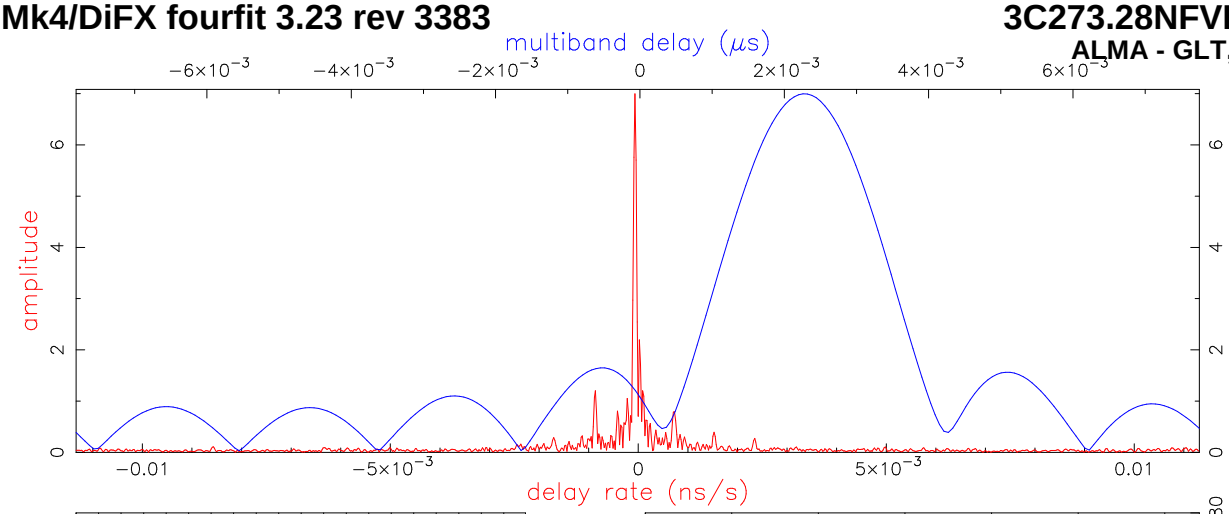
Mk4/DiFX fourfit 3.23 rev 3383

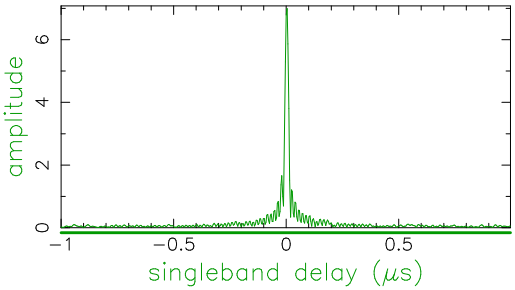
3C273.28NFVB, No0047, Ag

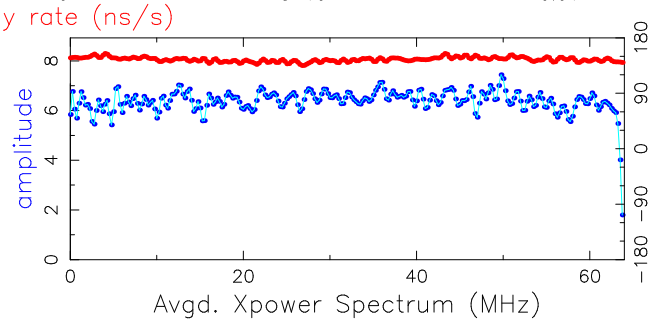
ALMA - GLT, fgroup W, pol LL



Fringe quality 8

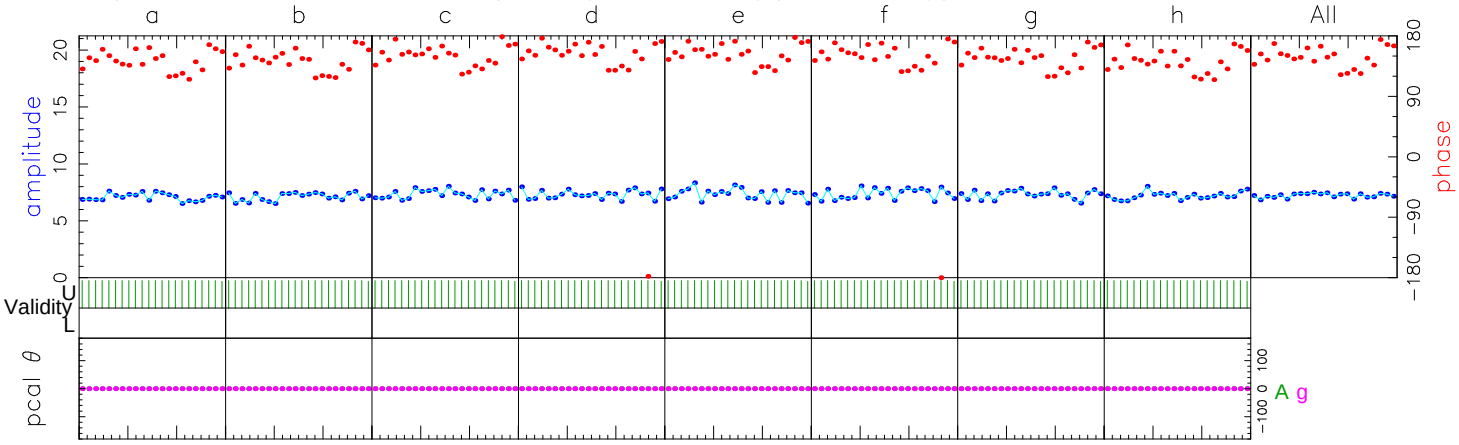
SNR 259.9
Int time 179.979
Amp 7.084
Phase 148.2
PFD 0.0e+00
Delays (us)
SBD 0.002547
MBD 0.002274
Fringe rate (Hz)
-0.005843
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512





Exp. mk013b
Exper # 16383
Yr:day 2021:113
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2022:164:112245
2022:164:132054
2022:109:102128
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	142.9	143.0	150.7	155.1	153.5	152.1	146.4	141.4	Phase	148.2
	6.9	6.9	7.1	7.1	7.1	7.1	7.1	7.0	Ampl.	7.0
	257.5	257.5	257.7	257.7	257.8	257.9	257.5	257.5	Sbd box	257.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
A:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids Tracks	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids Tracks	

Group delay (usec) (SBD)	9.79426591263E+03	Apriori delay (usec)	9.79426363818E+03	Resid mbdelay (usec)	2.27444E-03	+/-	4.2E-06
Sband delay (usec)	9.79426618543E+03	Apriori clock (usec)	-2.1080027E+03	Resid sbdelay (usec)	2.54725E-03	+/-	3.3E-05
Phase delay (usec)	9.79426364296E+03	Apriori clockrate (us/s)	-3.8999999E-07	Resid phdelay (usec)	4.77855E-06	+/-	1.4E-08
Delay rate (us/s)	5.05976681956E-01	Apriori rate (us/s)	5.05976749782E-01	Resid rate (us/s)	-6.78260E-08	+/-	1.4E-10
Total phase (deg)	73.6	Apriori accel (us/s/s)	-6.84771687593E-05	Resid phase (deg)	148.2	+/-	0.4

	RMS	Theor.	Amplitude	7.084 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	14.7	1.0	Search (1024X32)	6.915	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
amp/seg (%)	3.4	1.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	5.8	0.6	Inc. seg. avg.	7.234	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011
amp/frq (%)	1.8	1.1	Inc. frq. avg.	7.025	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

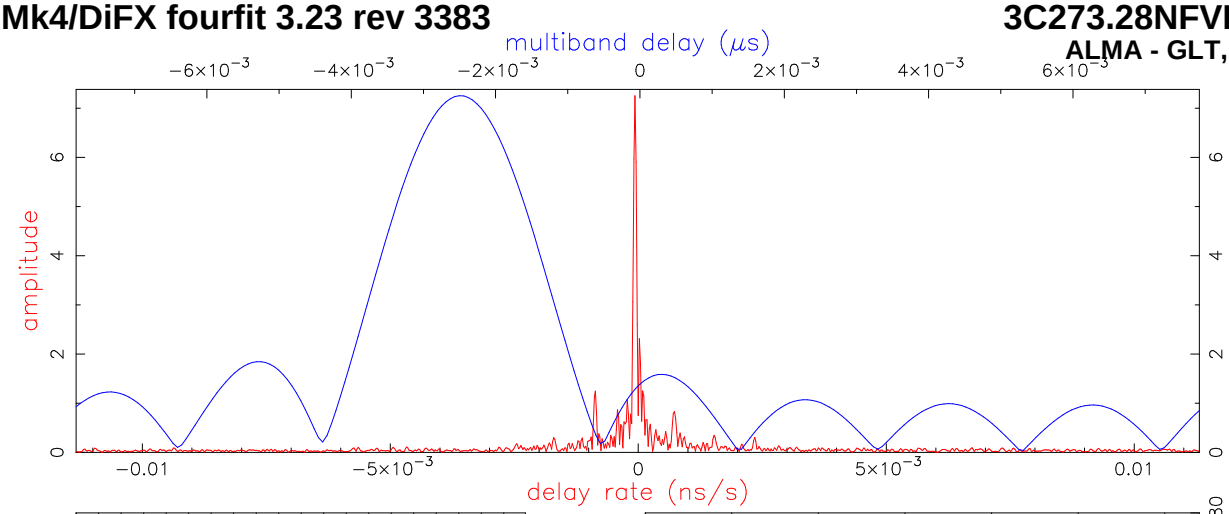
A: az 52.4 el 52.3 pa -133.2 g: az 149.1 el 13.6 pa -6.8 u,v (fr/asec) -2937.498 -12241.493 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/mk013b/v1_pc1/5099/No0047/Ag..28NFVB Output file: /Exps/mk013b/v1_pc1/5099/No0047/Ag.W.292.28NFVB

Mk4/DiFX fourfit 3.23 rev 3383

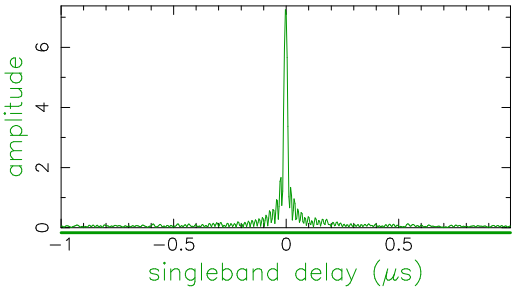
3C273.28NFVB, No0047, Ag

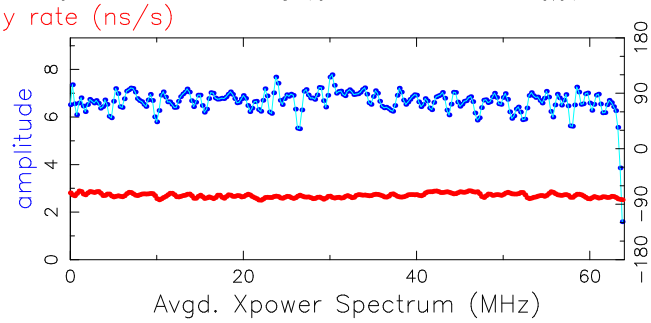
ALMA - GLT, fgroup W, pol RR



Fringe quality 8

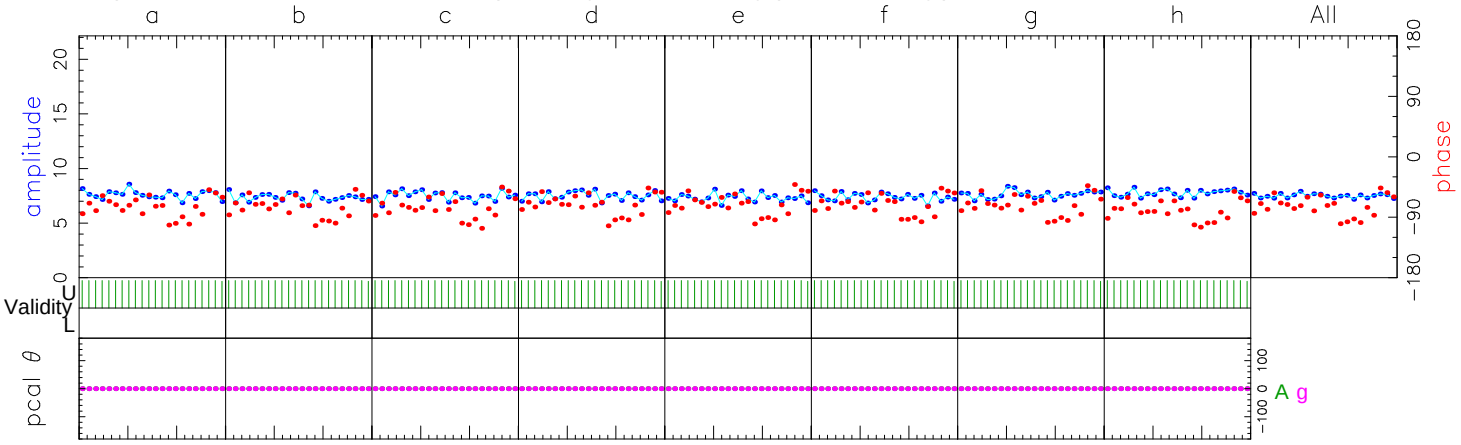
SNR 270.8
Int time 179.979
Amp 7.382
Phase -73.8
PFD 0.0e+00
Delays (us)
SBD -0.002282
MBD -0.002485
Fringe rate (Hz)
-0.005821
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512





Exp. mk013b
Exper # 16383
Yr:day 2021:113
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2022:164:112245
2022:164:132058
2022:109:102128
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-74.8	-75.3	-75.0	-71.0	-71.1	-71.0	-72.0	-79.5	Phase	-73.8
	7.4	7.1	7.2	7.3	7.1	7.1	7.4	7.6	Ampl.	7.3
	256.3	256.2	256.4	256.5	256.6	256.7	256.4	256.3	Sbd box	256.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
A:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	

Group delay (usec) (SBD)	9.79426115322E+03	Apriori delay (usec)	9.79426363818E+03	Resid mbdelay (usec)	-2.48496E-03	+/-	4.0E-06
Sband delay (usec)	9.79426135593E+03	Apriori clock (usec)	-2.1080027E+03	Resid sbdelay (usec)	-2.28225E-03	+/-	3.2E-05
Phase delay (usec)	9.79426363580E+03	Apriori clockrate (us/s)	-3.8999999E-07	Resid phdelay (usec)	-2.37856E-06	+/-	1.4E-08
Delay rate (us/s)	5.05976682208E-01	Apriori rate (us/s)	5.05976749782E-01	Resid rate (us/s)	-6.75737E-08	+/-	1.3E-10
Total phase (deg)	211.7	Apriori accel (us/s/s)	-6.84771687593E-05	Resid phase (deg)	-73.8	+/-	0.4

	RMS	Theor.	Amplitude	7.382 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	14.8	1.0	Search (1024X32)	7.238	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
amp/seg (%)	3.0	1.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	3.2	0.6	Inc. seg. avg.	7.499	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011
amp/frq (%)	2.6	1.0	Inc. frq. avg.	7.262	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

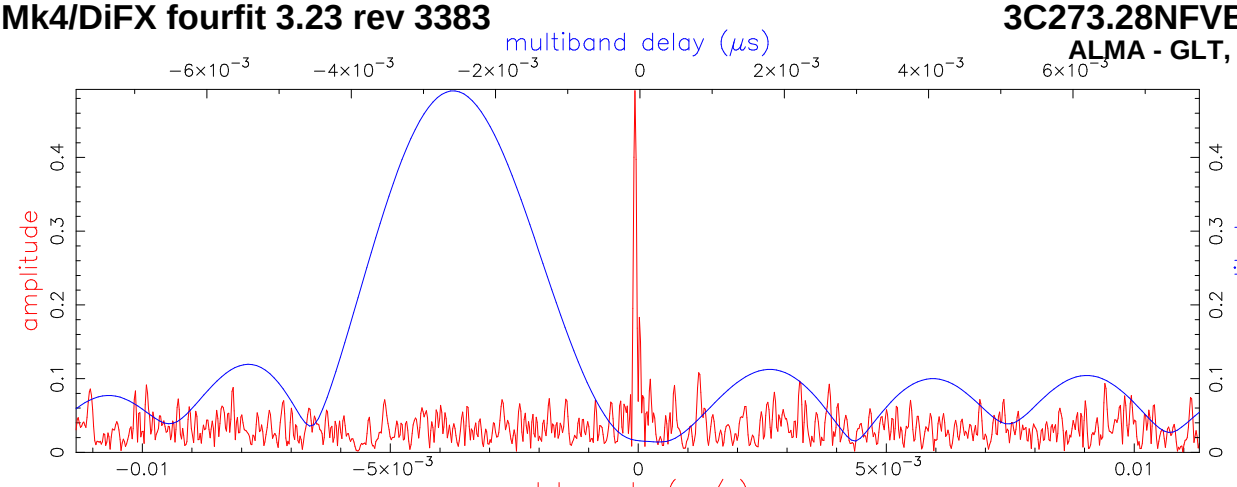
A: az 52.4 el 52.3 pa -133.2 g: az 149.1 el 13.6 pa -6.8 u,v (fr/asec) -2937.498 -12241.493 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/mk013b/v1_pc1/5099/No0047/Ag..28NFVB Output file: /Exps/mk013b/v1_pc1/5099/No0047/Ag.W.321.28NFVB

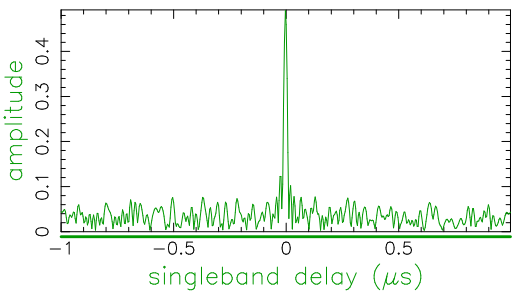
Mk4/DiFX fourfit 3.23 rev 3383

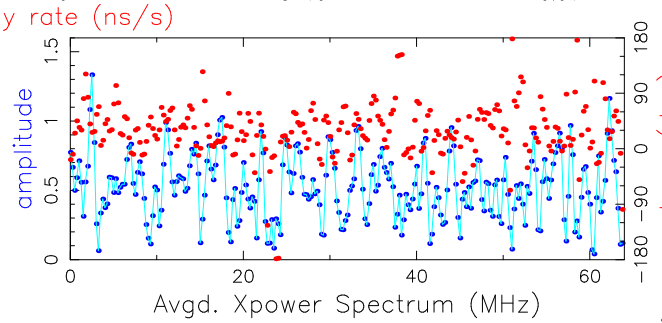
3C273.28NFVB, No0047, Ag

ALMA - GLT, fgroup W, pol LR

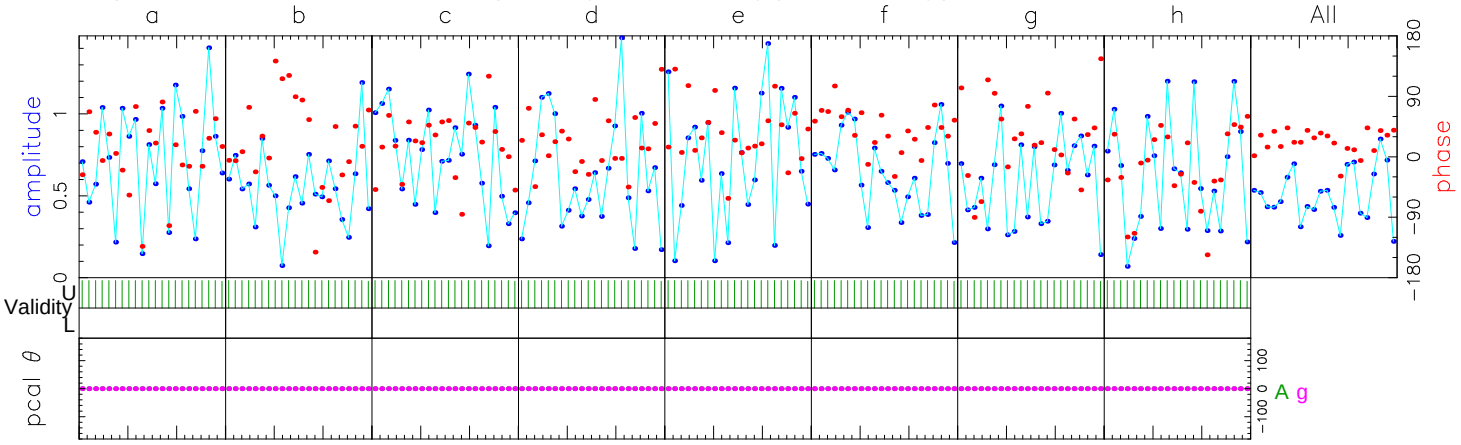


Fringe quality	9
SNR	18.1
Int time	179.979
Amp	0.492
Phase	23.5
PFD	0.0e+00
Delays (us)	
SBD	-0.003149
MBD	-0.002592
Fringe rate (Hz)	-0.005883
Ion TEC	0.000
Ref freq (MHz)	86140.0000
AP (sec)	0.512
Exp.	mk013b
Exper #	16383
Yr:day	2021:113
Start	010000.00
Stop	010300.22
FRT	010130.00
Corr/FF/build	2022:164:112245
	2022:164:132100
	2022:109:102128
RA & Dec (J2000)	12h29m06.699731s
	+02°03'08.598201"





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



									Freq (MHz)	All
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Phase	23.5
	16.9	27.0	22.4	13.9	30.8	46.6	26.9	0.3	Ampl.	0.5
	0.6	0.3	0.6	0.5	0.6	0.6	0.4	0.5	Sbd box	256.2
	256.2	255.4	255.7	256.5	256.6	256.7	256.2	256.1		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
A:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	

Group delay (usec) (SBD)	9.79426104644E+03	Apriori delay (usec)	9.79426363818E+03	Resid mbdelay (usec)	-2.59174E-03	+/-	6.0E-05
Sband delay (usec)	9.79426048943E+03	Apriori clock (usec)	-2.1080027E+03	Resid sbdelay (usec)	-3.14875E-03	+/-	4.8E-04
Phase delay (usec)	9.79426363894E+03	Apriori clockrate (us/s)	-3.8999999E-07	Resid phdelay (usec)	7.57906E-07	+/-	2.0E-07
Delay rate (us/s)	5.05976681483E-01	Apriori rate (us/s)	5.05976749782E-01	Resid rate (us/s)	-6.82993E-08	+/-	2.0E-09
Total phase (deg)	309.0	Apriori accel (us/s/s)	-6.84771687593E-05	Resid phase (deg)	23.5	+/-	6.3

	RMS	Theor.	Amplitude	0.492 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	17.6	14.9	Search (1024X32)	0.485	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
amp/seg (%)	32.1	26.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	14.7	9.0	Inc. seg. avg.	0.492	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011
amp/frq (%)	19.8	15.7	Inc. frq. avg.	0.497	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

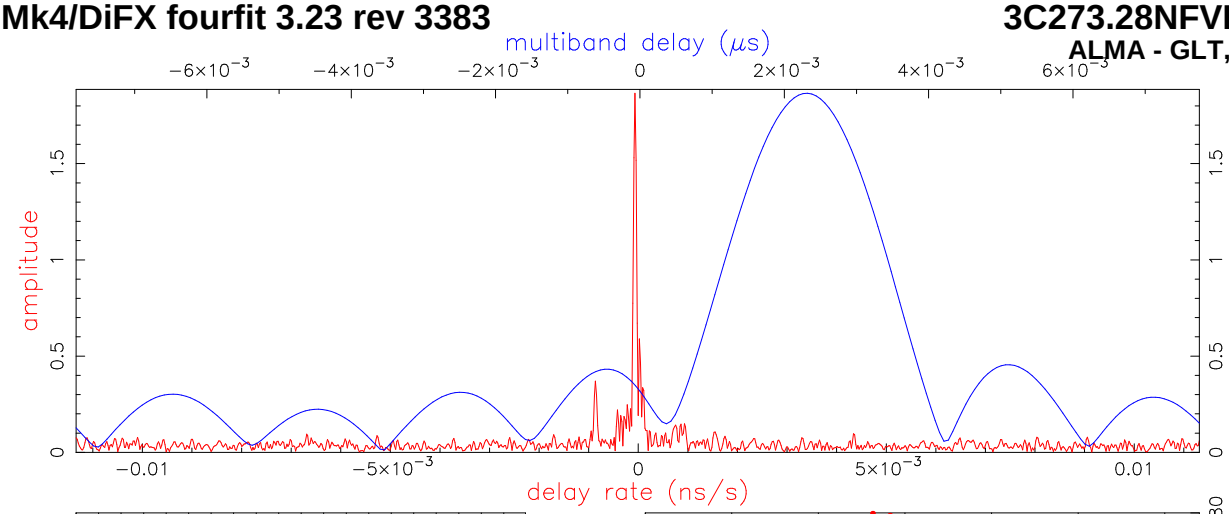
A: az 52.4 el 52.3 pa -133.2 g: az 149.1 el 13.6 pa -6.8 u,v (fr/asec) -2937.498 -12241.493 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/mk013b/v1_pc1/5099/No0047/Ag..28NFVB Output file: /Exps/mk013b/v1_pc1/5099/No0047/Ag.W.338.28NFVB

Mk4/DiFX fourfit 3.23 rev 3383

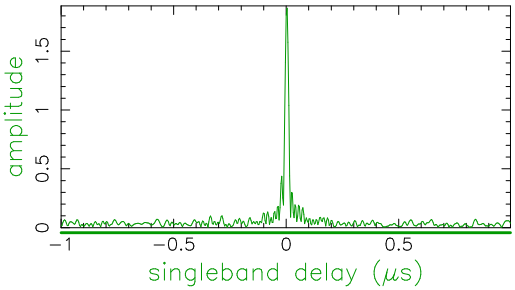
3C273.28NFVB, No0047, Ag

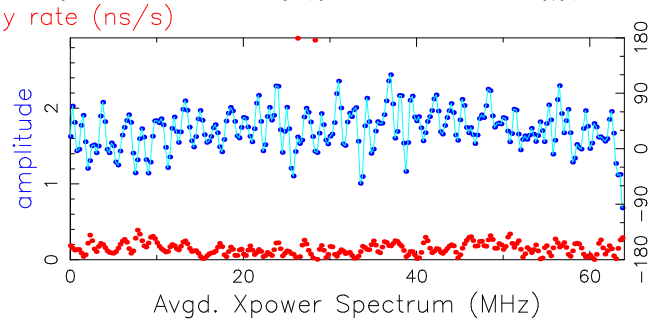
ALMA - GLT, fgroup W, pol RL



Fringe quality 8

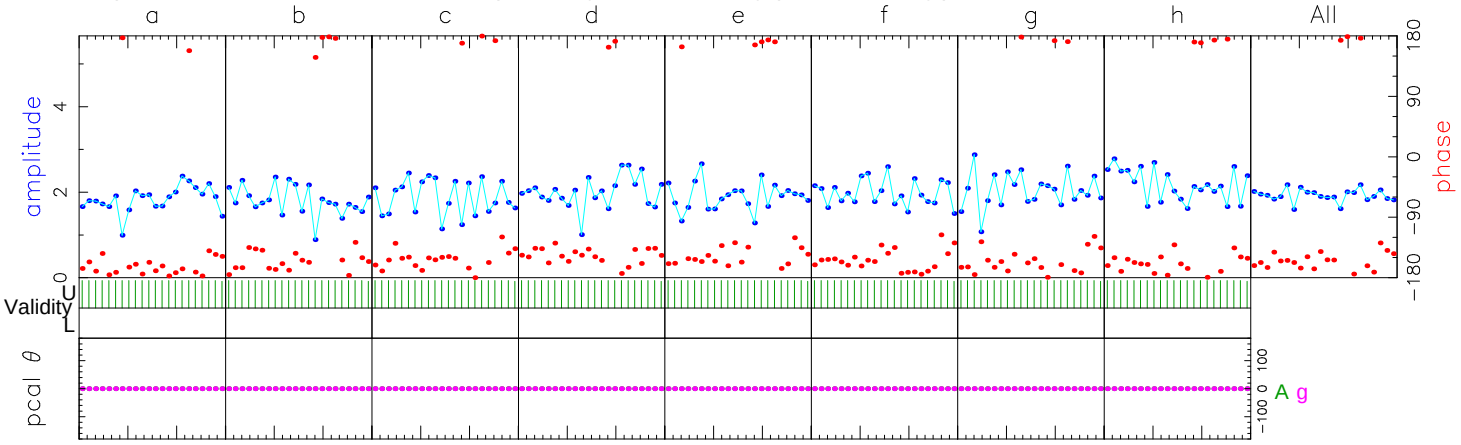
SNR 69.2
Int time 179.979
Amp 1.886
Phase -158.8
PFD 0.0e+00
Delays (us)
SBD 0.002619
MBD 0.002306
Fringe rate (Hz)
-0.005865
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512





Exp. mk013b
Exper # 16383
Yr:day 2021:113
Start 010000.00
Stop 010300.22
FRT 010130.00
Corr/FF/build
2022:164:112245
2022:164:132101
2022:109:102128
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-166.2	-160.8	-156.2	-151.3	-157.2	-153.6	-161.8	-163.4	Phase	-158.8
	1.8	1.7	1.8	1.9	1.8	1.9	1.9	2.1	Ampl.	1.9
	257.6	257.4	257.6	257.8	258.0	257.9	257.5	257.6	Sbd box	257.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
A:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	

Group delay (usec) (SBD)	9.79426594394E+03	Apriori delay (usec)	9.79426363818E+03	Resid mbdelay (usec)	2.30576E-03	+/-	1.6E-05
Sband delay (usec)	9.79426625718E+03	Apriori clock (usec)	-2.1080027E+03	Resid sbdelay (usec)	2.61900E-03	+/-	1.2E-04
Phase delay (usec)	9.79426363306E+03	Apriori clockrate (us/s)	-3.8999999E-07	Resid phdelay (usec)	-5.12141E-06	+/-	5.3E-08
Delay rate (us/s)	5.05976681690E-01	Apriori rate (us/s)	5.05976749782E-01	Resid rate (us/s)	-6.80924E-08	+/-	5.1E-10
Total phase (deg)	126.6	Apriori accel (us/s/s)	-6.84771687593E-05	Resid phase (deg)	-158.8	+/-	1.7

	RMS	Theor.	Amplitude	1.886 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	14.8	3.9	Search (1024X32)	1.850	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
amp/seg (%)	8.0	6.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	5.5	2.3	Inc. seg. avg.	1.924	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011
amp/frq (%)	6.1	4.1	Inc. frq. avg.	1.871	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

A: az 52.4 el 52.3 pa -133.2 g: az 149.1 el 13.6 pa -6.8 u,v (fr/asec) -2937.498 -12241.493 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/mk013b/v1_pc1/5099/No0047/Ag..28NFVB Output file: /Exps/mk013b/v1_pc1/5099/No0047/Ag.W.353.28NFVB