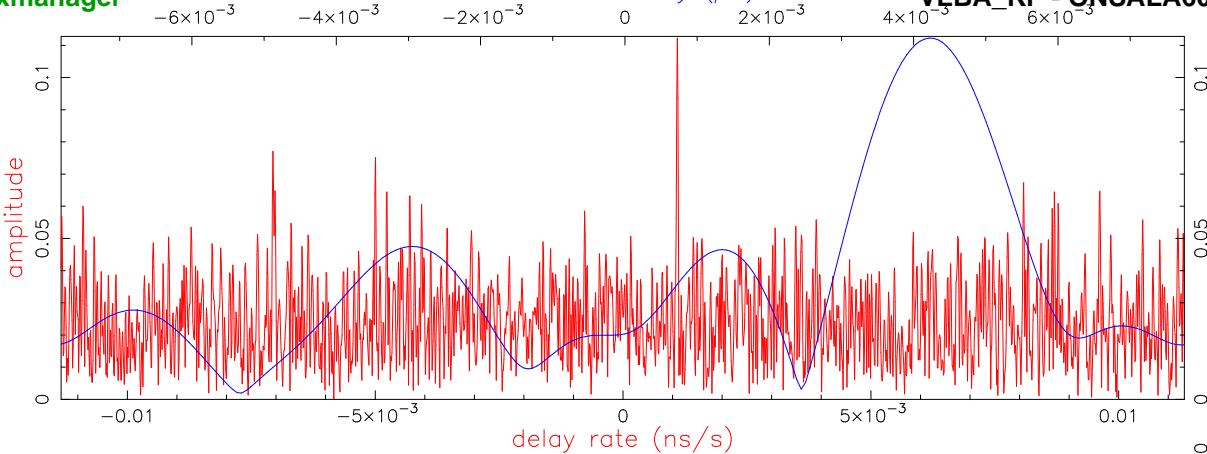
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, kX

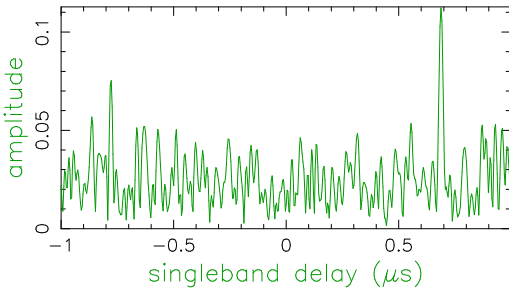
VLBA_KP - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

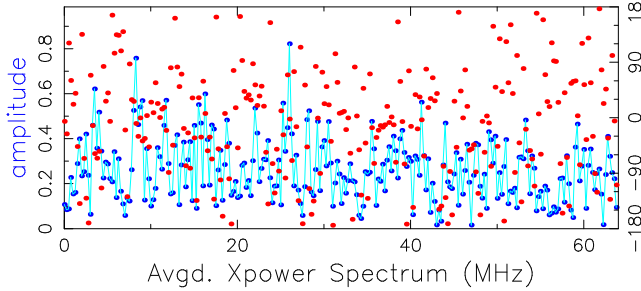


Fringe quality 0

SNR 5.8
 Int time 357.697
 Amp 0.113
 Phase -56.3
 PFD 7.9e-01
 Delays (us)
 SBD 0.687900
 MBD 0.004238
 Fringe rate (Hz)
 0.094507
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

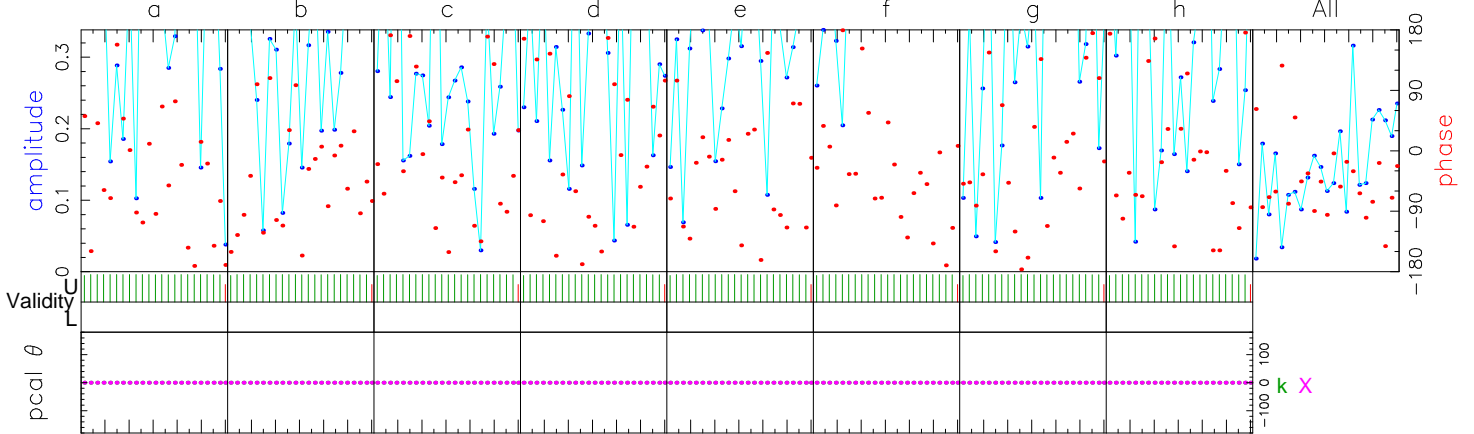


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.51
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041017
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-31.3	-58.1	-71.3	-98.9	-30.9	-53.7	-45.1	-56.9	Phase	-56.3
	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	129.8	275.8	166.9	489.1	185.0	272.7	187.8	507.3	Sbd box	433.1
U/L	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.16770122053E+04	Apriori delay (usec)	1.16763204670E+04	Resid mbdelay (usec)	4.23835E-03	+/-	1.9E-04
Sband delay (usec)	1.16770083672E+04	Apriori clock (usec)	-4.8037167E+01	Resid sbdelay (usec)	6.87900E-01	+/-	1.5E-03
Phase delay (usec)	1.16763204652E+04	Apriori clockrate (us/s)	-4.2800003E-07	Resid phdelay (usec)	-1.81632E-06	+/-	6.4E-07
Delay rate (us/s)	8.14158769464E-01	Apriori rate (us/s)	8.14157672329E-01	Resid rate (us/s)	1.09713E-06	+/-	3.1E-09
Total phase (deg)	-47.4	Apriori accel (us/s/s)	-8.58010611859E-05	Resid phase (deg)	-56.3	+/-	19.7

ph/seg (deg)	58.7	Theor.	47.3	Amplitude	0.113 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.5		82.5	Search (2048X32)	0.110	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	24.0		27.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	37.3		48.7	Inc. seg. avg.	0.109	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

k: az 45.3 el 75.2 pa -127.9 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -6333.661 -8013.917 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/kX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/kX.W.163.1IVDPU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

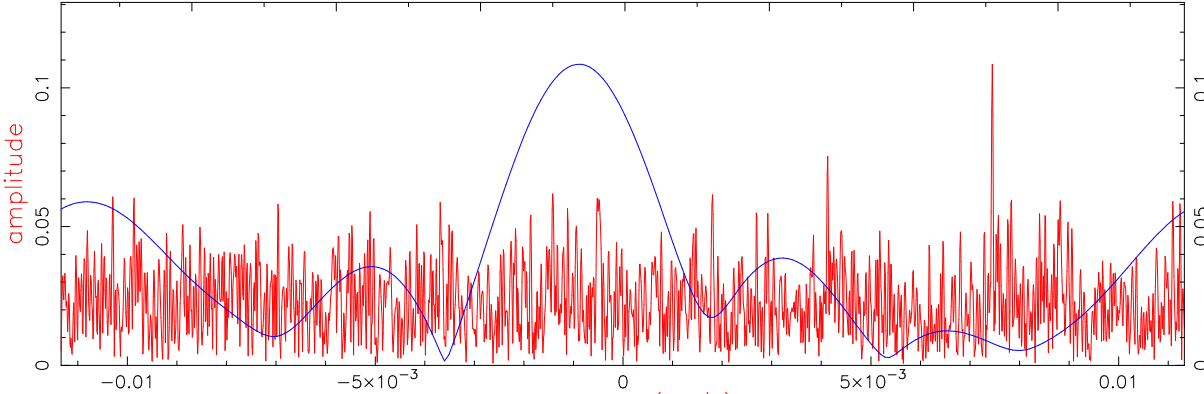
3C84.1IVDPU, No0283, kX

VLBA_KP - ONSALA60, fgroup W, pol RR

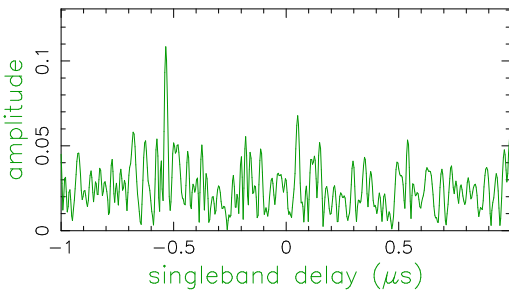
multiband delay (μ s)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

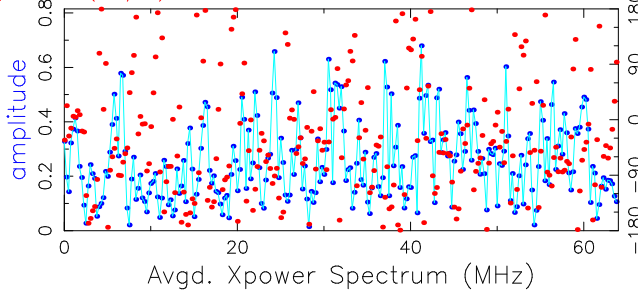
Fringe quality 0



SNR 5.6
Int time 357.697
Amp 0.131
Phase -95.6
PFD 9.9e-01
Delays (us)
SBD -0.534624
MBD -0.000601
Fringe rate (Hz)
0.643240
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

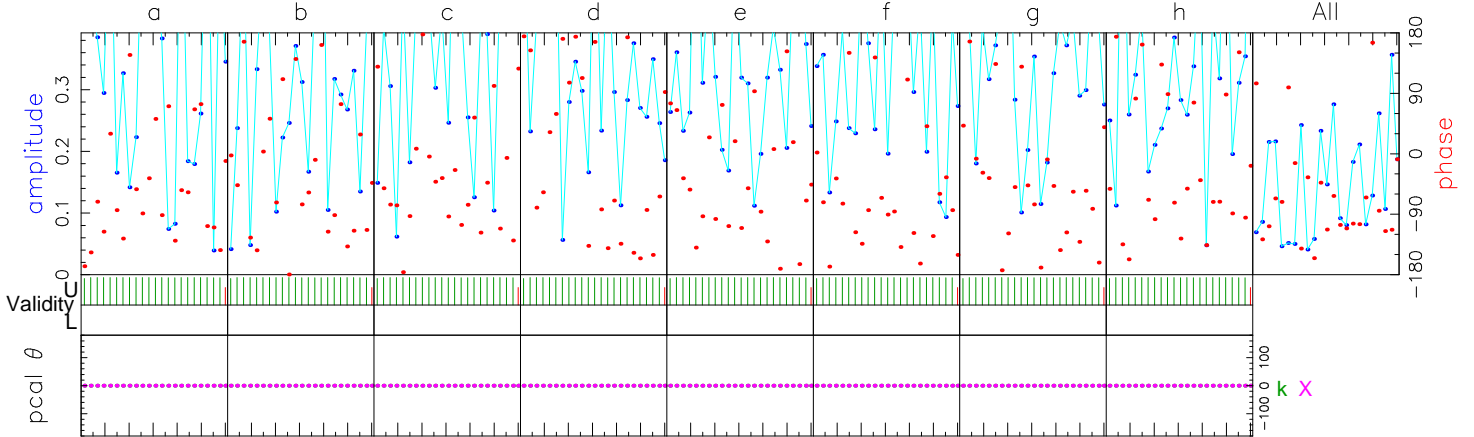


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:285
Start 083000.51
Stop 083559.94
FRT 083300.00
Corr/FF/build
2021:028:084120
2021:029:041021
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-83.7	-124.3	-72.5	-153.7	-63.3	-106.8	-90.0	-91.7	Phase	-95.6
	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	Ampl.	0.1
	118.3	173.1	333.1	442.7	192.8	312.8	315.7	433.0	Sbd box	120.1
U/L	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.16757886162E+04		Apriori delay (usec)		1.16763204670E+04		Resid mbdelay (usec)		-6.00728E-04	+/- 1.9E-04
Sband delay (usec)	1.16757858430E+04		Apriori clock (usec)		-4.8037167E+01		Resid sbdelay (usec)		-5.34624E-01	+/- 1.5E-03
Phase delay (usec)	1.16763204639E+04		Apriori clockrate (us/s)		-4.2800003E-07		Resid phdelay (usec)		-3.08407E-06	+/- 6.6E-07
Delay rate (us/s)	8.14165139703E-01		Apriori rate (us/s)		8.14157672329E-01		Resid rate (us/s)		7.46737E-06	+/- 3.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-8.58010611859E-05		Resid phase (deg)		-95.6	+/- 20.4

	RMS	Theor.	Amplitude	0.131 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	63.8	48.9	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	89.3	85.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	31.9	28.8	Inc. seg. avg.	0.131	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	40.0	50.3	Inc. frq. avg.	0.128	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 45.3 el 75.2 pa -127.9 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -6333.661 -8013.917 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/kX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/kX.W.182.11VDPU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

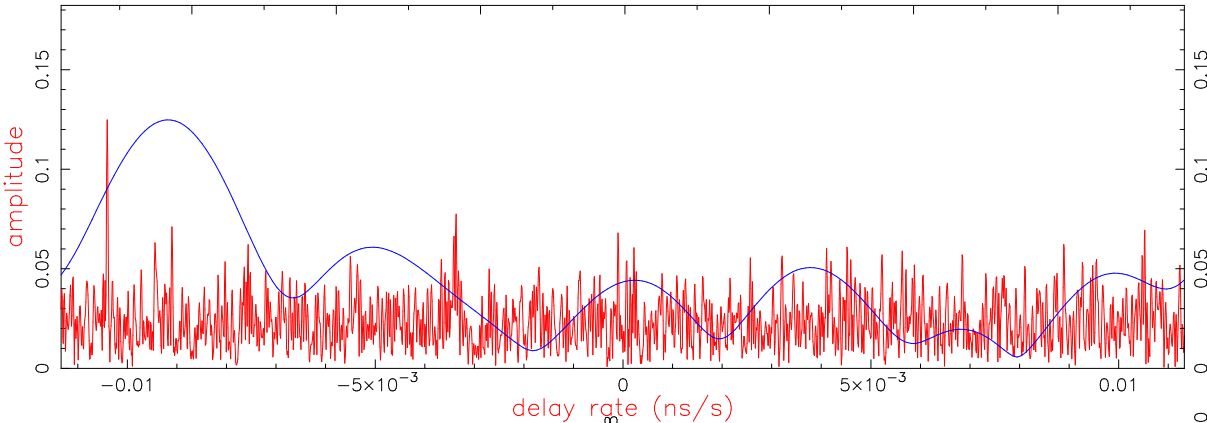
3C84.1IVDPU, No0283, kX

VLBA_KP - ONSALA60, fgroup W, pol LR

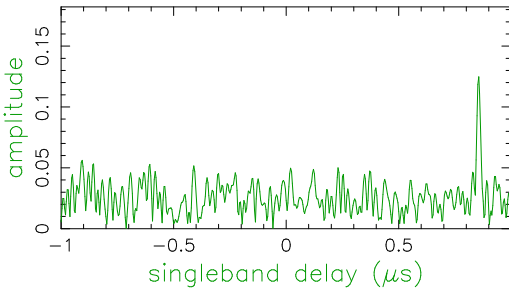
multiband delay (μs)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

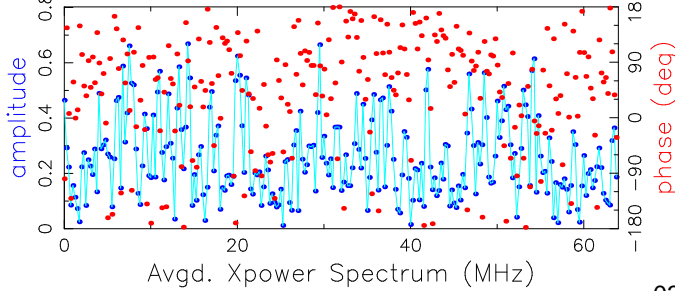
Fringe quality 0



SNR 6.5
Int time 357.697
Amp 0.182
Phase -70.7
PFD 2.6e-02
Delays (us)
SBD 0.854692
MBD -0.006332
Fringe rate (Hz)
-0.897438
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

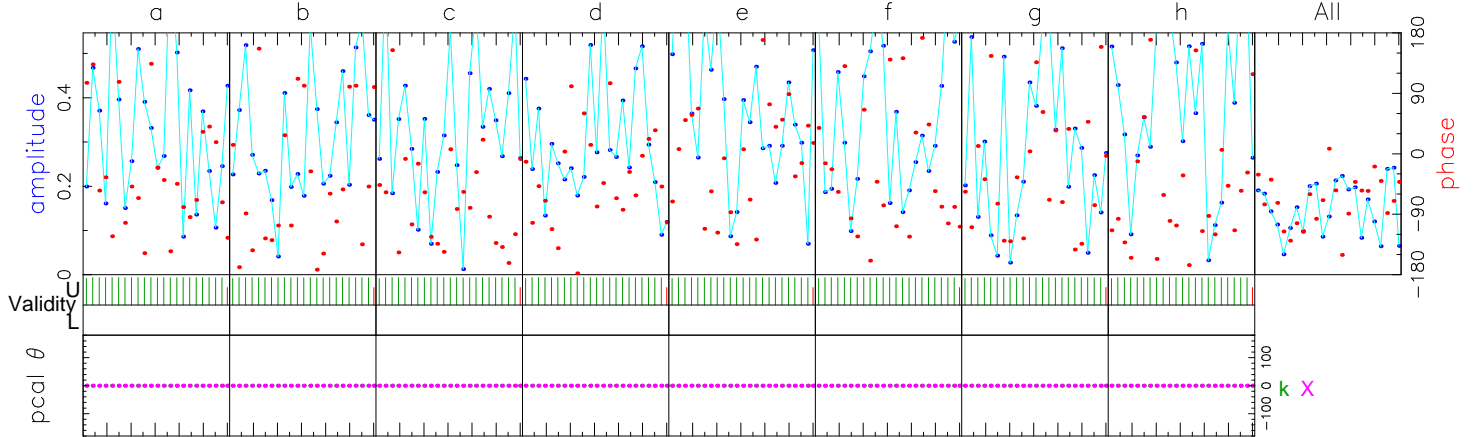


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:285
Start 083000.51
Stop 083559.94
FRT 083300.00
Corr/FF/build
2021:028:084120
2021:029:041025
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-89.8	-112.6	-79.4	-35.4	-11.1	-76.4	-67.9	-93.3	Phase	-70.7
	0.2	0.1	0.3	0.2	0.2	0.2	0.1	0.3	Ampl.	0.2
	286.2	8.5	474.0	348.3	79.0	477.6	94.7	476.1	Sbd box	475.8
U/L	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0	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	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)		1.16771735099E+04		Apriori delay (usec)	1.16763204670E+04		Resid mbdelay (usec)	-6.33212E-03	+/-	1.7E-04
Sband delay (usec)		1.16771751587E+04		Apriori clock (usec)	-4.8037167E+01		Resid sbdelay (usec)	8.54692E-01	+/-	1.3E-03
Phase delay (usec)		1.16763204647E+04		Apriori clockrate (us/s)	-4.2800003E-07		Resid phdelay (usec)	-2.27994E-06	+/-	5.7E-07
Delay rate (us/s)		8.14147253961E-01		Apriori rate (us/s)	8.14157672329E-01		Resid rate (us/s)	-1.04184E-05	+/-	2.7E-09
Total phase (deg)			-61.8	Apriori accel (us/s/s)	-8.58010611859E-05		Resid phase (deg)	-70.7	+/-	17.7

	RMS	Theor.	Amplitude	0.182 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	36.9	42.4	Search (2048X32)	0.124	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	51.3	74.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	35.4	25.0	Inc. seg. avg.	0.174	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	39.7	43.7	Inc. frq. avg.	0.190	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 45.3 el 75.2 pa -127.9 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -6333.661 -8013.917 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/kX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/kX.W.204.1IVDPU

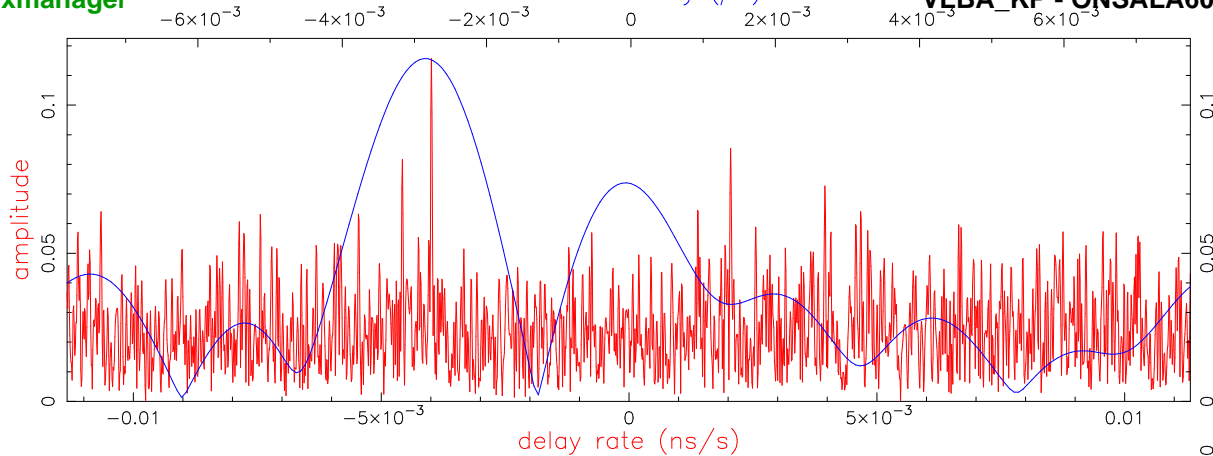
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, kX

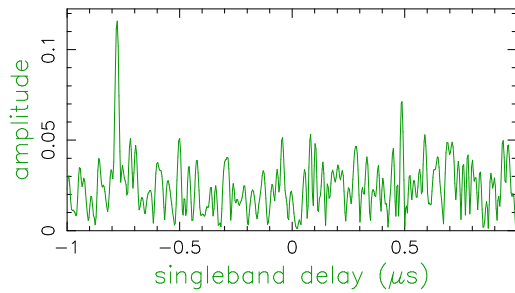
VLBA_KP - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

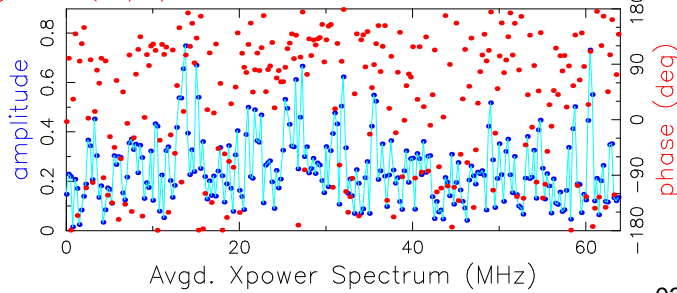


Fringe quality 0

SNR 6.0
Int time 357.697
Amp 0.123
Phase -177.9
PFD 3.7e-01
Delays (us)
SBD -0.778404
MBD -0.002872
Fringe rate (Hz)
-0.343995
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

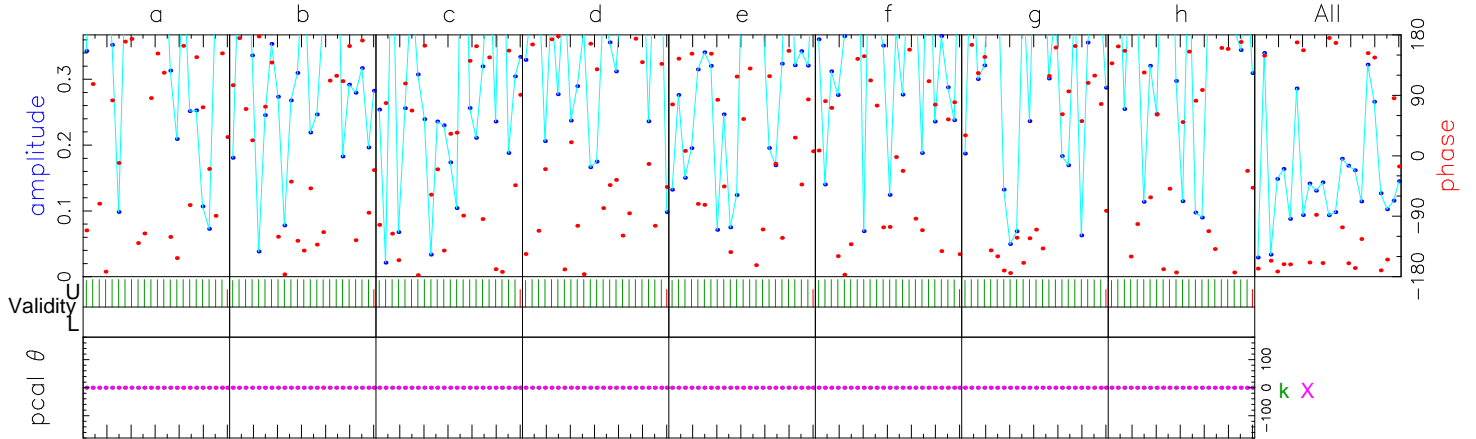


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:285
Start 083000.51
Stop 083559.94
FRT 083300.00
Corr/FF/build
2021:028:084120
2021:029:041029
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0		
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)		1.16755363445E+04				1.16763204670E+04			Resid mbdelay (usec)	-2.87246E-03 +/- 1.8E-04
Sband delay (usec)		1.16755420632E+04				-4.8037167E+01			Resid sbdelay (usec)	-7.78404E-01 +/- 1.4E-03
Phase delay (usec)		1.16763204612E+04				-4.2800003E-07			Resid phdelay (usec)	-5.73632E-06 +/- 6.1E-07
Delay rate (us/s)		8.14153678892E-01				8.14157672329E-01			Resid rate (us/s)	-3.99344E-06 +/- 3.0E-09
Total phase (deg)			-168.9			-8.58010611859E-05			Resid phase (deg)	-177.9 +/- 19.0

	RMS	Theor.	Amplitude	0.123 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	46.7	45.7	Search (2048X32)	0.111	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	75.5	79.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	29.9	26.9	Inc. seg. avg.	0.122	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	41.3	47.0	Inc. frq. avg.	0.118	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 45.3 el 75.2 pa -127.9 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -6333.661 -8013.917 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/kX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/kX.W.226.1IVDPU

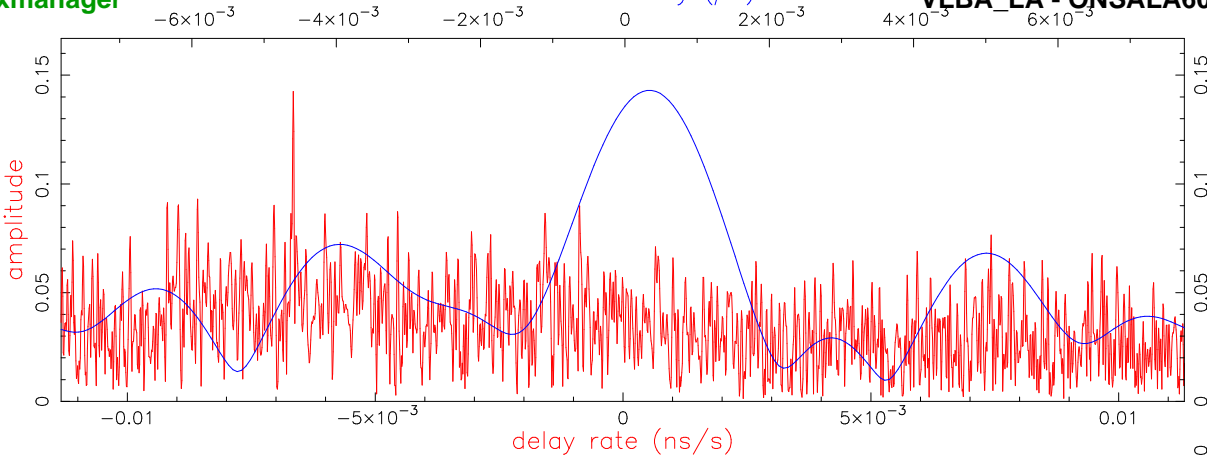
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11VDPU, No0283, IX

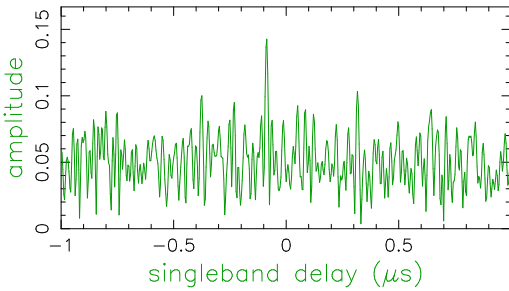
VLBA_LA - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

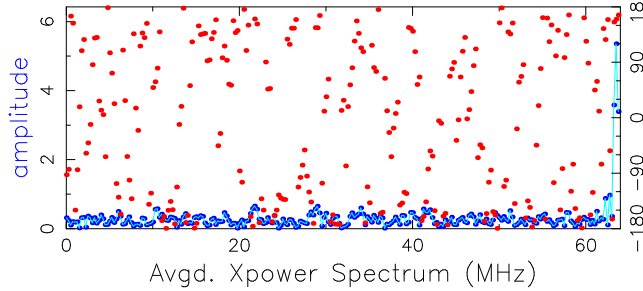


Fringe quality 9

SNR 7.5
 Int time 357.915
 Amp 0.167
 Phase -131.0
 PFD 2.8e-05
 Delays (us)
 SBD -0.087142
 MBD 0.000426
 Fringe rate (Hz)
 -0.574236
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

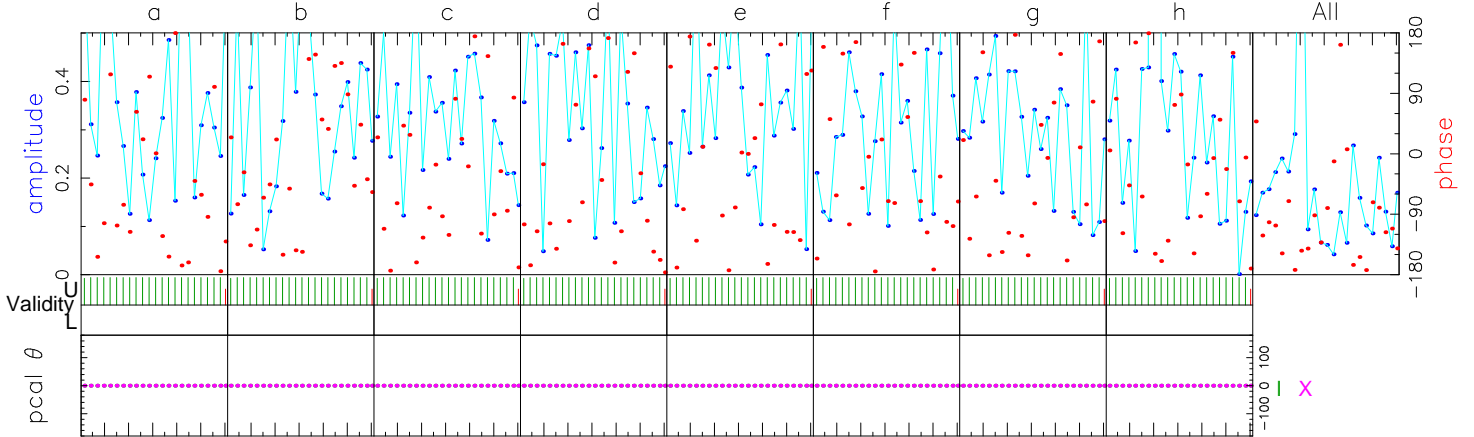


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083001.54
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041019
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.21035320481E+04	Apriori delay (usec)	1.21036253725E+04	Resid mbdelay (usec)	4.25642E-04	+/-	1.5E-04
Sband delay (usec)	1.21035382305E+04	Apriori clock (usec)	-4.8792202E+01	Resid sbdelay (usec)	-8.71420E-02	+/-	1.2E-03
Phase delay (usec)	1.21036253682E+04	Apriori clockrate (us/s)	-6.2800004E-07	Resid phdelay (usec)	-4.22364E-06	+/-	5.0E-07
Delay rate (us/s)	7.17516793223E-01	Apriori rate (us/s)	7.17523459528E-01	Resid rate (us/s)	-6.66631E-06	+/-	2.4E-09
Total phase (deg)	79.1	Apriori accel (us/s/s)	-8.39356607503E-05	Resid phase (deg)	-131.0	+/-	15.4

ph/seg (deg)	63.4	Theor.	36.8	Amplitude	0.167 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	142.5		64.3	Search (2048X32)	0.142	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	26.6		21.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	58.5		37.9	Inc. seg. avg.	0.181	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.165	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

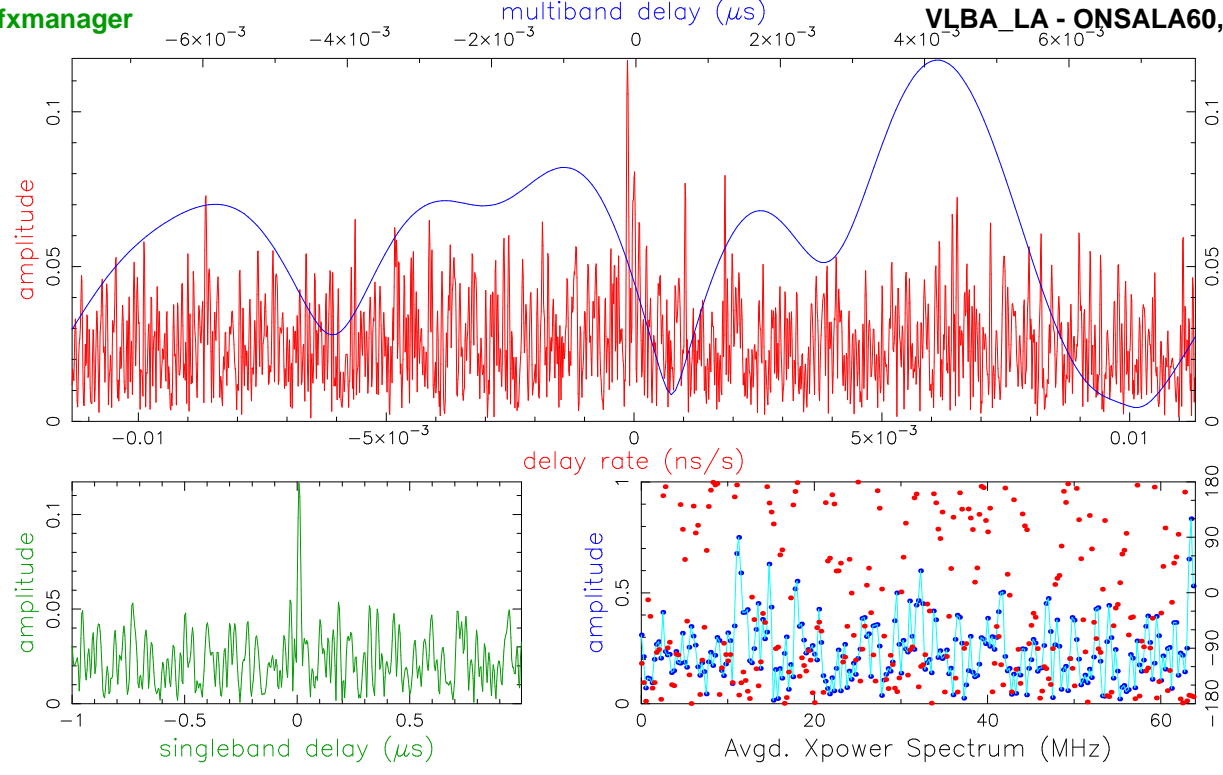
I: az 46.7 el 81.1 pa -130.0 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -5592.346 -7522.301 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/IX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/IX.W.175.11VDPU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

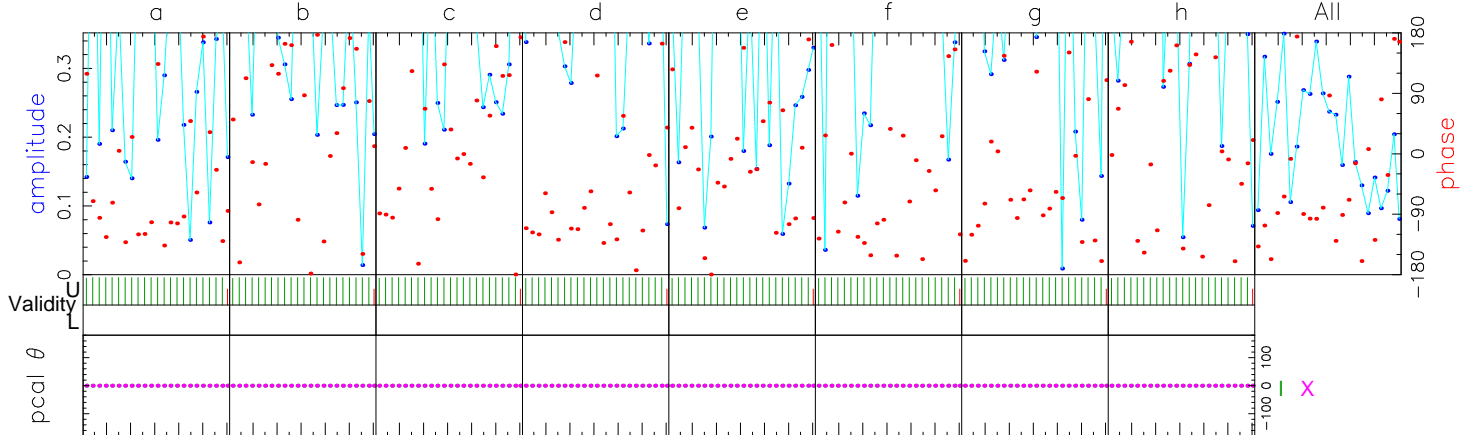
3C84.11VDPU, No0283, IX

VLBA_LA - ONSALA60, fgroup W, pol RR



Fringe quality 0
 SNR 6.1
 Int time 357.915
 Amp 0.117
 Phase -98.3
 PFD 2.9e-01
 Delays (us)
 SBD 0.008651
 MBD 0.004222
 Fringe rate (Hz)
 -0.011512
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Yr:day 16383
 Start 2021:028:084120
 Stop 2021:029:041023
 FRT 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-103.0	133.4	-26.9	-103.4	-16.2	-100.9	-97.5	-153.6	Phase	-98.3
	0.2	0.1	0.1	0.3	0.2	0.2	0.2	0.1	Ampl.	0.1
	259.9	71.9	441.0	258.7	384.6	169.9	192.7	217.8	Sbd box	259.2
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.21036295949E+04		Apriori delay (usec)		1.21036253725E+04		Resid mbdelay (usec)		4.22245E-03	+/- 1.8E-04
Sband delay (usec)	1.21036340232E+04		Apriori clock (usec)		-4.8792202E+01		Resid sbdelay (usec)		8.65075E-03	+/- 1.4E-03
Phase delay (usec)	1.21036253693E+04		Apriori clockrate (us/s)		-6.2800004E-07		Resid phdelay (usec)		-3.16871E-06	+/- 6.1E-07
Delay rate (us/s)	7.17523325886E-01		Apriori rate (us/s)		7.17523459528E-01		Resid rate (us/s)		-1.33642E-07	+/- 2.9E-09
Total phase (deg)	111.8		Apriori accel (us/s/s)		-8.39356607503E-05		Resid phase (deg)		-98.3	+/- 18.9

ph/seg (deg) RMS Theor. Amplitude 0.117 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 99.5 79.1 Interp. 0.114 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 72.4 26.7 Inc. seg. avg. 0.153 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 72.9 46.6 Inc. frq. avg. 0.147 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 I: az 46.7 el 81.1 pa -130.0 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -5592.346 -7522.301 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/IX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/IX.W.193.11VDPU

Mk4/DiFX fourfit 3.21 rev 2937

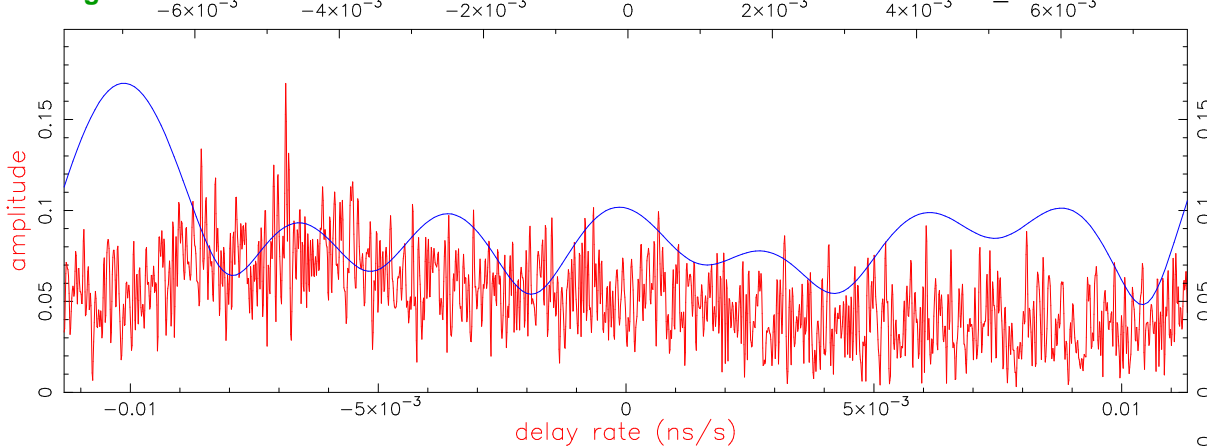
fxmanager

3C84.11VDPU, No0283, IX

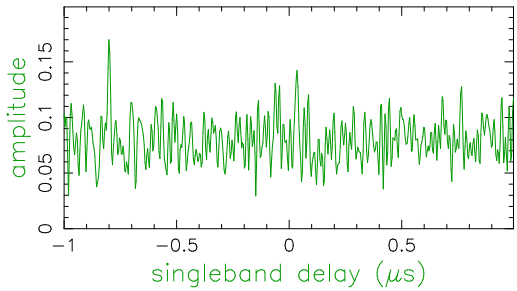
VLBA_LA - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

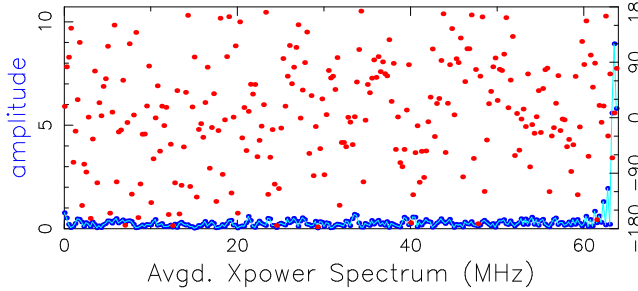
Fringe quality 9



SNR 8.8
 Int time 357.915
 Amp 0.200
 Phase -117.1
 PFD 3.8e-10
 Delays (us)
 SBD -0.799976
 MBD -0.007019
 Fringe rate (Hz)
 -0.592024
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

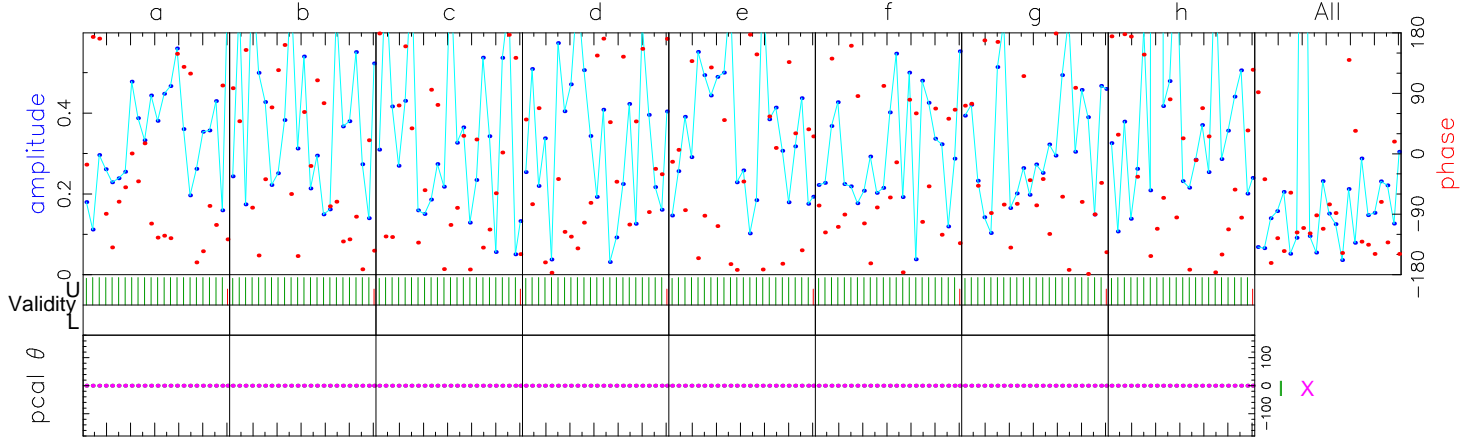


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083001.54
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041026
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-117.9	-99.2	-133.2	-119.6	-161.5	-100.6	-112.7	-114.1	Phase	-117.1
	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.8	Ampl.	0.2
	266.8	280.7	41.0	94.2	486.1	367.1	175.0	154.6	Sbd box	52.2
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.21028214787E+04	Apriori delay (usec)	1.21036253725E+04	Resid mbdelay (usec)	-7.01878E-03	+/-	1.2E-04
Sband delay (usec)	1.21028253965E+04	Apriori clock (usec)	-4.8792202E+01	Resid sbdelay (usec)	-7.99976E-01	+/-	9.8E-04
Phase delay (usec)	1.21036253687E+04	Apriori clockrate (us/s)	-6.2800004E-07	Resid phdelay (usec)	-3.77647E-06	+/-	4.2E-07
Delay rate (us/s)	7.17516586714E-01	Apriori rate (us/s)	7.17523459528E-01	Resid rate (us/s)	-6.87281E-06	+/-	2.0E-09
Total phase (deg)	93.0	Apriori accel (us/s/s)	-8.39356607503E-05	Resid phase (deg)	-117.1	+/-	13.0

ph/seg (deg)	65.0	Theor.	31.1	Amplitude	0.200 +/- 0.023	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	210.4		54.3	Search (2048X32)	0.168	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	21.8		18.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	112.6		32.0	Inc. seg. avg.	0.223	Sample rate(MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.194	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

I: az 46.7 el 81.1 pa -130.0 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -5592.346 -7522.301 simultaneous interpolator

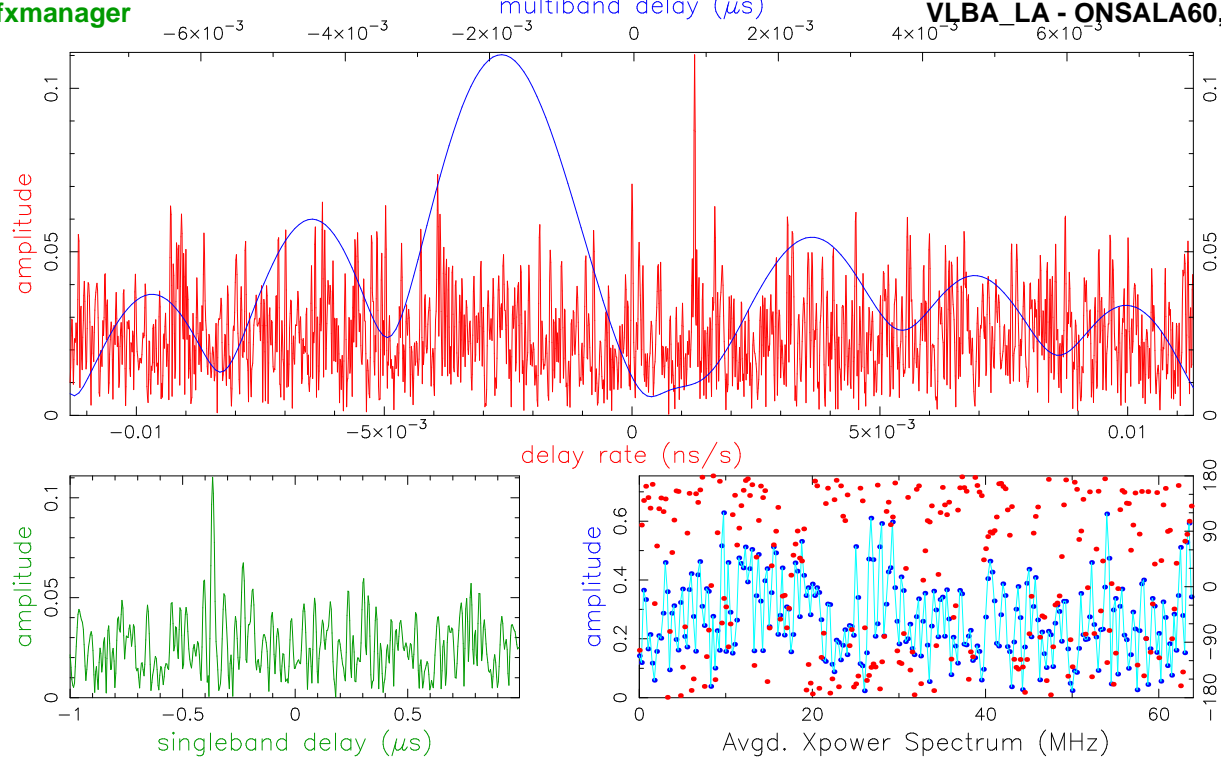
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/IX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/IX.W.214.11VDPU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

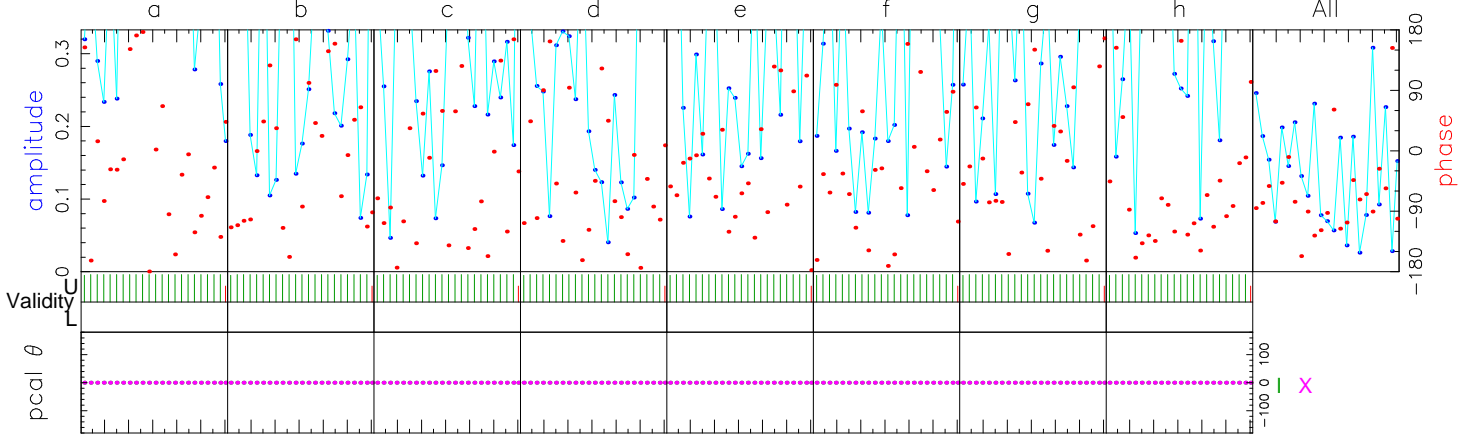
3C84.11VDPU, No0283, IX

VLBA_LA - ONSALA60, fgroup W, pol RL



Fringe quality 0
 SNR 5.7
 Int time 357.915
 Amp 0.111
 Phase -79.7
 PFD 9.4e-01
 Delays (us)
 SBD -0.366717
 MBD -0.001820
 Fringe rate (Hz) 0.108545
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083001.54
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041030
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-62.0	-99.2	-116.1	-95.7	-66.1	-34.2	-84.7	-91.8	Phase	-79.7
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	Ampl.	0.1
	55.2	366.4	207.7	145.9	334.7	428.9	90.9	162.7	Sbd box	163.1
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.21032641771E+04		Apriori delay (usec)		1.21036253725E+04		Resid mbdelay (usec)		-1.82033E-03	+/- 1.9E-04
Sband delay (usec)	1.21032586557E+04		Apriori clock (usec)		-4.8792202E+01		Resid sbdelay (usec)		-3.66717E-01	+/- 1.5E-03
Phase delay (usec)	1.21036253699E+04		Apriori clockrate (us/s)		-6.2800004E-07		Resid phdelay (usec)		-2.57039E-06	+/- 6.5E-07
Delay rate (us/s)	7.17524719629E-01		Apriori rate (us/s)		7.17523459528E-01		Resid rate (us/s)		1.26010E-06	+/- 3.1E-09
Total phase (deg)	130.4		Apriori accel (us/s/s)		-8.39356607503E-05		Resid phase (deg)		-79.7	+/- 20.1

	RMS	Theor.	Amplitude	0.111 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	51.9	48.1	Search (2048X32)	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	74.2	84.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	28.0	28.4	Inc. seg. avg.	0.103	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	52.5	49.5	Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
						ion window (TEC) 0.00 0.00

I: az 46.7 el 81.1 pa -130.0 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -5592.346 -7522.301 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/IX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/IX.W.234.11VDPU

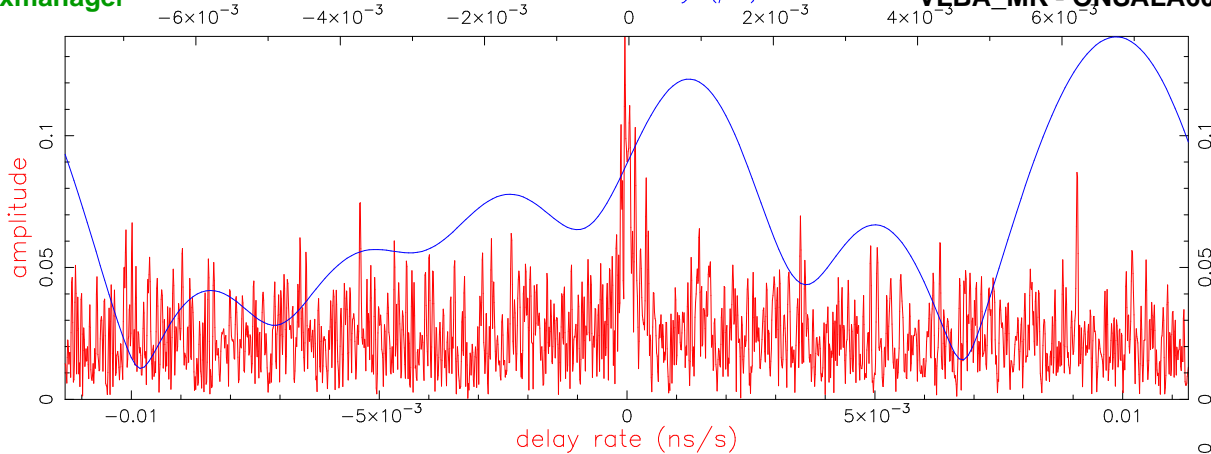
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11VDPU, No0283, mX

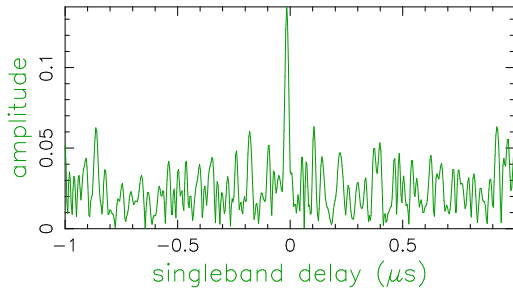
VLBA_MK - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

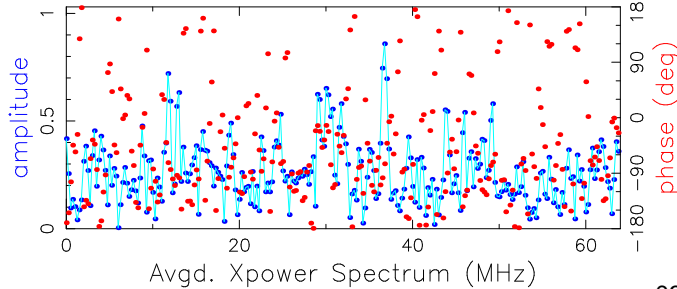


Fringe quality 0

SNR 7.1
 Int time 359.897
 Amp 0.138
 Phase 24.8
 PFD 2.8e-04
 Delays (us)
 SBD -0.015070
 MBD 0.006783
 Fringe rate (Hz)
 -0.003931
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

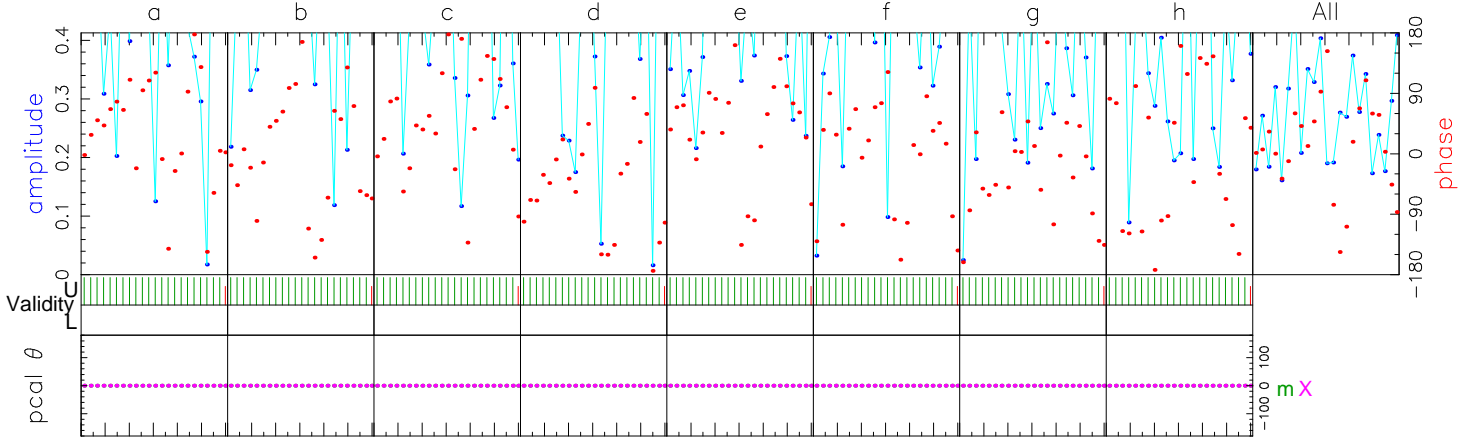


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041034
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	24.8	-6.5	67.2	-43.4	69.6	26.5	-32.6	143.5	Phase	24.8
	0.3	0.1	0.3	0.2	0.2	0.2	0.2	0.1	Ampl.	0.2
	252.8	396.9	252.1	252.4	251.8	253.4	250.9	250.6	Sbd box	253.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.99342088037E+03	Apriori delay (usec)	3.99342972273E+03	Resid mbdelay (usec)	6.78263E-03	+/-	1.5E-04
Sband delay (usec)	3.99341465273E+03	Apriori clock (usec)	-3.5007164E+01	Resid sbdelay (usec)	-1.50700E-02	+/-	1.2E-03
Phase delay (usec)	3.99342972353E+03	Apriori clockrate (us/s)	-4.2800003E-07	Resid phdelay (usec)	7.98155E-07	+/-	5.2E-07
Delay rate (us/s)	1.50563180065E+00	Apriori rate (us/s)	1.50563184629E+00	Resid rate (us/s)	-4.56332E-08	+/-	2.5E-09
Total phase (deg)	138.6	Apriori accel (us/s/s)	-5.91117773388E-05	Resid phase (deg)	24.8	+/-	16.0

ph/seg (deg)	RMS 70.3	Theor. 38.5	Amplitude Search (2048X32)	0.137	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	119.1	67.2	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)	66.9	22.7	Inc. seg. avg.	0.226	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	66.0	39.6	Inc. frq. avg.	0.191	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

m: az 52.3 el 36.8 pa -95.4 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -11592.036 -7378.613 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/mX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/mX.W.242.11VDPU

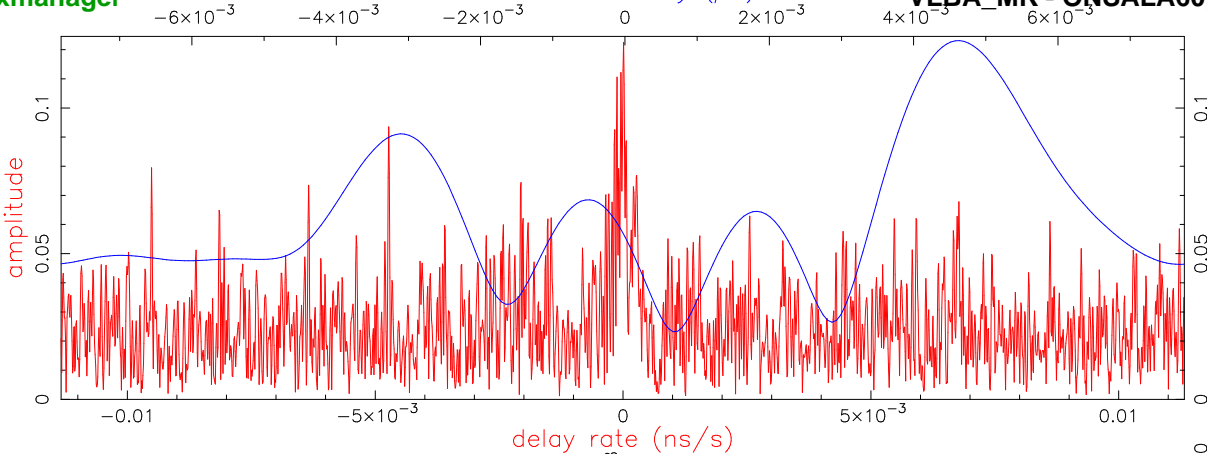
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11VDPU, No0283, mX

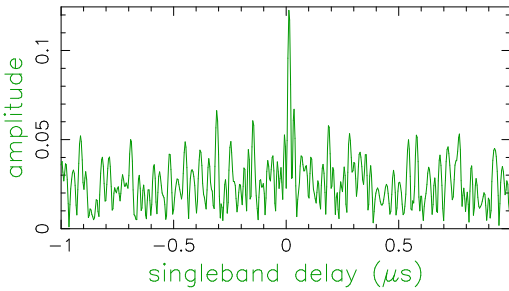
VLBA_MK - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

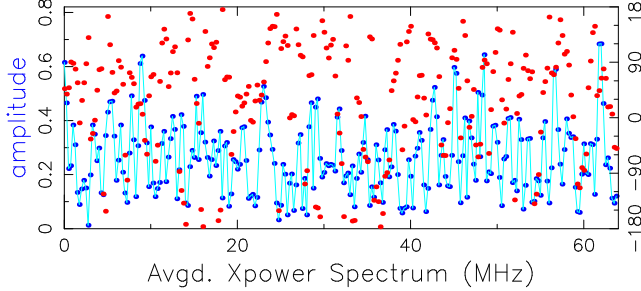


Fringe quality 0

SNR 6.5
 Int time 359.897
 Amp 0.125
 Phase 166.4
 PFD 2.8e-02
 Delays (us)
 SBD 0.013059
 MBD 0.004733
 Fringe rate (Hz) 0.000965
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

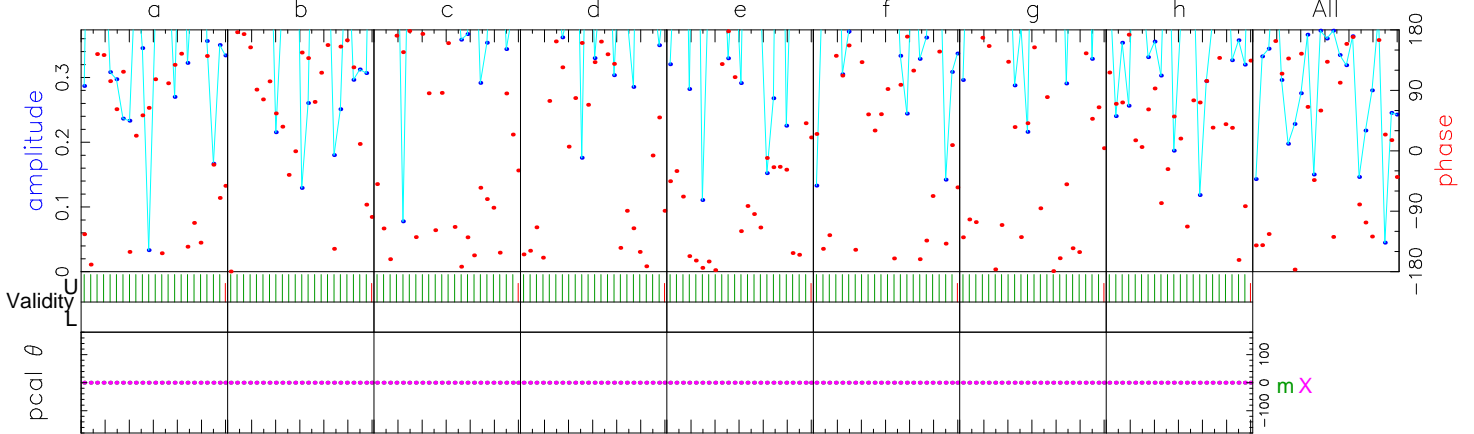


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041038
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	165.6	120.3	-158.2	169.2	-100.3	141.6	-175.5	55.9	Phase	166.4
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	159.0	260.7	259.6	260.1	178.0	79.7	258.9	257.1	Sbd box	260.3
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	3.99345008119E+03	Apriori delay (usec)	3.99342972273E+03	Resid mbdelay (usec)	4.73346E-03	+/-	1.7E-04
Sband delay (usec)	3.99344278123E+03	Apriori clock (usec)	-3.5007164E+01	Resid sbdelay (usec)	1.30585E-02	+/-	1.3E-03
Phase delay (usec)	3.99342972810E+03	Apriori clockrate (us/s)	-4.2800003E-07	Resid phdelay (usec)	5.36471E-06	+/-	5.7E-07
Delay rate (us/s)	1.50563185749E+00	Apriori rate (us/s)	1.50563184629E+00	Resid rate (us/s)	1.12016E-08	+/-	2.8E-09
Total phase (deg)	280.2	Apriori accel (us/s/s)	-5.91117773388E-05	Resid phase (deg)	166.4	+/-	17.7

ph/seg (deg)	82.0	Theor.	42.5	Amplitude	0.125 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	153.0		74.2	Search (2048X32)	0.121	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	64.9		25.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	55.0		43.8	Inc. seg. avg.	0.223	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.170	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

m: az 52.3 el 36.8 pa -95.4 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -11592.036 -7378.613 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/mX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/mX.W.260.11VDPU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

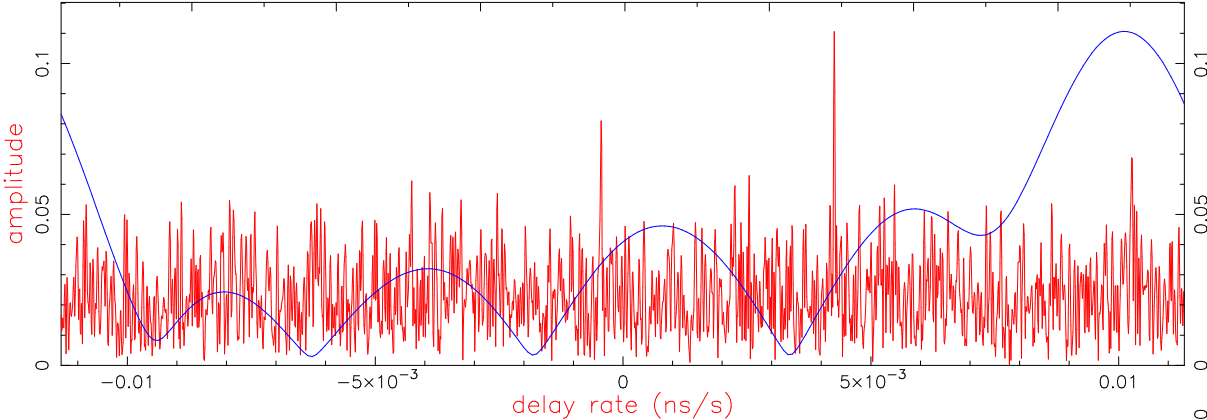
3C84.1IVDPU, No0283, mX

VLBA_MK - ONSALA60, fgroup W, pol LR

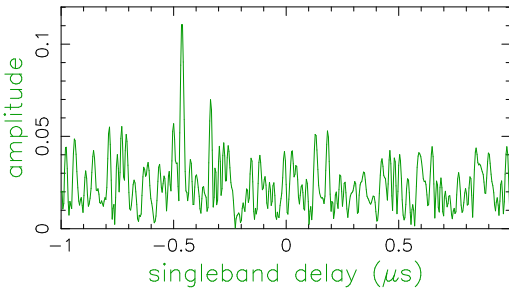
multiband delay (μ s)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

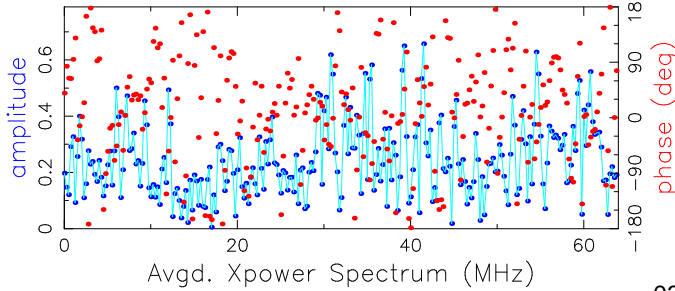
Fringe quality 0



SNR 5.9
Int time 359.897
Amp 0.120
Phase 4.8
PFD 6.5e-01
Delays (us)
SBD -0.462899
MBD 0.006872
Fringe rate (Hz)
0.368138
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

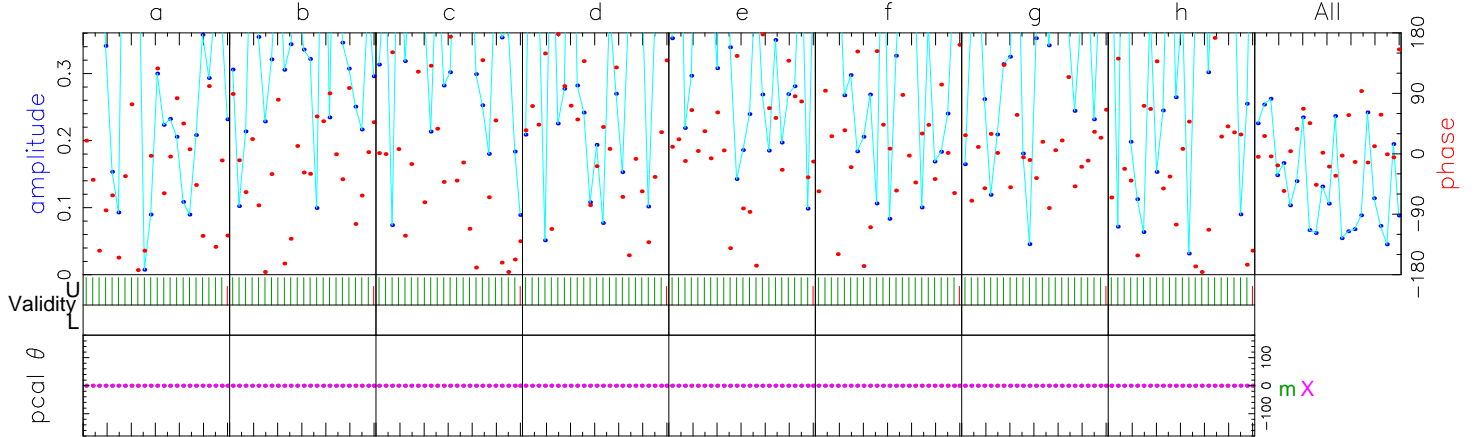


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:285
Start 083000.00
Stop 083559.94
FRT 083300.00
Corr/FF/build
2021:028:084120
2021:029:041041
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-49.7	6.2	-34.8	41.6	25.6	12.8	5.5	-51.0	Phase	4.8
	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	474.9	137.0	496.3	167.6	138.9	444.4	138.6	156.8	Sbd box	138.5
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.99296784465E+03		Apriori delay (usec)		3.99342972273E+03		Resid mbdelay (usec)		6.87191E-03	+/- 1.8E-04
Sband delay (usec)	3.99296682348E+03		Apriori clock (usec)		-3.5007164E+01		Resid sbdelay (usec)		-4.62899E-01	+/- 1.5E-03
Phase delay (usec)	3.99342972289E+03		Apriori clockrate (us/s)		-4.2800003E-07		Resid phdelay (usec)		1.54799E-07	+/- 6.3E-07
Delay rate (us/s)	1.50563612001E+00		Apriori rate (us/s)		1.50563184629E+00		Resid rate (us/s)		4.27372E-06	+/- 3.0E-09
Total phase (deg)	118.7		Apriori accel (us/s/s)		-5.91117773388E-05		Resid phase (deg)		4.8	+/- 19.5

ph/seg (deg) 44.8 46.7 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 67.5 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 39.8 27.6 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 50.1 48.1 Inc. frq. avg. 0.118 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 52.3 el 36.8 pa -95.4 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -11592.036 -7378.613 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/mX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/mX.W.281.1IVDPU

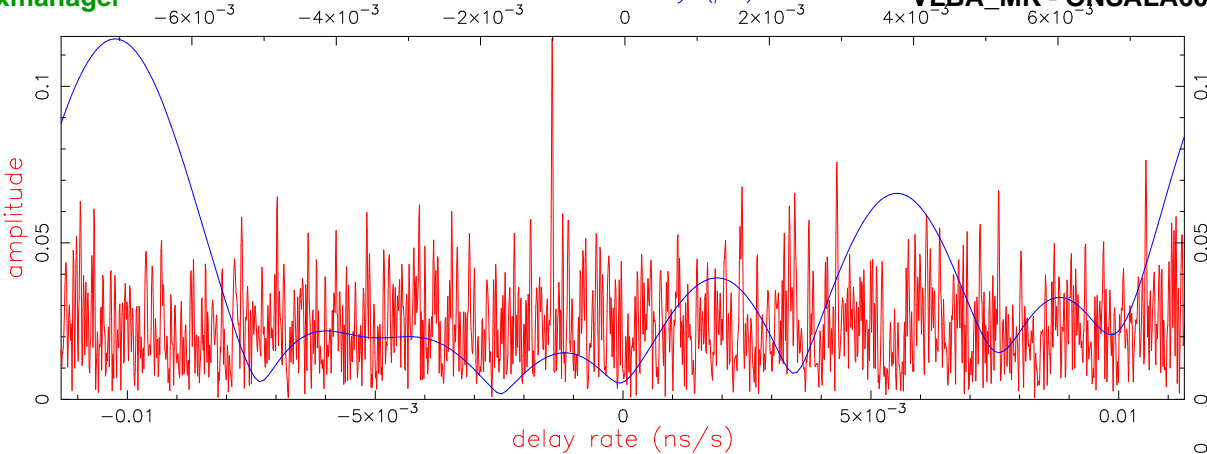
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11VDPU, No0283, mX

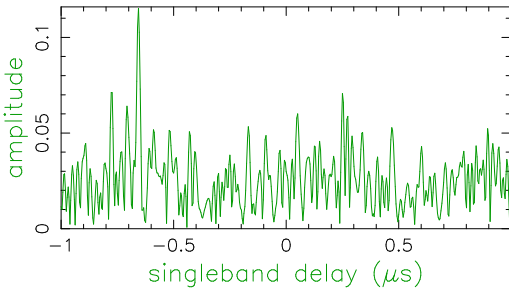
VLBA_MK - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

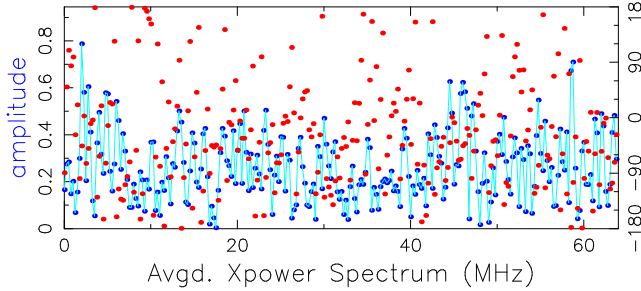


Fringe quality 0

SNR 6.0
 Int time 359.897
 Amp 0.116
 Phase 22.8
 PFD 4.4e-01
 Delays (us)
 SBD -0.656478
 MBD -0.007068
 Fringe rate (Hz)
 -0.123066
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

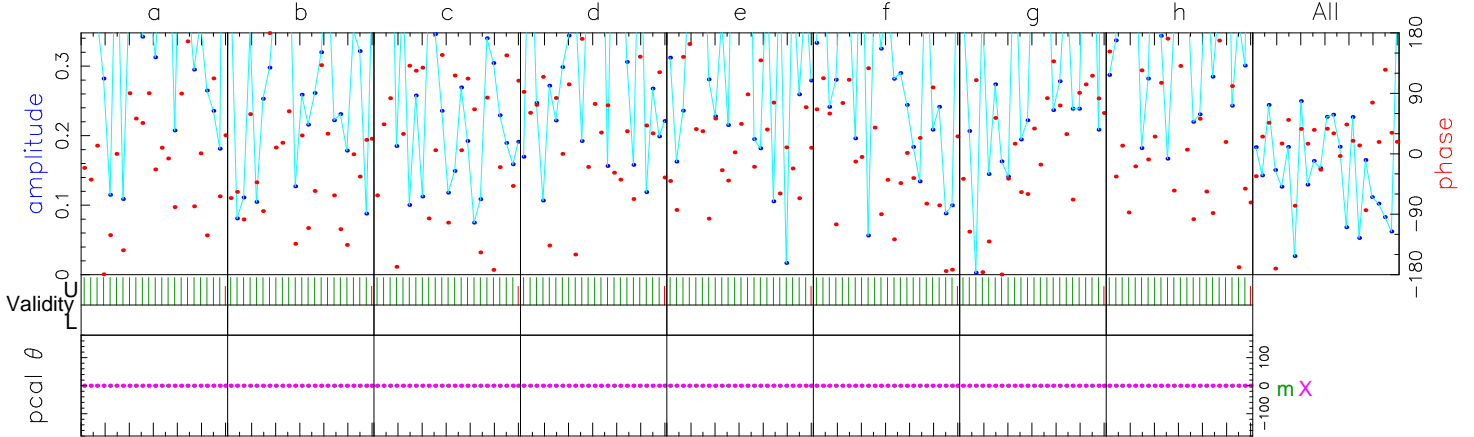


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041045
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	3.99276640471E+03	Apriori delay (usec)	3.99342972273E+03	Resid mbdelay (usec)	-7.06802E-03	+/-	1.8E-04
Sband delay (usec)	3.99277324498E+03	Apriori clock (usec)	-3.5007164E+01	Resid sbdelay (usec)	-6.56478E-01	+/-	1.4E-03
Phase delay (usec)	3.99342972347E+03	Apriori clockrate (us/s)	-4.2800003E-07	Resid phdelay (usec)	7.34081E-07	+/-	6.2E-07
Delay rate (us/s)	1.50563041762E+00	Apriori rate (us/s)	1.50563184629E+00	Resid rate (us/s)	-1.42867E-06	+/-	3.0E-09
Total phase (deg)	136.6	Apriori accel (us/s/s)	-5.9117773388E-05	Resid phase (deg)	22.8	+/-	19.2

ph/seg (deg)	56.0	Theor.	46.0	Amplitude	0.116 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.2		80.2	Search (2048X32)	0.114	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	31.6		27.1	Inc. seg. avg.	0.118	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	30.0		47.3	Inc. frq. avg.	0.115	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 52.3 el 36.8 pa -95.4 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -11592.036 -7378.613 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/mX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/mX.W.299.11VDPU

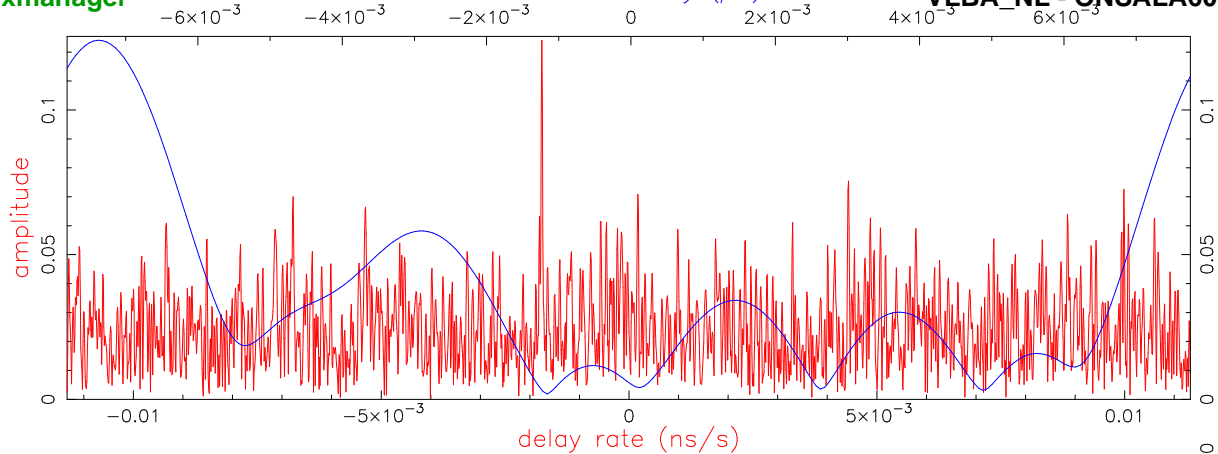
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, nX

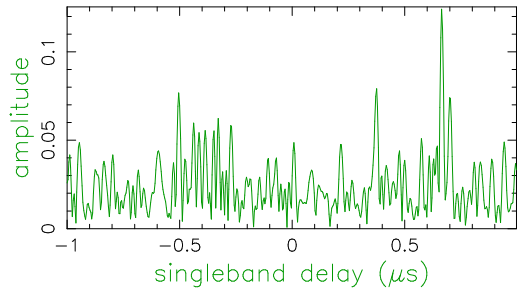
VLBA_NL - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

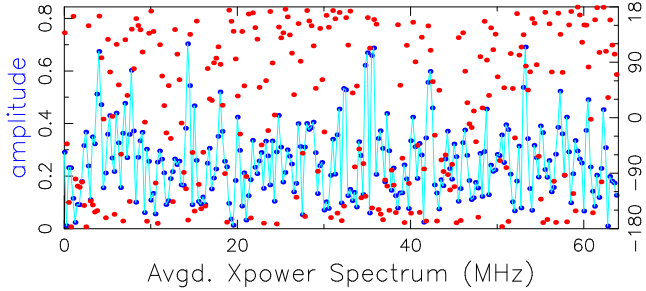


Fringe quality 0

SNR 6.4
 Int time 357.754
 Amp 0.125
 Phase -24.6
 PFD 3.6e-02
 Delays (us)
 SBD 0.664366
 MBD -0.007369
 Fringe rate (Hz)
 -0.151644
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

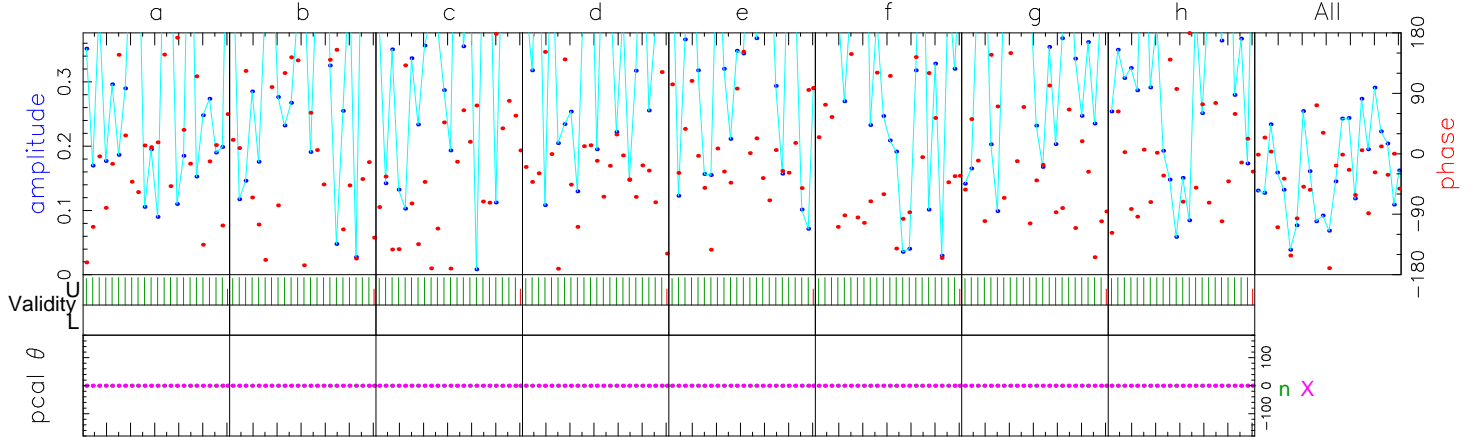


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083001.54
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041035
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-24.5	-48.5	-28.7	-24.8	7.9	-34.1	-51.2	-24.3	Phase	-24.6
	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	Ampl.	0.1
	100.7	214.6	350.5	426.8	436.5	174.8	297.0	150.5	Sbd box	427.1
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.22477556597E+04	Apriori delay (usec)	1.22470911539E+04	Resid mbdelay (usec)	-7.36914E-03	+/-	1.7E-04
Sband delay (usec)	1.22477555201E+04	Apriori clock (usec)	-4.8173096E+01	Resid sbdelay (usec)	6.64366E-01	+/-	1.3E-03
Phase delay (usec)	1.22470911531E+04	Apriori clockrate (us/s)	-2.8000009E-08	Resid phdelay (usec)	-7.92326E-07	+/-	5.8E-07
Delay rate (us/s)	4.85736434409E-01	Apriori rate (us/s)	4.85738194848E-01	Resid rate (us/s)	-1.76044E-06	+/-	2.8E-09
Total phase (deg)	333.2	Apriori accel (us/s/s)	-7.86003144446E-05	Resid phase (deg)	-24.6	+/-	17.8

ph/seg (deg)	58.2	Theor.	42.8	Amplitude	0.125 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.3		74.7	Search (2048X32)	0.120	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	20.2		25.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	40.7		44.0	Inc. seg. avg.	0.129	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.120	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

n: az 269.6 el 85.5 pa 84.5 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -3812.464 -6622.834 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/nX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/nX.W.245.11VDPU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

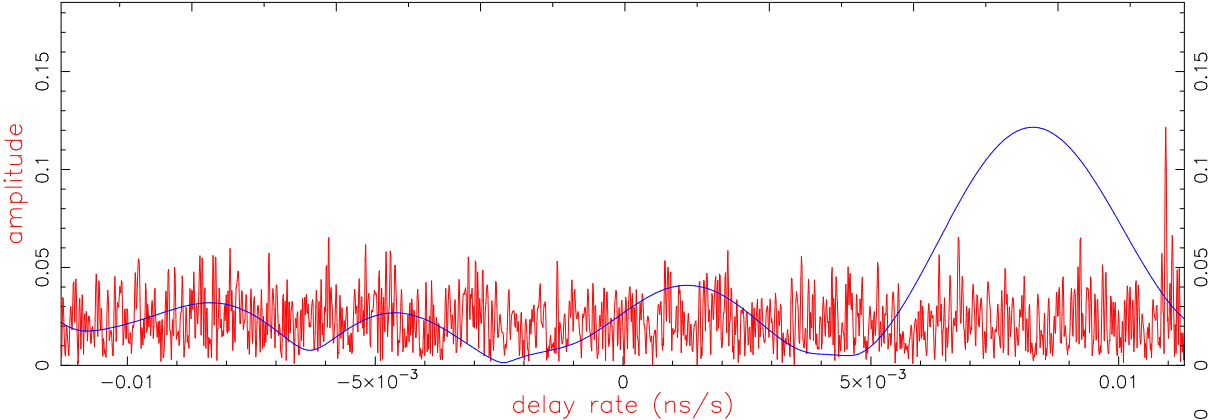
3C84.1IVDPU, No0283, nX

VLBA_NL - ONSALA60, fgroup W, pol RR

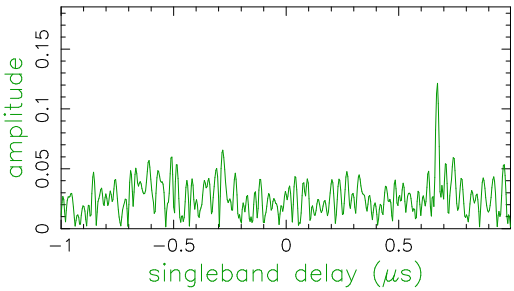
multiband delay (μ s)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

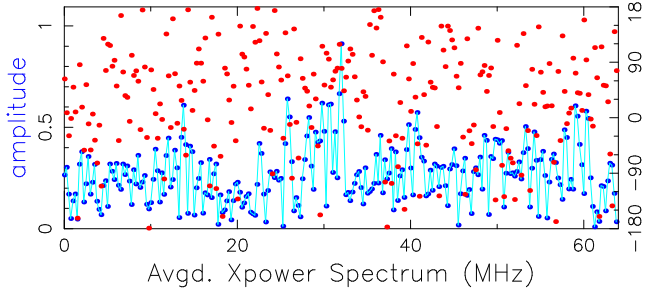
Fringe quality 0



SNR 6.3
Int time 357.754
Amp 0.185
Phase 157.3
PFD 7.8e-02
Delays (us)
SBD 0.671218
MBD 0.005601
Fringe rate (Hz)
0.944418
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

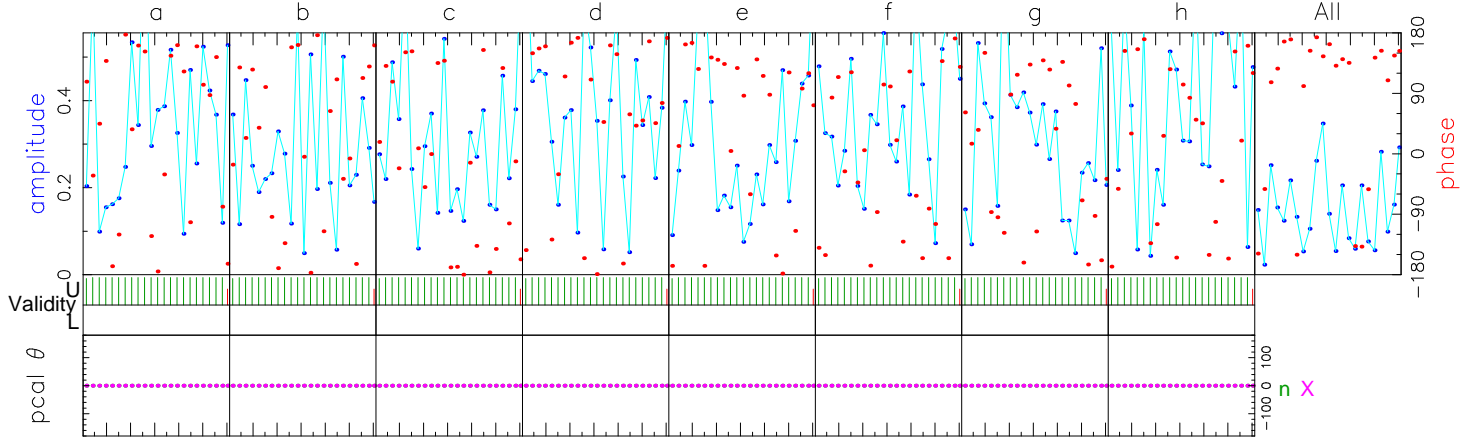


singleband delay (μ s)



Exp. c202b
Exper # 16383
Yr:day 2020:285
Start 083001.54
Stop 083559.94
FRT 083300.00
Corr/FF/build
2021:028:084120
2021:029:041039
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.22477686302E+04			1.22470911539E+04				5.60131E-03	+/- 1.7E-04
Sband delay (usec)		1.22477623721E+04			-4.8173096E+01				6.71218E-01	+/- 1.4E-03
Phase delay (usec)		1.22470911589E+04			-2.8000009E-08				5.07266E-06	+/- 5.9E-07
Delay rate (us/s)		4.85749158601E-01			4.85738194848E-01				1.09638E-05	+/- 2.8E-09
Total phase (deg)			155.1		-7.86003144446E-05				157.3	+/- 18.2
RMS	56.0	43.6			0.117					
ph/seg (deg)	56.0	43.6			0.117					
amp/seg (%)	75.0	76.1			0.000					
ph/frq (deg)	15.2	25.7			0.178					
amp/frq (%)	44.0	44.9			0.172					
Group delay (usec)(sbd)										
Sband delay (usec)										
Phase delay (usec)										
Delay rate (us/s)										
Total phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

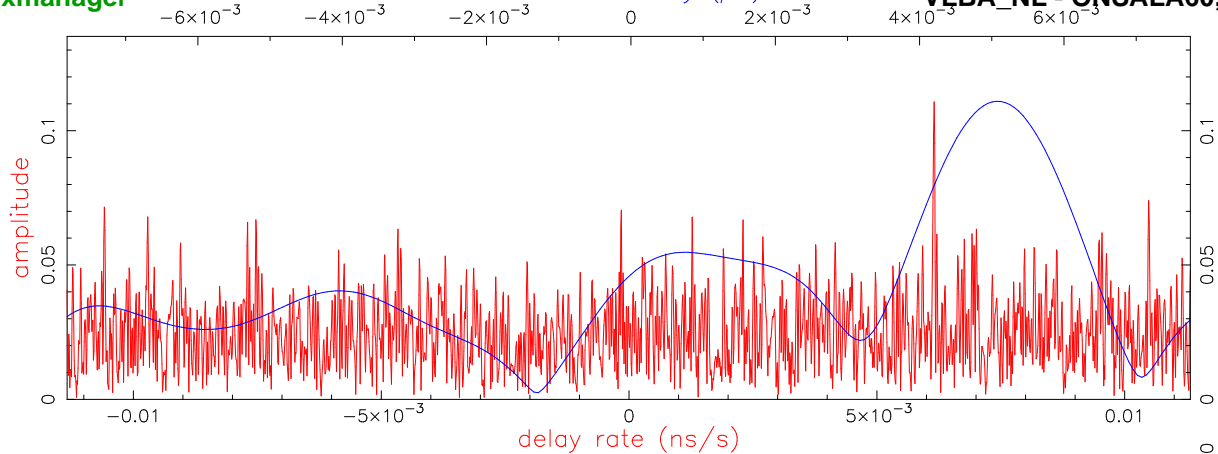
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, nX

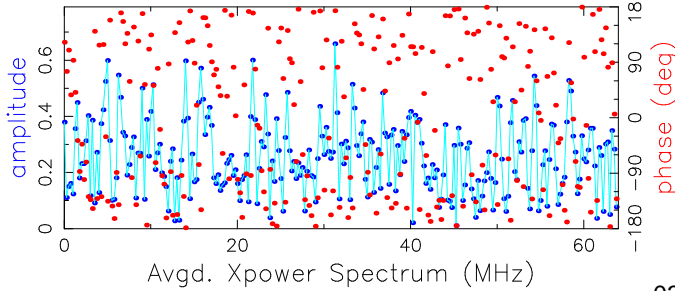
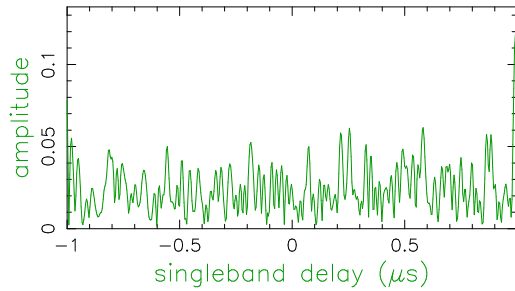
VLBA_NL - ONSALA60, fgroup W, pol LR

multiband delay (μ s)



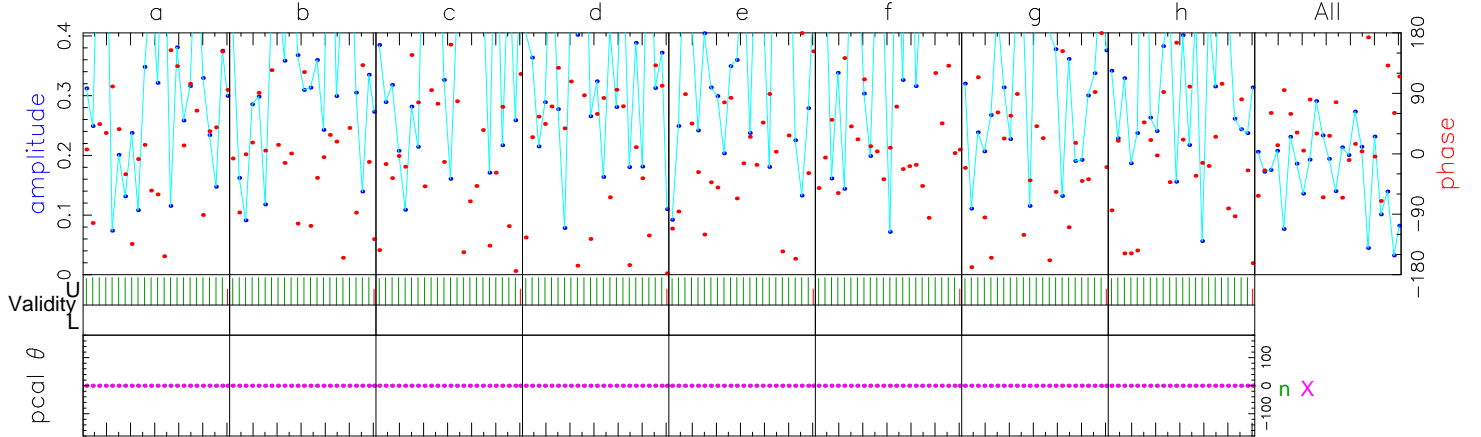
Fringe quality 0

SNR 6.2
 Int time 357.754
 Amp 0.135
 Phase 14.1
 PFD 1.7e-01
 Delays (us)
 SBD 0.991921
 MBD 0.005158
 Fringe rate (Hz)
 0.531332
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083001.54
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041042
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	32.2	3.7	-18.3	89.4	3.8	5.7	17.3	6.6	Phase	14.1
	0.1	0.2	0.1	0.1	0.2	0.3	0.1	0.1	Ampl.	0.1
	49.8	212.7	217.9	476.3	448.7	509.8	388.7	133.1	Sbd box	510.9
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.22480806866E+04		Apriori delay (usec)		1.22470911539E+04		Resid mbdelay (usec)		5.15770E-03	+/- 1.8E-04
Sband delay (usec)	1.22480830751E+04		Apriori clock (usec)		-4.8173096E+01		Resid sbdelay (usec)		9.91921E-01	+/- 1.4E-03
Phase delay (usec)	1.22470911543E+04		Apriori clockrate (us/s)		-2.8000009E-08		Resid phdelay (usec)		4.55577E-07	+/- 6.0E-07
Delay rate (us/s)	4.85744363082E-01		Apriori rate (us/s)		4.85738194848E-01		Resid rate (us/s)		6.16823E-06	+/- 2.9E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.86003144446E-05		Resid phase (deg)		14.1	+/- 18.6

	RMS	Theor.	Amplitude	0.135 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	64.8	44.6	Search (2048X32)	0.116	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	72.7	77.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	35.1	26.3	Inc. seg. avg.	0.152	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	49.1	45.9	Inc. frq. avg.	0.128	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

n: az 269.6 el 85.5 pa 84.5 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -3812.464 -6622.834 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/nX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/nX.W.286.11VDPU

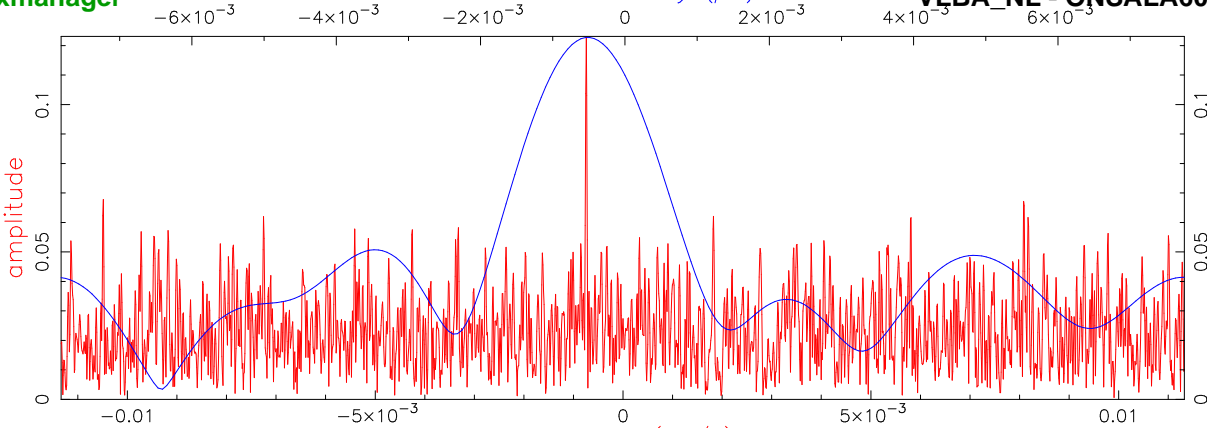
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, nX

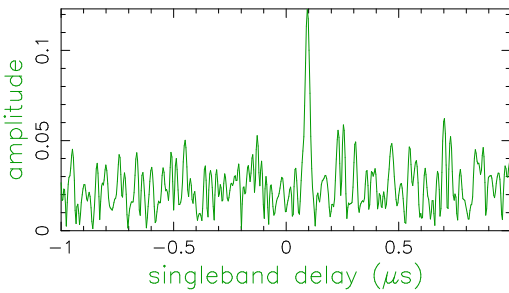
VLBA_NL - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

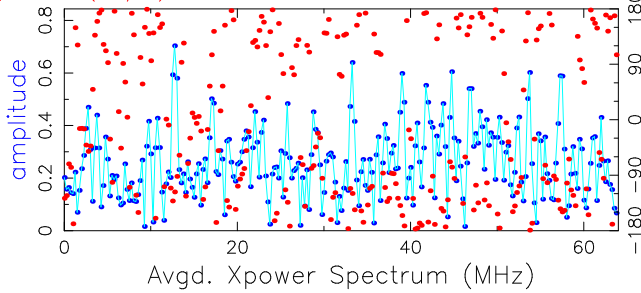


Fringe quality 0

SNR 6.4
 Int time 357.754
 Amp 0.123
 Phase -142.5
 PFD 5.5e-02
 Delays (us)
 SBD 0.094303
 MBD -0.000493
 Fringe rate (Hz)
 -0.063794
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

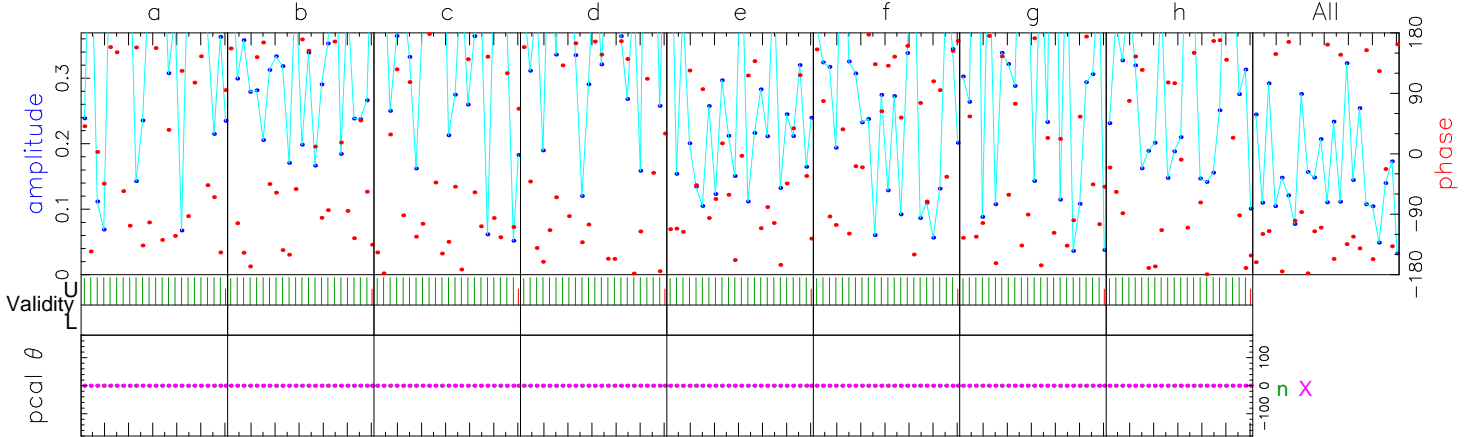


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083001.54
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041046
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-146.2	-131.1	-139.9	-165.6	-88.9	149.4	-131.3	-168.3		-142.5
	0.1	0.1	0.2	0.2	0.1	0.0	0.2	0.1		0.1
	268.5	257.4	279.9	280.6	467.4	399.9	132.6	495.0		281.1
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.22471844109E+04				1.22470911539E+04			Resid mbdelay (usec)	-4.92940E-04 +/- 1.7E-04
Sband delay (usec)		1.22471854571E+04				-4.8173096E+01			Resid sbdelay (usec)	9.43033E-02 +/- 1.4E-03
Phase delay (usec)		1.22470911493E+04				-2.8000009E-08			Resid phdelay (usec)	-4.59567E-06 +/- 5.8E-07
Delay rate (us/s)		4.85737454264E-01				4.85738194848E-01			Resid rate (us/s)	-7.40584E-07 +/- 2.8E-09
Total phase (deg)			215.2			-7.86003144446E-05			Resid phase (deg)	-142.5 +/- 18.0
	RMS	Theor.	Amplitude		0.123 +/- 0.019				Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	49.8	43.2	Search (2048X32)		0.121				Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	69.1	75.5	Interp.		0.000				Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	38.7	25.5	Inc. seg. avg.		0.126				Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	46.5	44.5	Inc. frq. avg.		0.122				Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 269.6 el 85.5 pa 84.5 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -3812.464 -6622.834 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/nX..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/nX.W.305.11VDPU

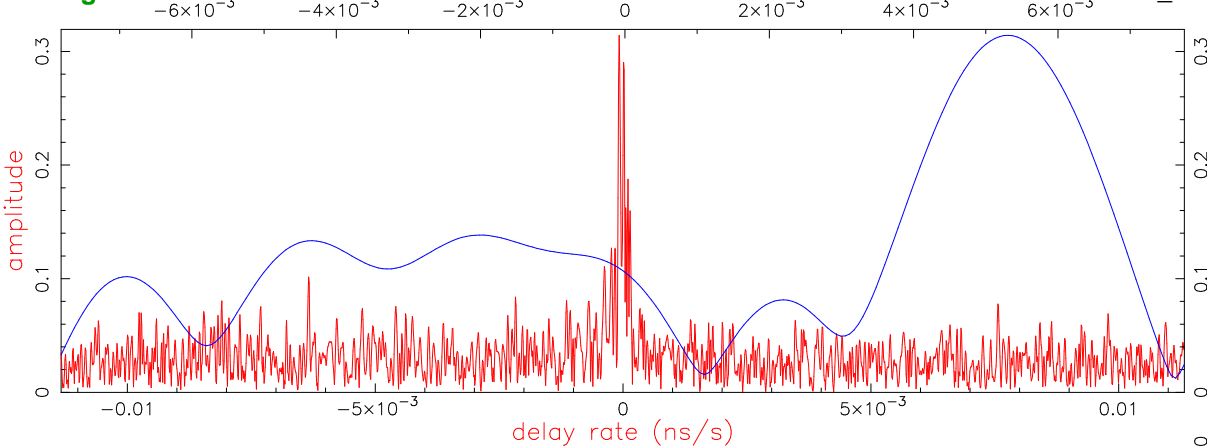
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, Xo

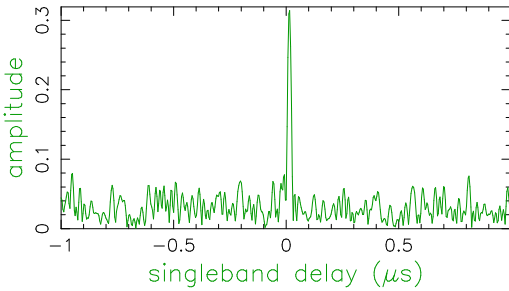
ONSALA60 - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

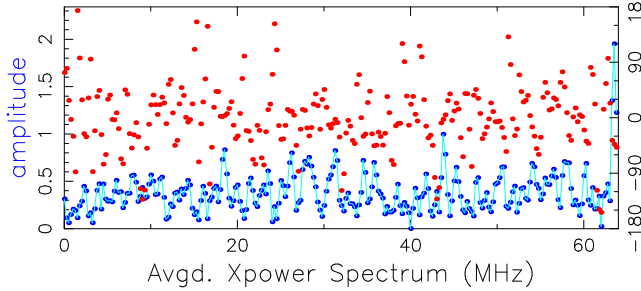


Fringe quality 8

SNR 16.5
Int time 356.800
Amp 0.319
Phase 95.2
PFD 0.0e+00
Delays (us)
SBD 0.014004
MBD 0.005301
Fringe rate (Hz)
-0.006729
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

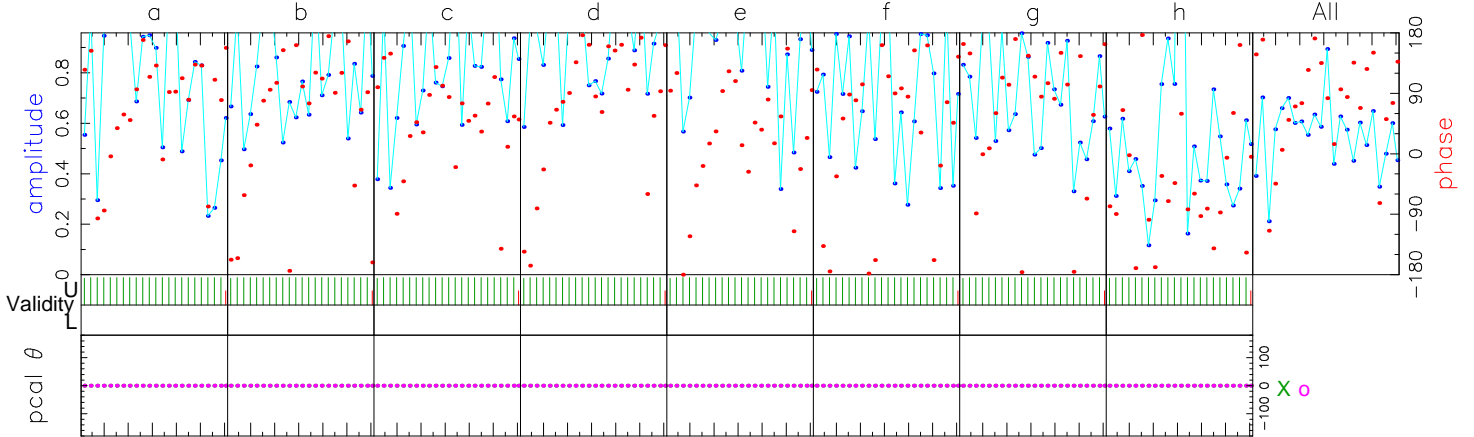


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:285
Start 083002.56
Stop 083559.94
FRT 083300.00
Corr/FF/build
2021:028:084120
2021:029:041037
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	93.8	115.7	63.8	125.7	47.2	122.2	116.2	-46.3	Phase	95.2
	0.4	0.4	0.5	0.5	0.4	0.3	0.4	0.1	Ampl.	0.4
	260.5	261.3	261.3	260.7	261.5	262.2	261.4	262.9	Sbd box	260.6
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0	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	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	-1.15333410615E+04	Apriori delay (usec)	-1.15333619872E+04	Resid mbdelay (usec)	5.30064E-03	+/-	6.6E-05
Sband delay (usec)	-1.15333479832E+04	Apriori clock (usec)	2.6991201E+01	Resid sbdelay (usec)	1.40040E-02	+/-	5.2E-04
Phase delay (usec)	-1.15333619841E+04	Apriori clockrate (us/s)	6.2800004E-07	Resid phdelay (usec)	3.07131E-06	+/-	2.2E-07
Delay rate (us/s)	-9.03341642589E-01	Apriori rate (us/s)	-9.03341564468E-01	Resid rate (us/s)	-7.81206E-08	+/-	1.1E-09
Total phase (deg)	-111.2	Apriori accel (us/s/s)	7.92629404453E-05	Resid phase (deg)	95.2	+/-	6.9

ph/seg (deg)	71.4	Theor.	16.7	Search (2048X32)	0.313	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	87.1		29.1	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)	65.6		9.8	Inc. seg. avg.	0.539	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	39.8		17.1	Inc. frq. avg.	0.388	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 308.9 el 25.1 pa 33.8 o: az 68.3 el 73.5 pa -97.8 u,v (fr/asec) 7009.472 7052.351 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xo..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xo.W.258.1IVDPU

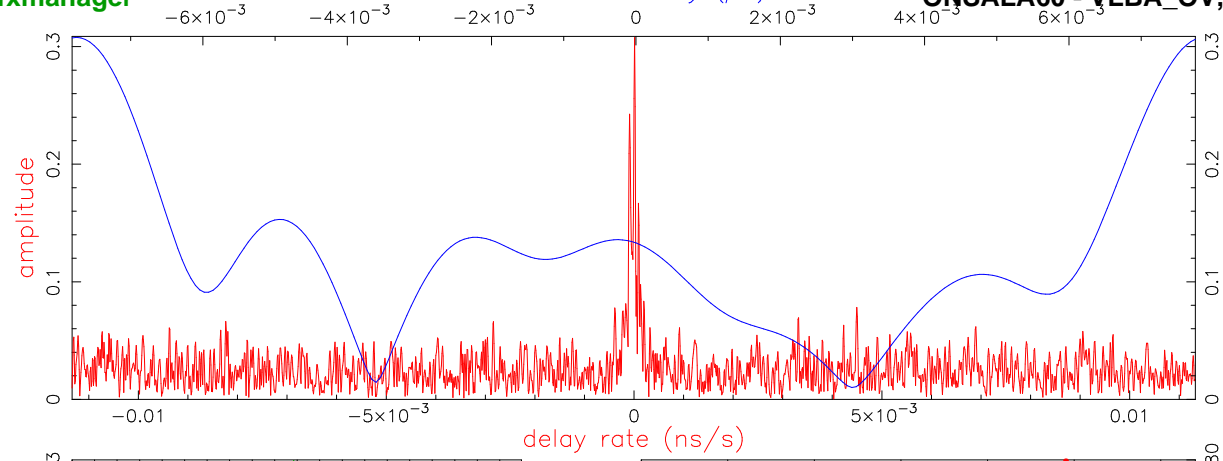
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, Xo

ONSALA60 - VLBA_OV, fgroup W, pol RR

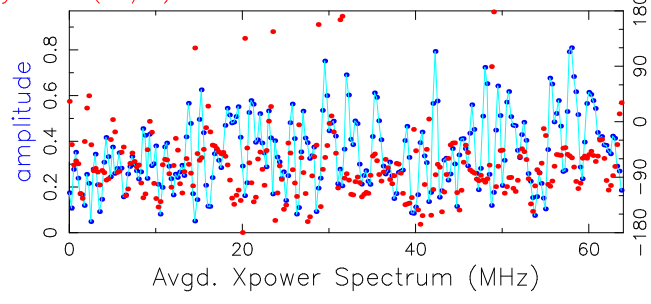
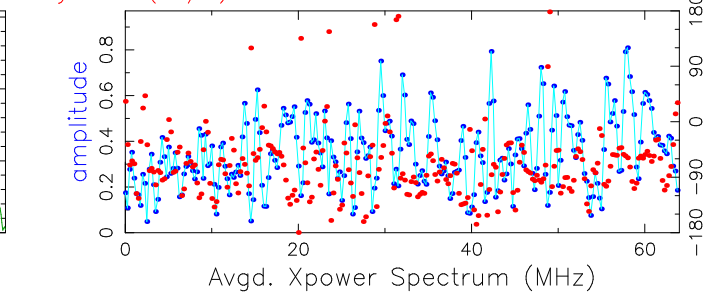
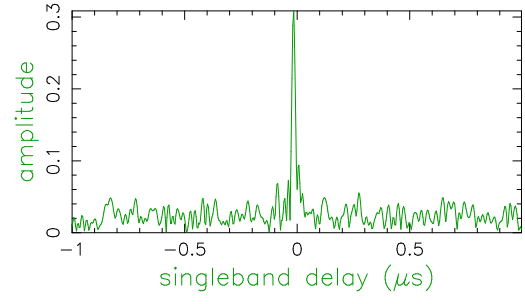
multiband delay (μ s)



Fringe quality 7

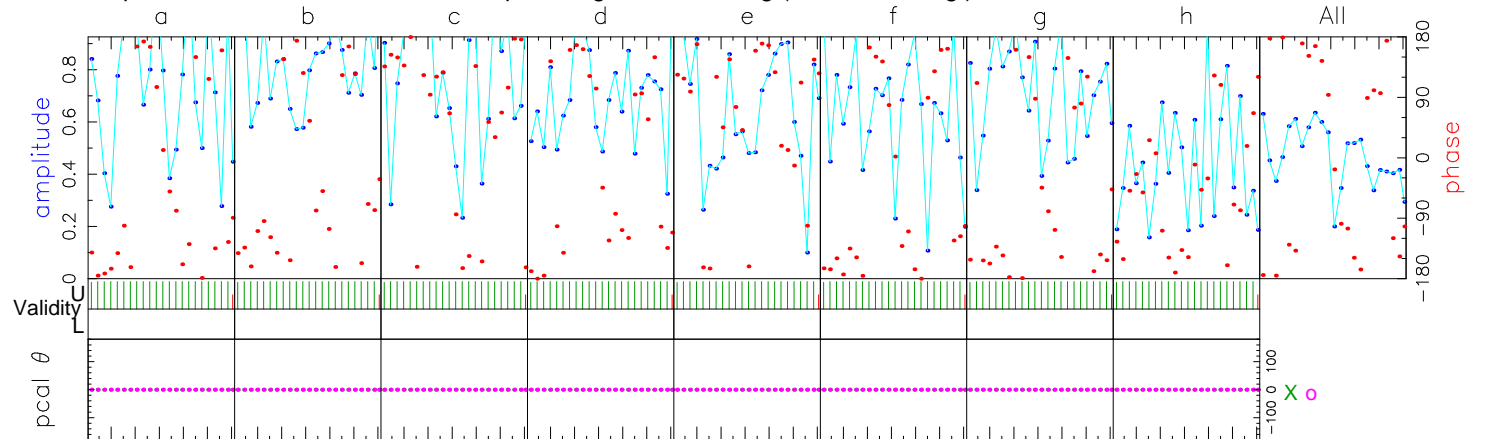
SNR 15.9
 Int time 356.799
 Amp 0.309
 Phase -177.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.016301
 MBD -0.007772
 Fringe rate (Hz) 0.001389
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083002.56
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041040
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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

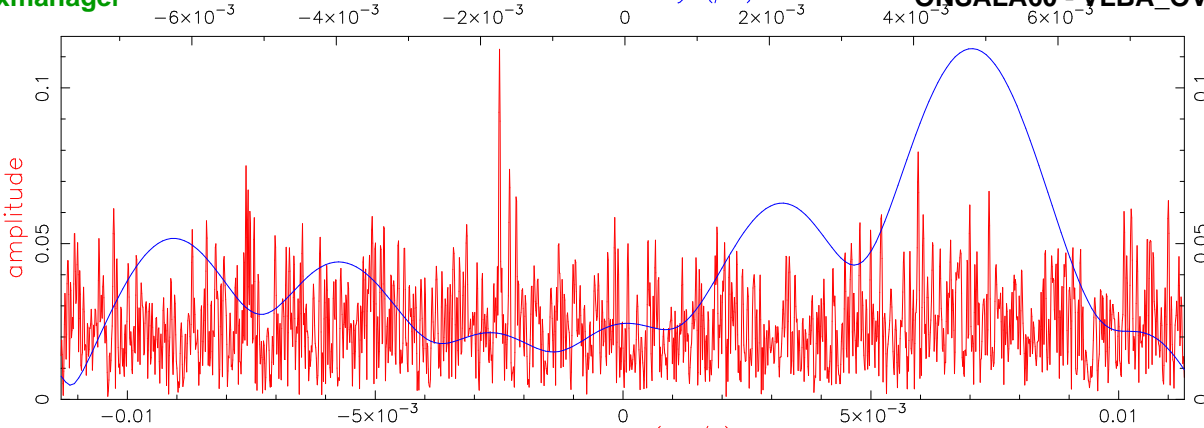


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-164.2	-136.3	135.8	-174.1	122.4	-168.9	-170.0	-82.2	Phase	-177.5
	0.4	0.4	0.5	0.3	0.4	0.5	0.4	0.2	Ampl.	0.4
	253.1	252.8	253.1	253.6	253.8	253.1	253.5	257.0	Sbd box	252.8
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.15333853844E+04		Apriori delay (usec)		-1.15333619872E+04		Resid mbdelay (usec)		-7.77229E-03	+/- 6.8E-05
Sband delay (usec)	-1.15333782887E+04		Apriori clock (usec)		2.6991201E+01		Resid sbdelay (usec)		-1.63015E-02	+/- 5.4E-04
Phase delay (usec)	-1.15333619929E+04		Apriori clockrate (us/s)		6.2800004E-07		Resid phdelay (usec)		-5.72281E-06	+/- 2.3E-07
Delay rate (us/s)	-9.03341548341E-01		Apriori rate (us/s)		-9.03341564468E-01		Resid rate (us/s)		1.61268E-08	+/- 1.1E-09
Total phase (deg)			Apriori accel (us/s/s)		7.92629404453E-05		Resid phase (deg)		-177.5	+/- 7.2

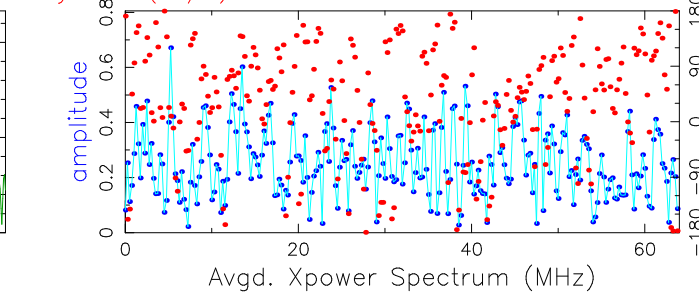
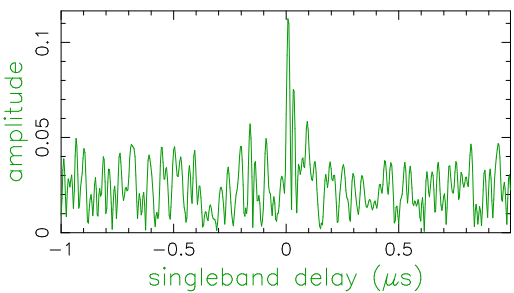
ph/seg (deg) 60.8 17.2 Search (2048X32) 0.295 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.7 30.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 53.1 10.2 Inc. seg. avg. 0.454 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.9 17.7 Inc. frq. avg. 0.380 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 308.9 el 25.1 pa 33.8 o: az 68.3 el 73.5 pa -97.8 u,v (fr/asec) 7009.472 7052.351 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xo..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xo.W.276.1IVDPU

multiband delay (μ s)

Fringe quality 0

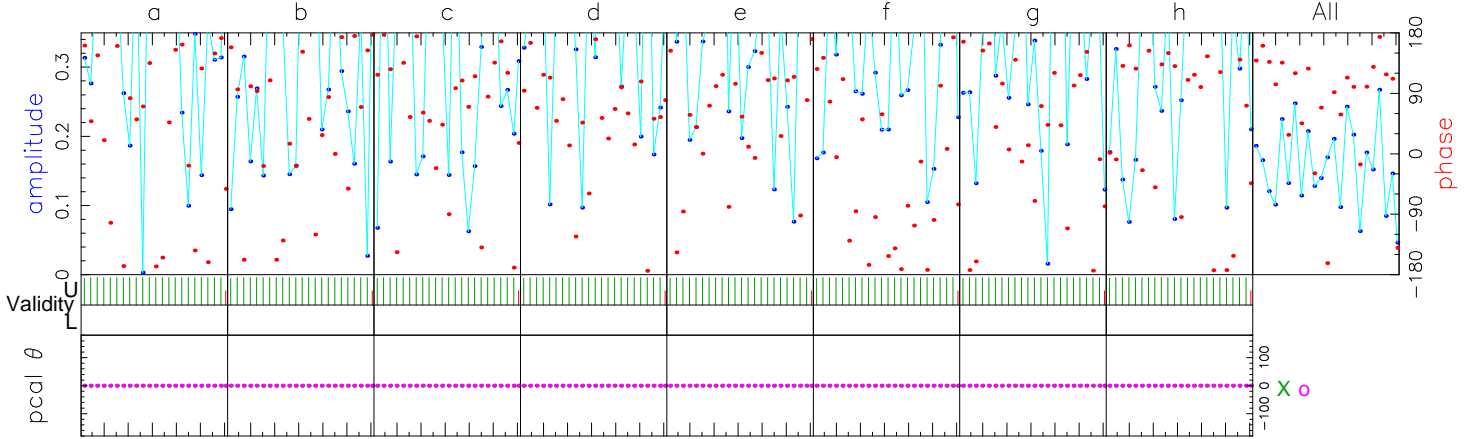


SNR 5.9
 Int time 356.799
 Amp 0.117
 Phase 116.8
 PFD 6.0e-01
 Delays (us)
 SBD 0.009355
 MBD 0.004873
 Fringe rate (Hz)
 -0.214659
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083002.56
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041044
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.15333571143E+04								4.87288E-03	+/- 1.8E-04
Sband delay (usec)	-1.15333526319E+04								9.35525E-03	+/- 1.5E-03
Phase delay (usec)	-1.15333619834E+04								3.76717E-06	+/- 6.3E-07
Delay rate (us/s)	-9.03344056452E-01								-2.49198E-06	+/- 3.0E-09
Total phase (deg)			-89.7						116.8	+/- 19.4
Apriori delay (usec)					-1.15333619872E+04					
Apriori clock (usec)					2.6991201E+01					
Apriori clockrate (us/s)					6.2800004E-07					
Apriori rate (us/s)					-9.03341564468E-01					
Apriori accel (us/s/s)					7.92629404453E-05					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate (MSamp/s):	128									
Data rate (Mb/s):	2048									
nlags:	256									
t_cohere	infinite									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

ph/seg (deg) 58.8 46.6 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.4 81.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.8 27.5 Inc. seg. avg. 0.122 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.1 47.9 Inc. frq. avg. 0.120 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 308.9 el 25.1 pa 33.8 o: az 68.3 el 73.5 pa -97.8 u,v (fr/asec) 7009.472 7052.351 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xo..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xo.W.298.1IVDPU

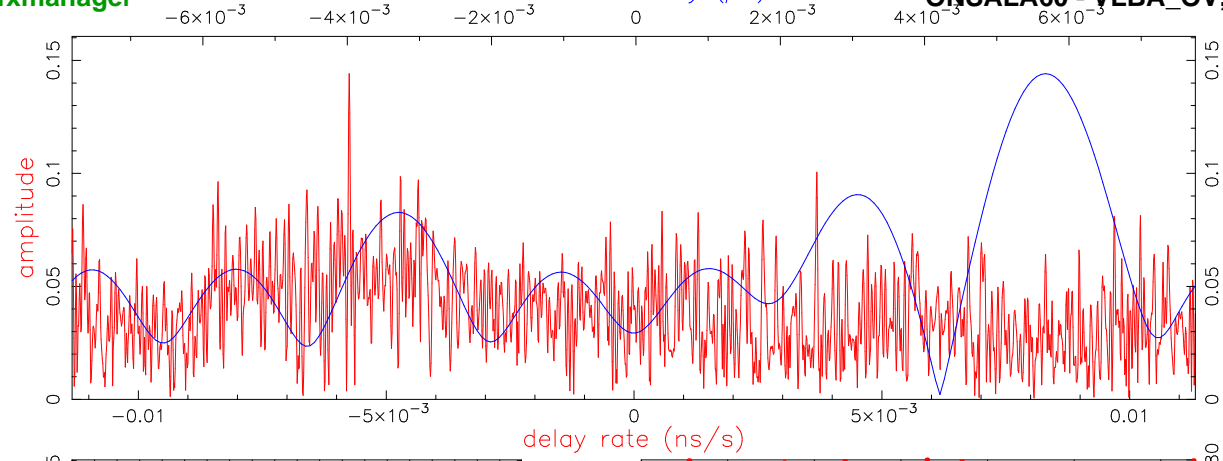
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

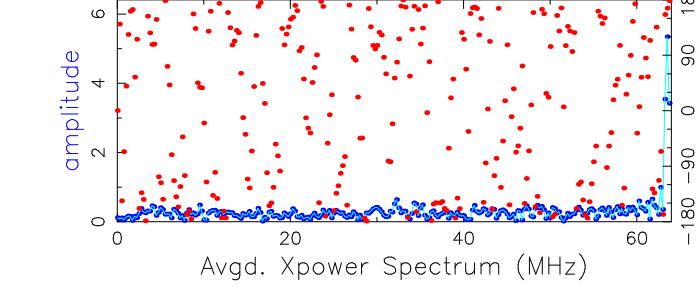
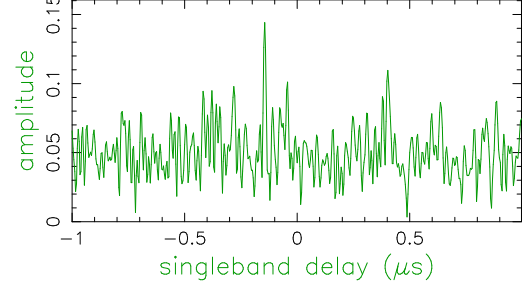
3C84.1IVDPU, No0283, Xo

ONSALA60 - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

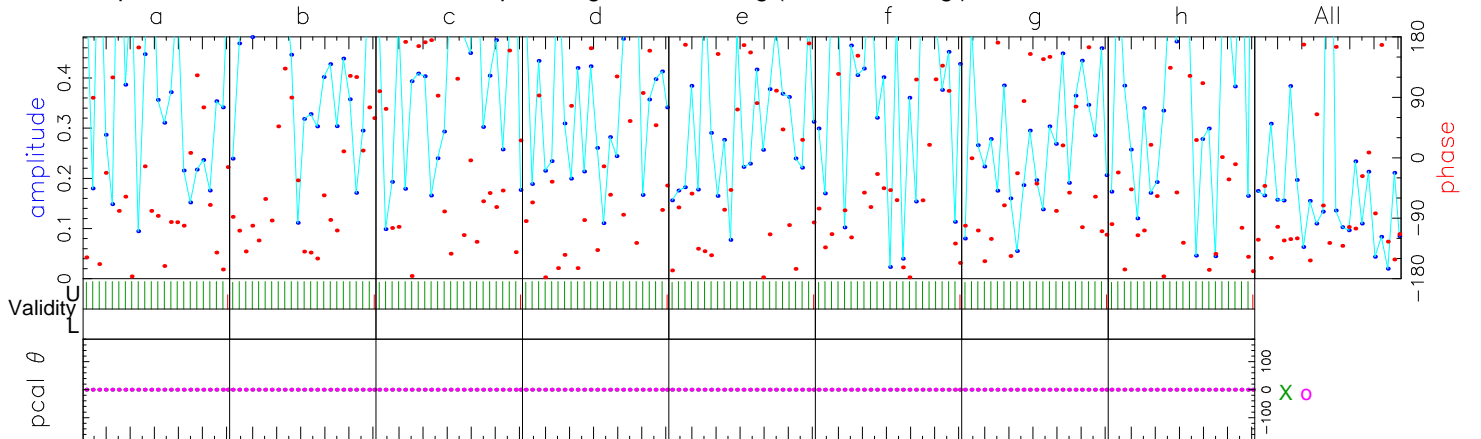


Fringe quality 9
 SNR 7.4
 Int time 356.800
 Amp 0.161
 Phase -121.6
 PFD 3.1e-05
 Delays (us)
 SBD -0.144600
 MBD 0.005679
 Fringe rate (Hz)
 -0.495589
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083002.56
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041048
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-107.8	-106.0	-139.9	-136.8	-168.8	-96.7	-100.9	-120.3	Phase	-121.6
	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.5	Ampl.	0.2
	220.7	436.1	182.7	364.5	319.7	78.9	421.2	155.0	Sbd box	220.0
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.15335125580E+04		Apriori delay (usec)		-1.15333619872E+04		Resid mbdelay (usec)		5.67917E-03	+/- 1.5E-04
Sband delay (usec)	-1.15335065869E+04		Apriori clock (usec)		2.6991201E+01		Resid sbdelay (usec)		-1.44600E-01	+/- 1.2E-03
Phase delay (usec)	-1.15333619911E+04		Apriori clockrate (us/s)		6.2800004E-07		Resid phdelay (usec)		-3.92024E-06	+/- 5.0E-07
Delay rate (us/s)	-9.03347317763E-01		Apriori rate (us/s)		-9.03341564468E-01		Resid rate (us/s)		-5.75330E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		7.92629404453E-05		Resid phase (deg)		-121.6	+/- 15.4

ph/seg (deg) 61.6 36.9 Search (2048X32) 0.141 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 155.9 64.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.7 21.8 Inc. seg. avg. 0.182 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 73.0 38.0 Inc. frq. avg. 0.158 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 308.9 el 25.1 pa 33.8 o: az 68.3 el 73.5 pa -97.8 u,v (fr/asec) 7009.472 7052.351 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xo..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xo.W.317.1IVDPU

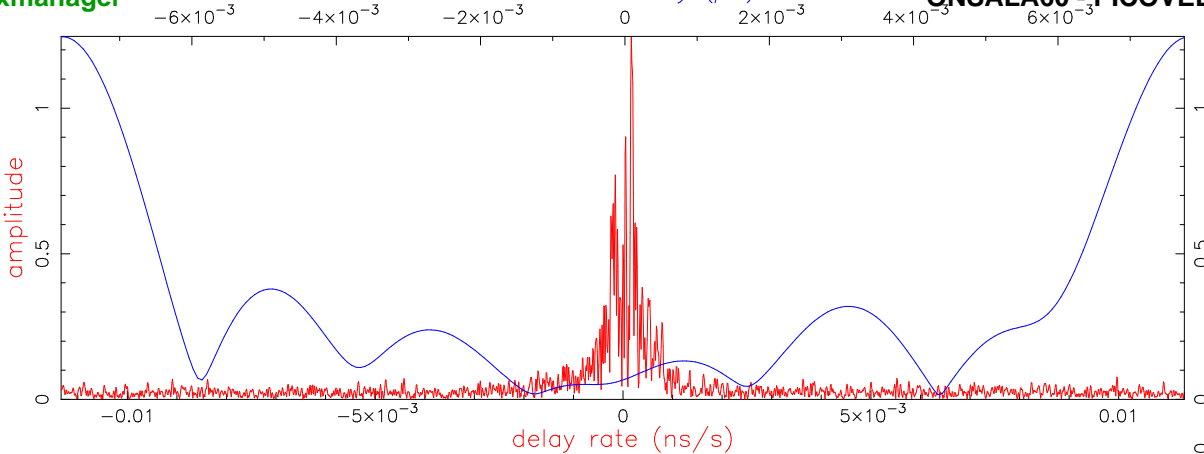
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, XP

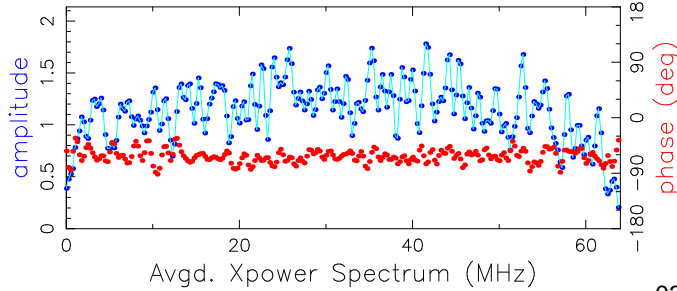
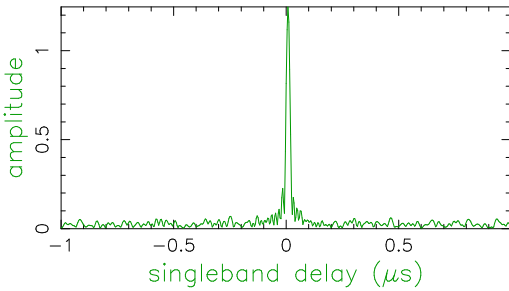
ONSALA60 - PICOVEL, fgroup W, pol LL

multiband delay (μ s)



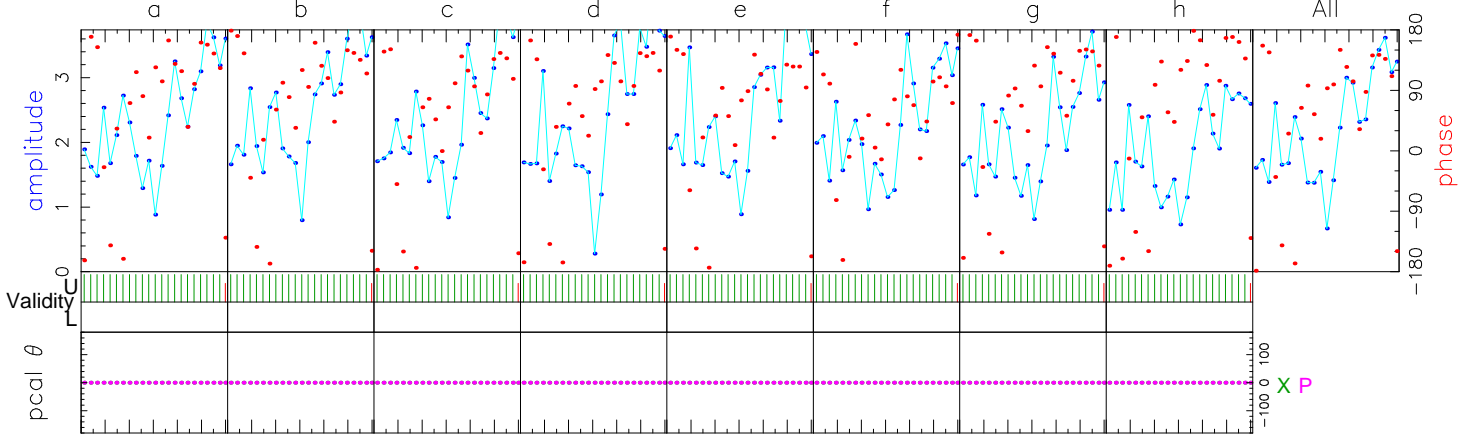
Fringe quality 4

SNR 64.6
 Int time 359.525
 Amp 1.246
 Phase 121.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.008213
 MBD -0.007789
 Fringe rate (Hz)
 0.013900
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041038
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	134.0	124.8	119.4	122.3	109.8	81.9	134.1	147.8	Phase	121.5
	1.3	1.5	1.3	1.4	1.4	1.2	1.2	1.0	Ampl.	1.3
	258.7	259.1	259.0	259.2	258.8	259.2	259.5	259.1	Sbd box	259.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

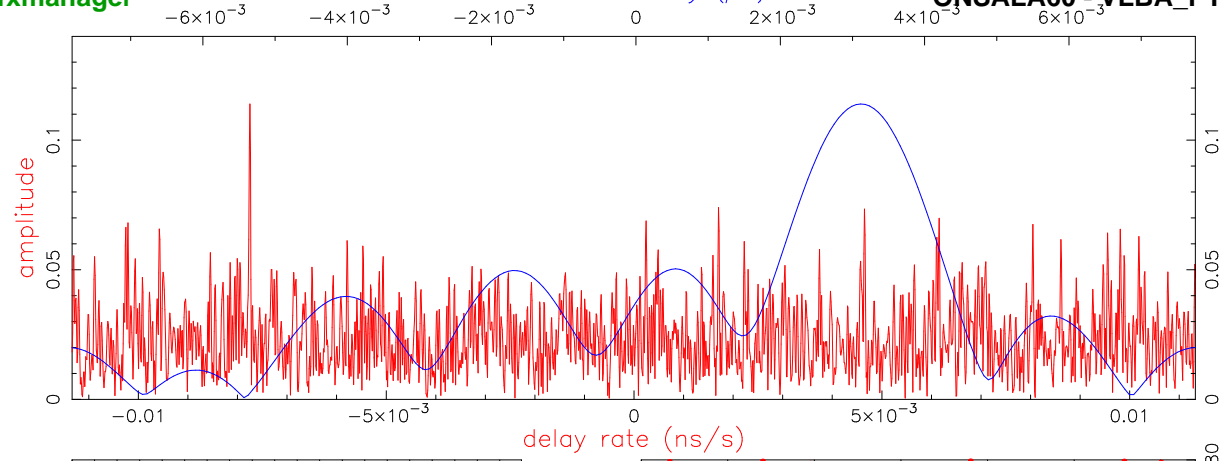
Group delay (usec)(sbd)	1.54467643205E+03	Apriori delay (usec)	1.54466859651E+03	Resid mbdelay (usec)	-7.78946E-03	+/-	1.7E-05
Sband delay (usec)	1.54467680951E+03	Apriori clock (usec)	4.8623077E+01	Resid sbdelay (usec)	8.21300E-03	+/-	1.3E-04
Phase delay (usec)	1.54466860043E+03	Apriori clockrate (us/s)	9.2799997E-07	Resid phdelay (usec)	3.91911E-06	+/-	5.7E-08
Delay rate (us/s)	3.36091269288E-01	Apriori rate (us/s)	3.36091107918E-01	Resid rate (us/s)	1.61370E-07	+/-	2.8E-10
Total phase (deg)	86.8	Apriori accel (us/s/s)	9.99630786960E-06	Resid phase (deg)	121.5	+/-	1.8

ph/seg (deg)	63.8	RMS	Theor.	Amplitude	1.246 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	98.8	63.8	4.3	Search (2048X32)	1.214	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	21.3	98.8	7.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	12.3	21.3	2.5	Inc. seg. avg.	2.190	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
		12.3	4.4	Inc. frq. avg.	1.304	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

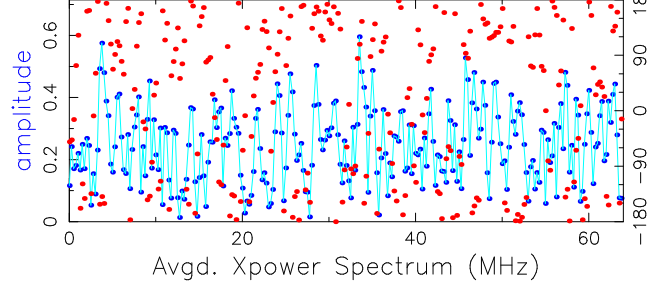
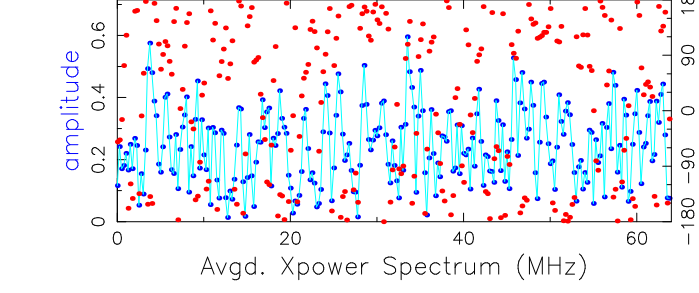
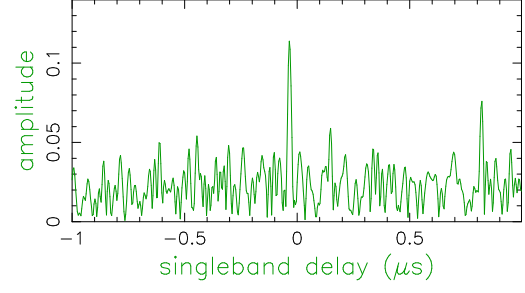
X: az 308.9 el 25.1 pa 33.8 P: az 307.0 el 20.9 pa 59.4 u,v (fr/asec) -2564.088 2302.221 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/XP..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/XP.W.262.1IVDPU

multiband delay (μ s)

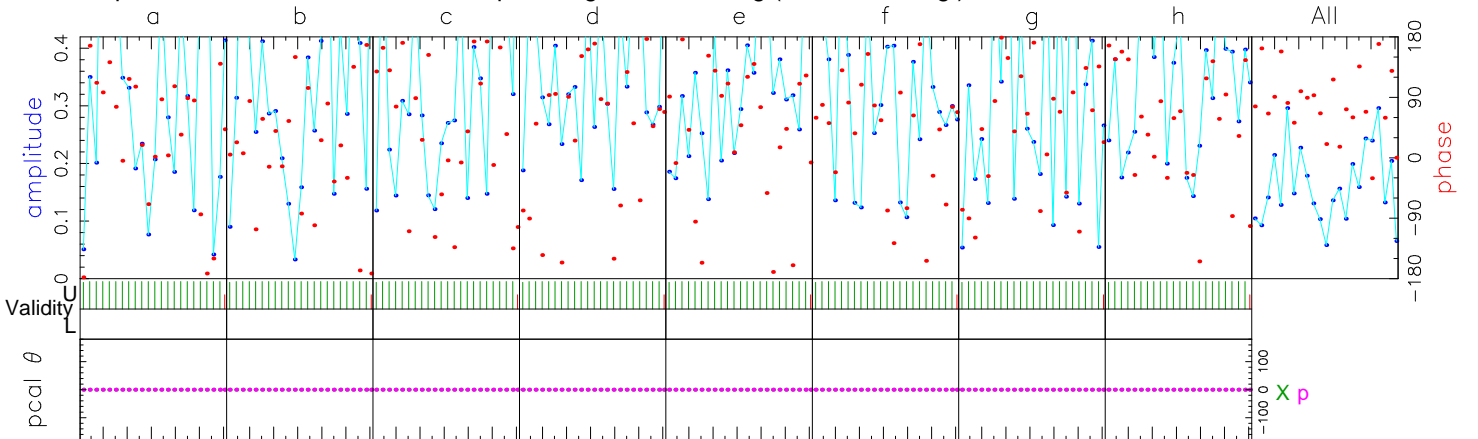


Fringe quality 0
 SNR 5.9
 Int time 356.915
 Amp 0.140
 Phase 86.7
 PFD 5.7e-01
 Delays (us)
 SBD -0.034183
 MBD 0.003140
 Fringe rate (Hz) -0.668177
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083002.56
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041039
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.19749368877E+04	Apriori delay (usec)	-1.19749087774E+04	Resid mbdelay (usec)	3.13967E-03	+/-	1.8E-04
Sband delay (usec)	-1.19749429599E+04	Apriori clock (usec)	4.8269611E+01	Resid sbdelay (usec)	-3.41825E-02	+/-	1.5E-03
Phase delay (usec)	-1.19749087746E+04	Apriori clockrate (us/s)	1.2800004E-07	Resid phdelay (usec)	2.79621E-06	+/-	6.2E-07
Delay rate (us/s)	-7.50906166757E-01	Apriori rate (us/s)	-7.50898409880E-01	Resid rate (us/s)	-7.75688E-06	+/-	3.0E-09
Total phase (deg)		Apriori accel (us/s/s)	8.48225904817E-05	Resid phase (deg)	86.7	+/-	19.4

ph/seg (deg)	49.1	Theor.	46.4	Amplitude	0.140 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	71.9	Search (2048X32)	0.110	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	27.5	Inc. seg. avg.	0.152	Inc. frq. avg.	0.132	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	31.5	Inc. frq. avg.	0.132	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
X:	az 308.9 el 25.1 pa 33.8	p:	az 45.6 el 79.0 pa -129.7	u,v (fr/asec)	5848.645 7721.725	ion window (TEC)	0.00	0.00	0.00	simultaneous interpolator	

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xp..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xp.W.270.1IVDPU

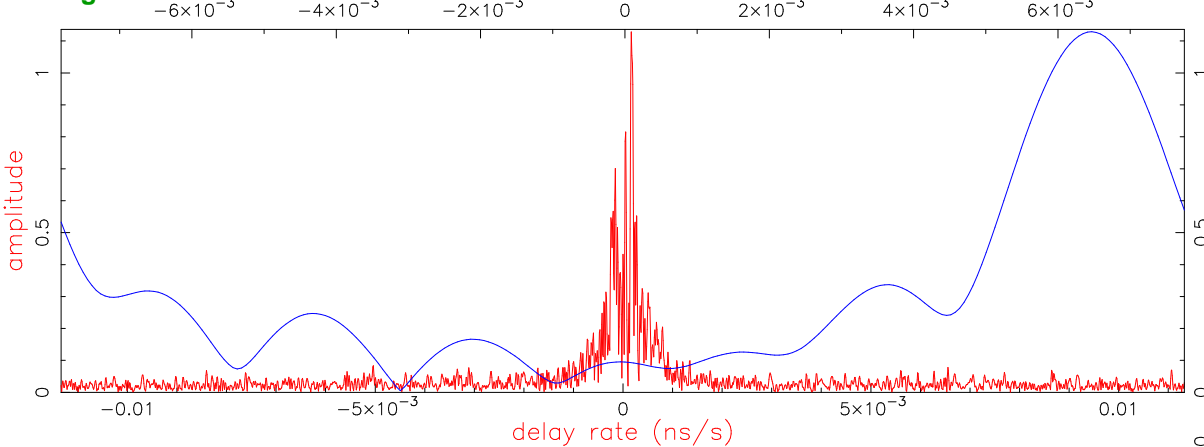
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, XP

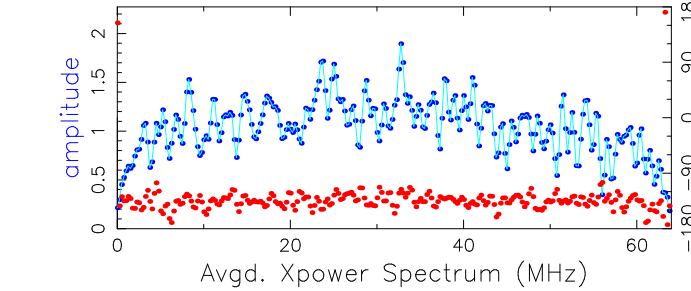
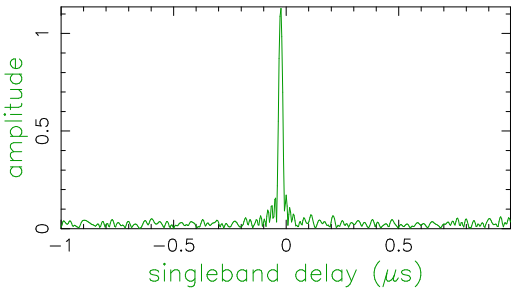
ONSALA60 - PICOVEL, fgroup W, pol RR

multiband delay (μ s)



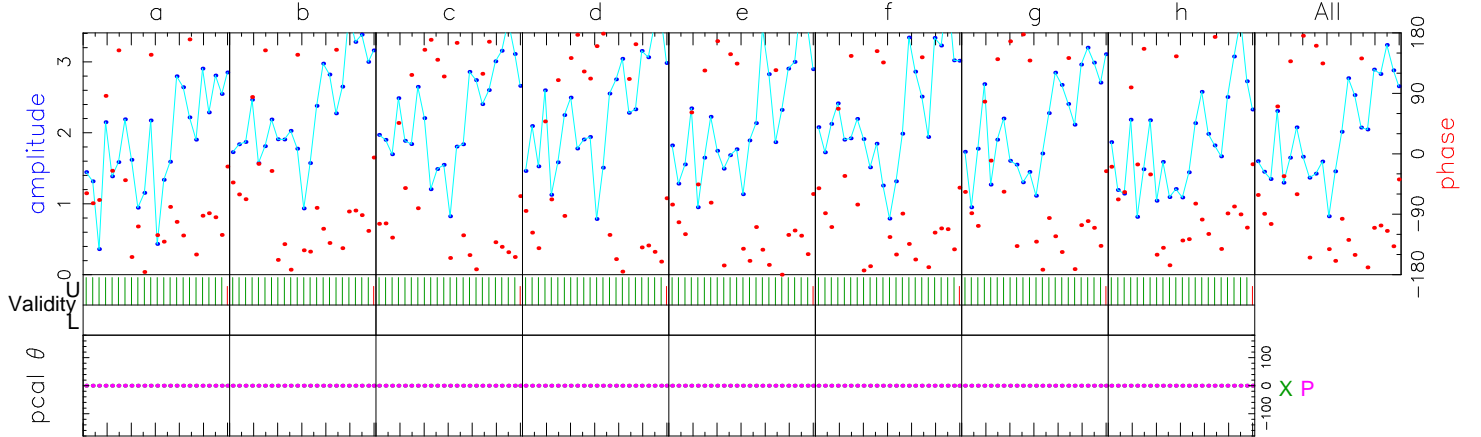
Fringe quality 3

SNR 58.9
 Int time 359.525
 Amp 1.136
 Phase -131.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.024554
 MBD 0.006433
 Fringe rate (Hz)
 0.013938
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041042
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-110.3	-108.7	-155.0	-162.8	-142.6	-130.4	-129.2	-100.9	Phase	-131.3
	1.0	1.2	1.3	1.3	1.3	1.3	1.1	1.1	Ampl.	1.2
	250.7	250.4	250.3	250.8	251.2	250.6	250.8	251.0	Sbd box	250.7
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.54464377902E+03	Apriori delay (usec)	1.54466859651E+03	Resid mbdelay (usec)	6.43251E-03	+/-	1.8E-05
Sband delay (usec)	1.54464404301E+03	Apriori clock (usec)	4.8623077E+01	Resid sbdelay (usec)	-2.45535E-02	+/-	1.5E-04
Phase delay (usec)	1.54466859228E+03	Apriori clockrate (us/s)	9.2799997E-07	Resid phdelay (usec)	-4.23537E-06	+/-	6.3E-08
Delay rate (us/s)	3.36091269724E-01	Apriori rate (us/s)	3.36091107918E-01	Resid rate (us/s)	1.61806E-07	+/-	3.0E-10
Total phase (deg)	194.0	Apriori accel (us/s/s)	9.99630786960E-06	Resid phase (deg)	-131.3	+/-	1.9

ph/seg (deg)	63.3	RMS	Theor.	Amplitude	1.136 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	93.8	63.3	4.7	Search (2048X32)	1.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	24.4	93.8	8.1	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	11.8	24.4	2.8	Inc. seg. avg.	1.984	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
		11.8	4.8	Inc. frq. avg.	1.207	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

X: az 308.9 el 25.1 pa 33.8 P: az 307.0 el 20.9 pa 59.4 u,v (fr/asec) -2564.088 2302.221 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/XP..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/XP.W.283.1IVDPU

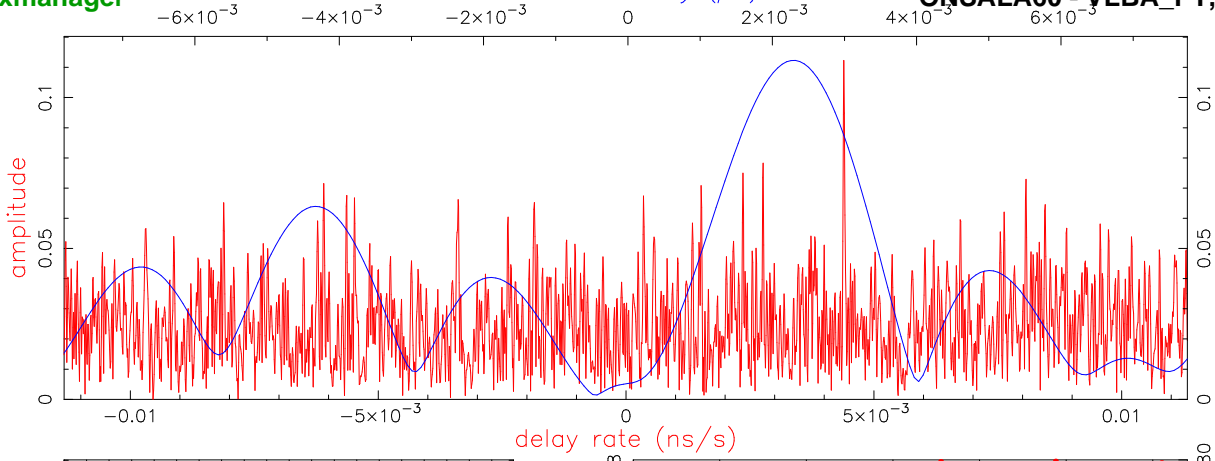
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, Xp

ONSALA60 - VLBA_PT, fgroup W, pol RR

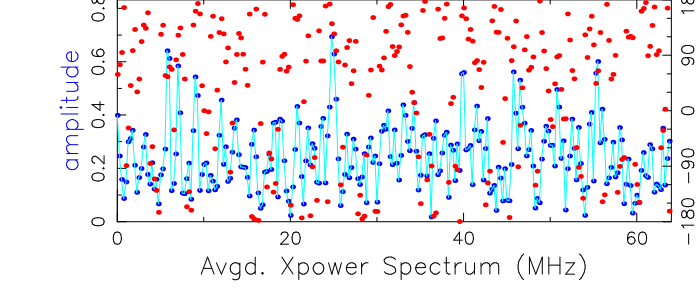
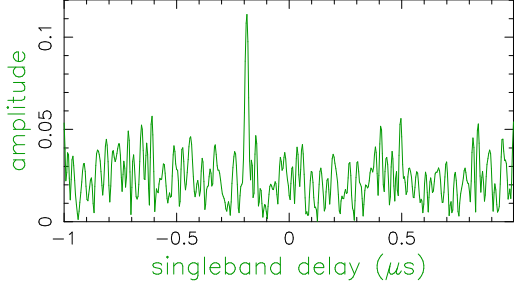
multiband delay (μ s)



Fringe quality 0

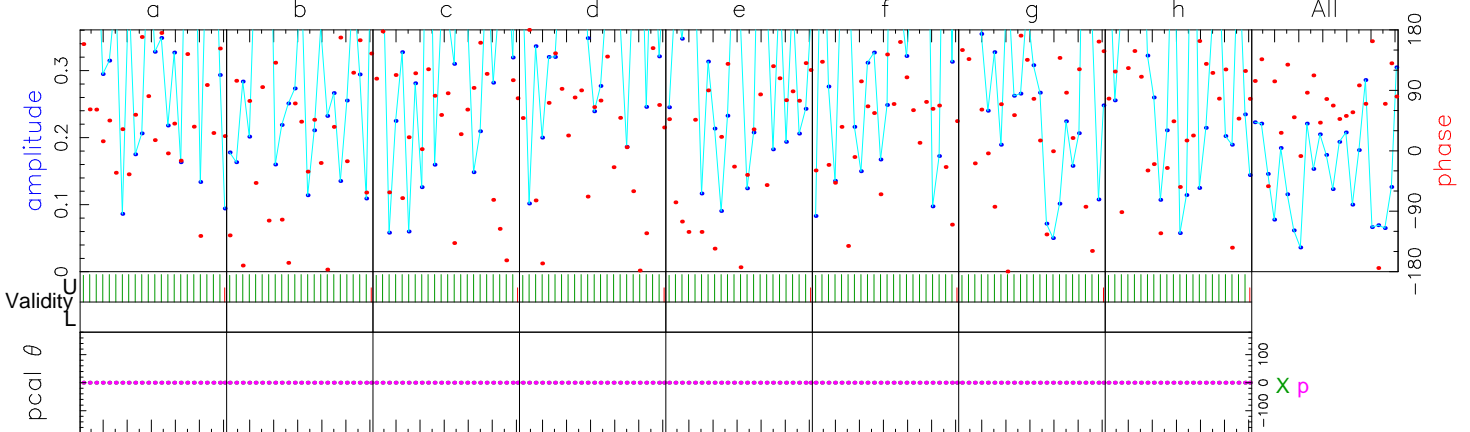
SNR 5.8
 Int time 356.915
 Amp 0.120
 Phase 79.8
 PFD 7.4e-01
 Delays (us)
 SBD -0.188487
 MBD 0.002270
 Fringe rate (Hz)
 0.379449
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083002.56
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041043
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.19750940077E+04									
Sband delay (usec)	-1.19750972641E+04									
Phase delay (usec)	-1.19749087748E+04									
Delay rate (us/s)	-7.50894004859E-01									
Total phase (deg)			50.1							
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)										

ph/seg (deg) 52.4 47.1 Search (2048X32) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.1 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) 27.4 27.8 Inc. seg. avg. 0.120 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.1 48.5 Inc. frq. avg. 0.115 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 308.9 el 25.1 pa 33.8 p: az 45.6 el 79.0 pa -129.7 u,v (fr/asec) 5848.645 7721.725 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xp..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xp.W.289.1IVDPU

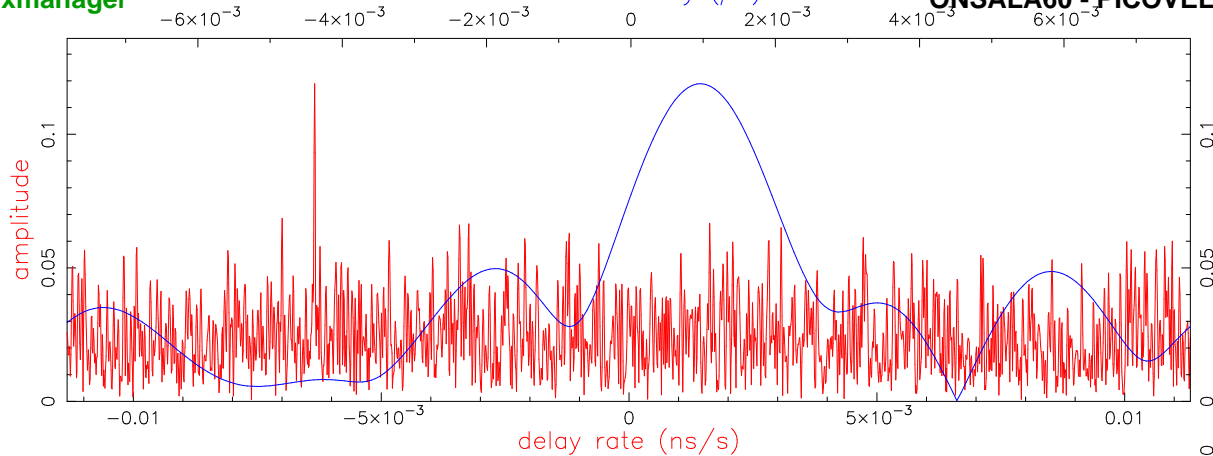
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, XP

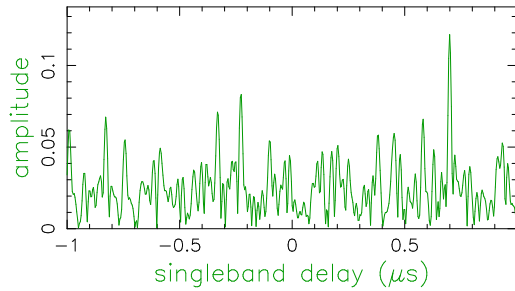
ONSALA60 - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

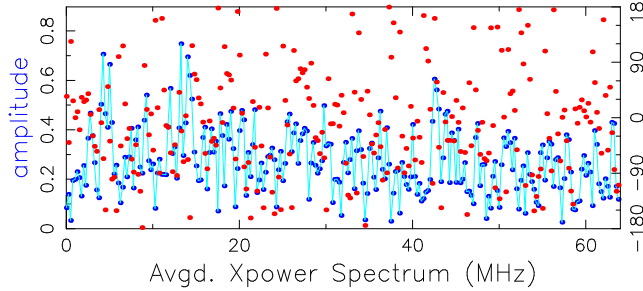


Fringe quality 0

SNR 6.2
 Int time 359.525
 Amp 0.136
 Phase 107.4
 PFD 1.7e-01
 Delays (us)
 SBD 0.699481
 MBD 0.000969
 Fringe rate (Hz)
 -0.547718
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

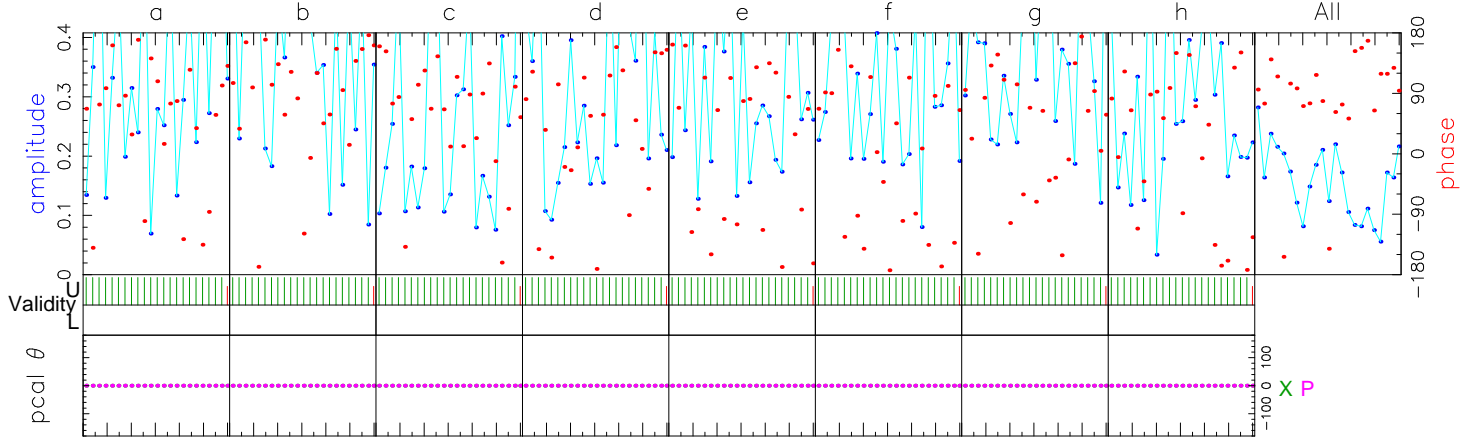


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041045
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	101.2	119.6	91.3	99.8	111.3	171.6	66.5	111.6	Phase	107.4
	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	195.0	437.1	457.4	201.9	496.8	321.5	18.8	132.1	Sbd box	436.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	

Group delay (usec)(sbd)	1.54537269011E+03	Apriori delay (usec)	1.54466859651E+03	Resid mbdelay (usec)	9.68593E-04	+/-	1.8E-04
Sband delay (usec)	1.54536807751E+03	Apriori clock (usec)	4.8623077E+01	Resid sbdelay (usec)	6.99481E-01	+/-	1.4E-03
Phase delay (usec)	1.54466859998E+03	Apriori clockrate (us/s)	9.2799997E-07	Resid phdelay (usec)	3.46191E-06	+/-	6.0E-07
Delay rate (us/s)	3.36084749453E-01	Apriori rate (us/s)	3.36091107918E-01	Resid rate (us/s)	-6.35846E-06	+/-	2.9E-09
Total phase (deg)		Apriori accel (us/s/s)	9.99630786960E-06	Resid phase (deg)	107.4	+/-	18.6

ph/seg (deg)	44.7	Theor.	44.5	Amplitude	0.136 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	58.6		77.7	Search (2048X32)	0.114	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	32.5		26.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	35.5		45.8	Inc. seg. avg.	0.137	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.135	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

X: az 308.9 el 25.1 pa 33.8 P: az 307.0 el 20.9 pa 59.4 u,v (fr/asec) -2564.088 2302.221 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/XP..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/XP.W.302.1IVDPU

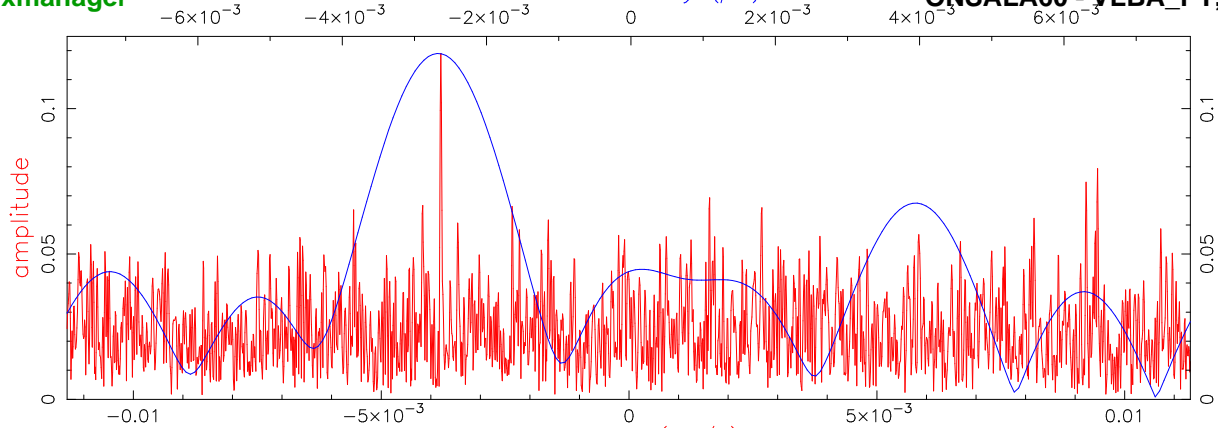
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, Xp

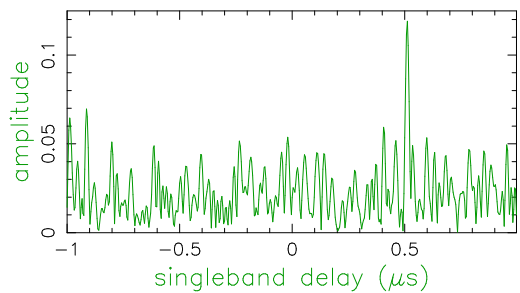
ONSALA60 - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

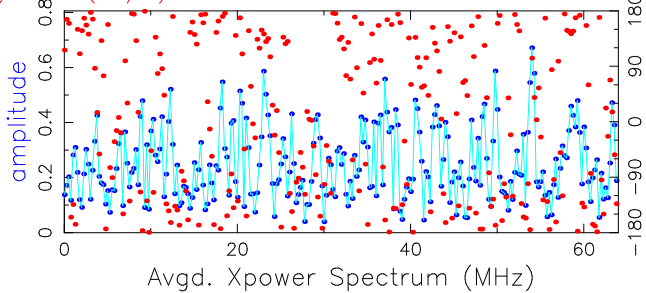


Fringe quality 0

SNR 6.2
Int time 356.915
Amp 0.125
Phase -31.2
PFD 1.8e-01
Delays (us)
SBD 0.511189
MBD -0.002695
Fringe rate (Hz)
-0.327144
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

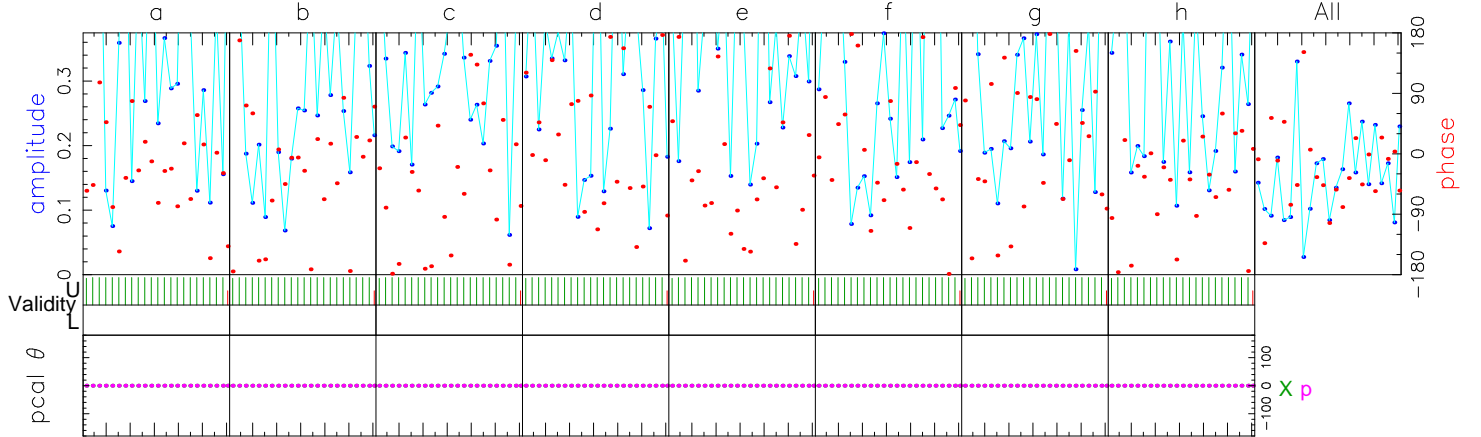


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:285
Start 083002.56
Stop 083559.94
FRT 083300.00
Corr/FF/build
2021:028:084120
2021:029:041046
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-26.7	-17.9	-45.0	-34.5	-64.4	-19.1	32.6	-28.1	Phase	-31.2
	0.2	0.1	0.1	0.1	0.2	0.2	0.0	0.2	Ampl.	0.1
	387.3	4.2	44.7	203.5	389.0	386.6	137.4	386.9	Sbd box	387.9
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0	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)	-1.19743958473E+04		Apriori delay (usec)		-1.19749087774E+04		Resid mbdelay (usec)		-2.69494E-03	+/- 1.8E-04
Sband delay (usec)	-1.19743975884E+04		Apriori clock (usec)		4.8269611E+01		Resid sbdelay (usec)		5.11189E-01	+/- 1.4E-03
Phase delay (usec)	-1.19749087784E+04		Apriori clockrate (us/s)		1.2800004E-07		Resid phdelay (usec)		-1.00614E-06	+/- 6.0E-07
Delay rate (us/s)	-7.50902207702E-01		Apriori rate (us/s)		-7.50898409880E-01		Resid rate (us/s)		-3.79782E-06	+/- 2.9E-09
Total phase (deg)			Apriori accel (us/s/s)		8.48225904817E-05		Resid phase (deg)		-31.2	+/- 18.6

ph/seg (deg) 58.8 44.6 Search (2048X32) 0.119 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 64.2 77.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 30.9 26.3 Inc. seg. avg. 0.123 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 51.5 45.9 Inc. frq. avg. 0.120 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 308.9 el 25.1 pa 33.8 p: az 45.6 el 79.0 pa -129.7 u,v (fr/asec) 5848.645 7721.725 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xp..11VDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xp.W.310.11VDPU

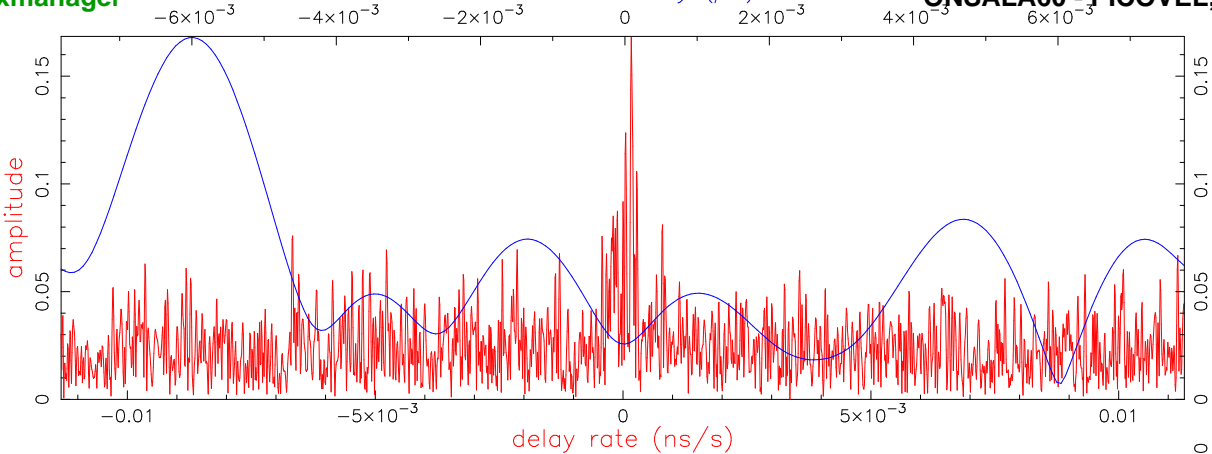
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, XP

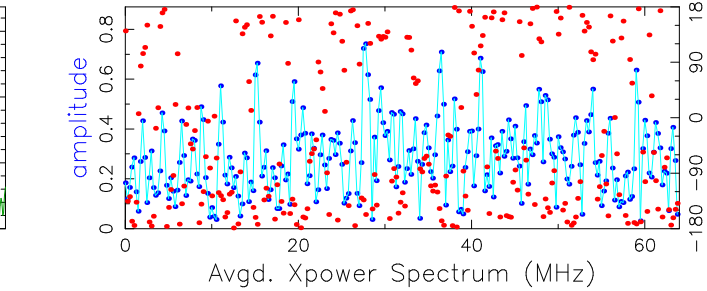
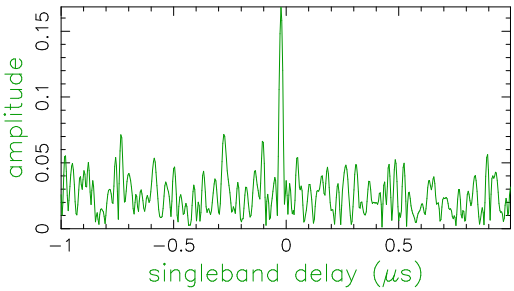
ONSALA60 - PICOVEL, fgroup W, pol RL

multiband delay (μ s)



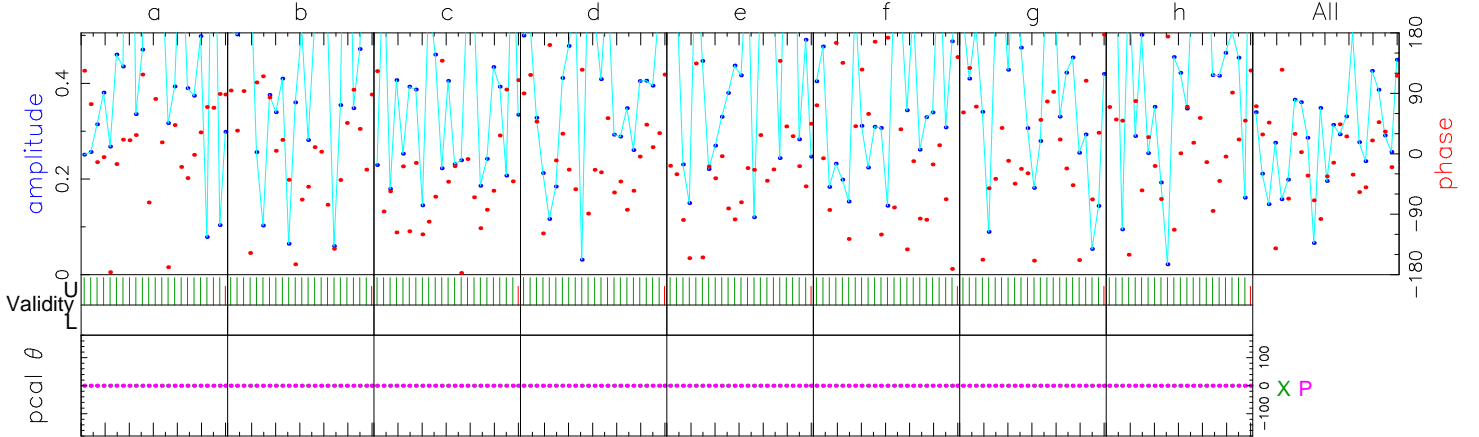
Fringe quality 9

SNR 8.7
 Int time 359.525
 Amp 0.169
 Phase 3.0
 PFD 9.0e-10
 Delays (us)
 SBD -0.022748
 MBD -0.005995
 Fringe rate (Hz)
 0.013928
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041048
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	24.1	28.1	-60.7	-0.9	-18.6	-17.5	27.0	19.7	Phase	3.0
	0.3	0.2	0.2	0.2	0.3	0.0	0.2	0.2	Ampl.	0.2
	250.4	251.0	251.3	252.0	250.6	383.0	226.7	230.8	Sbd box	251.2
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.54464697689E+03		Apriori delay (usec)		1.54466859651E+03		Resid mbdelay (usec)		-5.99462E-03	+/- 1.2E-04
Sband delay (usec)	1.54464584876E+03		Apriori clock (usec)		4.8623077E+01		Resid sbdelay (usec)		-2.27477E-02	+/- 9.9E-04
Phase delay (usec)	1.54466859661E+03		Apriori clockrate (us/s)		9.2799997E-07		Resid phdelay (usec)		9.68516E-08	+/- 4.2E-07
Delay rate (us/s)	3.36091269610E-01		Apriori rate (us/s)		3.36091107918E-01		Resid rate (us/s)		1.61692E-07	+/- 2.0E-09
Total phase (deg)	328.3		Apriori accel (us/s/s)		9.99630786960E-06		Resid phase (deg)		3.0	+/- 13.1

	RMS	Theor.	Amplitude	0.169 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	62.5	31.5	Search (2048X32)	0.162	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	93.4	54.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	33.9	18.5	Inc. seg. avg.	0.252	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	41.9	32.4	Inc. frq. avg.	0.183	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

X: az 308.9 el 25.1 pa 33.8 P: az 307.0 el 20.9 pa 59.4 u,v (fr/asec) -2564.088 2302.221 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/XP..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/XP.W.318.1IVDPU

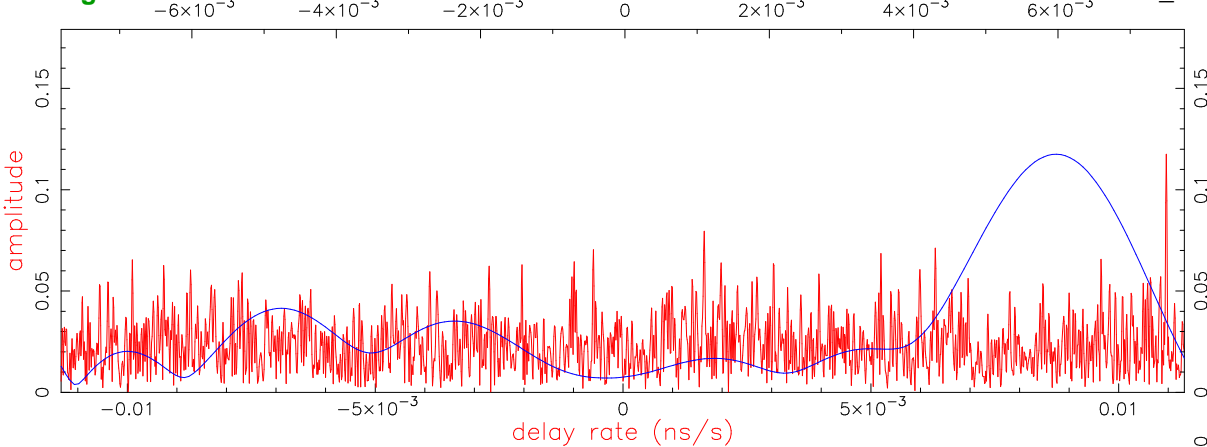
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, Xp

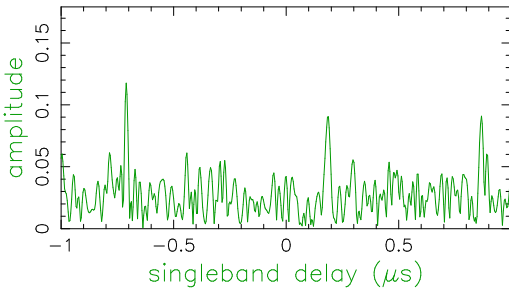
ONSALA60 - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

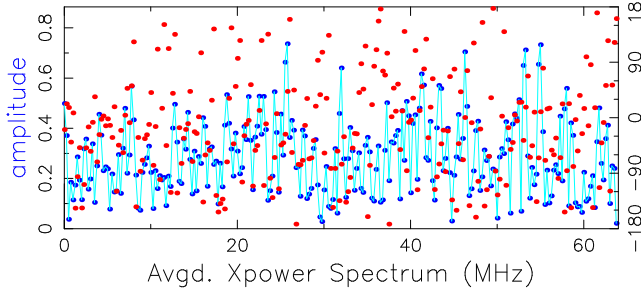


Fringe quality 0

SNR 6.1
 Int time 356.915
 Amp 0.179
 Phase 0.8
 PFD 2.7e-01
 Delays (us)
 SBD -0.710459
 MBD 0.005998
 Fringe rate (Hz)
 0.945245
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

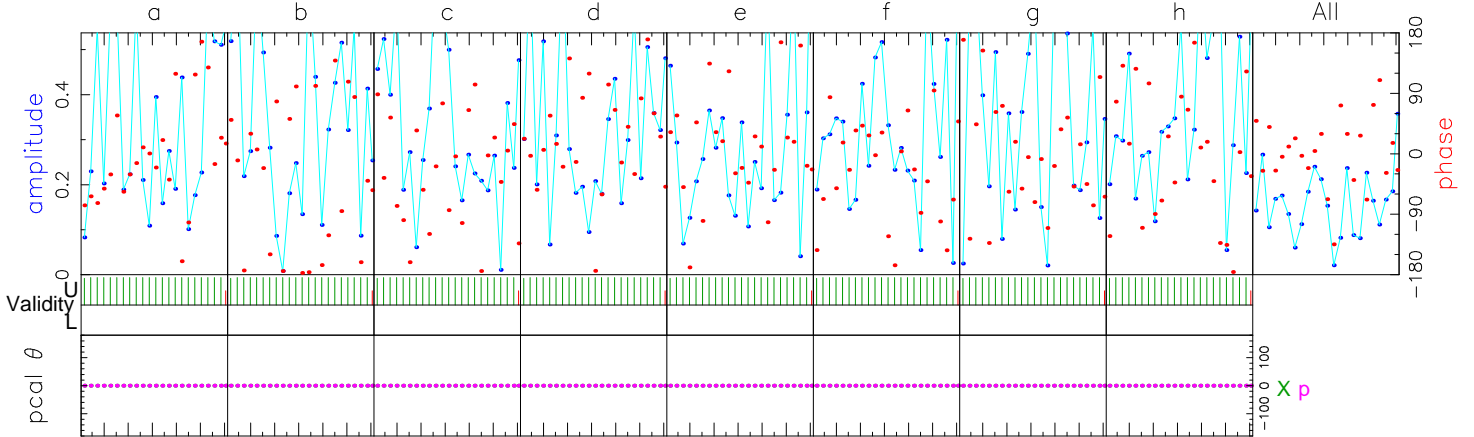


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083002.56
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041050
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0		
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)	-1.19756215291E+04	Apriori delay (usec)	-1.19749087774E+04	Resid mbdelay (usec)	5.99827E-03	+/-	1.8E-04
Sband delay (usec)	-1.19756192366E+04	Apriori clock (usec)	4.8269611E+01	Resid sbdelay (usec)	-7.10459E-01	+/-	1.4E-03
Phase delay (usec)	-1.19749087773E+04	Apriori clockrate (us/s)	1.2800004E-07	Resid phdelay (usec)	2.71376E-08	+/-	6.1E-07
Delay rate (us/s)	-7.50887436526E-01	Apriori rate (us/s)	-7.50898409880E-01	Resid rate (us/s)	1.09734E-05	+/-	2.9E-09
Total phase (deg)	-28.8	Apriori accel (us/s/s)	8.48225904817E-05	Resid phase (deg)	0.8	+/-	18.9

ph/seg (deg)	52.3	Theor.	45.2	Amplitude	0.179 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	67.1		78.9	Search (2048X32)	0.115	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	23.8		26.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	31.1		46.5	Inc. seg. avg.	0.181	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.169	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

X: az 308.9 el 25.1 pa 33.8 p: az 45.6 el 79.0 pa -129.7 u,v (fr/asec) 5848.645 7721.725 simultaneous interpolator

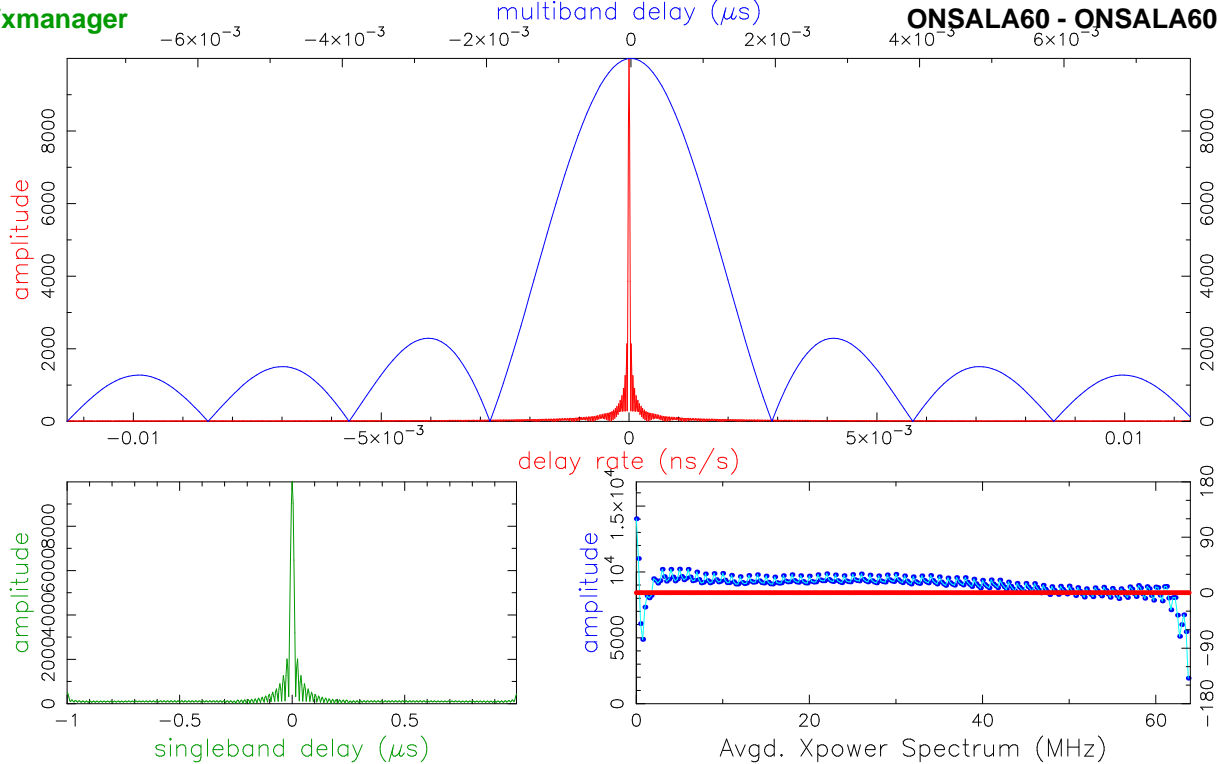
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xp..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/Xp.W.321.1IVDPU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, XX

ONŞALA60 - ONSALA60, fgroup W, pol LL

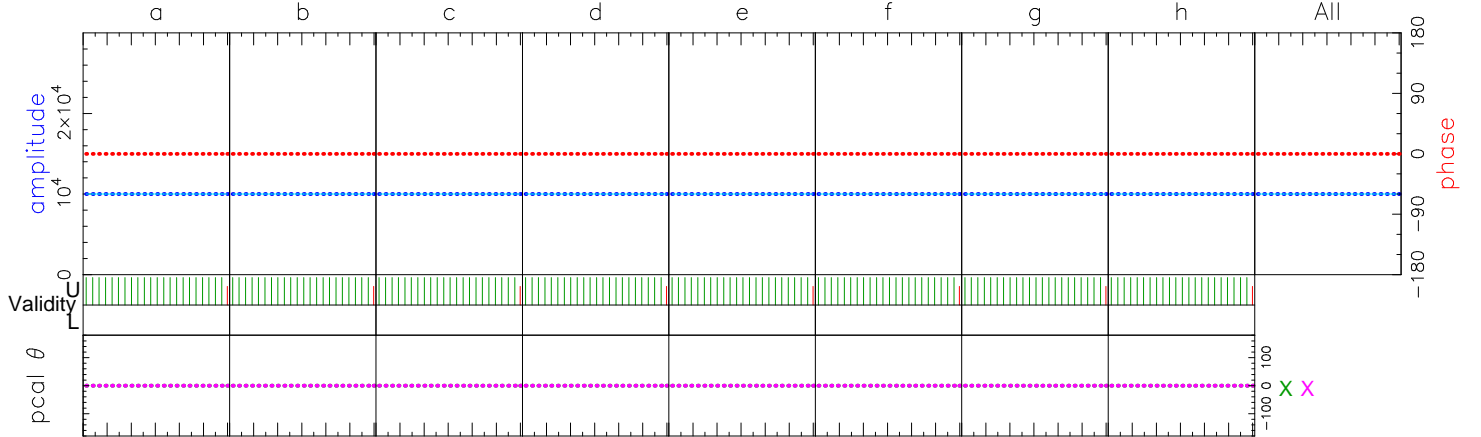


Fringe quality 9

SNR 518784.5
 Int time 359.897
 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. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041049
 2020:247:085004
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

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



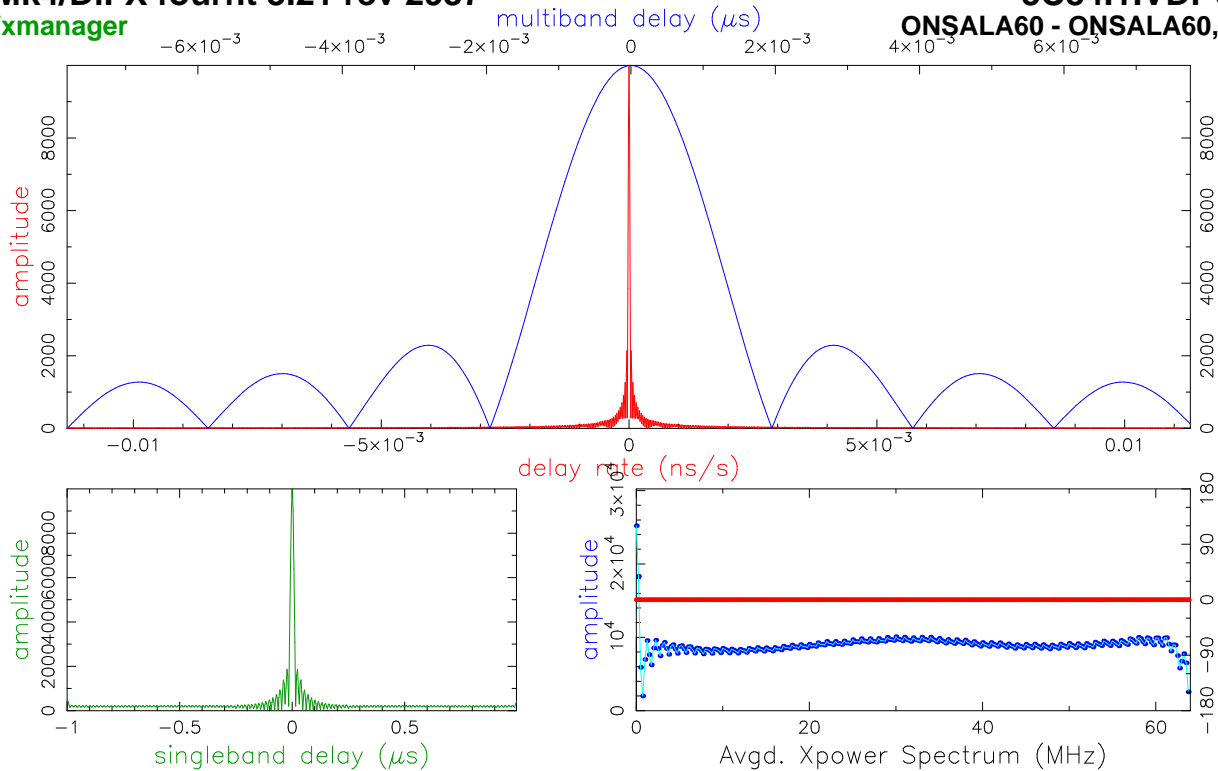
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	10000.0	10000.0
X	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
X	1000	1000	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	+/-	2.1E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.7E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	7.1E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.4E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.999 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	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

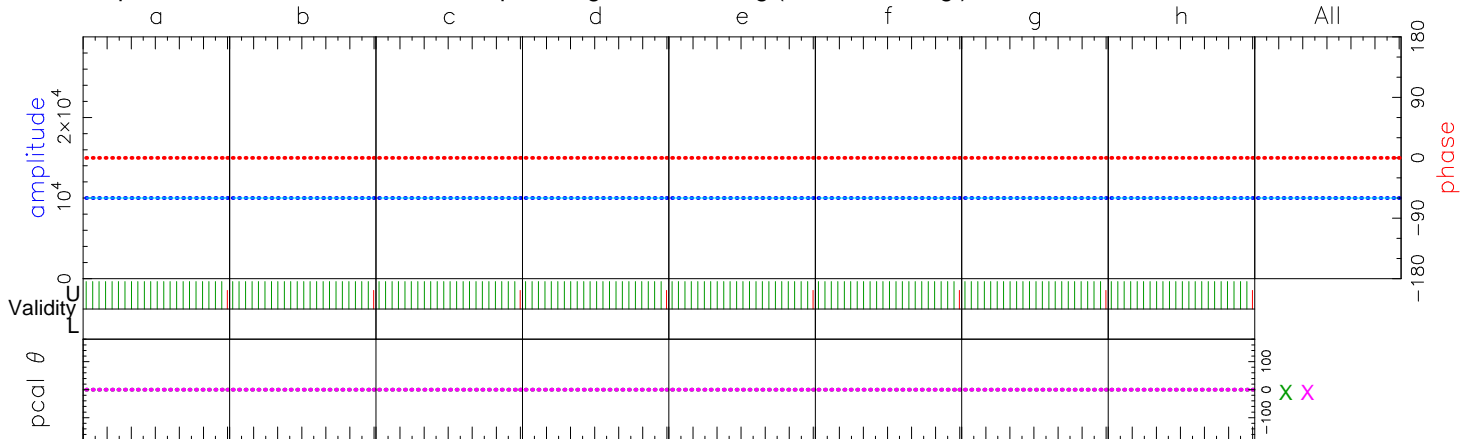
X: az 308.9 el 25.1 pa 33.8 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/XX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/XX.W.320.1IVDPU



Fringe quality 9
SNR 518784.5
Int time 359.897
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. c202b
Exper # 16383
Yr:day 2020:285
Start 083000.00
Stop 083559.94
FRT 083300.00
Corr/FF/build 2021:028:084120
2021:029:041052
2020:247:085004
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	2.1E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.7E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	7.1E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	3.4E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

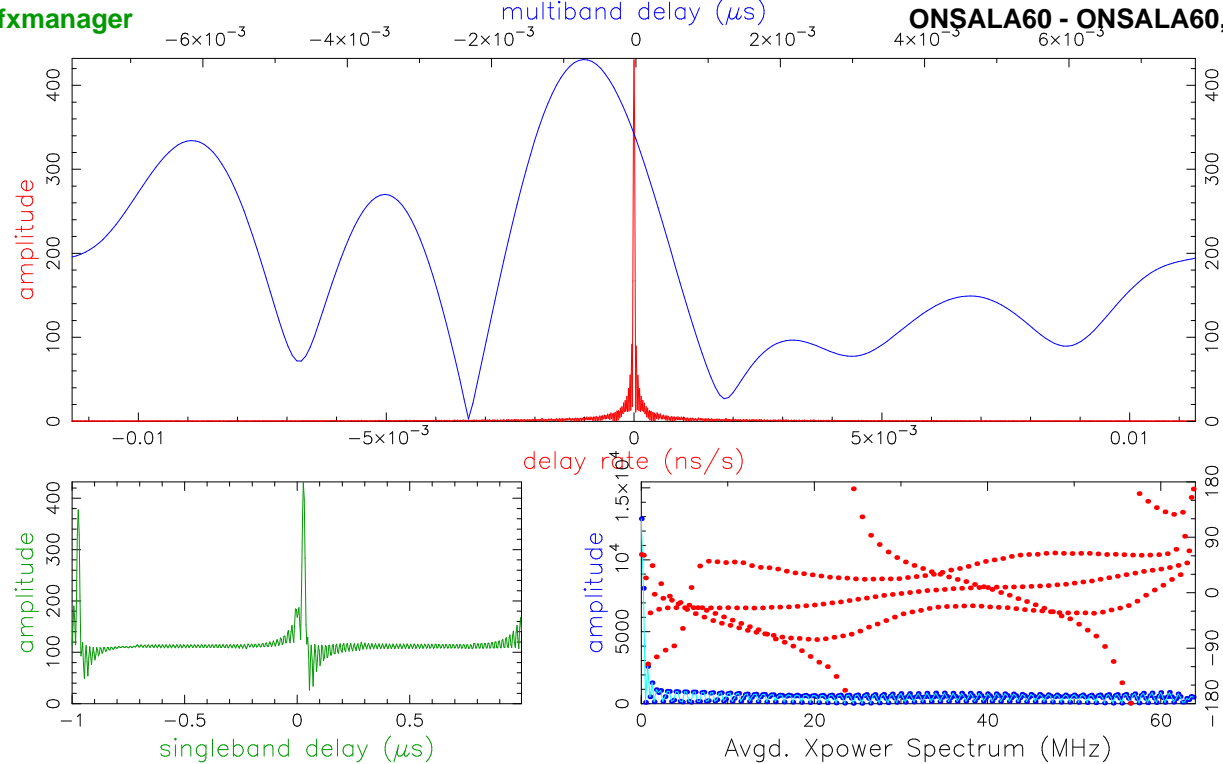
ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	9999.999 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	9999.999	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	9999.999	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	0.0	0.0	Inc. frq. avg.	9999.999	Inc. frq. avg.	9999.999	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
								Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00		

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

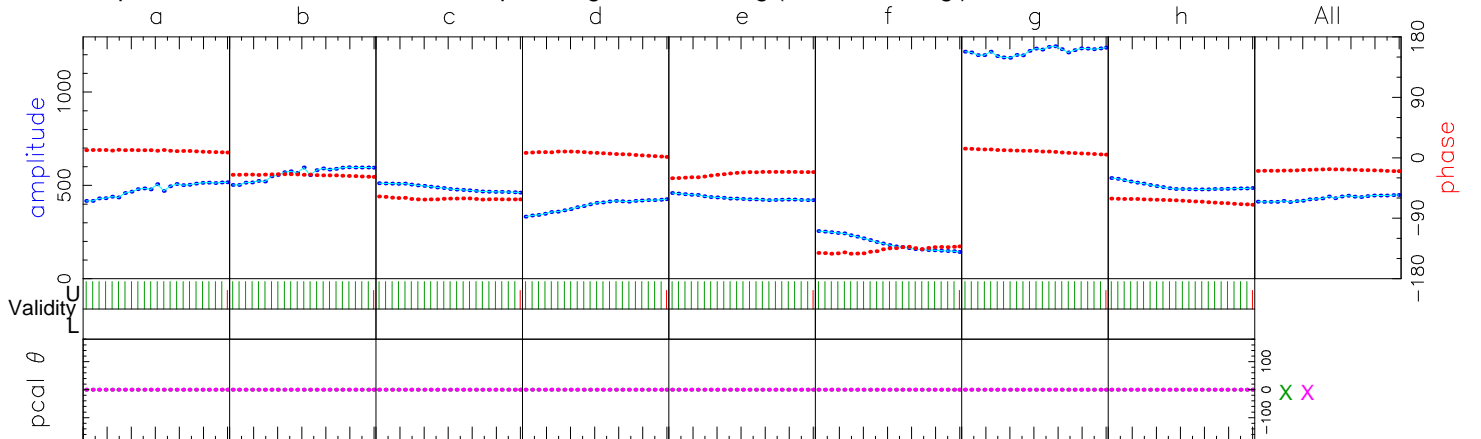
3C84.1IVDPU, No0283, XX

ONŞALA60 - ONŞALA60, fgroup W, pol LR



Fringe quality 5
 SNR 22413.1
 Int time 359.897
 Amp 432.031
 Phase -18.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.028023
 MBD -0.000681
 Fringe rate (Hz) 0.000075
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041055
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	10.4	-25.8	-60.9	6.2	-24.2	-138.0	9.5	-64.4	Phase	-18.5
	477.9	563.4	485.2	390.0	432.2	192.1	1216.0	494.4	Ampl.	531.4
	266.0	263.9	265.2	265.7	263.6	8.9	263.4	265.4	Sbd box	264.2
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	

Group delay (usec)(sbd) 3.05688750000E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -6.81125E-04 +/- 4.8E-08
 Sband delay (usec) 2.80232500000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 2.80233E-02 +/- 3.8E-07
 Phase delay (usec) -5.95949154322E-07 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -5.95949E-07 +/- 1.6E-10
 Delay rate (us/s) 8.71525872089E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 8.71526E-10 +/- 7.9E-13
 Total phase (deg) -18.5 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -18.5 +/- 0.0

RMS Theor. Amplitude 432.031 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.9 0.0 Search (2048X32) 419.439 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 3.2 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 58.4 0.0 Inc. seg. avg. 430.510 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 68.5 0.0 Inc. frq. avg. 531.409 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 308.9 el 25.1 pa 33.8 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/XX.1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/XX.W.339.1IVDPU

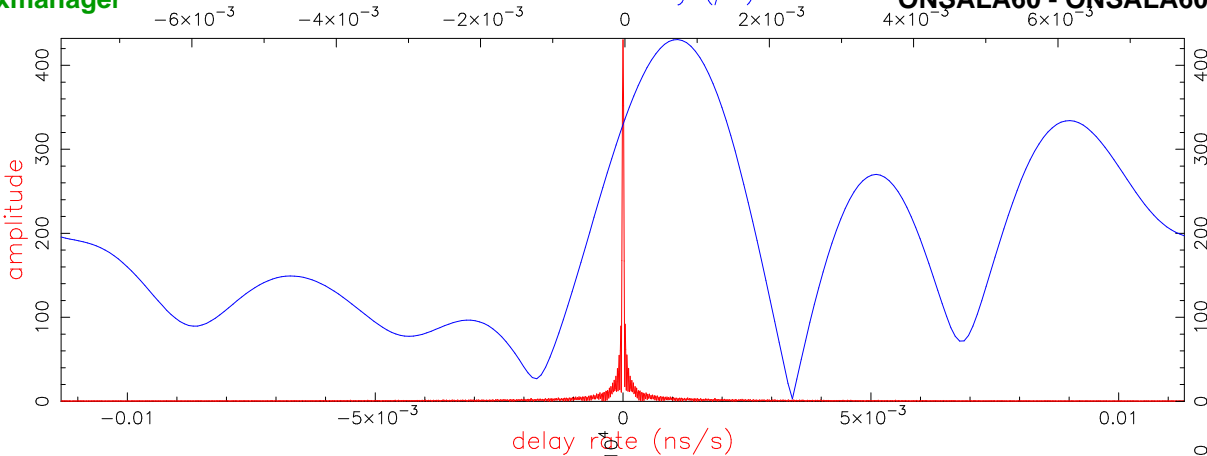
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, XX

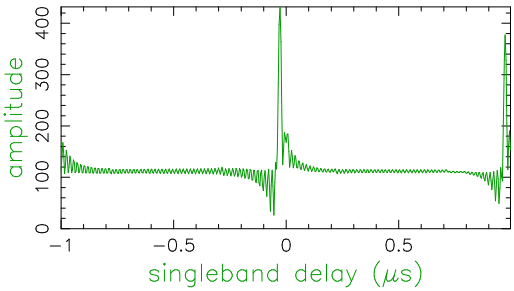
ONSALA60 - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

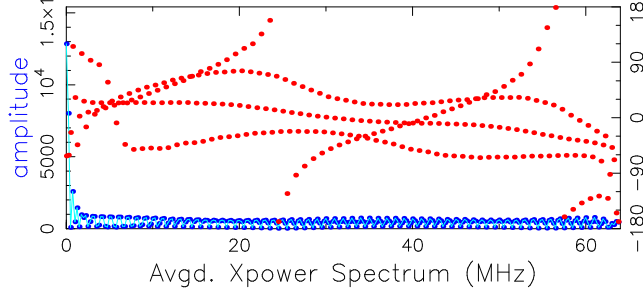


Fringe quality 5

SNR 22413.1
 Int time 359.897
 Amp 432.031
 Phase 18.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.028023
 MBD 0.000681
 Fringe rate (Hz)
 -0.000075
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

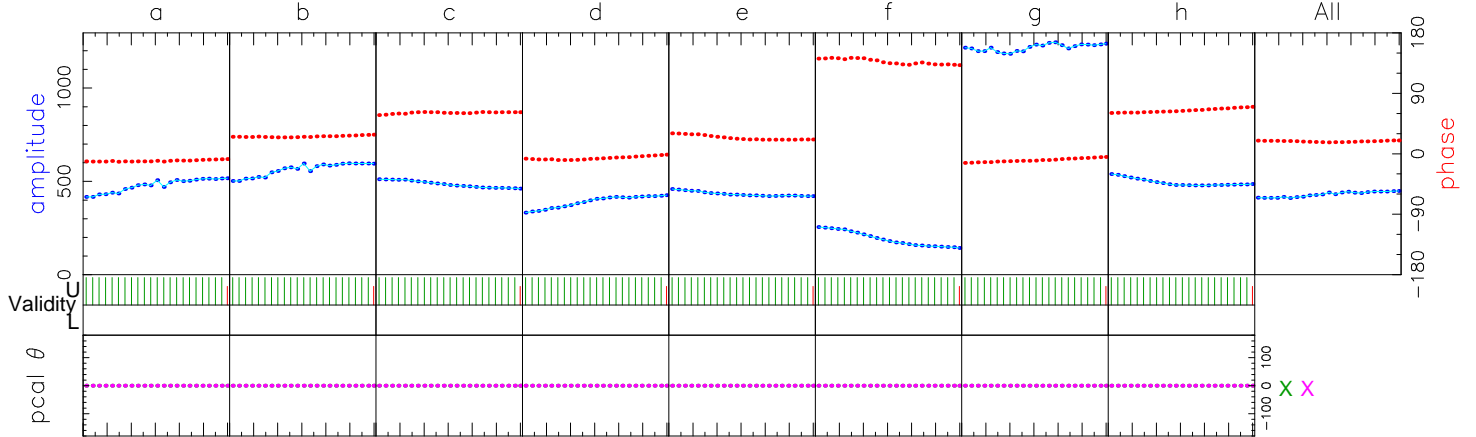


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041058
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-10.4	25.8	60.9	-6.2	24.2	138.0	-9.5	64.4		18.5
	477.9	563.4	485.2	390.0	432.2	192.1	1216.0	494.4	Ampl.	531.4
	248.0	250.1	248.8	248.3	250.4	505.1	250.6	248.6	Sbd box	249.8
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	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	

Group delay (usec)(sbd)	-3.05688750000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	6.81125E-04	+/-	4.8E-08
Sband delay (usec)	-2.80232500000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-2.80233E-02	+/-	3.8E-07
Phase delay (usec)	5.95949154322E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.95949E-07	+/-	1.6E-10
Delay rate (us/s)	-8.71525872089E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-8.71526E-10	+/-	7.9E-13
Total phase (deg)	18.5	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	18.5	+/-	0.0

ph/seg (deg)	0.9	Theor.	0.0	Search (2048X32)	419.439	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	3.2	0.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	58.4	0.0	Inc. seg. avg.	430.510	Sample rate(MISamp/s): 128	Data rate(Mb/s): 2048	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	68.5	0.0	Inc. frq. avg.	531.409			t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 308.9 el 25.1 pa 33.8 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

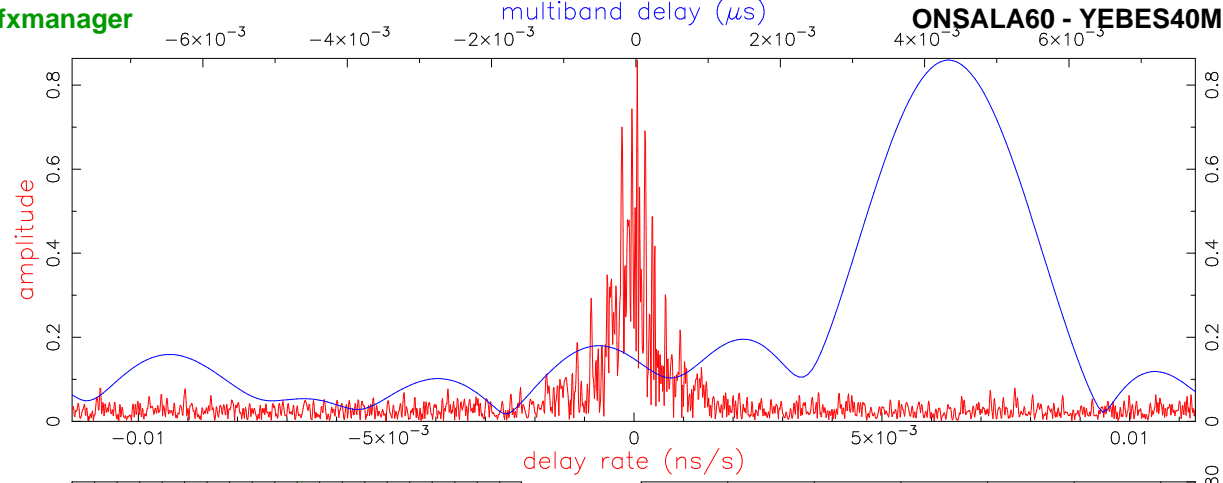
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/XX.1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/XX.W.349.1IVDPU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, XY

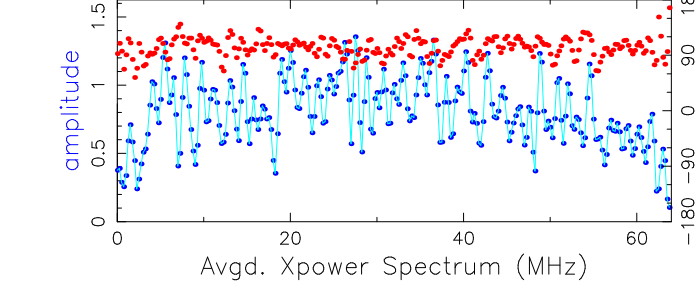
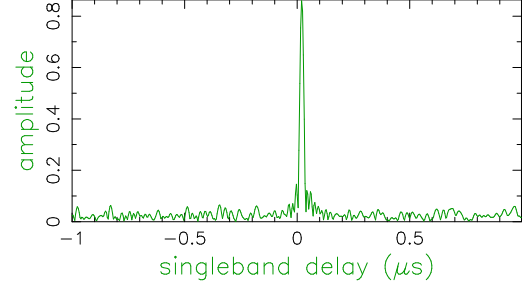
ONŞALA60 - YEBES40M, fgroup W, pol LL



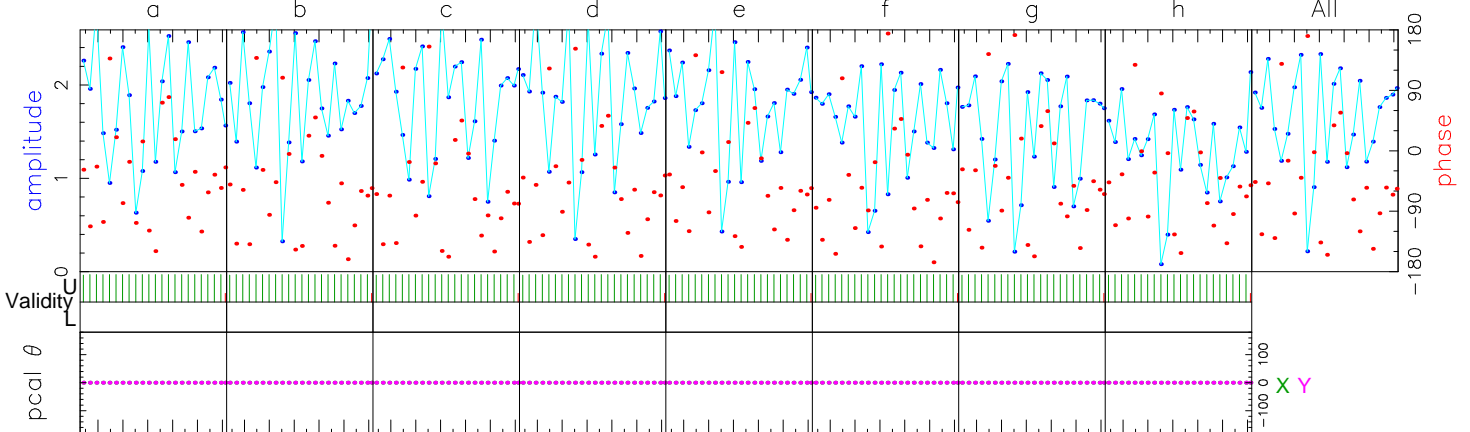
Fringe quality 6

SNR 43.7
 Int time 341.791
 Amp 0.864
 Phase -71.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.020438
 MBD 0.004351
 Fringe rate (Hz) 0.006000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083016.90
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041051
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-52.3	-74.1	-88.9	-72.2	-65.9	-88.4	-65.1	-63.5	Phase	-71.5
	0.9	0.9	1.0	1.0	1.0	0.8	0.8	0.6	Ampl.	0.9
	261.9	262.2	262.4	262.4	262.1	262.0	262.6	261.8	Sbd box	262.2
U/L	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0	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	

Group delay (usec)(sbd)	8.83066442444E+02	Apriori delay (usec)	8.83046466877E+02	Resid mbdelay (usec)	4.35057E-03	+/-	2.5E-05
Sband delay (usec)	8.83066905377E+02	Apriori clock (usec)	3.4684887E+01	Resid sbdelay (usec)	2.04385E-02	+/-	2.0E-04
Phase delay (usec)	8.83046464570E+02	Apriori clockrate (us/s)	4.0800002E-07	Resid phdelay (usec)	-2.30692E-06	+/-	8.5E-08
Delay rate (us/s)	2.91789597493E-01	Apriori rate (us/s)	2.91789527838E-01	Resid rate (us/s)	6.96548E-08	+/-	4.3E-10
Total phase (deg)	164.9	Apriori accel (us/s/s)	9.93119812043E-06	Resid phase (deg)	-71.5	+/-	2.6

ph/seg (deg)	RMS 70.0	Theor. 6.3	Amplitude Search (2048X32)	0.864 +/- 0.020	0.837	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	107.9	11.0	Interp.	0.000	0.837	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	13.5	3.7	Inc. seg. avg.	1.631	0.837	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	13.2	6.5	Inc. frq. avg.	0.876	0.837	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 308.9 el 25.1 pa 33.8 Y: az 306.0 el 22.7 pa 54.9 u,v (fr/asec) -2224.361 1984.900 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/XY..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/XY.W.322.1IVDPU

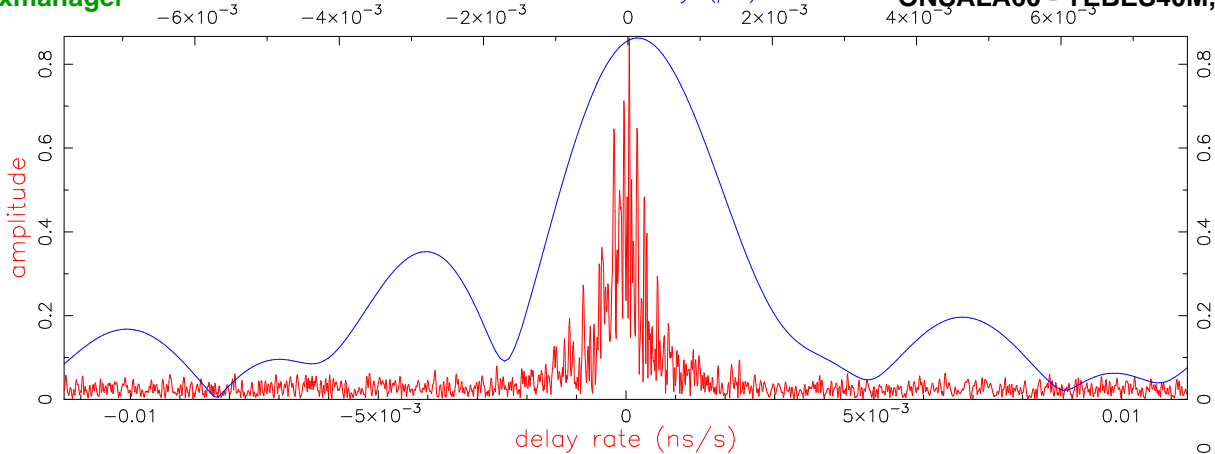
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, XY

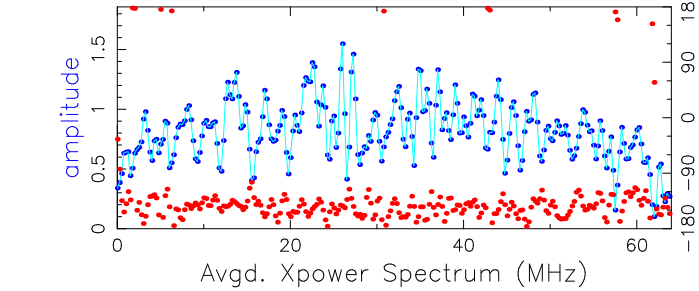
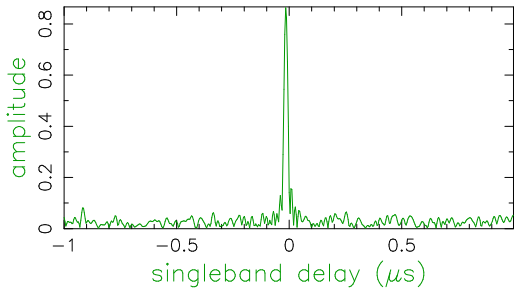
ONŞALA60 - YEŞES40M, fgroup W, pol RR

multiband delay (μ s)



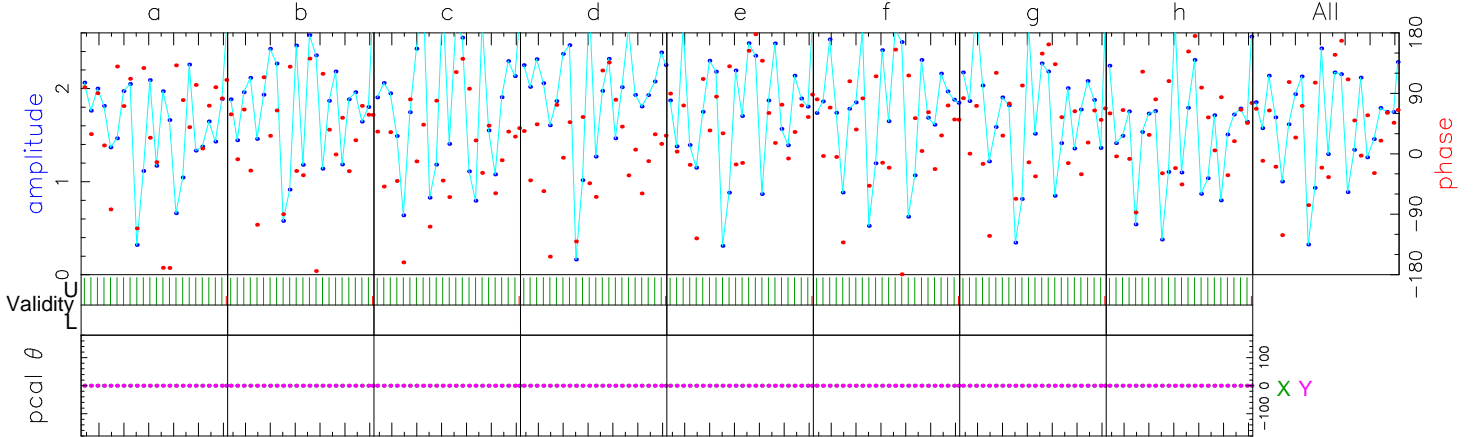
Fringe quality 5

SNR 43.8
 Int time 341.791
 Amp 0.867
 Phase 42.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.014710
 MBD 0.000160
 Fringe rate (Hz)
 0.005959
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083016.90
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041054
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	79.4	39.9	17.2	11.7	59.1	50.8	44.9	44.4	Phase	42.6
	0.9	0.9	1.0	1.1	1.0	0.9	0.9	0.8	Ampl.	0.9
	253.5	252.4	253.1	252.9	253.4	252.9	253.1	253.3	Sbd box	253.2
U/L	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0	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	

Group delay (usec)(sbd)	8.83031001819E+02	Apriori delay (usec)	8.83046466877E+02	Resid mbdelay (usec)	1.59943E-04	+/-	2.5E-05
Sband delay (usec)	8.83031756627E+02	Apriori clock (usec)	3.4684887E+01	Resid sbdelay (usec)	-1.47103E-02	+/-	2.0E-04
Phase delay (usec)	8.83046468251E+02	Apriori clockrate (us/s)	4.0800002E-07	Resid phdelay (usec)	1.37378E-06	+/-	8.4E-08
Delay rate (us/s)	2.91789597014E-01	Apriori rate (us/s)	2.91789527838E-01	Resid rate (us/s)	6.91765E-08	+/-	4.3E-10
Total phase (deg)	279.0	Apriori accel (us/s/s)	9.93119812043E-06	Resid phase (deg)	42.6	+/-	2.6

ph/seg (deg)	69.5	Theor.	6.3	Search (2048X32)	0.843	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	105.7		10.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	23.5		3.7	Inc. seg. avg.	1.619	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	11.2		6.5	Inc. frq. avg.	0.920	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
						Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

X: az 308.9 el 25.1 pa 33.8 Y: az 306.0 el 22.7 pa 54.9 u,v (fr/asec) -2224.361 1984.900 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/XY..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/XY.W.333.1IVDPU

Mk4/DiFX fourfit 3.21 rev 2937

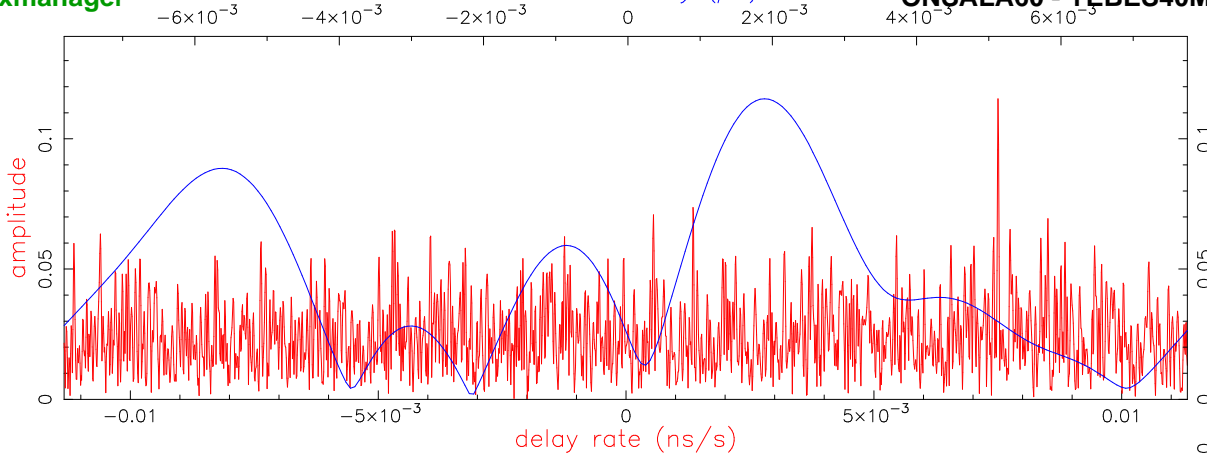
fxmanager

3C84.1IVDPU, No0283, XY

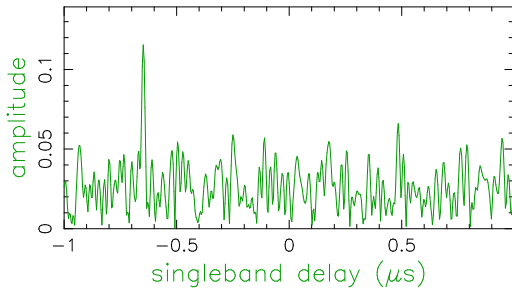
ONŞALA60 - YEBES40M, fgroup W, pol LR

multiband delay (μ s)

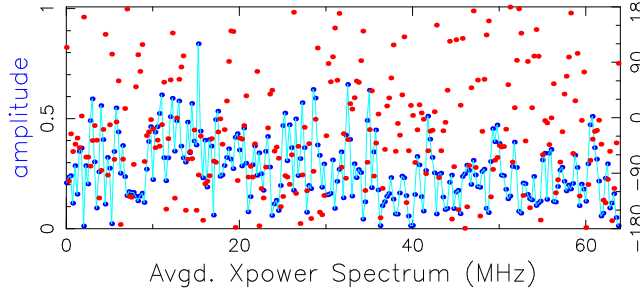
Fringe quality 0



SNR 5.8
 Int time 341.791
 Amp 0.139
 Phase 23.8
 PFD 7.4e-01
 Delays (us)
 SBD -0.648135
 MBD 0.001907
 Fringe rate (Hz)
 0.647824
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

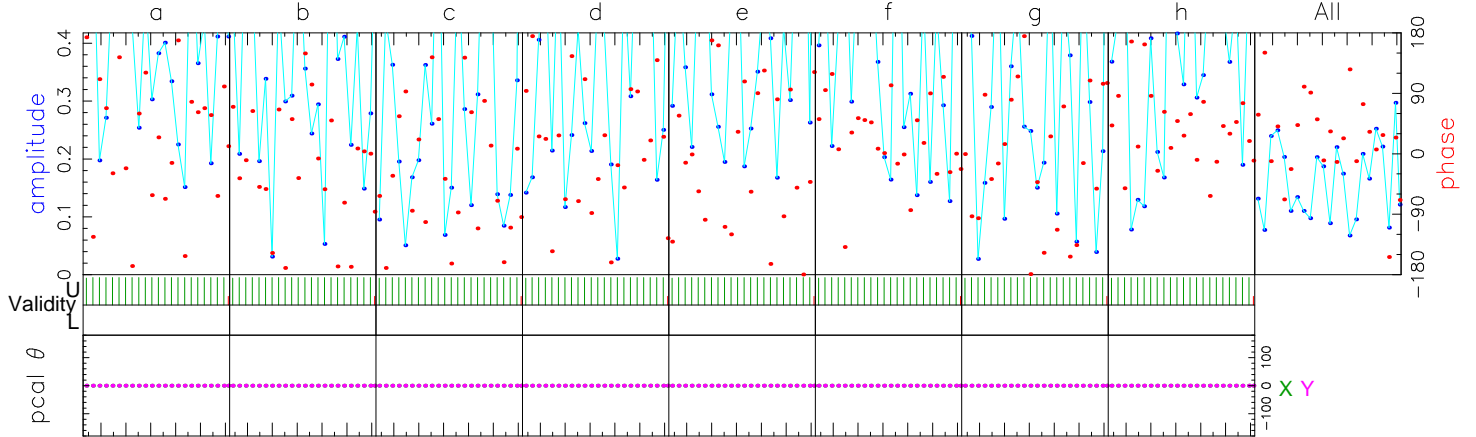


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083016.90
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041057
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	77.6	15.5	-18.3	16.0	-122.8	23.5	37.4	27.0	Phase	23.8
	0.1	0.2	0.1	0.2	0.1	0.3	0.1	0.3	Ampl.	0.1
	383.9	131.9	382.6	279.8	458.8	90.9	273.3	90.7	Sbd box	91.1
U/L	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	8.82392124031E+02	Apriori delay (usec)	8.83046466877E+02	Resid mbdelay (usec)	1.90715E-03	+/-	1.9E-04
Sband delay (usec)	8.82398331377E+02	Apriori clock (usec)	3.4684887E+01	Resid sbdelay (usec)	-6.48135E-01	+/-	1.5E-03
Phase delay (usec)	8.83046467644E+02	Apriori clockrate (us/s)	4.0800002E-07	Resid phdelay (usec)	7.67497E-07	+/-	6.3E-07
Delay rate (us/s)	2.91797048431E-01	Apriori rate (us/s)	2.91789527838E-01	Resid rate (us/s)	7.52059E-06	+/-	3.2E-09
Total phase (deg)	260.2	Apriori accel (us/s/s)	9.93119812043E-06	Resid phase (deg)	23.8	+/-	19.6

ph/seg (deg)	64.2	RMS	71.0	Theor.	47.1	Amplitude	0.139 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	71.0	Search (2048X32)	0.112	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled	sb window (us)	-1.000 1.000
ph/frq (deg)	66.4	Inc. seg. avg.	0.148	Inc. frq. avg.	0.142	Bits/sample: 2x2		Sample rate(MISamp/s): 128	mb window (us)	-0.008 0.008
amp/frq (%)	73.3	Inc. frq. avg.	0.142			Data rate(Mb/s): 2048		nlags: 256	dr window (ns/s)	-0.011 0.011

X: az 308.9 el 25.1 pa 33.8 Y: az 306.0 el 22.7 pa 54.9 u,v (fr/asec) -2224.361 1984.900 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/XY..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/XY.W.345.1IVDPU

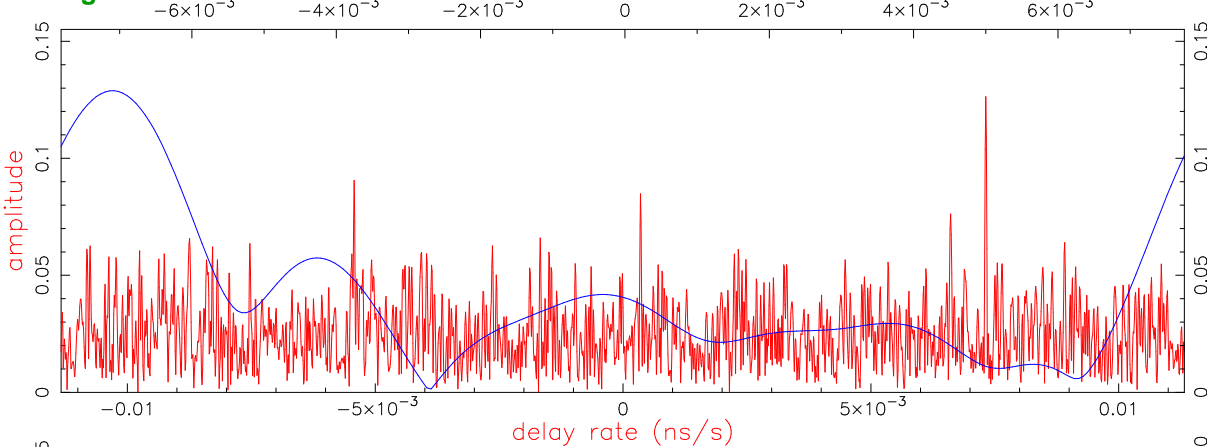
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IVDPU, No0283, XY

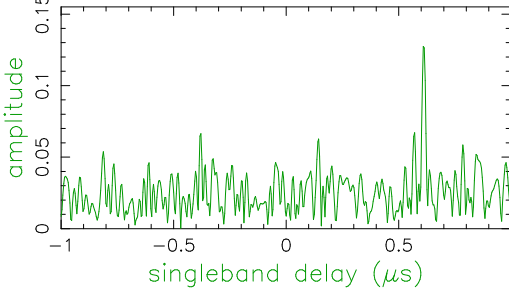
ONŞALA60 - YEŞES40M, fgroup W, pol RL

multiband delay (μ s)

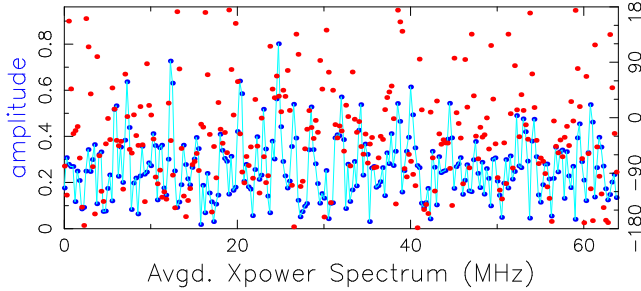


Fringe quality 0

SNR 6.6
 Int time 341.791
 Amp 0.155
 Phase 66.0
 PFD 1.5e-02
 Delays (us)
 SBD 0.611161
 MBD 0.008301
 Fringe rate (Hz) 0.631015
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

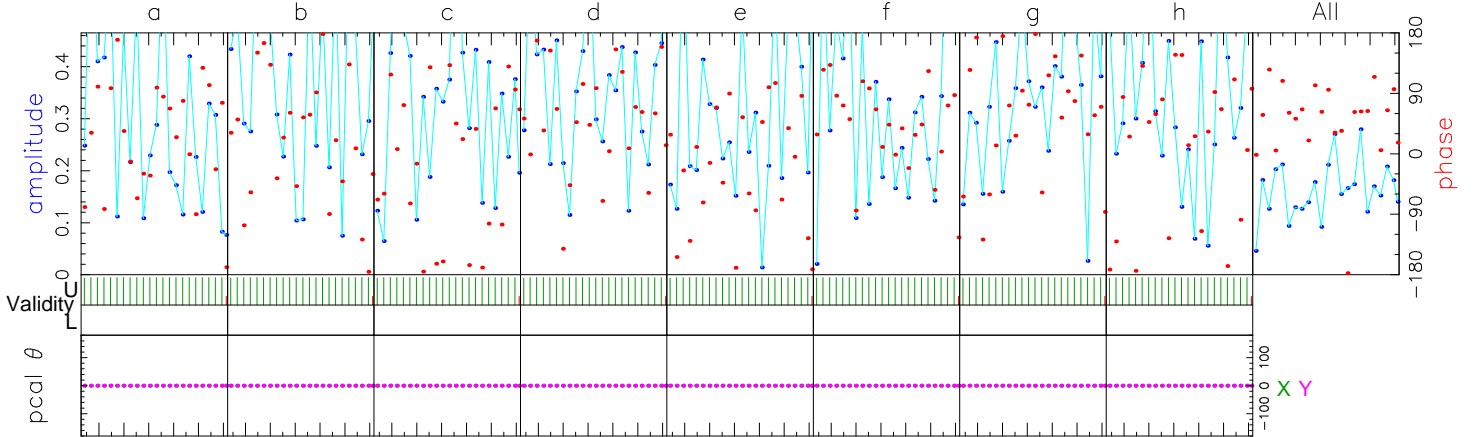


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083016.90
 Stop 083559.94
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041100
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	35.9	84.0	77.3	61.4	12.6	68.8	85.6	96.3	Phase	66.0
	0.2	0.1	0.1	0.2	0.1	0.3	0.2	0.1	Ampl.	0.2
	272.3	448.2	368.9	415.2	463.2	413.4	413.5	25.9	Sbd box	413.5
U/L	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0	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	

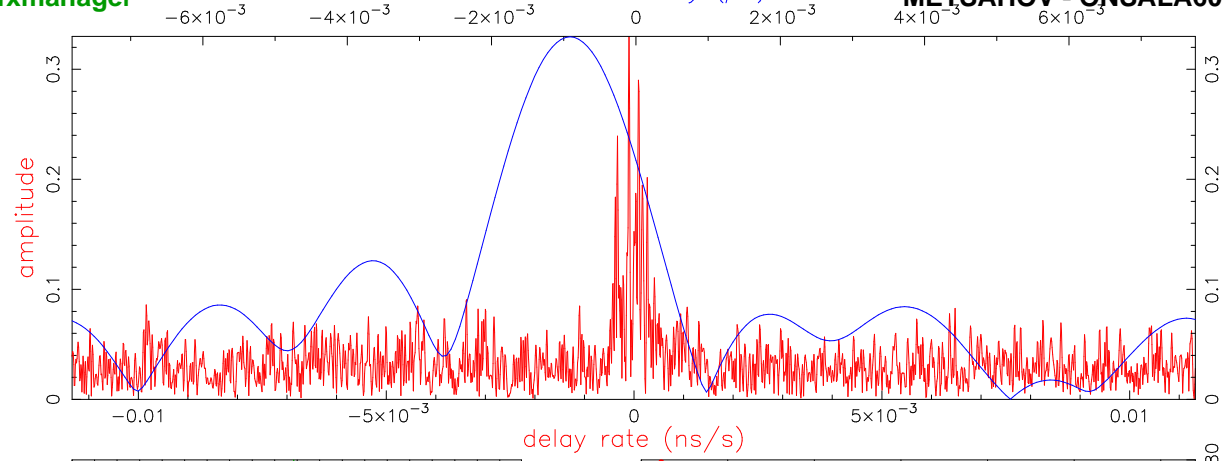
Group delay (usec)(sbd)	8.83664142658E+02	Apriori delay (usec)	8.83046466877E+02	Resid mbdelay (usec)	8.30078E-03	+/-	1.7E-04
Sband delay (usec)	8.83657627627E+02	Apriori clock (usec)	3.4684887E+01	Resid sbdelay (usec)	6.11161E-01	+/-	1.3E-03
Phase delay (usec)	8.83046469005E+02	Apriori clockrate (us/s)	4.0800002E-07	Resid phdelay (usec)	2.12792E-06	+/-	5.6E-07
Delay rate (us/s)	2.91796853302E-01	Apriori rate (us/s)	2.91789527838E-01	Resid rate (us/s)	7.32546E-06	+/-	2.8E-09
Total phase (deg)	302.4	Apriori accel (us/s/s)	9.93119812043E-06	Resid phase (deg)	66.0	+/-	17.5

ph/seg (deg)	43.2	Theor.	41.9	Search (2048X32)	0.126	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	49.2		73.1	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)	30.4		24.7	Inc. seg. avg.	0.155	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	39.8		43.1	Inc. frq. avg.	0.151	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 308.9 el 25.1 pa 33.8 Y: az 306.0 el 22.7 pa 54.9 u,v (fr/asec) -2224.361 1984.900 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/XY..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/XY.W.356.1IVDPU

multiband delay (μ s)



Fringe quality 9

SNR 14.6

Int time 260.394

Amp 0.330

Phase -179.2

PFD 3.1e-39

Delays (us)

SBD -0.016099

MBD -0.000924

Fringe rate (Hz)

-0.008128

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c202b

Exper # 16383

Yr:day 2020:285

Start 083000.00

Stop 083559.42

FRT 083300.00

Corr/FF/build

2021:028:084120

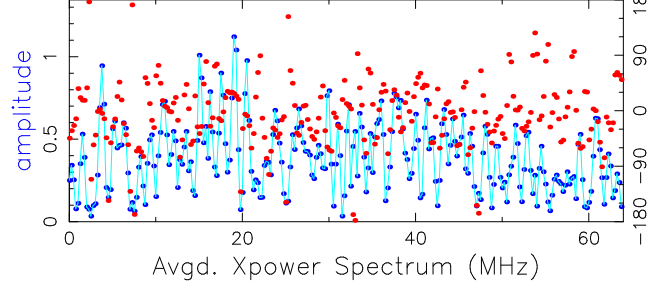
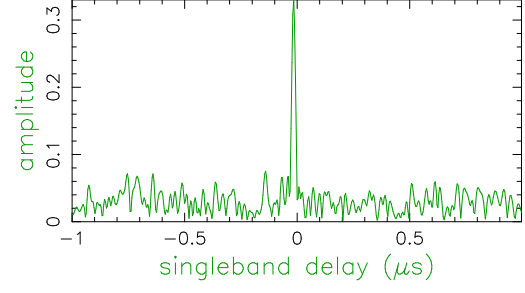
2021:029:041052

2020:247:085004

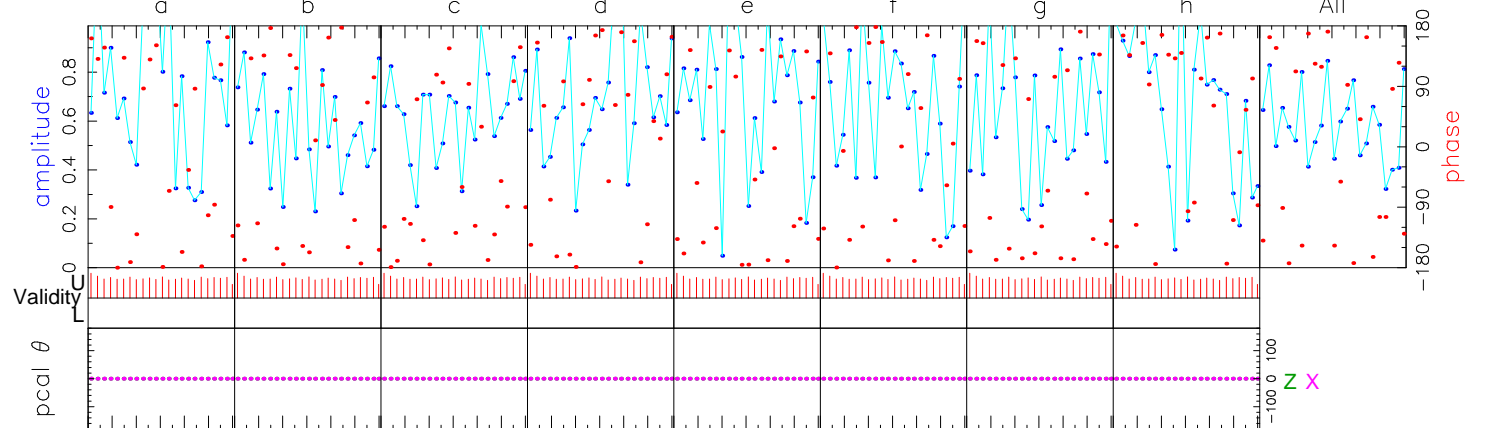
RA & Dec (J2000)

03h19m48.160095s

+41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	173.8	178.2	-158.0	154.1	-173.5	-160.4	-166.3	160.6	Phase	-179.2
	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	Ampl.	0.3
	252.5	252.2	252.9	252.8	252.8	253.0	253.0	252.8	Sbd box	252.9
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0	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	PC amp	
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)	-9.95325832962E+02		Apriori delay (usec)		-9.95309284427E+02		Resid mbdelay (usec)		-9.23535E-04 +/- 7.5E-05	
Sband delay (usec)	-9.95325383177E+02		Apriori clock (usec)		-4.8237133E+01		Resid sbdelay (usec)		-1.60988E-02 +/- 5.9E-04	
Phase delay (usec)	-9.95309290206E+02		Apriori clockrate (us/s)		-5.1200000E-07		Resid phdelay (usec)		-5.77874E-06 +/- 2.5E-07	
Delay rate (us/s)	1.01887320165E-01		Apriori rate (us/s)		1.01887414520E-01		Resid rate (us/s)		-9.43551E-08 +/- 1.2E-09	
Total phase (deg)			Apriori accel (us/s/s)		6.95276453464E-06		Resid phase (deg)		-179.2 +/- 7.9	

ph/seg (deg) 63.6 18.8 Search (2048X32) 0.314 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 89.5 32.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 19.1 11.1 Inc. seg. avg. 0.556 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 16.0 19.4 Inc. frq. avg. 0.336 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 316.7 el 22.3 pa 28.4 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -771.863 659.296 simultaneous interpolator

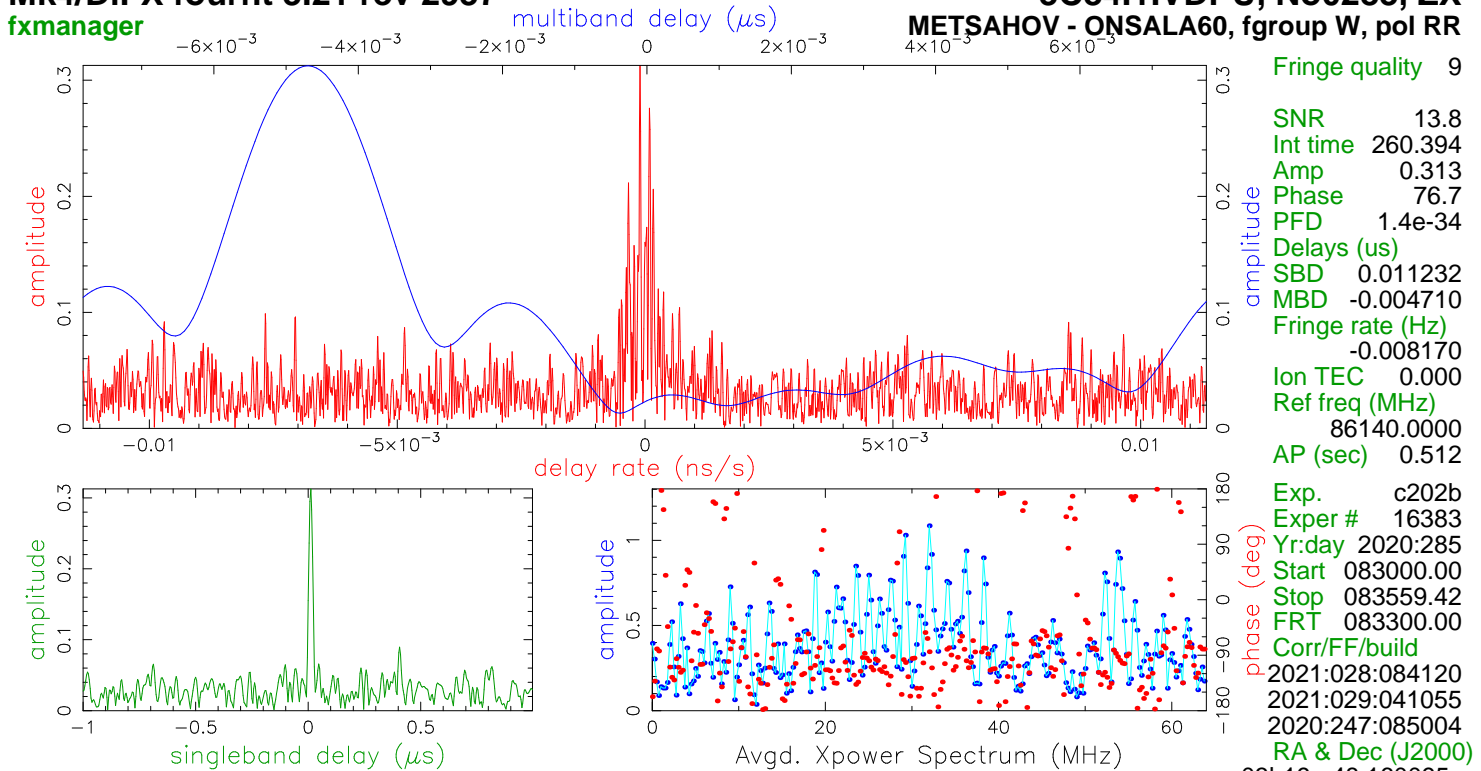
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/ZX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/ZX.W.327.1IVDPU

Mk4/DiFX fourfit 3.21 rev 2937

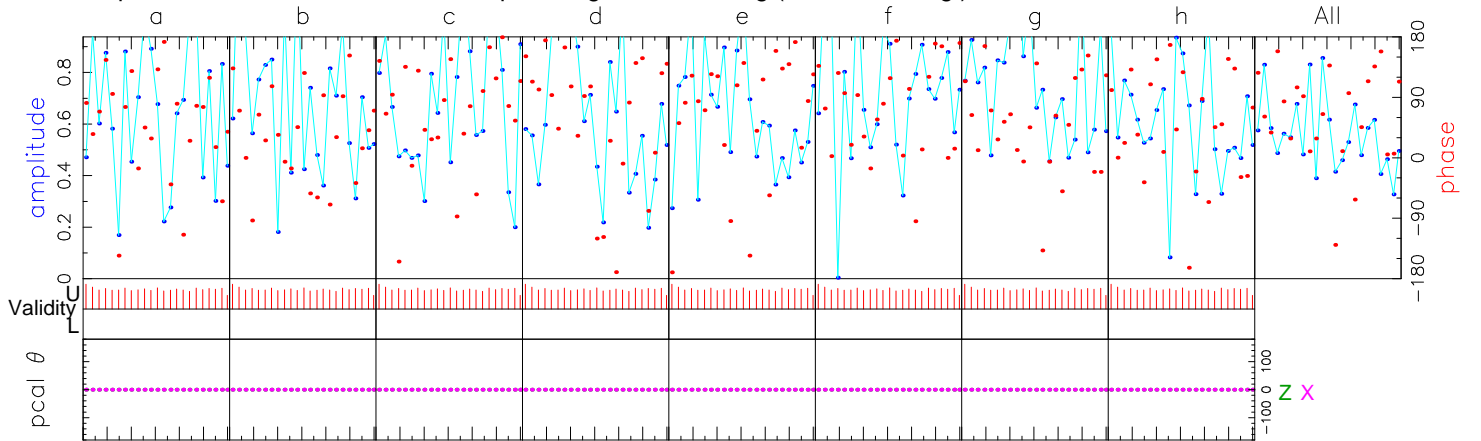
fxmanager

3C84.1IVDPU, No0283, ZX

METSÁHOV - ONSALA60, fgroup W, pol RR



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	65.7	41.1	97.9	104.2	108.2	78.2	55.7	62.5	Phase	76.7
	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.2	Ampl.	0.3
	259.8	260.0	259.7	259.3	259.1	260.1	259.8	259.6	Sbd box	259.9
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-9.95298369087E+02		Apriori delay (usec)	-9.95309284427E+02	Resid mbdelay (usec)	-4.70966E-03	+/-	7.9E-05		
Sband delay (usec)	-9.95298052677E+02		Apriori clock (usec)	-4.8237133E+01	Resid sbdelay (usec)	1.12318E-02	+/-	6.2E-04		
Phase delay (usec)	-9.95309281954E+02		Apriori clockrate (us/s)	-5.1200000E-07	Resid phdelay (usec)	2.47262E-06	+/-	2.7E-07		
Delay rate (us/s)	1.01887319670E-01		Apriori rate (us/s)	1.01887414520E-01	Resid rate (us/s)	-9.48504E-08	+/-	1.3E-09		
Total phase (deg)		-197.1	Apriori accel (us/s/s)	6.95276453464E-06	Resid phase (deg)	76.7	+/-	8.3		

ph/seg (deg) 64.3 19.8 Search (2048X32) 0.297 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 91.4 34.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

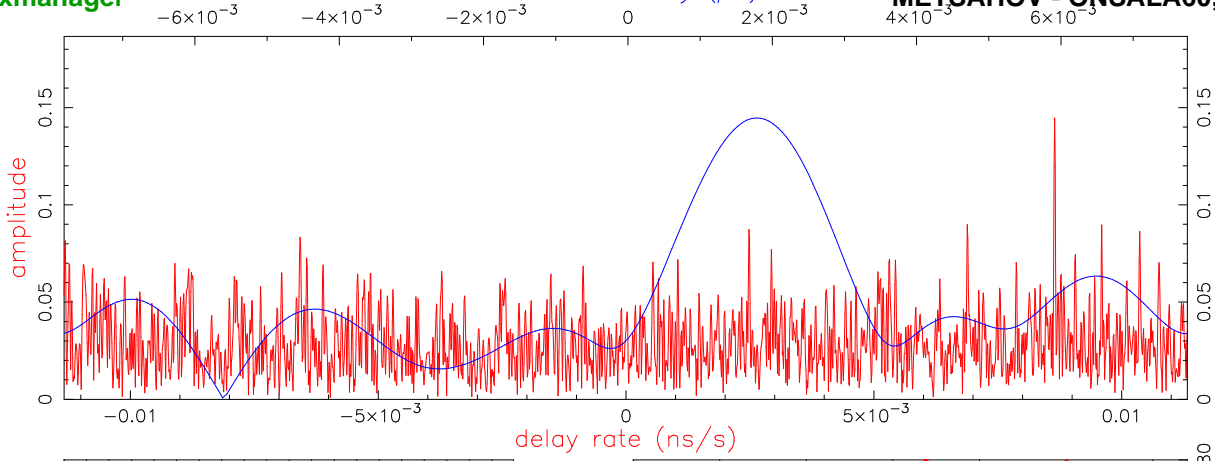
ph/frq (deg) 26.6 11.7 Inc. seg. avg. 0.531 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 15.4 20.5 Inc. frq. avg. 0.333 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 316.7 el 22.3 pa 28.4 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -771.863 659.296 simultaneous interpolator

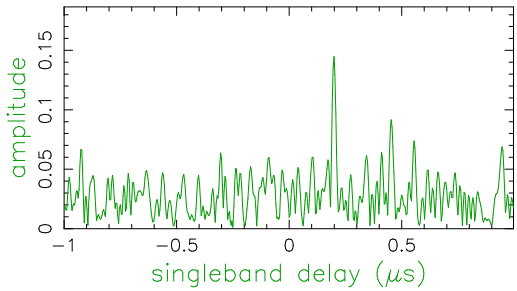
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/ZX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/ZX.W.340.1IVDPU

multiband delay (μ s)

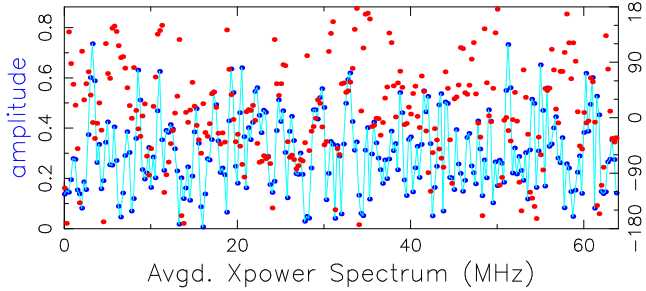


Fringe quality 0

SNR 6.4
 Int time 260.394
 Amp 0.187
 Phase 115.2
 PFD 4.3e-02
 Delays (us)
 SBD 0.198634
 MBD 0.001764
 Fringe rate (Hz) 0.745970
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

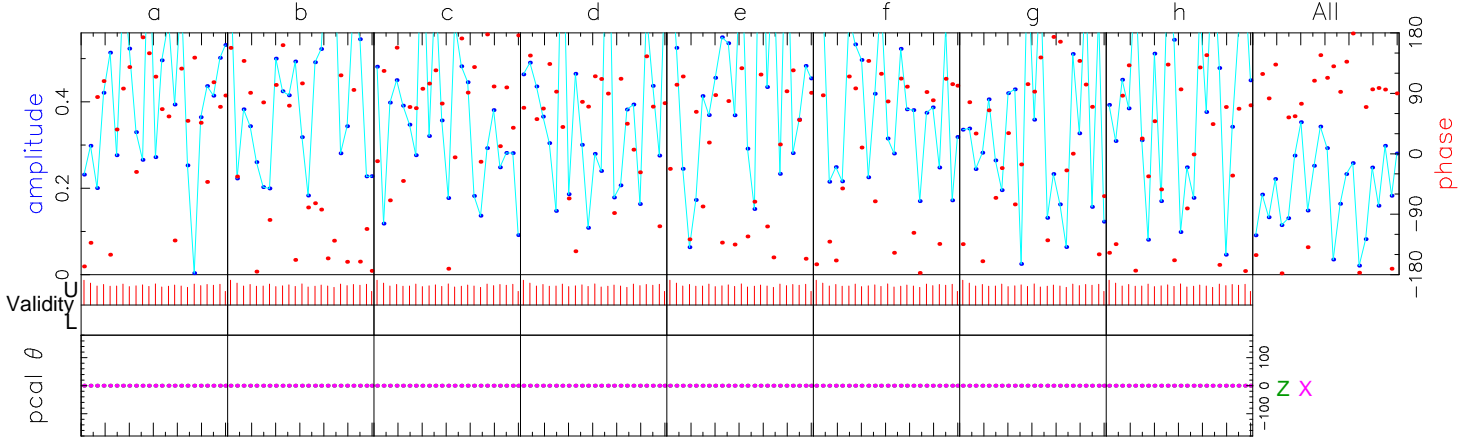


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.42
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041058
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



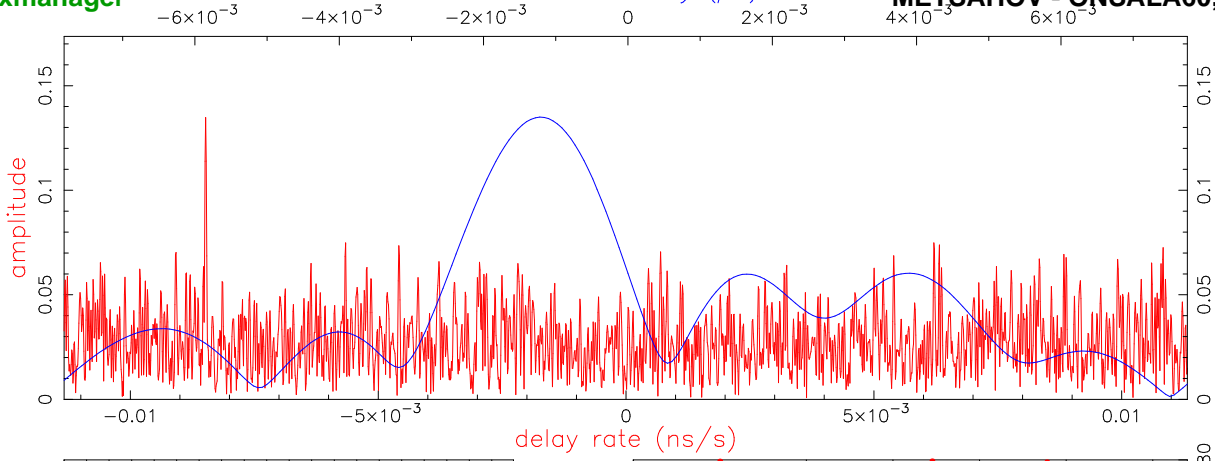
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	107.2	175.7	87.6	82.0	116.5	120.8	111.2	135.4	Phase	115.2
	0.3	0.2	0.2	0.3	0.2	0.2	0.1	0.2	Ampl.	0.2
	306.7	306.7	503.5	55.0	71.6	310.2	282.0	420.0	Sbd box	307.9
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-9.95104395197E+02	Apriori delay (usec)	-9.95309284427E+02	Resid mbdelay (usec)	1.76423E-03	+/-	1.7E-04
Sband delay (usec)	-9.95110650677E+02	Apriori clock (usec)	-4.8237133E+01	Resid sbdelay (usec)	1.98634E-01	+/-	1.3E-03
Phase delay (usec)	-9.95309280712E+02	Apriori clockrate (us/s)	-5.1200000E-07	Resid phdelay (usec)	3.71457E-06	+/-	5.8E-07
Delay rate (us/s)	1.01896074489E-01	Apriori rate (us/s)	1.01887414520E-01	Resid rate (us/s)	8.65997E-06	+/-	2.8E-09
Total phase (deg)	-158.6	Apriori accel (us/s/s)	6.95276453464E-06	Resid phase (deg)	115.2	+/-	17.9

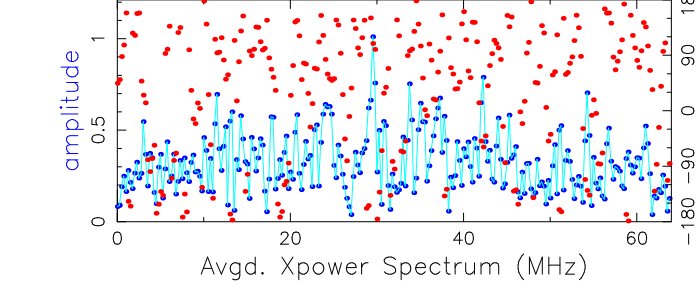
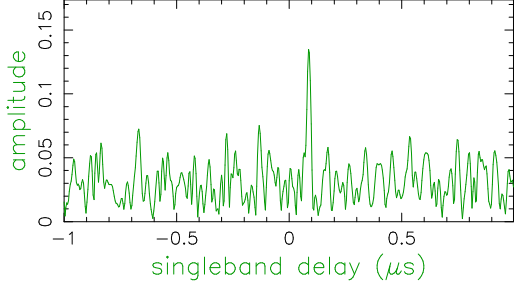
ph/seg (deg)	49.6	Theor.	42.8	Amplitude	0.187 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	70.9		74.8	Search (2048X32)	0.139	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	31.8		25.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	30.6		44.2	Inc. seg. avg.	0.196	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	0.193	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

Z: az 316.7 el 22.3 pa 28.4 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -771.863 659.296 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/ZX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/ZX.W.352.1IVDPU

multiband delay (μs)

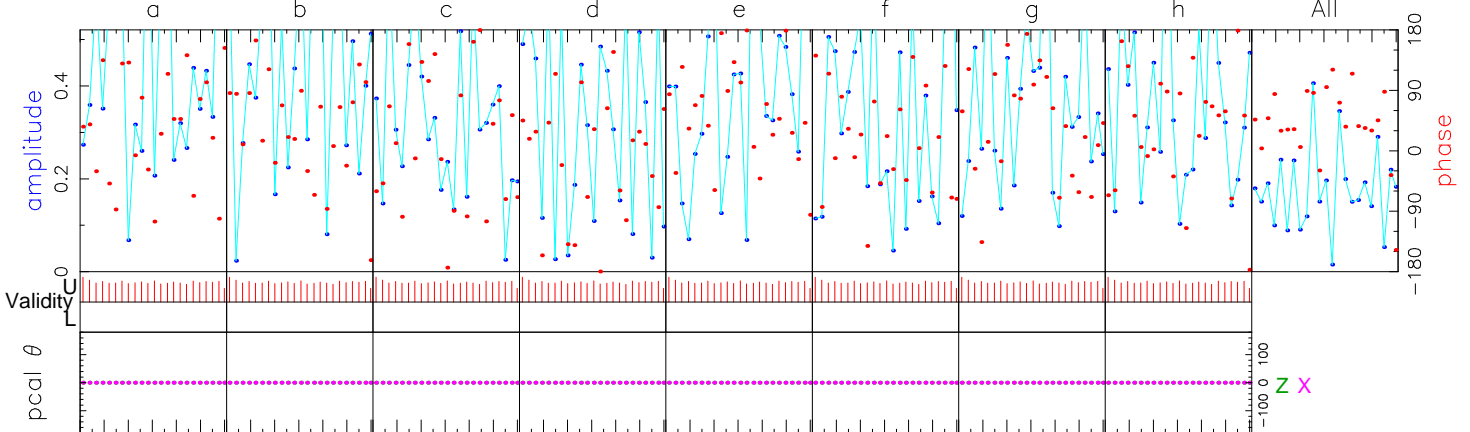


Fringe quality 0
 SNR 6.0
 Int time 260.394
 Amp 0.174
 Phase 48.1
 PFD 3.8e-01
 Delays (us)
 SBD 0.087376
 MBD -0.001266
 Fringe rate (Hz)
 -0.731503
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:285
 Start 083000.00
 Stop 083559.42
 FRT 083300.00
 Corr/FF/build
 2021:028:084120
 2021:029:041102
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	698/0	698/0	698/0	698/0	698/0	698/0	698/0	698/0		
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		

Group delay (usec)(sbd)	-9.95216800245E+02	Apriori delay (usec)		-9.95309284427E+02	Resid mbdelay (usec)		-1.26582E-03	+/- 1.8E-04	
Sband delay (usec)	-9.95221908177E+02	Apriori clock (usec)		-4.8237133E+01	Resid sbdelay (usec)		8.73763E-02	+/- 1.4E-03	
Phase delay (usec)	-9.95309282877E+02	Apriori clockrate (us/s)		-5.1200000E-07	Resid phdelay (usec)		1.55012E-06	+/- 6.1E-07	
Delay rate (us/s)	1.01878922490E-01	Apriori rate (us/s)		1.01887414520E-01	Resid rate (us/s)		-8.49203E-06	+/- 3.0E-09	
Total phase (deg)		-225.7	Apriori accel (us/s/s)		6.95276453464E-06	Resid phase (deg)		48.1	+/- 19.1

ph/seg (deg)	49.2	Theor. 45.6	Amplitude	0.174 +/- 0.029	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
amp/seg (%)	71.2	79.6	Search (2048X32)	0.132	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
ph/frq (deg)	25.8	27.0	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	42.2	47.1	Inc. seg. avg.	0.174	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
			Inc. frq. avg.	0.164	Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 316.7 el 22.3 pa 28.4 X: az 308.9 el 25.1 pa 33.8 u,v (fr/asec) -771.863 659.296 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0283/ZX..1IVDPU Output file: /Exps/c202b/v1/v1_3mm/1234/No0283/ZX.W.362.1IVDPU