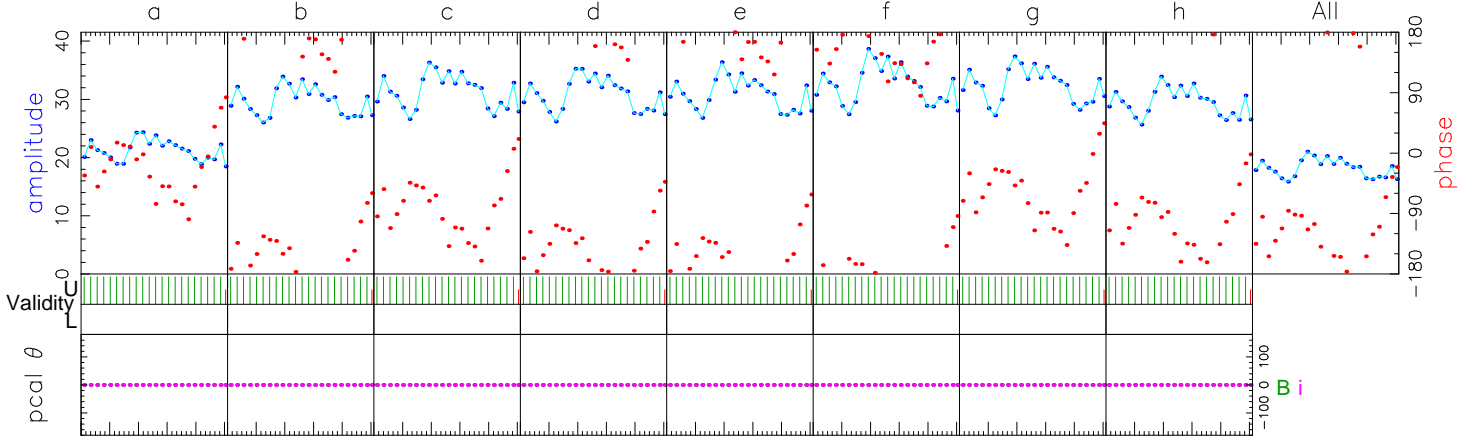
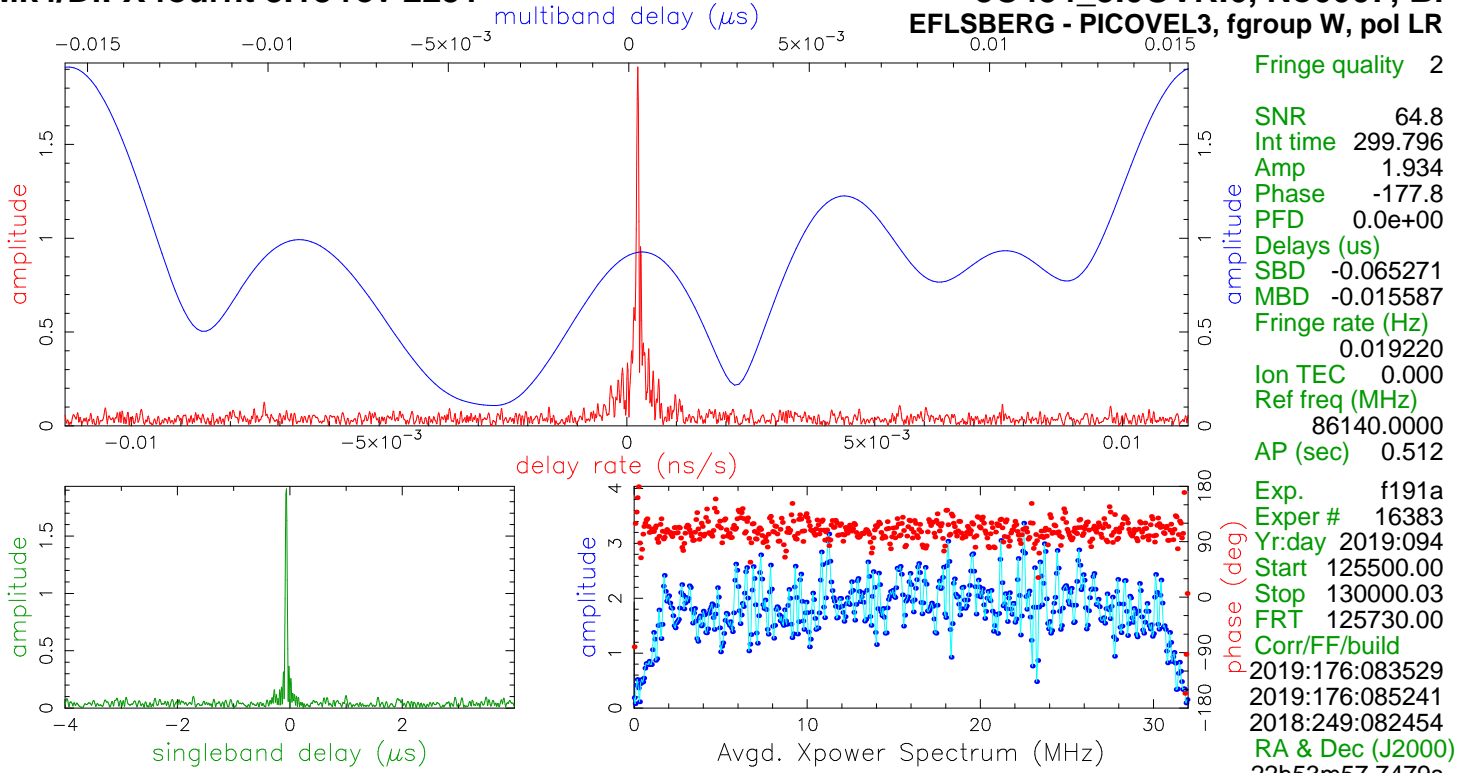


Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

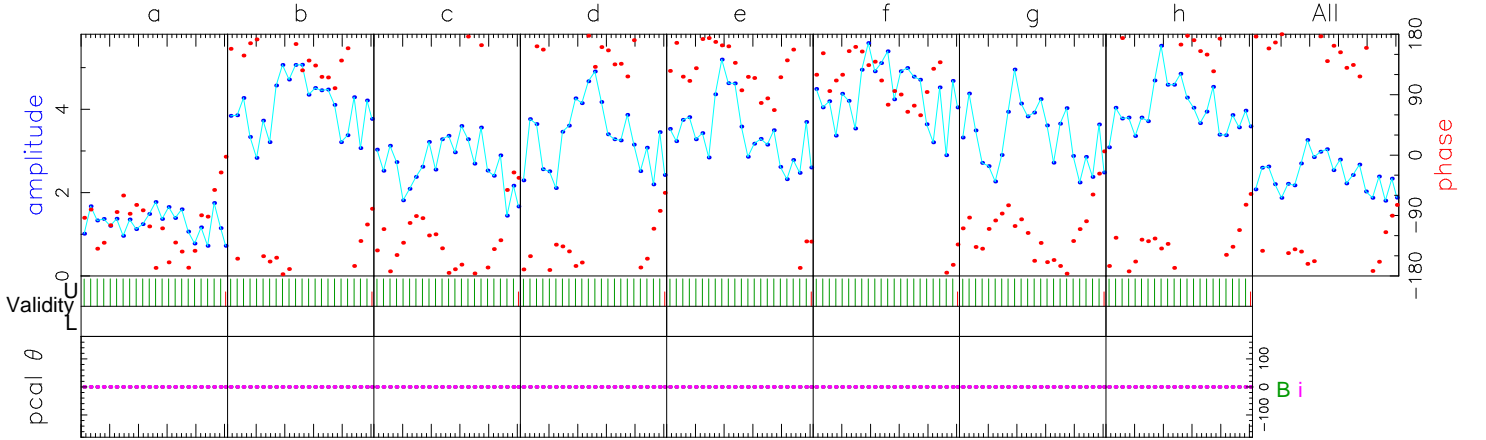


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-23.0	-163.7	-84.9	-148.3	-167.2	160.5	-61.8	-107.6	Phase	-126.6
	16.2	22.5	23.8	23.4	24.7	24.5	22.2	22.2	Ampl.	22.6
	503.2	504.1	504.8	504.9	505.2	505.2	505.0	505.0	Sbd box	505.3
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
i	0	0	0	0	0	0	0	0	PC freqs	
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:i	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	
i	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.16781664124E+03		Apriori delay (usec)		-3.16774274808E+03		Resid mbdelay (usec)		-1.13932E-02	+/- 4.7E-06
Sband delay (usec)	-3.16780325508E+03		Apriori clock (usec)		2.0462181E+01		Resid sbdelay (usec)		-6.05070E-02	+/- 3.7E-05
Phase delay (usec)	-3.16774275217E+03		Apriori clockrate (us/s)		5.3000000E-08		Resid phdelay (usec)		-4.08333E-06	+/- 8.0E-09
Delay rate (us/s)	3.44394129752E-02		Apriori rate (us/s)		3.44391901913E-02		Resid rate (us/s)		2.22784E-07	+/- 4.6E-11
Total phase (deg)			Apriori accel (us/s/s)		2.22898763986E-05		Resid phase (deg)		-126.6	+/- 0.2

RMS Theor. Amplitude 13.848 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 42.8 0.6 Search (2048X32) 13.654 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 33.2 1.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 65.6 0.3 Inc. seg. avg. 18.205 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 65.7 0.6 Inc. frq. avg. 22.588 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 B: az 247.2 el 37.9 pa 37.5 i: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) -176.511 1949.312 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//Bi..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//Bi.W.31.0OVRI6

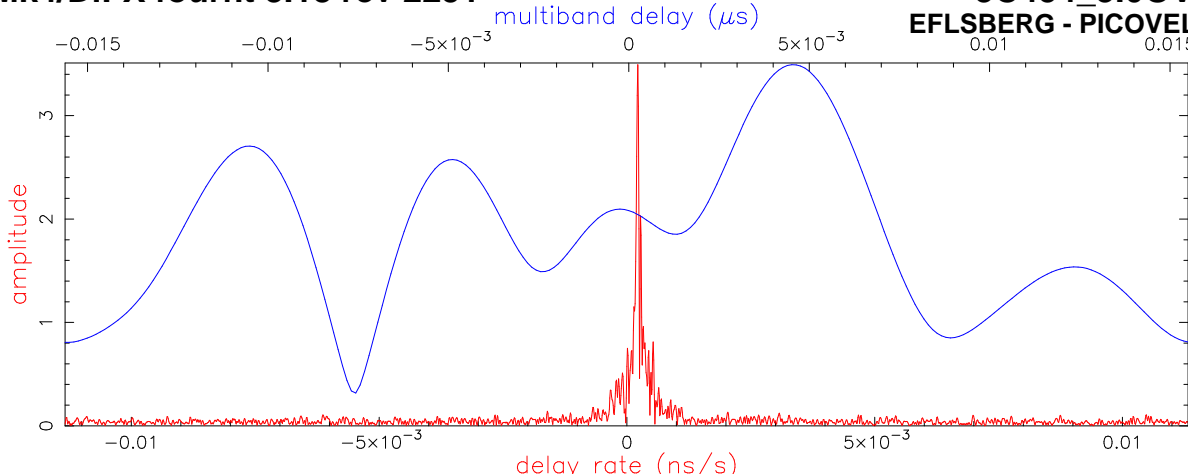


Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-106.3	168.2	-141.6	-177.7	138.7	119.4	-115.8	-157.7	Phase	-177.8
	1.0	3.1	2.1	2.6	2.7	3.4	2.7	3.1	Ampl.	2.6
	502.4	504.2	503.8	504.9	504.6	504.5	504.5	504.5	Sbd box	504.6
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
i	0	0	0	0	0	0	0	0	PC freqs	
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:i	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	
i	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.16782083517E+03		Apriori delay (usec)		-3.16774274808E+03		Resid mbdelay (usec)		-1.55871E-02	+/- 3.4E-05
Sband delay (usec)	-3.16780801908E+03		Apriori clock (usec)		2.0462181E+01		Resid sbdelay (usec)		-6.52710E-02	+/- 2.7E-04
Phase delay (usec)	-3.16774275381E+03		Apriori clockrate (us/s)		5.3000000E-08		Resid phdelay (usec)		-5.73202E-06	+/- 5.7E-08
Delay rate (us/s)	3.44394133132E-02		Apriori rate (us/s)		3.44391901913E-02		Resid rate (us/s)		2.23122E-07	+/- 3.3E-10
Total phase (deg)			Apriori accel (us/s/s)		2.22898763986E-05		Resid phase (deg)		-177.8	+/- 1.8

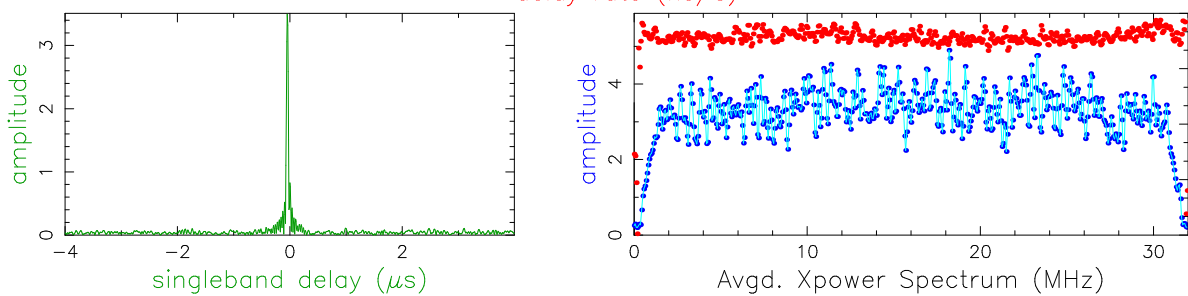
	RMS	Theor.	Amplitude	1.934 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-4.000	4.000
ph/seg (deg)	40.5	4.2	Search (2048X32)	1.905	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
amp/seg (%)	32.8	7.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	52.8	2.5	Inc. seg. avg.	2.422	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
amp/frq (%)	49.8	4.4	Inc. frq. avg.	2.586	Data rate(Mb/s): 1024	nlags: 512 t_cohere infinite			



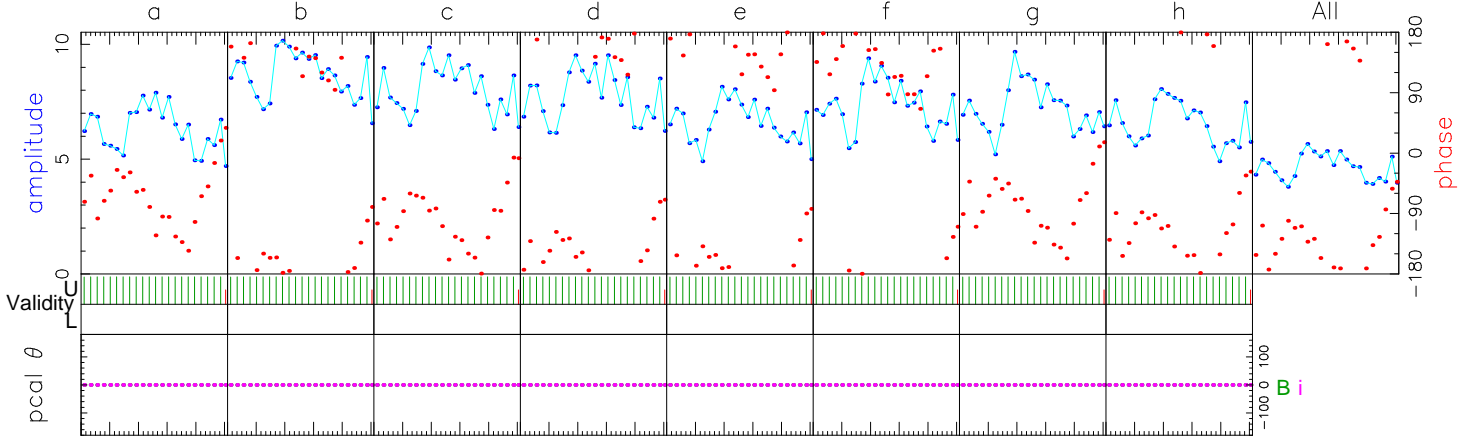
Fringe quality 2

SNR 117.5
Int time 299.796
Amp 3.510
Phase -144.3
PFD 0.0e+00
Delays (us)
SBD -0.045116
MBD 0.004595
Fringe rate (Hz)
0.019156
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. f191a
Exper # 16383
Yr:day 2019:094
Start 125500.00
Stop 130000.03
FRT 125730.00
Corr/FF/build
2019:176:083529
2019:176:085248
2018:249:082454
RA & Dec (J2000)
22h53m57.7479s
+16°08'53.561"



Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

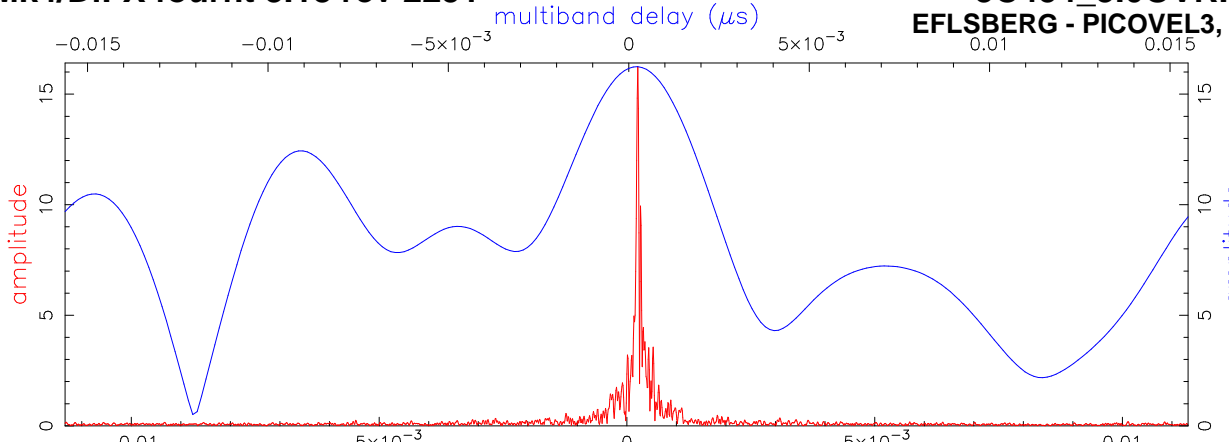


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-69.9	168.9	-100.7	-163.5	173.8	141.4	-81.4	-124.3	Phase	-144.3
	4.8	6.5	6.1	5.8	5.0	5.5	5.4	5.0	Ampl.	5.5
	505.6	506.4	506.9	506.9	507.3	507.2	507.1	507.0	Sbd box	507.2
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
i	0	0	0	0	0	0	0	0	PC freqs	
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:i	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	
i	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.16780065286E+03		Apriori delay (usec)		-3.16774274808E+03		Resid mbdelay (usec)		4.59522E-03	+/- 1.8E-05
Sband delay (usec)	-3.16778786408E+03		Apriori clock (usec)		2.0462181E+01		Resid sbdelay (usec)		-4.51160E-02	+/- 1.5E-04
Phase delay (usec)	-3.16774275274E+03		Apriori clockrate (us/s)		5.3000000E-08		Resid phdelay (usec)		-4.65331E-06	+/- 3.1E-08
Delay rate (us/s)	3.44394125714E-02		Apriori rate (us/s)		3.44391901913E-02		Resid rate (us/s)		2.2380E-07	+/- 1.8E-10
Total phase (deg)			Apriori accel (us/s/s)		2.22898763986E-05		Resid phase (deg)		-144.3	+/- 1.0

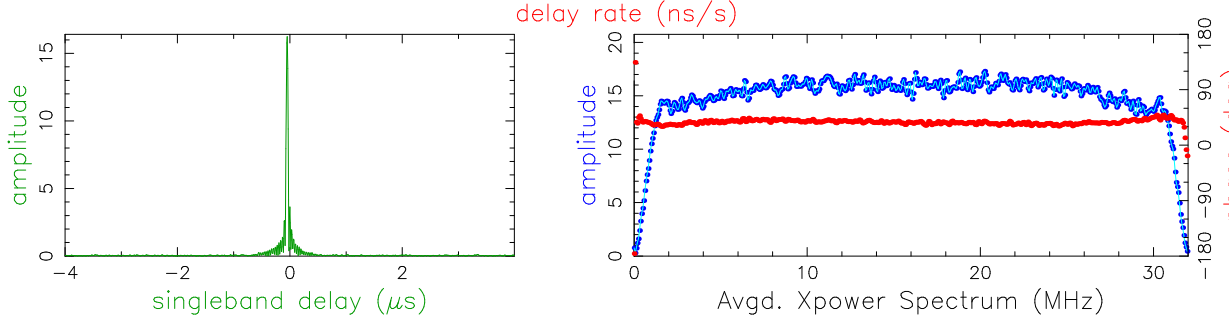
RMS Theor. Amplitude 3.510 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 43.4 2.3 Search (2048X32) 3.444 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 36.5 4.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 60.0 1.4 Inc. seg. avg. 4.666 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 59.1 2.4 Inc. frq. avg. 5.503 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 247.2 el 37.9 pa 37.5 i: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) -176.511 1949.312 simultaneous interpolator

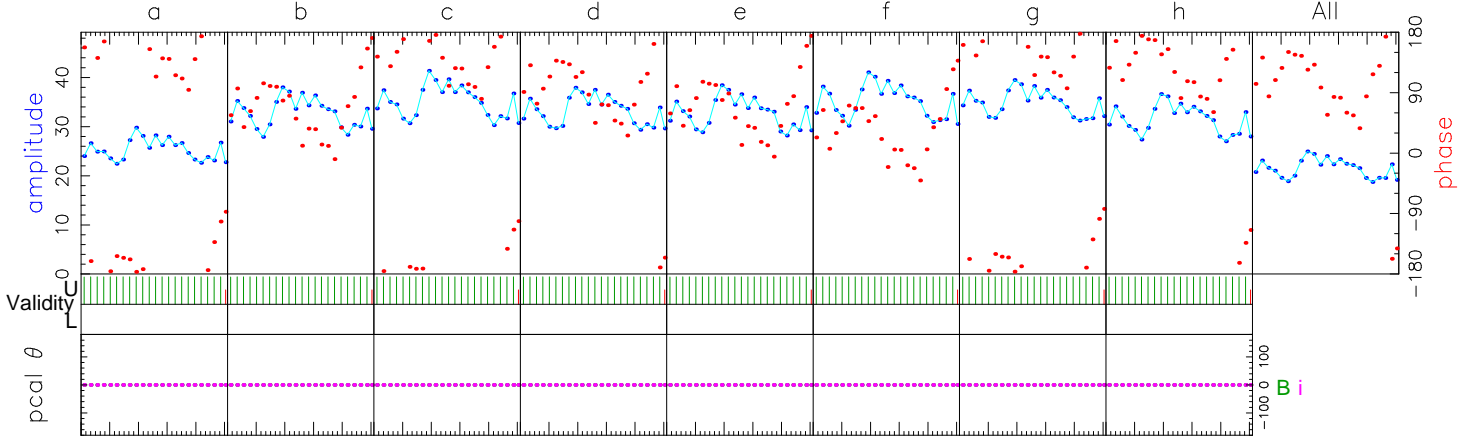
Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//Bi..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//Bi.W.75.0OVRI6



Fringe quality 2
 SNR 549.3
 Int time 299.796
 Amp 16.410
 Phase 111.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.049517
 MBD 0.000160
 Fringe rate (Hz) 0.019161
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085224
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

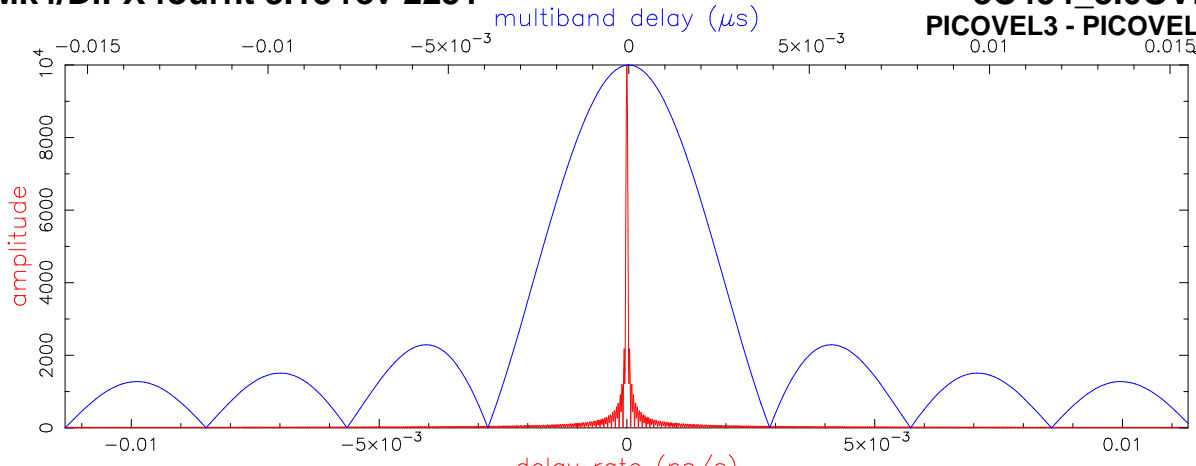


Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

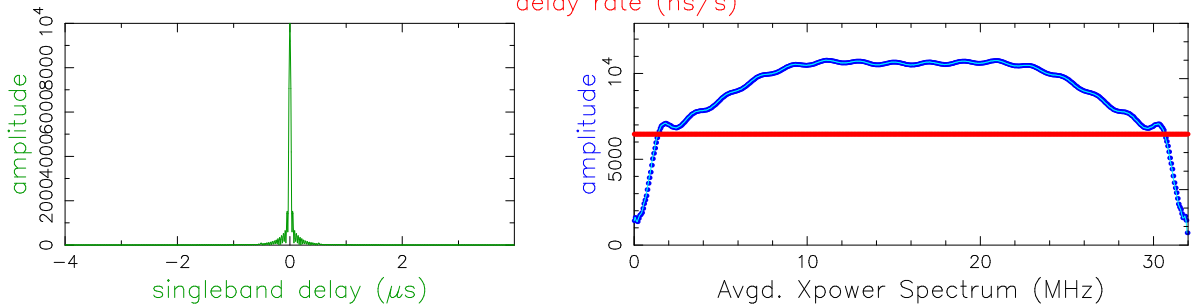


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0		
B	0	0	0	0	0	0	0	0		
i	0	0	0	0	0	0	0	0		
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
i	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-3.16780508805E+03		Apriori delay (usec)		-3.16774274808E+03		Resid mbdelay (usec)		1.60032E-04	+/- 4.0E-06
Sband delay (usec)	-3.16779226508E+03		Apriori clock (usec)		2.0462181E+01		Resid sbdelay (usec)		-4.95170E-02	+/- 3.1E-05
Phase delay (usec)	-3.16774274450E+03		Apriori clockrate (us/s)		5.3000000E-08		Resid phdelay (usec)		3.58612E-06	+/- 6.7E-09
Delay rate (us/s)	3.44394126295E-02		Apriori rate (us/s)		3.44391901913E-02		Resid rate (us/s)		2.22438E-07	+/- 3.9E-11
Total phase (deg)			Apriori accel (us/s/s)		2.22898763986E-05		Resid phase (deg)		111.2	+/- 0.2

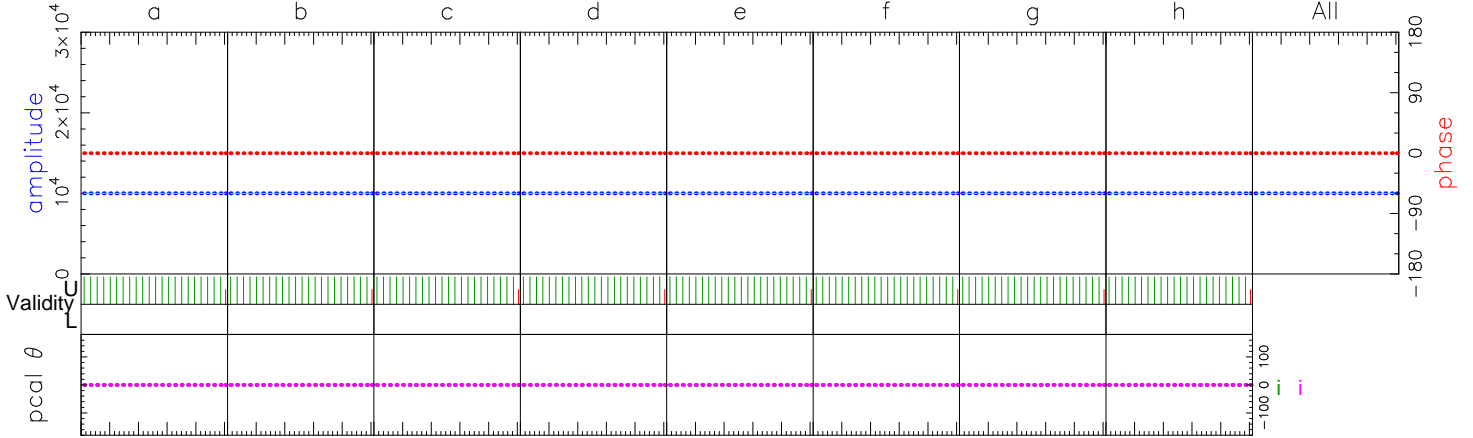
ph/seg (deg) 43.0 0.5 Theor. Amplitude 16.410 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 33.3 0.9 Search (2048X32) 16.158 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 57.1 0.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 52.1 0.5 Inc. seg. avg. 21.557 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 24.650 u.v (fr/asec) -176.511 1949.312 ion window (TEC) 0.00 0.00
 B: az 247.2 el 37.9 pa 37.5 i: az 249.4 el 49.9 pa 51.2 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//Bi..0OVR16 Output file: /Exps2/f191a/FRINGE/5555/No0007//Bi.W.9.0OVR16



Fringe quality 9
 SNR 334909.0
 Int time 299.977
 Amp 10000.000
 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. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085226
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

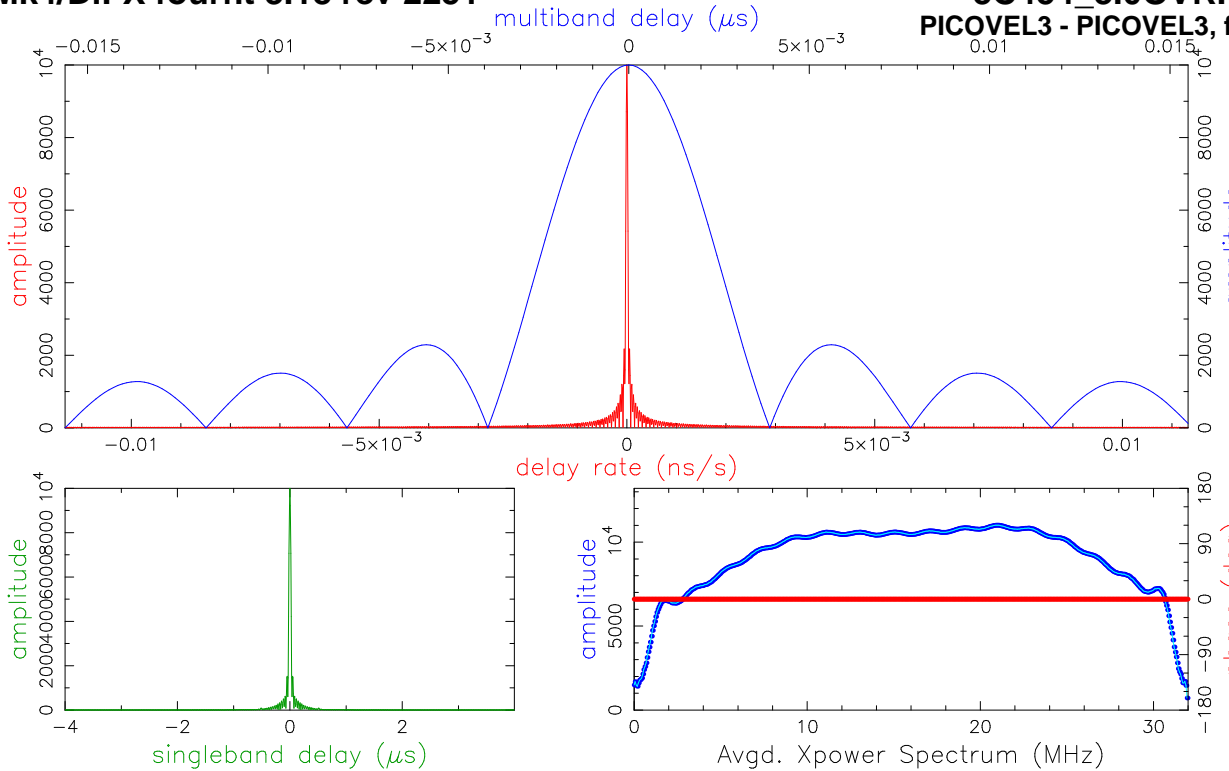


Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



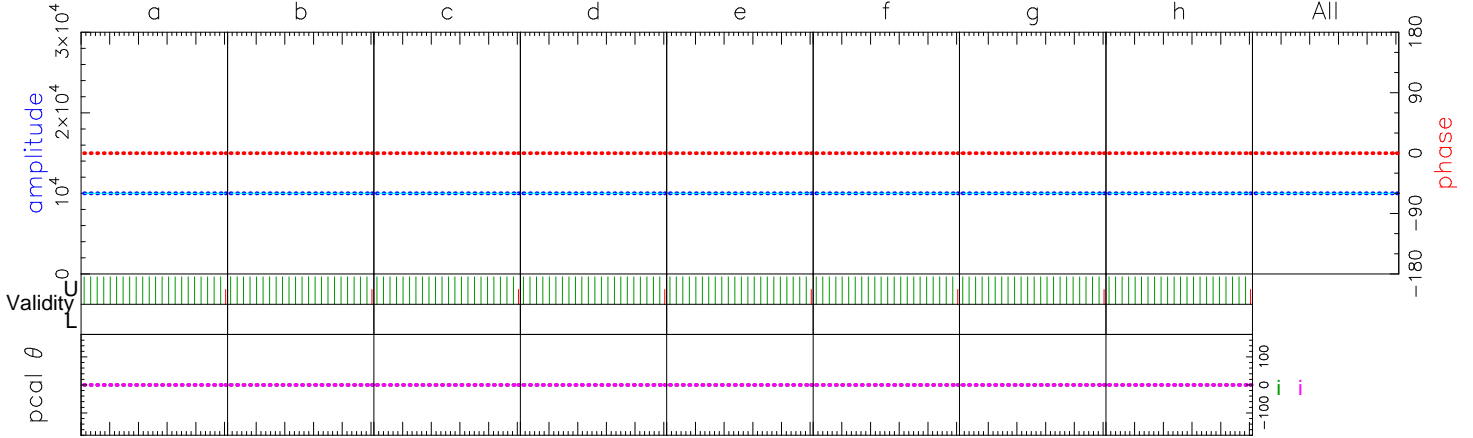
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0	Sbd box	513.0
U/L 586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
i 0	0	0	0	0	0	0	0	0	PC freqs	
i 0	0	0	0	0	0	0	0	0	PC freqs	
i:i 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ii 0:0	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	1000	PC amp	
i 1000	1000	1000	1000	1000	1000	1000	1000	1000		
i W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
									Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	0.0000000000E+00		Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	6.5E-09		
Sband delay (usec)	0.0000000000E+00		Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	5.1E-08		
Phase delay (usec)	0.0000000000E+00		Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.1E-11		
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	6.4E-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 0.0 Theor. Amplitude 10000.000 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 i: az 249.4 el 49.9 pa 51.2 i: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//ii...0OVR16 Output file: /Exps2/f191a/FRINGE/5555/No0007//ii.W.20.0OVR16



Fringe quality 9
 SNR 334909.0
 Int time 299.977
 Amp 10000.000
 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. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085233
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

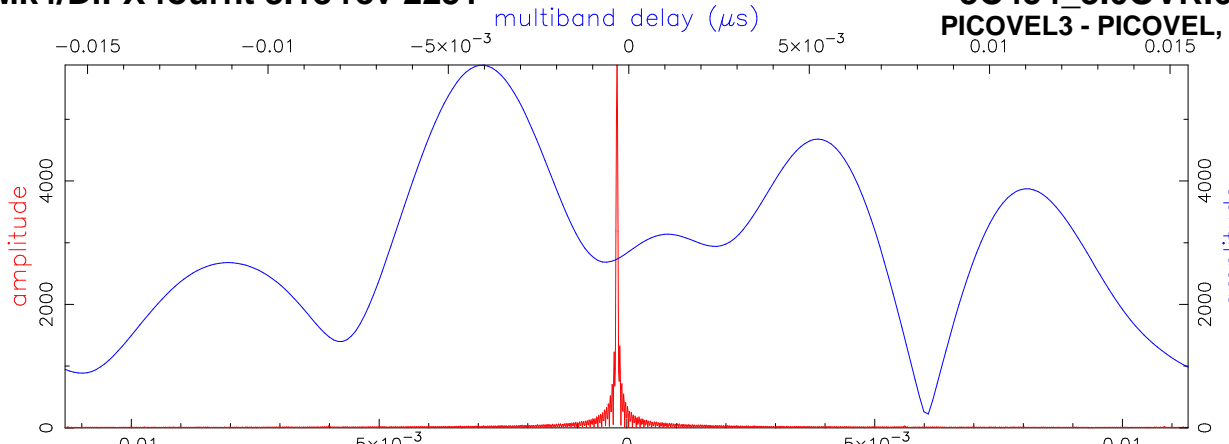


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0		
i	0	0	0	0	0	0	0	0		
ii	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
iii	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
iiii	1000	1000	1000	1000	1000	1000	1000	1000		
iiiii	1000	1000	1000	1000	1000	1000	1000	1000		
vi	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
vii	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
viii										
ix										
x										
xi										
xii										
xiii										
xiv										
xv										
xvi										
xvii										
xviii										
xix										
xx										
xxi										
xxii										
xxiii										
xxiv										
xxv										
xxvi										
xxvii										
xxviii										
xxix										
xxx										
xxxi										
xxxii										
xxxiii										
xxxiv										
xxxv										
xxxvi										
xxxvii										
xxxviii										
xxxix										
xl										
xli										
xlii										
xliiii										
xliv										
xlv										
xlvi										
xlvii										
xlviii										
xlvix										
l										
li										
lii										
liiii										
liv										
lv										
lvi										
lvii										
lviii										
lvix										
lxx										
lxxi										
lxxii										
lxxiii										
lxxiv										
lxxv										
lxxvi										
lxxvii										
lxxviii										
lxxix										
lxxx										
lxxxi										
lxxxii										
lxxxiii										
lxxxiv										
lxxxv										
lxxxvi										
lxxxvii										
lxxxviii										
lxxxix										
lxxxx										
lxxxxi										
lxxxxii										
lxxxxiii										
lxxxxiv										
lxxxxv										
lxxxxvi										
lxxxxvii										
lxxxxviii										
lxxxxix										
lxxxxx										

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 6.5E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 5.1E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.1E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 6.4E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

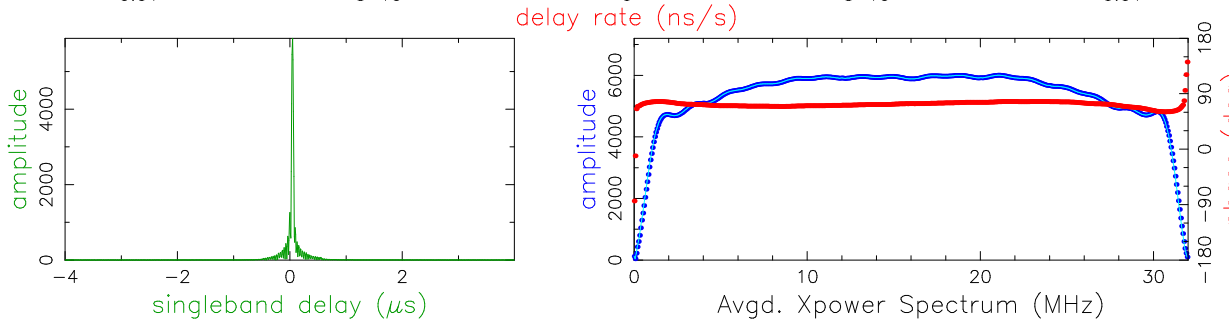
RMS Theor. Amplitude 10000.000 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

i: az 249.4 el 49.9 pa 51.2 i: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//ii...0OVR16 Output file: /Exps2/f191a/FRINGE/5555/No0007//ii.W.37.0OVR16



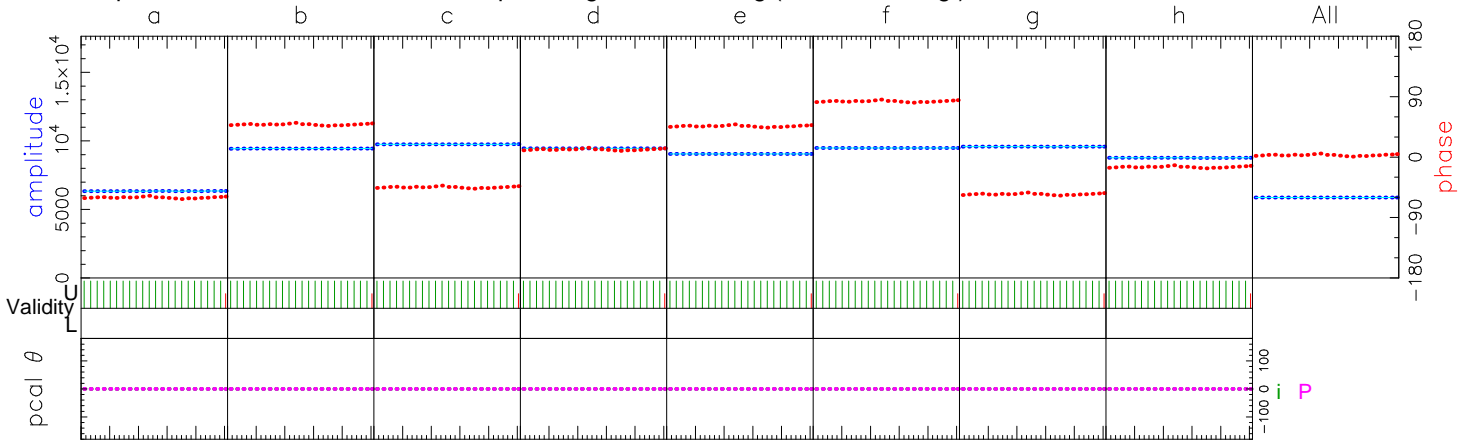
Fringe quality 5

SNR 195895.0
 Int time 296.825
 Amp 5880.928
 Phase 2.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.046287
 MBD -0.004082
 Fringe rate (Hz)
 -0.017177
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



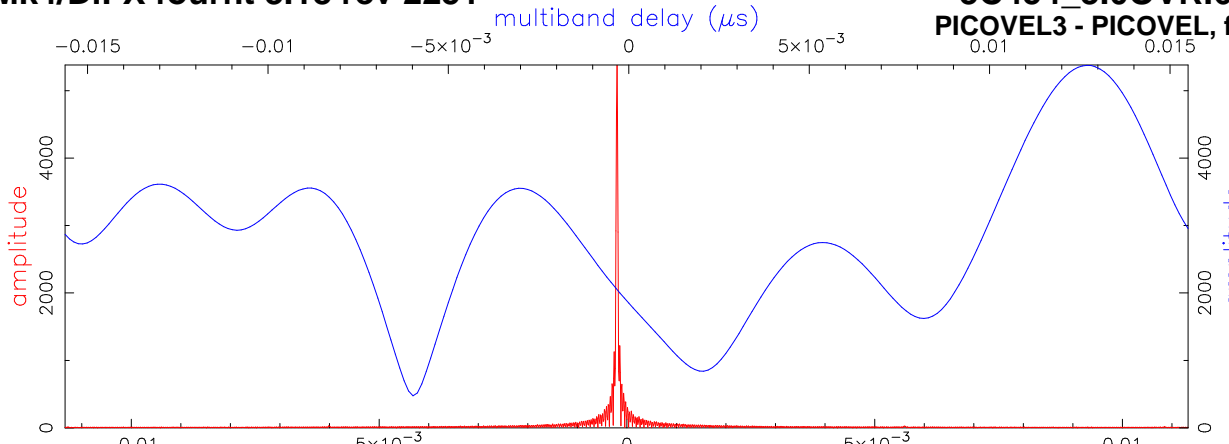
Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085225
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

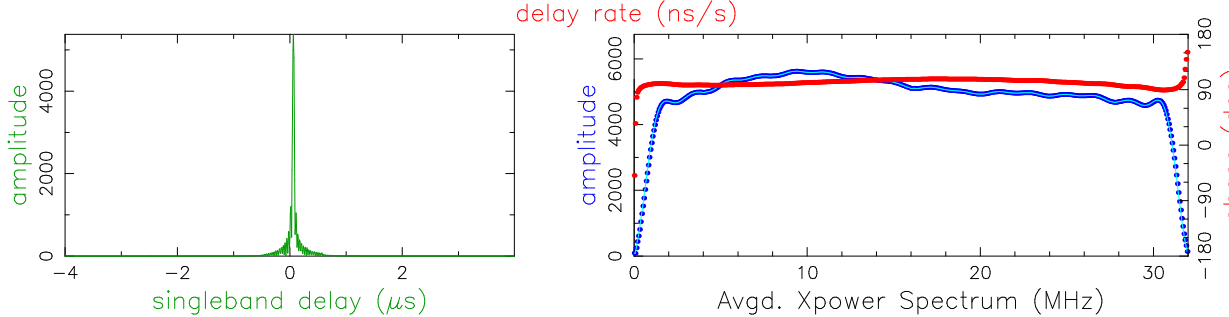


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-60.2	48.5	-44.9	11.2	46.0	83.1	-55.2	-14.8	Phase	2.9
	6342.5	9440.6	9755.1	9454.3	9053.6	9483.6	9579.7	8766.3	Amp.	8984.5
	520.1	519.7	519.1	519.2	519.0	518.9	518.9	518.9	Sbd box	518.9
UL	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
i	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
i:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
i:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
i	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.25891591258E-01		Apriori delay (usec)		-4.84310000000E-01		Resid mbdelay (usec)		-4.08159E-03	+/- 1.1E-08
Sband delay (usec)	-4.38023000000E-01		Apriori clock (usec)		-4.8430824E-01		Resid sbdelay (usec)		4.62870E-02	+/- 8.8E-08
Phase delay (usec)	-4.84309907972E-01		Apriori clockrate (us/s)		2.0000001E-07		Resid phdelay (usec)		9.20275E-08	+/- 1.9E-11
Delay rate (us/s)	5.87794874276E-10		Apriori rate (us/s)		1.99999999984E-07		Resid rate (us/s)		-1.99412E-07	+/- 1.1E-13
Total phase (deg)	-164.0		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		2.9	+/- 0.0

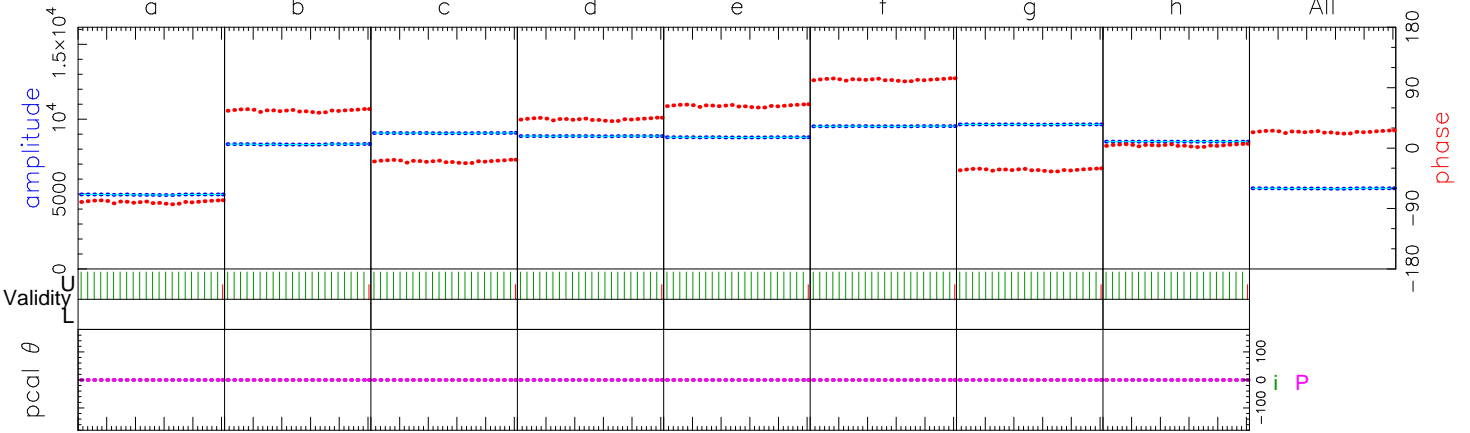
ph/seg (deg) 1.1 0.0 Theor. Amplitude 5880.928 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 5857.421 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 58.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 55.7 0.0 Inc. seg. avg. 5878.990 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 i: az 249.4 el 49.9 pa 51.2 P: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//iP..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//iP.W.17.0OVRI6



Fringe quality 5
 SNR 179234.8
 Int time 296.825
 Amp 5380.775
 Phase 24.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.061752
 MBD 0.012704
 Fringe rate (Hz)
 -0.017174
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085234
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"



Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

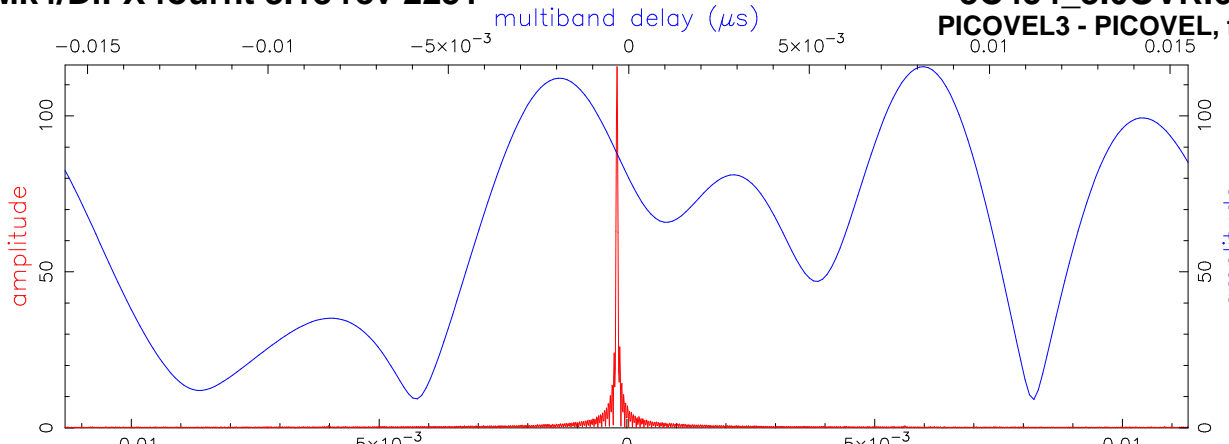


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-80.2	55.8	-19.6	43.0	63.0	101.8	-32.3	4.2	Phase	24.2
	4963.6	8323.3	9072.2	8869.6	8791.3	9530.4	9649.0	8499.0	Ampl.	8462.3
	523.3	522.0	521.4	521.2	521.1	521.1	521.1	520.8	Sbd box	520.9
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
i	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
i:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
i:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
i	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

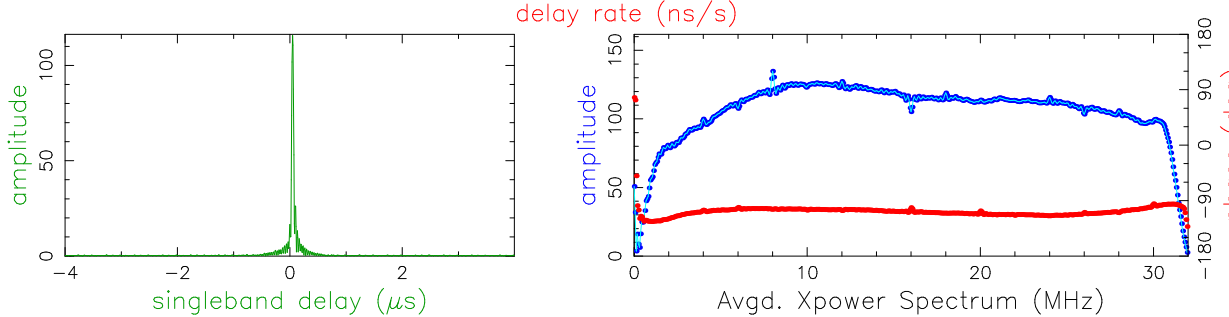
Group delay (usec)(sbd) -4.09105653758E-01 Apriori delay (usec) -4.84310000000E-01 Resid mbdelay (usec) 1.27043E-02 +/- 1.2E-08
 Sband delay (usec) -4.22557500000E-01 Apriori clock (usec) -4.8430824E-01 Resid sbdelay (usec) 6.17525E-02 +/- 9.6E-08
 Phase delay (usec) -4.84309220350E-01 Apriori clockrate (us/s) 2.0000001E-07 Resid phdelay (usec) 7.79650E-07 +/- 2.1E-11
 Delay rate (us/s) 6.24639870494E-10 Apriori rate (us/s) 1.99999999984E-07 Resid rate (us/s) -1.99375E-07 +/- 1.2E-13
 Total phase (deg) -142.6 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 24.2 +/- 0.0

RMS Theor. Amplitude 5380.775 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 1.3 0.0 Search (2048X32) 5366.846 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 0.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 64.9 0.0 Inc. seg. avg. 5377.798 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 62.8 0.0 Inc. frq. avg. 8462.300 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

i: az 249.4 el 49.9 pa 51.2 P: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//iP..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//iP.W.40.0OVRI6

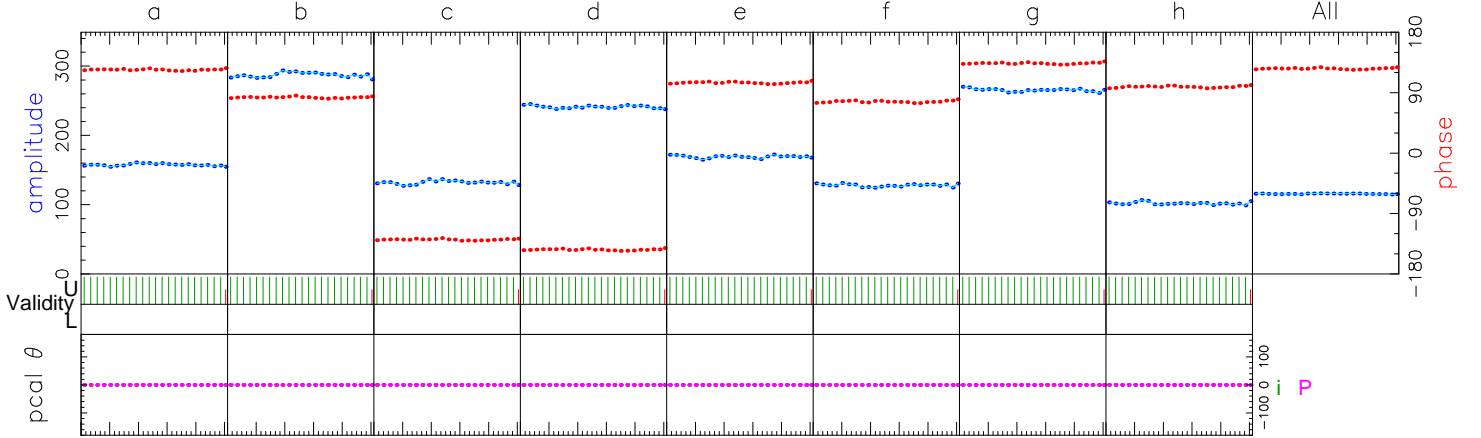


Fringe quality 5
 SNR 3874.7
 Int time 296.825
 Amp 116.323
 Phase 125.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.048756
 MBD 0.008198
 Fringe rate (Hz)
 -0.017179
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085241
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"



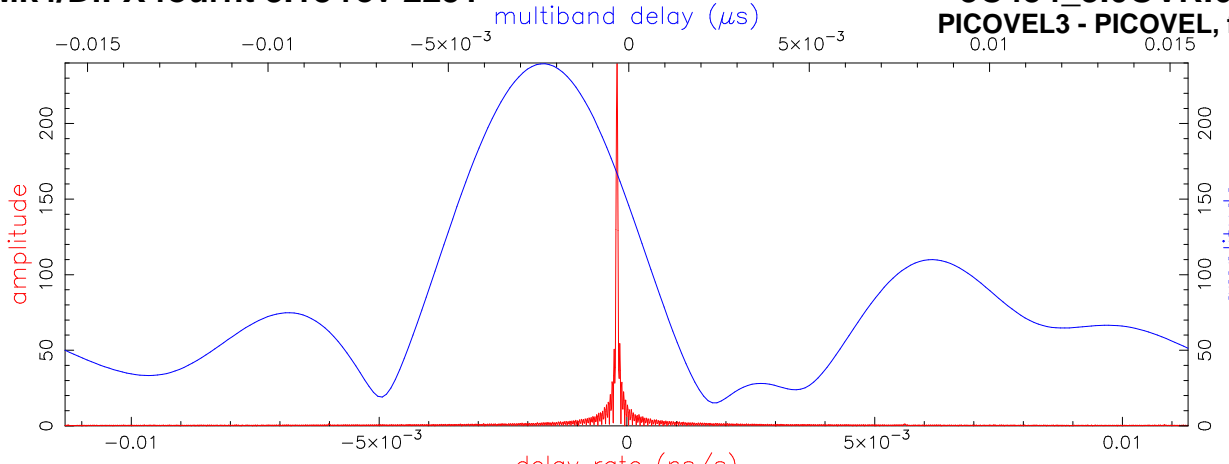
amplitude
 phase (deg)
 2019:176:083529
 2019:176:085241
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	124.0	82.9	-128.7	-143.7	104.7	76.5	133.5	98.6	Phase	125.8
	157.7	287.3	132.2	241.3	169.2	128.0	265.5	102.0	Ampl.	185.4
	520.6	519.4	520.4	519.2	519.4	518.5	519.4	519.3	Sbd box	519.2
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
i	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
i:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
i:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.44862278758E-01		Apriori delay (usec)		-4.84310000000E-01		Resid mbdelay (usec)		8.19772E-03	+/- 5.6E-07
Sband delay (usec)	-4.35553500000E-01		Apriori clock (usec)		-4.8430824E-01		Resid sbdelay (usec)		4.87565E-02	+/- 4.4E-06
Phase delay (usec)	-4.84305944505E-01		Apriori clockrate (us/s)		2.0000001E-07		Resid phdelay (usec)		4.05549E-06	+/- 9.5E-10
Delay rate (us/s)	5.66538145689E-10		Apriori rate (us/s)		1.99999999984E-07		Resid rate (us/s)		-1.99433E-07	+/- 5.5E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		125.8	+/- 0.0

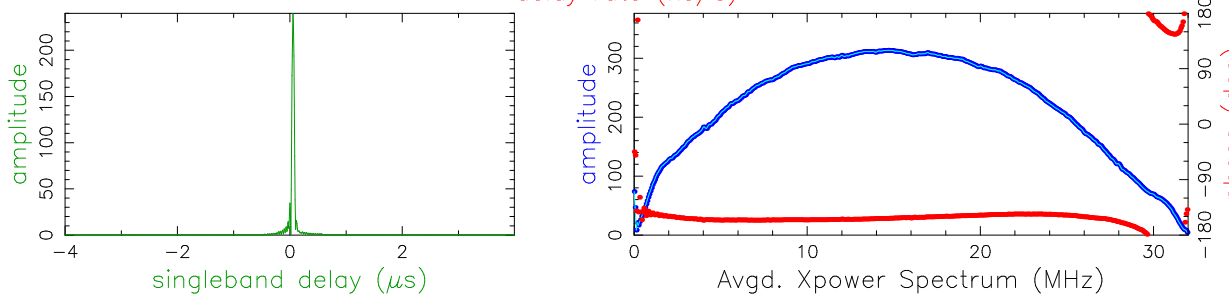
ph/seg (deg) 1.0 0.1 Theor. Amplitude 116.323 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.6 0.1 Search (2048X32) 113.482 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 64.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 81.7 0.1 Inc. seg. avg. 115.768 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 i: az 249.4 el 49.9 pa 51.2 P: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//iP..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//iP.W.59.0OVRI6



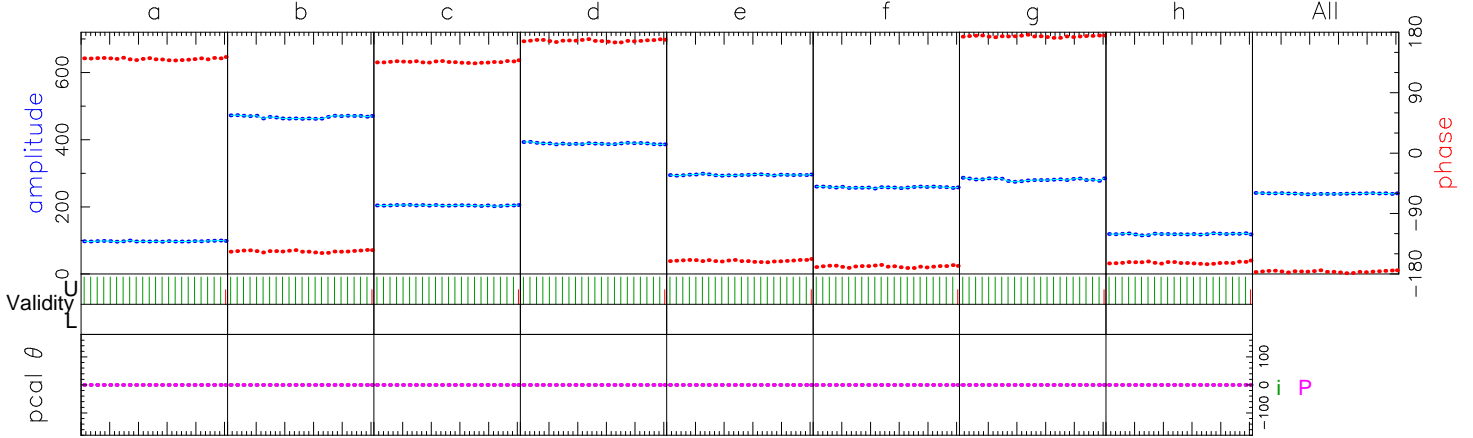
Fringe quality 5

SNR 7996.1
 Int time 296.825
 Amp 240.050
 Phase -176.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.056076
 MBD -0.002372
 Fringe rate (Hz)
 -0.017176
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085249
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"



Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

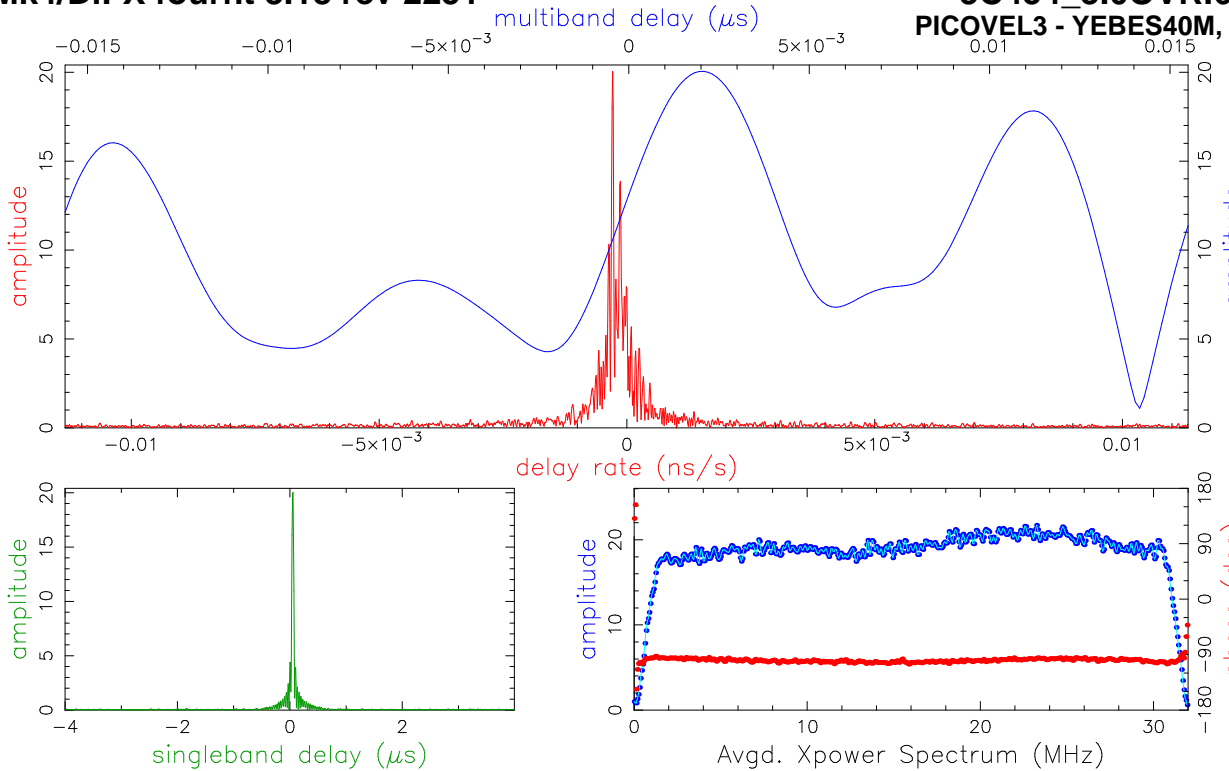


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	140.2	-146.2	135.6	167.2	-160.3	-168.7	173.8	-163.2	Phase	-176.3
	97.7	467.6	204.3	388.5	295.1	258.1	281.0	119.0	Ampl.	263.9
	519.2	520.3	518.8	519.9	520.3	521.8	519.7	518.8	Sbd box	520.2
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
i	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
i:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
i:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
i	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd) -4.24181591258E-01 Apriori delay (usec) -4.84310000000E-01 Resid mbdelay (usec) -2.37159E-03 +/- 2.7E-07
 Sband delay (usec) -4.28234000000E-01 Apriori clock (usec) -4.8430824E-01 Resid sbdelay (usec) 5.60760E-02 +/- 2.2E-06
 Phase delay (usec) -4.84315686381E-01 Apriori clockrate (us/s) 2.0000001E-07 Resid phdelay (usec) -5.68638E-06 +/- 4.6E-10
 Delay rate (us/s) 6.03383141907E-10 Apriori rate (us/s) 1.99999999984E-07 Resid rate (us/s) -1.99397E-07 +/- 2.7E-12
 Total phase (deg) -343.2 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -176.3 +/- 0.0

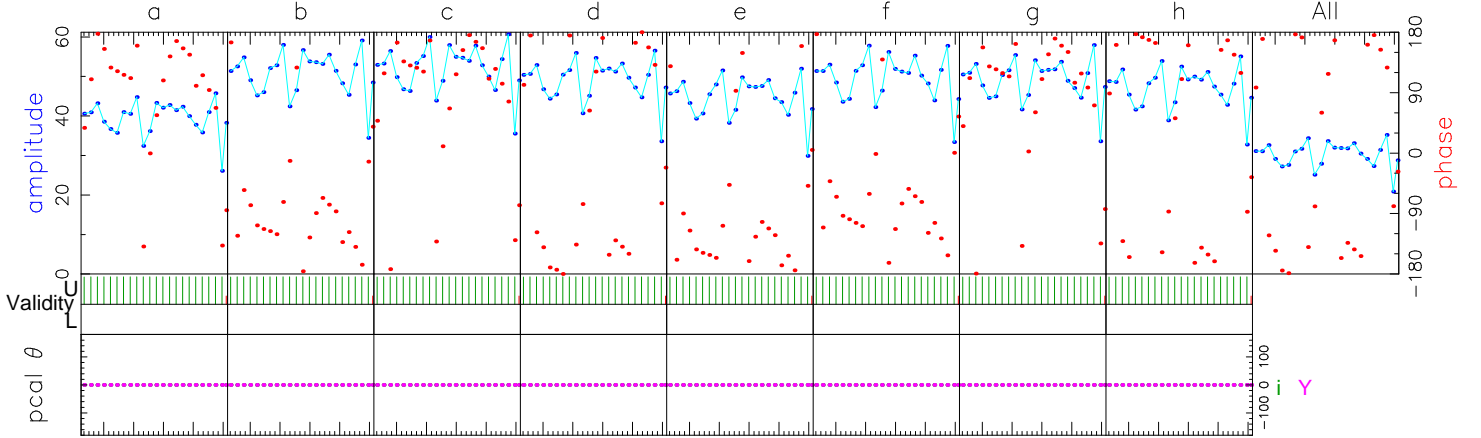
RMS Theor. Amplitude 240.050 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 1.1 0.0 Search (2048X32) 236.271 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 0.5 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 31.5 0.0 Inc. seg. avg. 239.609 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 50.0 0.0 Inc. frq. avg. 263.919 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

i: az 249.4 el 49.9 pa 51.2 P: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//iP..00VRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//iP.W.78.00VRI6



Fringe quality 1
 SNR 666.3
 Int time 285.318
 Amp 20.406
 Phase -175.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.051229
 MBD 0.001946
 Fringe rate (Hz)
 -0.025020
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085225
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
124.1	-109.0	133.5	-171.9	-144.4	-96.2	127.1	176.2	Phase	-175.9
26.2	33.5	34.6	32.4	29.7	32.8	32.5	31.2	Ampl.	31.6
521.4	520.4	519.9	519.8	519.7	519.7	519.7	519.9	Sbd box	519.6
U/L 558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
i 0	0	0	0	0	0	0	0	PC freqs	
Y 0	0	0	0	0	0	0	0	PC freqs	
i:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
i:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Y i 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
i W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	3.63127636507E+02	Apriori delay (usec)	3.63063190485E+02	Resid mbdelay (usec)	1.94602E-03	+/-	3.3E-06		
Sband delay (usec)	3.63114419985E+02	Apriori clock (usec)	-7.5829983E+00	Resid sbdelay (usec)	5.12295E-02	+/-	2.6E-05		
Phase delay (usec)	3.63063184812E+02	Apriori clockrate (us/s)	-2.9000001E-07	Resid phdelay (usec)	-5.67261E-06	+/-	5.5E-09		
Delay rate (us/s)	-3.15635779856E-02	Apriori rate (us/s)	-3.15632875252E-02	Resid rate (us/s)	-2.90460E-07	+/-	3.4E-11		
Total phase (deg)	-93.7	Apriori accel (us/s/s)	-3.45006921952E-06	Resid phase (deg)	-175.9	+/-	0.2		

ph/seg (deg) 54.7 0.4
 amp/seg (%) 50.7 0.7
 ph/frq (deg) 59.6 0.2
 amp/frq (%) 56.2 0.4

RMS Theor. Amplitude 20.406 +/- 0.031
 Search (2048X32) 19.874
 Interp. 0.000
 Inc. seg. avg. 30.251
 Inc. frq. avg. 31.614

Group delay (usec)(sbd) 3.63127636507E+02
 Sband delay (usec) 3.63114419985E+02
 Phase delay (usec) 3.63063184812E+02
 Delay rate (us/s) -3.15635779856E-02
 Total phase (deg) -93.7

Apriori delay (usec) 3.63063190485E+02
 Apriori clock (usec) -7.5829983E+00
 Apriori clockrate (us/s) -2.9000001E-07
 Apriori rate (us/s) -3.15632875252E-02
 Apriori accel (us/s/s) -3.45006921952E-06

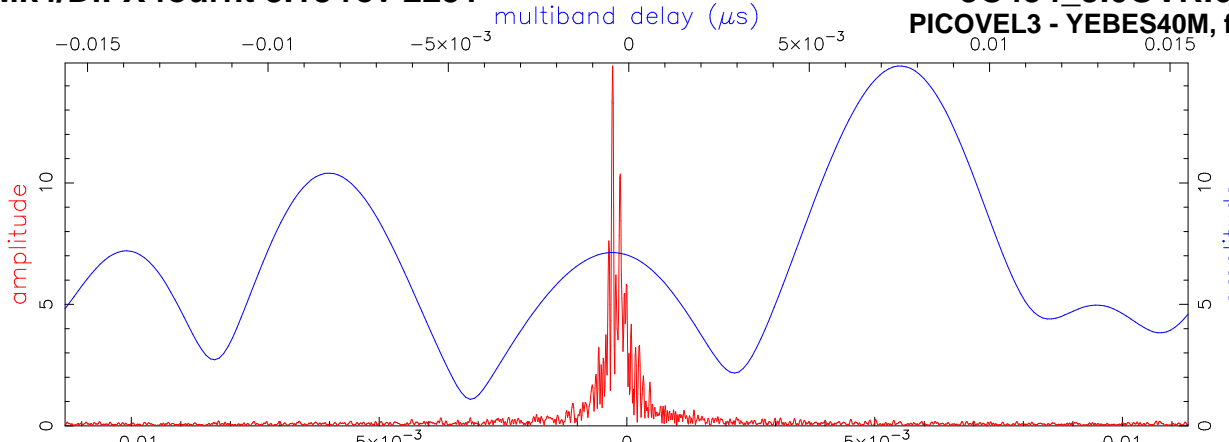
Resid mbdelay (usec) 1.94602E-03 +/- 3.3E-06
 Resid sbdelay (usec) 5.12295E-02 +/- 2.6E-05
 Resid phdelay (usec) -5.67261E-06 +/- 5.5E-09
 Resid rate (us/s) -2.90460E-07 +/- 3.4E-11
 Resid phase (deg) -175.9 +/- 0.2

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Sample rate(MSamp/s): 64
 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite

sb window (us) -4.000 4.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

i: az 249.4 el 49.9 pa 51.2 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 183.682 -478.490 simultaneous interpolator

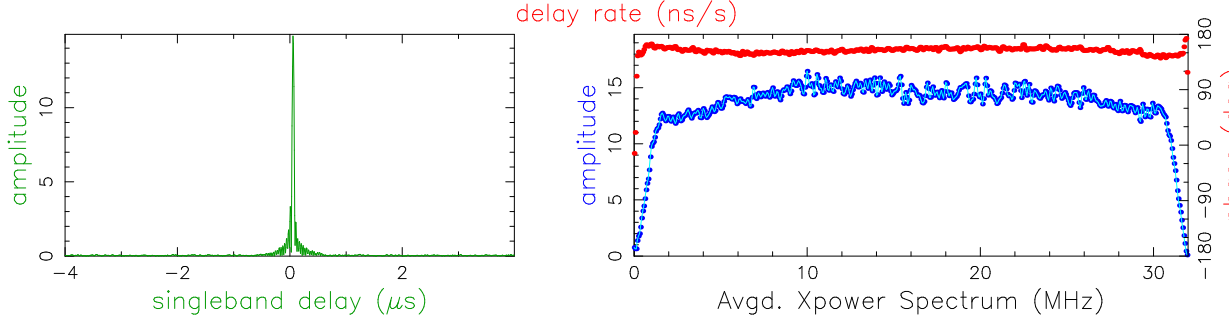
Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//iY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//iY.W.16.0OVRI6



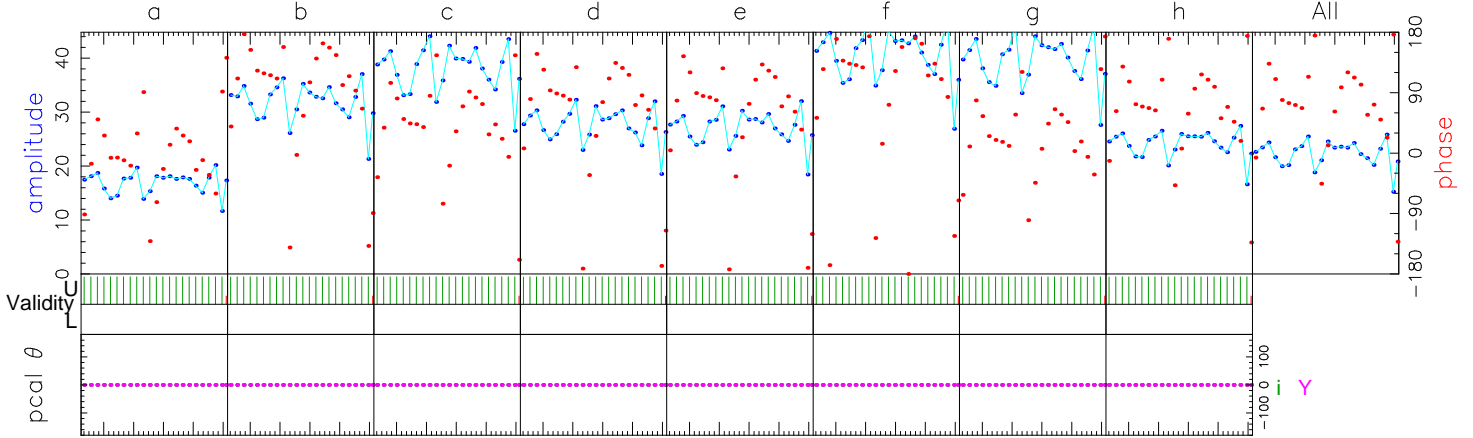
Fringe quality 1

SNR 487.9
Int time 285.318
Amp 14.941
Phase 79.1
PFD 0.0e+00
Delays (us)
SBD 0.057032
MBD 0.007546
Fringe rate (Hz)
-0.025024
Ion TEC 0.000
Ref freq (MHz)
86140.000
AP (sec) 0.512

Exp. f191a
Exper # 16383
Yr:day 2019:094
Start 125514.34
Stop 130000.03
FRT 125730.00
Corr/FF/build
2019:176:083529
2019:176:085233
2018:249:082454
RA & Dec (J2000)
22h53m57.7479s
+16°08'53.561"



Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-4.6	122.5	50.3	93.1	90.4	138.9	24.0	75.0	Phase	79.1
	11.2	21.1	25.1	18.3	18.0	27.1	26.2	16.0	Ampl.	20.4
	522.2	521.7	520.9	520.0	520.5	520.4	520.8	520.6	Sbd box	520.3
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
i	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
i:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.63133236007E+02		Apriori delay (usec)		3.63063190485E+02		Resid mbdelay (usec)		7.54552E-03	+/- 4.4E-06
Sband delay (usec)	3.63120222485E+02		Apriori clock (usec)		-7.5829983E+00		Resid sbdelay (usec)		5.70320E-02	+/- 3.5E-05
Phase delay (usec)	3.63063193035E+02		Apriori clockrate (us/s)		-2.9000001E-07		Resid phdelay (usec)		2.54977E-06	+/- 7.6E-09
Delay rate (us/s)	-3.15635780310E-02		Apriori rate (us/s)		-3.15632875252E-02		Resid rate (us/s)		-2.90506E-07	+/- 4.6E-11
Total phase (deg)	161.3		Apriori accel (us/s/s)		-3.45006921952E-06		Resid phase (deg)		79.1	+/- 0.2

ph/seg (deg) 54.7 0.6
amp/seg (%) 52.0 1.0
ph/frq (deg) 52.7 0.3
amp/frq (%) 50.3 0.6

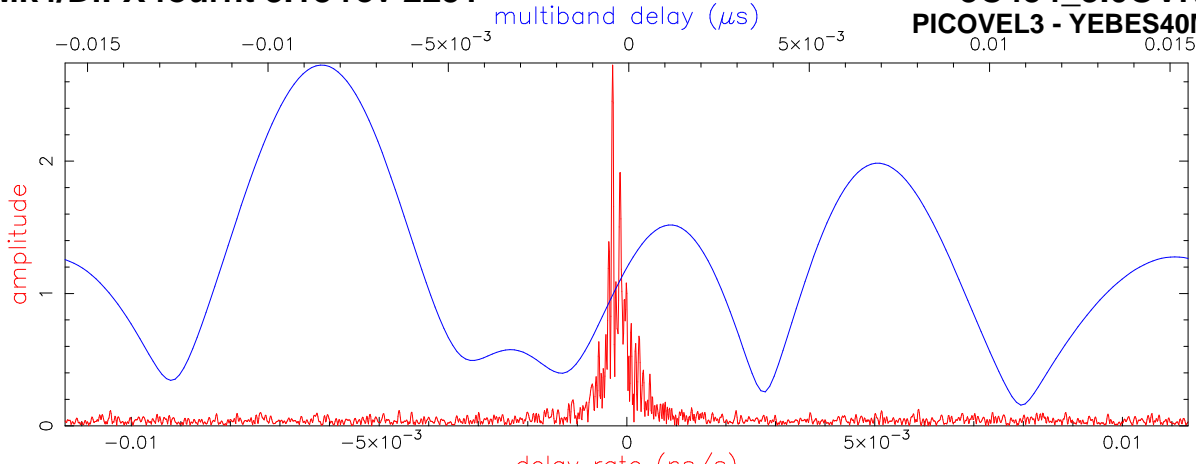
RMS Theor. Amplitude 14.941 +/- 0.031
Search (2048X32) 14.629
Interp. 0.000
Inc. seg. avg. 22.346
Inc. frq. avg. 20.381

Group delay (usec)(sbd) 3.63133236007E+02
Apriori delay (usec) 3.63063190485E+02
Resid mbdelay (usec) 7.54552E-03 +/- 4.4E-06
Sband delay (usec) 3.63120222485E+02
Apriori clock (usec) -7.5829983E+00
Resid sbdelay (usec) 5.70320E-02 +/- 3.5E-05
Phase delay (usec) 3.63063193035E+02
Apriori clockrate (us/s) -2.9000001E-07
Resid phdelay (usec) 2.54977E-06 +/- 7.6E-09
Delay rate (us/s) -3.15635780310E-02
Apriori rate (us/s) -3.15632875252E-02
Resid rate (us/s) -2.90506E-07 +/- 4.6E-11
Total phase (deg) 161.3
Apriori accel (us/s/s) -3.45006921952E-06
Resid phase (deg) 79.1 +/- 0.2

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
sb window (us) -4.000 4.000
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

i: az 249.4 el 49.9 pa 51.2 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 183.682 -478.490 simultaneous interpolator

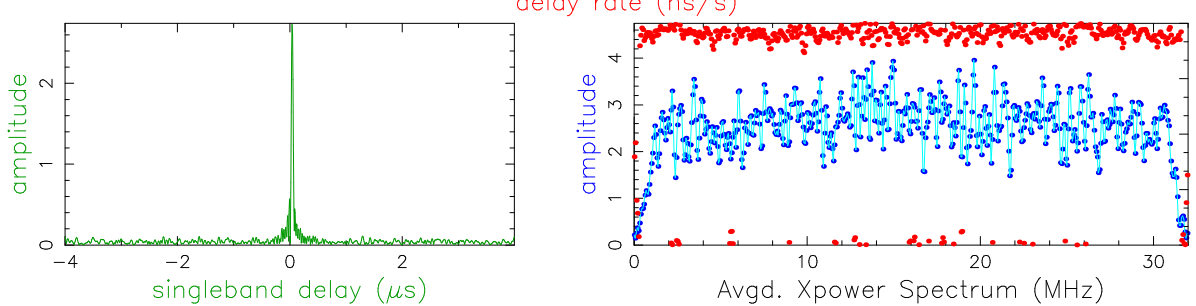
Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//iY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//iY.W.36.0OVRI6



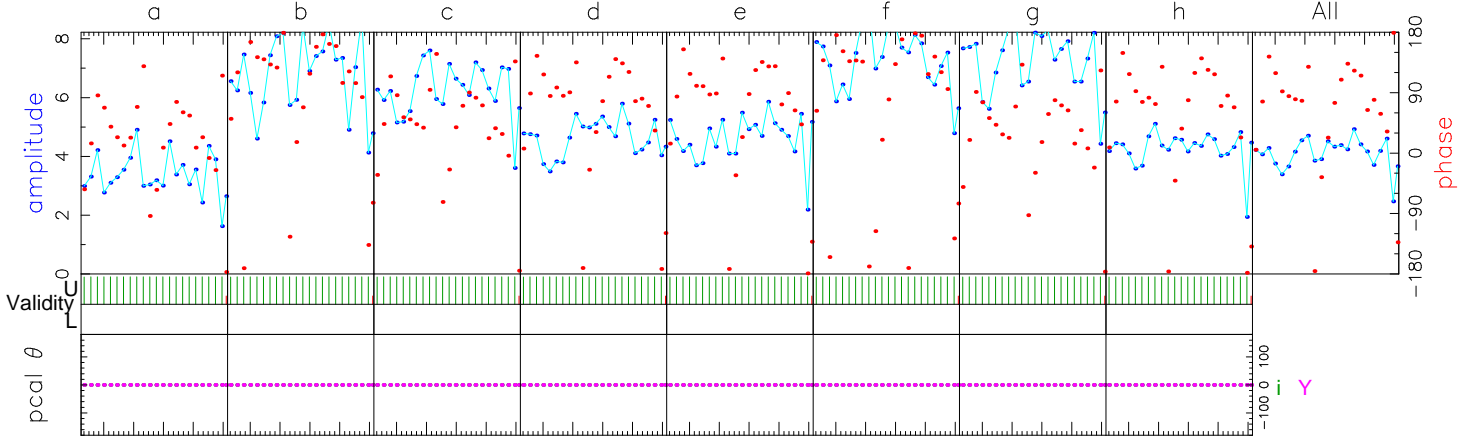
Fringe quality 1

SNR 89.5
Int time 285.318
Amp 2.742
Phase 90.1
PFD 0.0e+00
Delays (us)
SBD 0.040978
MBD -0.008487
Fringe rate (Hz)
-0.024930
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. f191a
Exper # 16383
Yr:day 2019:094
Start 125514.34
Stop 130000.03
FRT 125730.00
Corr/FF/build
2019:176:083529
2019:176:085241
2018:249:082454
RA & Dec (J2000)
22h53m57.7479s
+16°08'53.561"



Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec

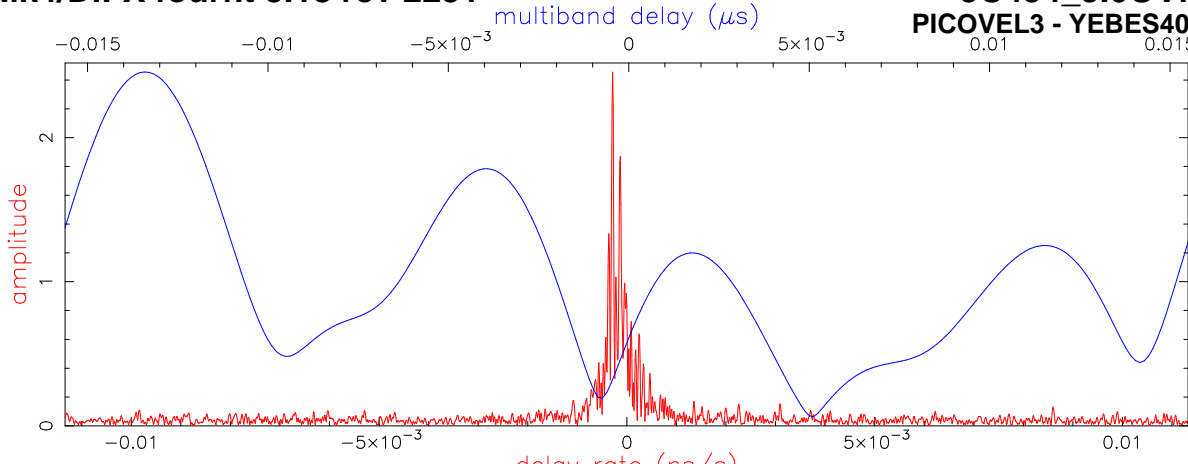


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	30.3	135.8	51.7	97.6	98.2	148.7	38.1	92.1	Phase	90.1
	2.2	4.6	4.2	3.0	3.1	4.8	4.8	2.8	Ampl.	3.7
	519.8	519.3	518.8	518.0	518.6	518.4	518.8	518.7	Sbd box	518.2
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
i	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
i:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 3.63117203445E+02 Apriori delay (usec) 3.63063190485E+02 Resid mbdelay (usec) -8.48704E-03 +/- 2.4E-05
 Sband delay (usec) 3.63104167985E+02 Apriori clock (usec) -7.5829983E+00 Resid sbdelay (usec) 4.09775E-02 +/- 1.9E-04
 Phase delay (usec) 3.63063193390E+02 Apriori clockrate (us/s) -2.9000001E-07 Resid phdelay (usec) 2.90558E-06 +/- 4.1E-08
 Delay rate (us/s) -3.15635769419E-02 Apriori rate (us/s) -3.15632875252E-02 Resid rate (us/s) -2.89417E-07 +/- 2.5E-10
 Total phase (deg) 172.3 Apriori accel (us/s/s) -3.45006921952E-06 Resid phase (deg) 90.1 +/- 1.3

RMS Theor. Amplitude 2.742 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.0 3.1 Search (2048X32) 2.691 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 53.2 5.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 47.2 1.8 Inc. seg. avg. 4.103 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 48.9 3.2 Inc. frq. avg. 3.676 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

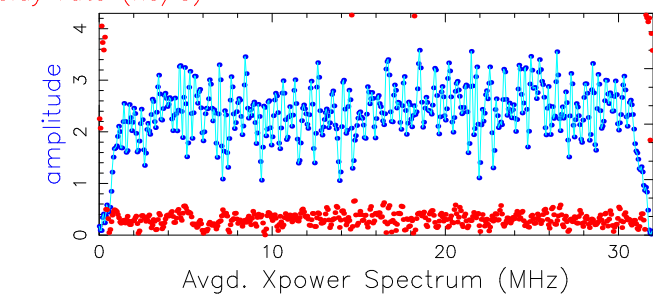
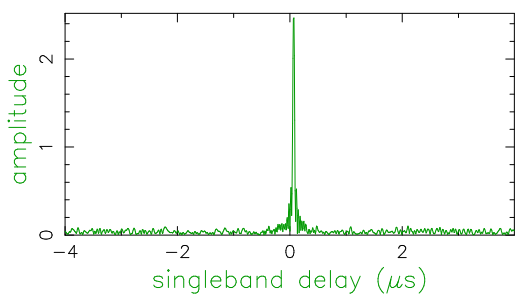
i: az 249.4 el 49.9 pa 51.2 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 183.682 -478.490 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//iY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//iY.W.55.0OVRI6



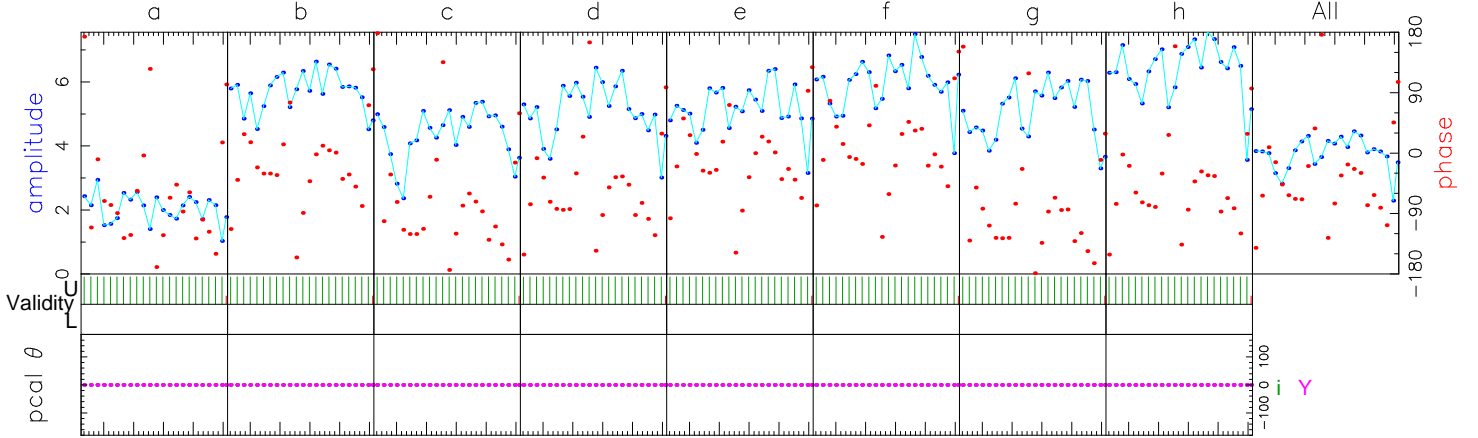
Fringe quality 1

SNR 82.2
 Int time 285.318
 Amp 2.519
 Phase -53.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.066569
 MBD -0.013332
 Fringe rate (Hz)
 -0.024979
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512

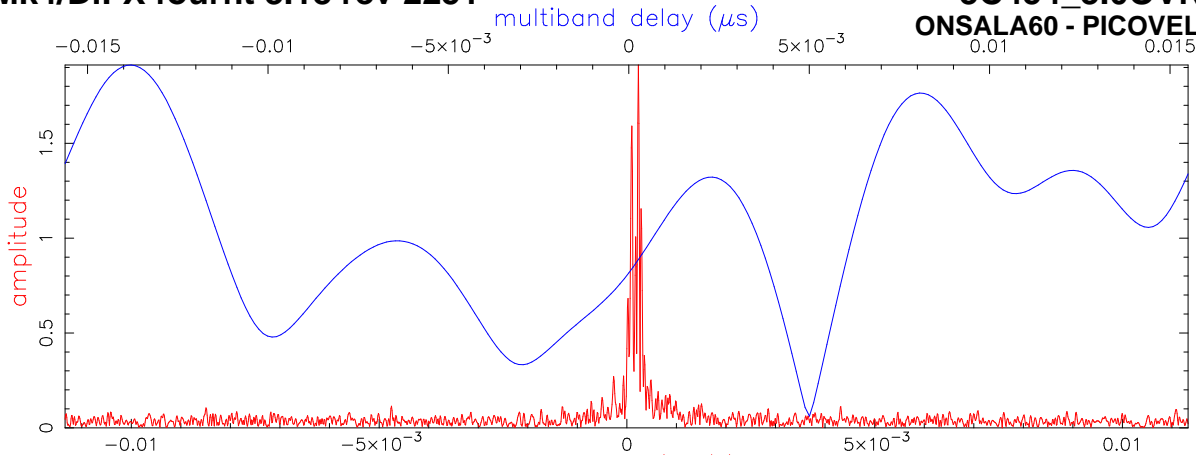
Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085248
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"



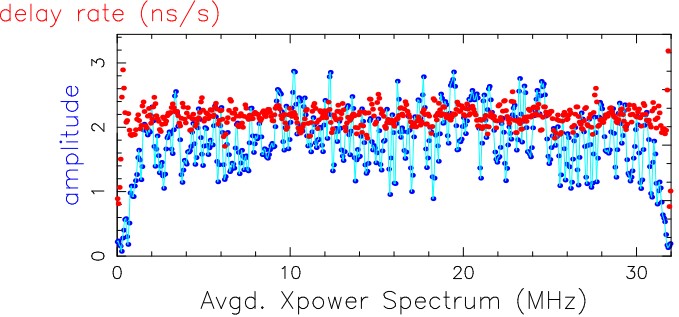
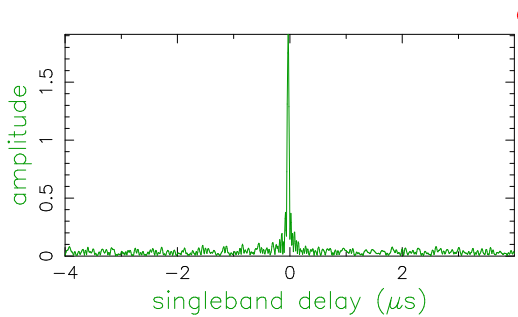
Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



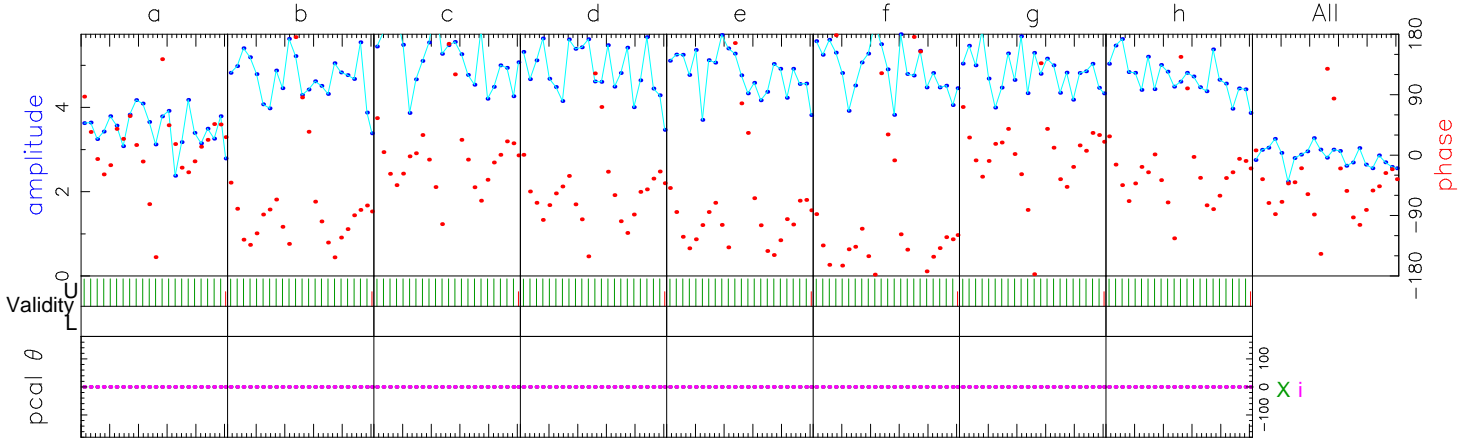
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All	
	-96.6	-22.1	-104.9	-70.2	-13.3	4.8	-111.5	-62.0	Phase	-53.7	
	1.2	3.8	2.8	3.3	3.4	3.4	3.4	4.2	Ampl.	3.2	
	524.3	522.1	522.2	521.8	521.5	521.8	522.1	521.8	Sbd box	521.5	
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used		
i	0	0	0	0	0	0	0	0	PC freqs		
Y	0	0	0	0	0	0	0	0	PC freqs		
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
i	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
Y	1000	1000	1000	1000	1000	1000	1000	1000			
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	3.63143608445E+02		Apriori delay (usec)		3.63063190485E+02		Resid mbdelay (usec)		-1.33320E-02	+/- 2.6E-05	
Sband delay (usec)	3.63129759485E+02		Apriori clock (usec)		-7.5829983E+00		Resid sbdelay (usec)		6.65690E-02	+/- 2.1E-04	
Phase delay (usec)	3.63063188753E+02		Apriori clockrate (us/s)		-2.9000001E-07		Resid phdelay (usec)		-1.73194E-06	+/- 4.5E-08	
Delay rate (us/s)	-3.15635775123E-02		Apriori rate (us/s)		-3.15632875252E-02		Resid rate (us/s)		-2.89987E-07	+/- 2.7E-10	
Total phase (deg)	28.5		Apriori accel (us/s/s)		-3.45006921952E-06		Resid phase (deg)		-53.7	+/- 1.4	
	RMS	Theor.	Amplitude	2.519 +/- 0.031		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	56.3	3.3	Search (2048X32)	2.420		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-4.000	4.000	
amp/seg (%)	53.4	5.8	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	48.6	2.0	Inc. seg. avg.	3.759		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	44.8	3.4	Inc. frq. avg.	3.248		Data rate(Mb/s): 1024		nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00
i: az 249.4 el 49.9 pa 51.2	Y: az 246.0 el 48.3 pa 46.5		u,v (fr/asec) 183.682 -478.490						simultaneous interpolator		



Fringe quality 1
SNR 64.0
Int time 299.796
Amp 1.913
Phase -54.9
PFD 0.0e+00
Delays (us)
SBD -0.031401
MBD -0.013820
Fringe rate (Hz) 0.020254
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512
Exp. f191a
Exper # 16383
Yr:day 2019:094
Start 125500.00
Stop 130000.03
FRT 125730.00
Corr/FF/build
2019:176:083529
2019:176:085226
2018:249:082454
RA & Dec (J2000)
22h53m57.7479s
+16°08'53.561"



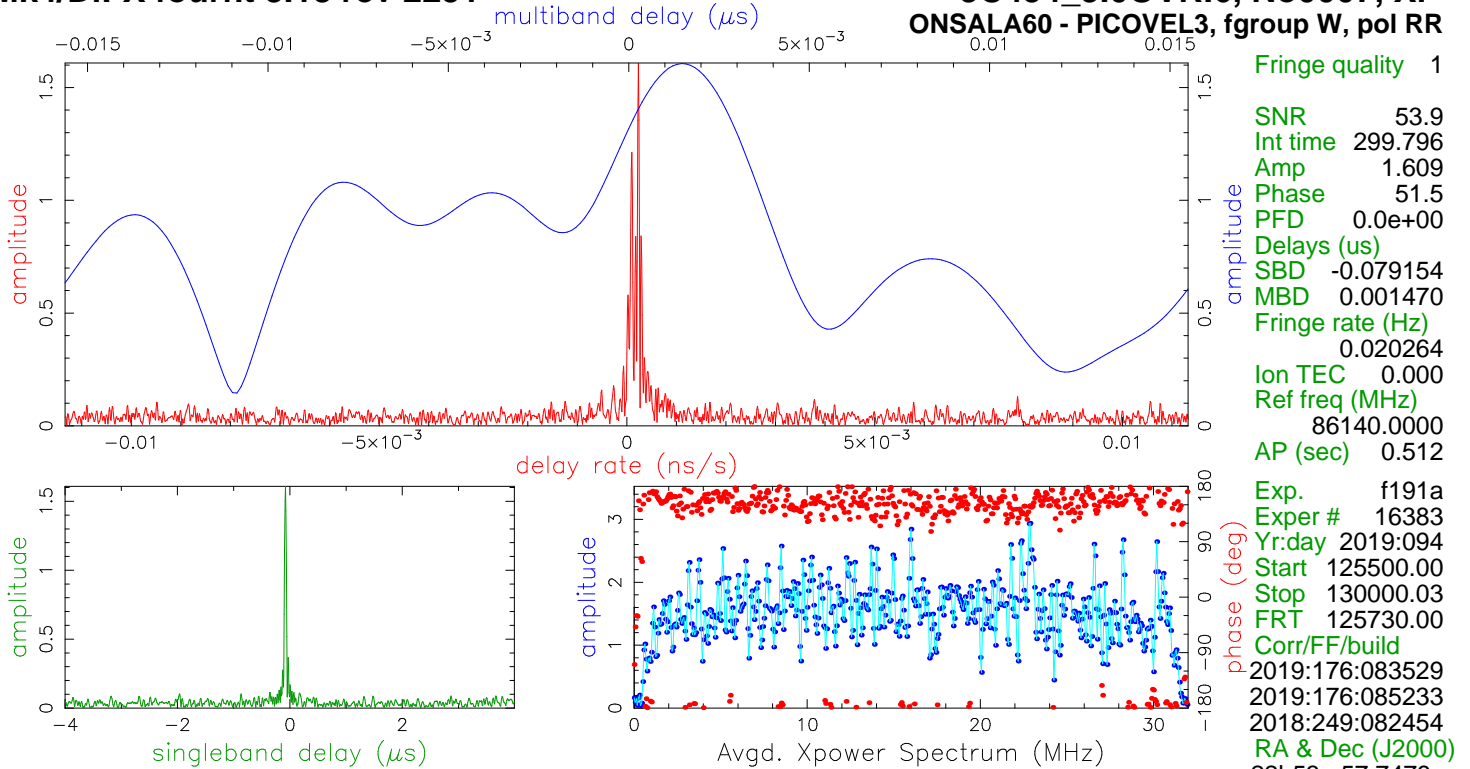
Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	16.1	-102.8	-10.6	-62.4	-103.7	-149.5	7.0	-33.3	Phase	-54.9
	2.4	3.3	3.4	3.4	3.3	3.4	3.3	3.3	Ampl.	3.2
	507.0	508.3	508.6	508.8	508.5	508.8	509.1	508.7	Sbd box	509.0
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
i	0	0	0	0	0	0	0	0	PC freqs	
X:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:i	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	
i	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.78474906832E+03		Apriori delay (usec)		-4.78470399789E+03		Resid mbdelay (usec)		-1.38204E-02	+/- 3.4E-05
Sband delay (usec)	-4.78473539889E+03		Apriori clock (usec)		2.5630024E+01		Resid sbdelay (usec)		-3.14010E-02	+/- 2.7E-04
Phase delay (usec)	-4.78470399966E+03		Apriori clockrate (us/s)		8.7699997E-07		Resid phdelay (usec)		-1.76904E-06	+/- 5.8E-08
Delay rate (us/s)	1.02212215701E-01		Apriori rate (us/s)		1.02211980568E-01		Resid rate (us/s)		2.35133E-07	+/- 3.3E-10
Total phase (deg)			Apriori accel (us/s/s)		3.31456296864E-05		Resid phase (deg)		-54.9	+/- 1.8

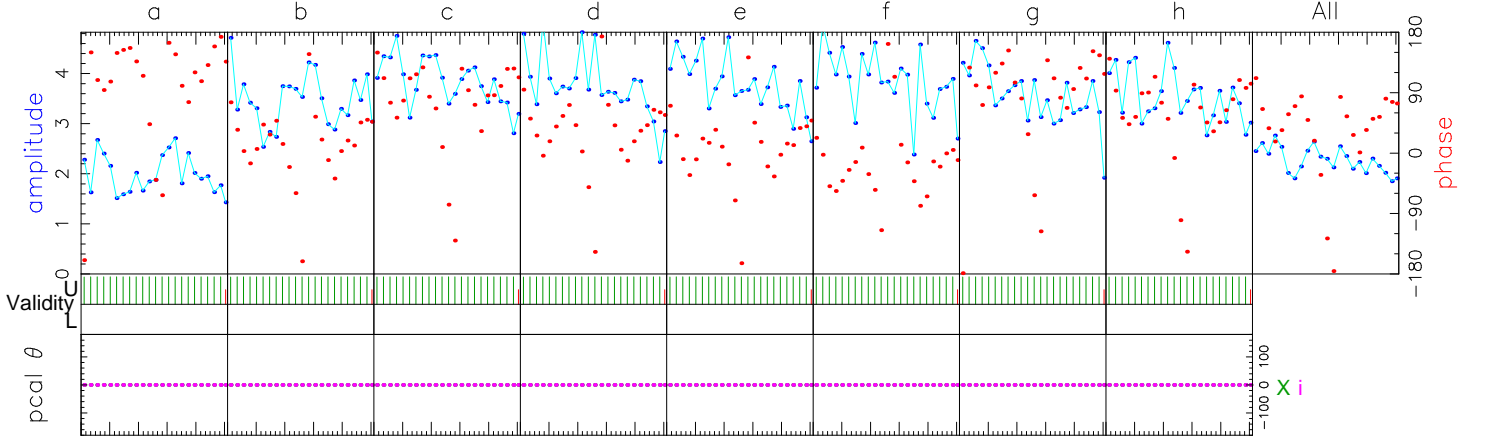
RMS Theor. Amplitude 1.913 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 57.9 4.3 Search (2048X32) 1.885 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 49.9 7.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 64.5 2.5 Inc. seg. avg. 2.831 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 70.6 4.4 Inc. frq. avg. 3.223 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 247.6 el 32.5 pa 31.4 i: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) -566.705 2800.708 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//Xi..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//Xi.W.19.0OVRI6



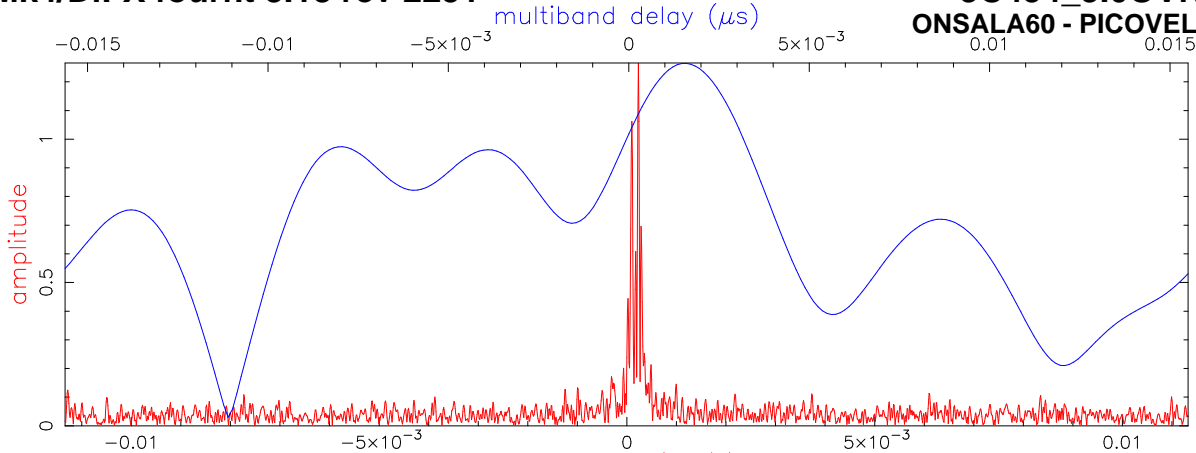
Fringe quality 1
 SNR 53.9
 Int time 299.796
 Amp 1.609
 Phase 51.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.079154
 MBD 0.001470
 Fringe rate (Hz) 0.020264
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085233
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	129.6	21.4	93.3	36.3	10.4	-25.6	114.3	73.9	Phase	51.5
	1.3	2.4	2.7	2.5	2.7	2.5	2.5	2.5	Ampl.	2.4
	501.9	501.9	502.5	502.6	502.8	502.5	502.8	502.7	Sbd box	502.9
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
i	0	0	0	0	0	0	0	0	PC freqs	
X:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:i	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	
i	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.78479627795E+03		Apriori delay (usec)		-4.78470399789E+03		Resid mbdelay (usec)		1.46994E-03	+/- 4.0E-05
Sband delay (usec)	-4.78478315139E+03		Apriori clock (usec)		2.5630024E+01		Resid sbdelay (usec)		-7.91535E-02	+/- 3.2E-04
Phase delay (usec)	-4.78470399623E+03		Apriori clockrate (us/s)		8.7699997E-07		Resid phdelay (usec)		1.65990E-06	+/- 6.9E-08
Delay rate (us/s)	1.02212215808E-01		Apriori rate (us/s)		1.02211980568E-01		Resid rate (us/s)		2.35240E-07	+/- 4.0E-10
Total phase (deg)			Apriori accel (us/s/s)		3.31456296864E-05		Resid phase (deg)		51.5	+/- 2.1

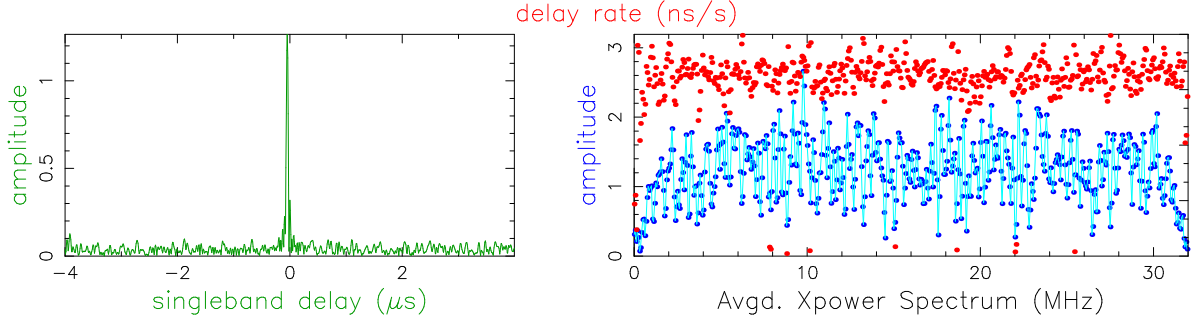
RMS Theor. Amplitude 1.609 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.1 5.1 Search (2048X32) 1.556 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 44.4 8.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 59.2 3.0 Inc. seg. avg. 2.269 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 56.6 5.3 Inc. frq. avg. 2.406 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 X: az 247.6 el 32.5 pa 31.4 i: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) -566.705 2800.708 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//Xi..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//Xi.W.39.0OVRI6



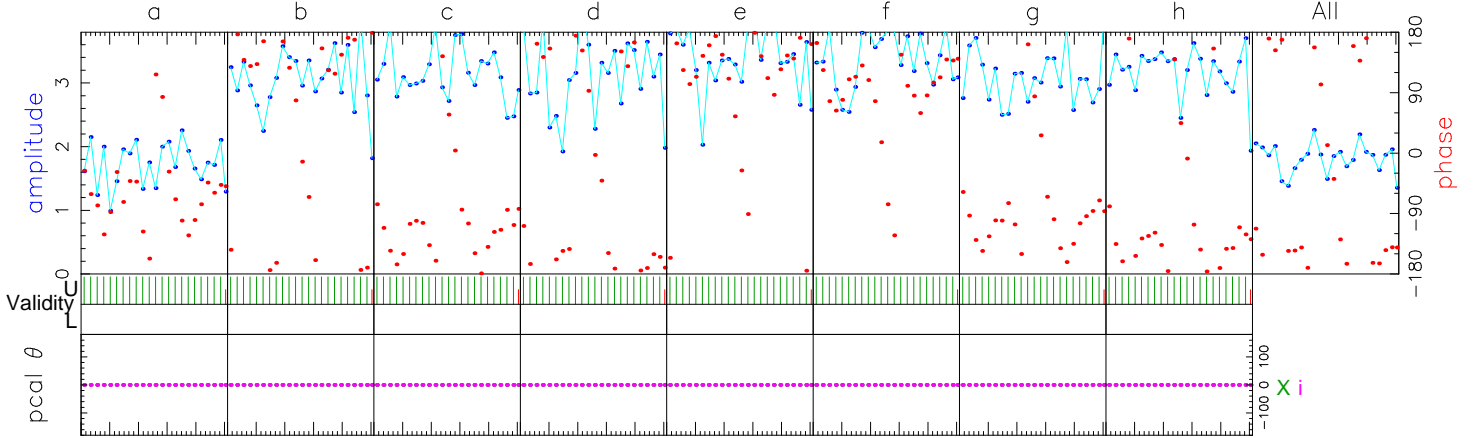
Fringe quality 3

SNR 42.4
 Int time 299.796
 Amp 1.266
 Phase -167.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.047615
 MBD 0.001546
 Fringe rate (Hz) 0.020103
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085241
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

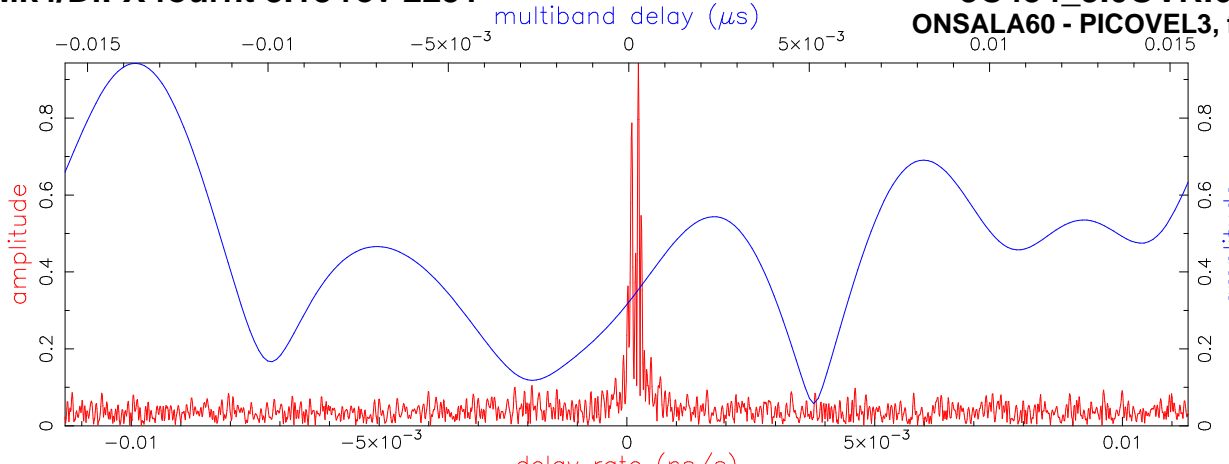


Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

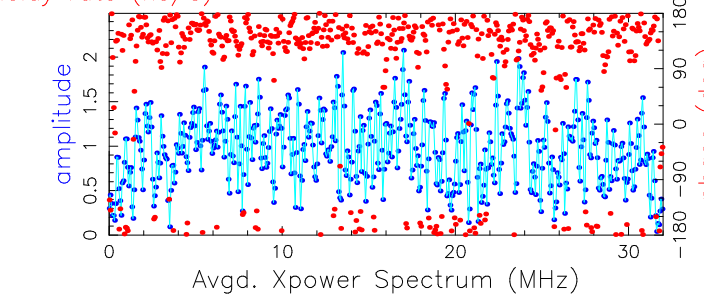
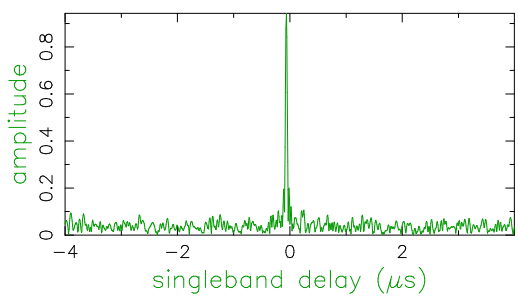


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-69.7	161.6	-122.5	-178.2	142.7	106.6	-108.9	-143.4	Phase	-167.9
	1.2	2.1	2.2	2.1	2.3	2.3	2.1	2.3	Ampl.	2.1
	504.5	506.0	506.3	506.7	506.6	506.9	506.9	506.6	Sbd box	506.9
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
i	0	0	0	0	0	0	0	0	PC freqs	
X:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:i	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	
i	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.78476495176E+03		Apriori delay (usec)		-4.78470399789E+03		Resid mbdelay (usec)		1.54613E-03	+/- 5.1E-05
Sband delay (usec)	-4.78475161339E+03		Apriori clock (usec)		2.5630024E+01		Resid sbdelay (usec)		-4.76155E-02	+/- 4.1E-04
Phase delay (usec)	-4.78470400330E+03		Apriori clockrate (us/s)		8.7699997E-07		Resid phdelay (usec)		-5.41436E-06	+/- 8.7E-08
Delay rate (us/s)	1.02212213948E-01		Apriori rate (us/s)		1.02211980568E-01		Resid rate (us/s)		2.33380E-07	+/- 5.0E-10
Total phase (deg)			Apriori accel (us/s/s)		3.31456296864E-05		Resid phase (deg)		-167.9	+/- 2.7

ph/seg (deg) 57.3 6.5 Theor. Amplitude 1.266 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 47.7 11.3 Search (2048X32) 1.240 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 66.5 3.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 69.0 6.7 Inc. seg. avg. 1.815 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 247.6 el 32.5 pa 31.4 i: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) -566.705 2800.708 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//Xi..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//Xi.W.58.0OVRI6

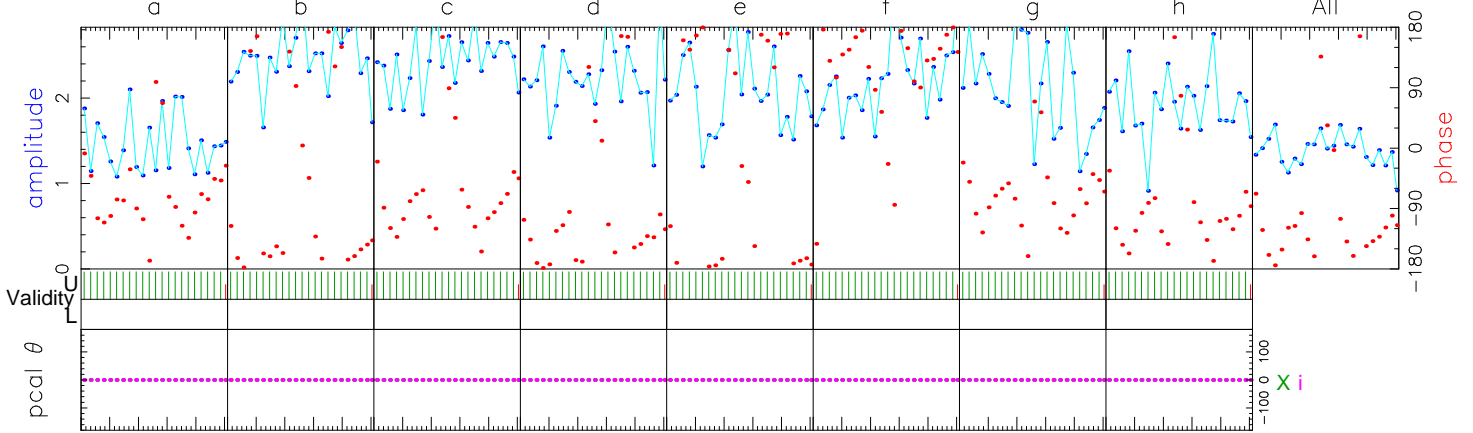


Fringe quality 3
 SNR 31.6
 Int time 299.796
 Amp 0.943
 Phase -135.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.063289
 MBD -0.013694
 Fringe rate (Hz)
 0.020117
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512



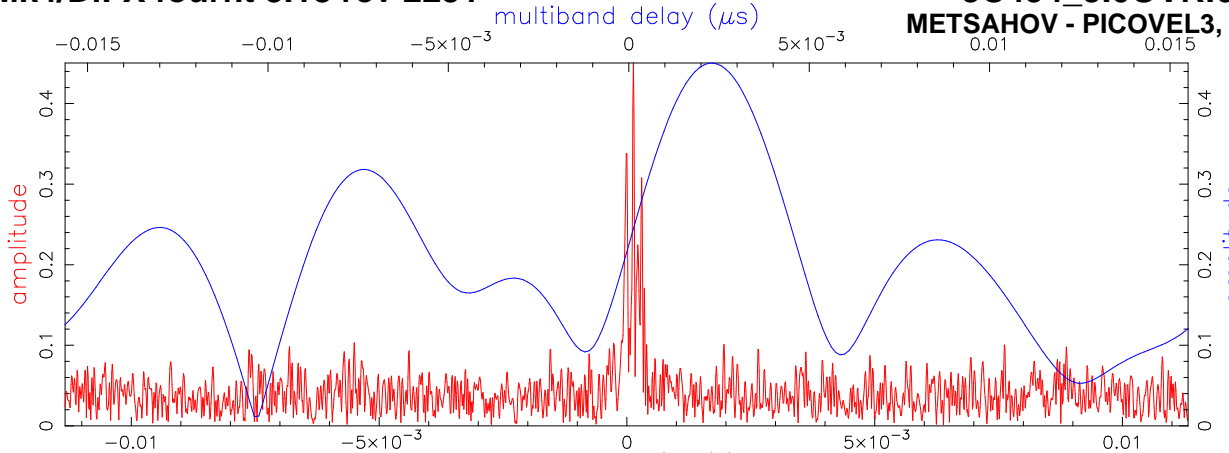
Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085249
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-77.7	-171.5	-90.1	-144.3	175.5	143.1	-78.9	-114.6	Phase	-135.5
	0.9	1.6	1.6	1.5	1.4	1.4	1.5	1.3	Ampl.	1.4
	503.8	504.1	504.7	504.8	504.9	504.5	504.9	504.7	Sbd box	504.9
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
i	0	0	0	0	0	0	0	0	PC freqs	
X:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:i	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	
i	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.78478019232E+03		Apriori delay (usec)		-4.78470399789E+03		Resid mbdelay (usec)		-1.36944E-02	+/- 6.9E-05
Sband delay (usec)	-4.78476728639E+03		Apriori clock (usec)		2.5630024E+01		Resid sbdelay (usec)		-6.32885E-02	+/- 5.5E-04
Phase delay (usec)	-4.78470400226E+03		Apriori clockrate (us/s)		8.7699997E-07		Resid phdelay (usec)		-4.36925E-06	+/- 1.2E-07
Delay rate (us/s)	1.02212214101E-01		Apriori rate (us/s)		1.02211980568E-01		Resid rate (us/s)		2.3534E-07	+/- 6.8E-10
Total phase (deg)			Apriori accel (us/s/s)		3.31456296864E-05		Resid phase (deg)		-135.5	+/- 3.6

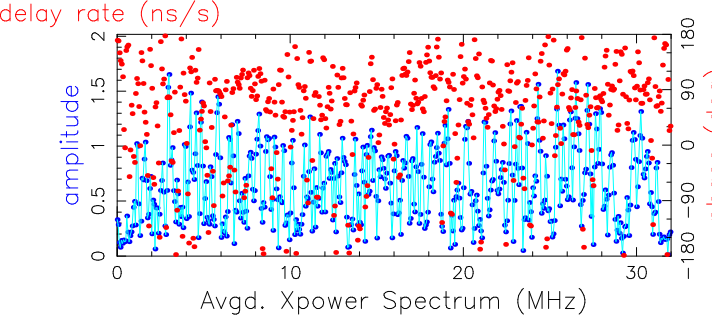
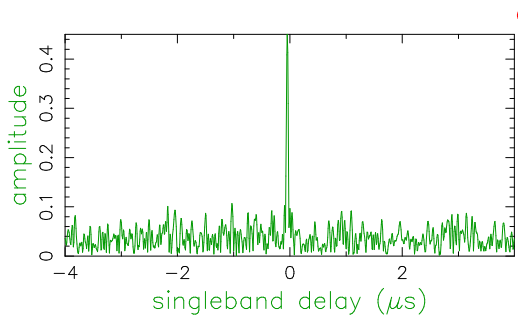
RMS Theor. Amplitude 0.943 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.0 8.7 Search (2048X32) 0.939 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 51.5 15.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 56.9 5.1 Inc. seg. avg. 1.382 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 52.9 9.0 Inc. frq. avg. 1.393 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 X: az 247.6 el 32.5 pa 31.4 i: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) -566.705 2800.708 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//Xi..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//Xi.W.79.0OVRI6



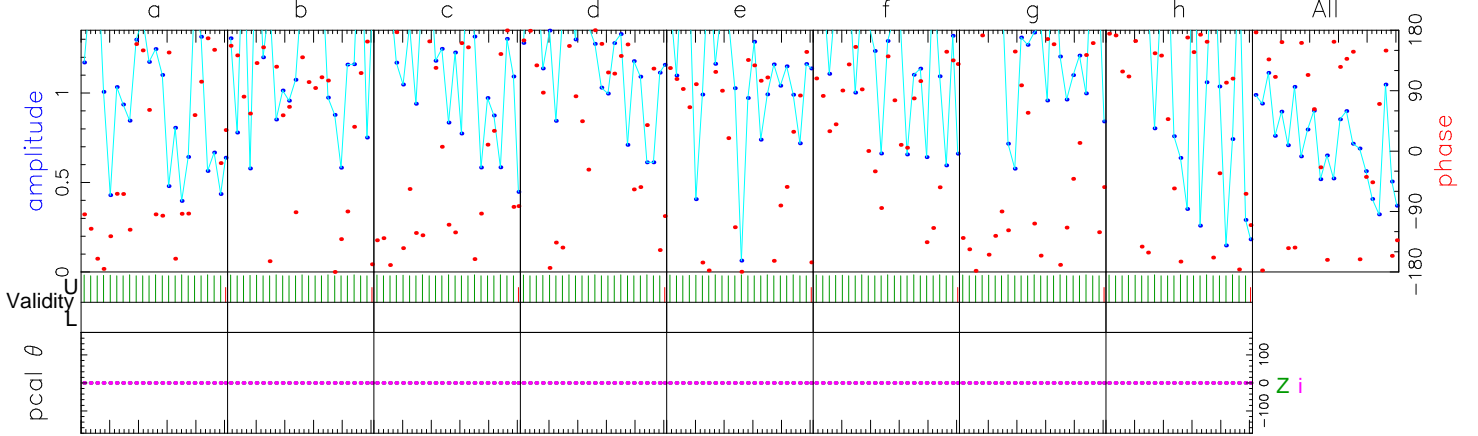
Fringe quality 7

SNR 14.9
 Int time 291.861
 Amp 0.450
 Phase 159.7
 PFD 5.7e-41
 Delays (us)
 SBD -0.046628
 MBD 0.002307
 Fringe rate (Hz)
 0.011371
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512

Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085225
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"



Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
-145.1	125.1	-149.8	153.4	119.1	83.2	-158.3	164.1	Phase	159.7
0.3	0.8	0.6	0.5	0.5	0.5	0.8	0.7	Ampl.	0.6
504.3	507.1	505.9	506.8	507.1	506.9	506.6	506.9	Sbd box	507.0
U/L 586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z 0	0	0	0	0	0	0	0	PC freqs	
i 0	0	0	0	0	0	0	0	PC freqs	
Z:i 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:i 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	
i 1000	1000	1000	1000	1000	1000	1000	1000		
Z W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
i W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
								Chan ids	
								Tracks	

Group delay (usec)(sbd) -7.08862198639E+03 Apriori delay (usec) -7.08856179347E+03 Resid mbdelay (usec) 2.30708E-03 +/- 1.5E-04

Sband delay (usec) -7.08860842147E+03 Apriori clock (usec) 7.0823097E-01 Resid sbdelay (usec) -4.66280E-02 +/- 1.2E-03

Phase delay (usec) -7.08856178832E+03 Apriori clockrate (us/s) 6.4699998E-07 Resid phdelay (usec) 5.14989E-06 +/- 2.5E-07

Delay rate (us/s) 7.65470371270E-02 Apriori rate (us/s) 7.65469051213E-02 Resid rate (us/s) 1.32006E-07 +/- 1.4E-09

Total phase (deg) -160.6 Apriori accel (us/s/s) 4.60716722859E-05 Resid phase (deg) 159.7 +/- 7.7

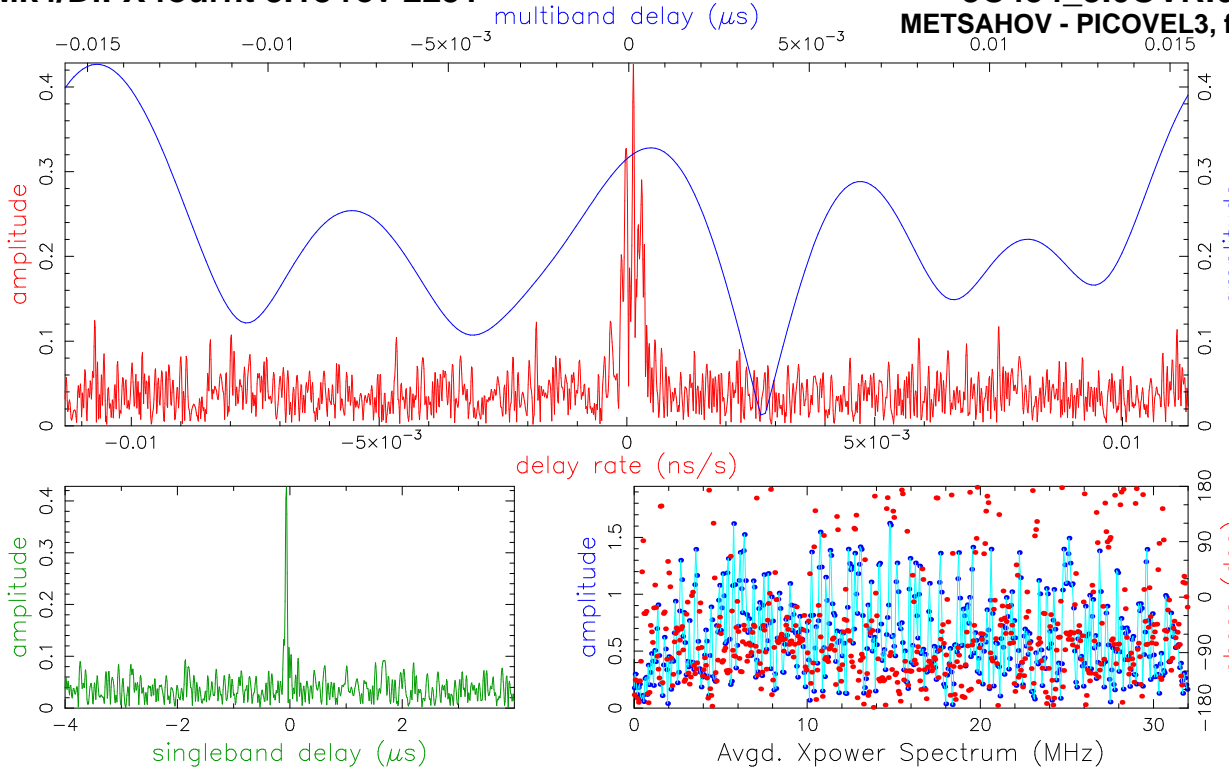
RMS Theor. Amplitude 0.450 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 72.7 18.5 Search (2048X32) 0.444 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000

amp/seg (%) 80.5 32.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

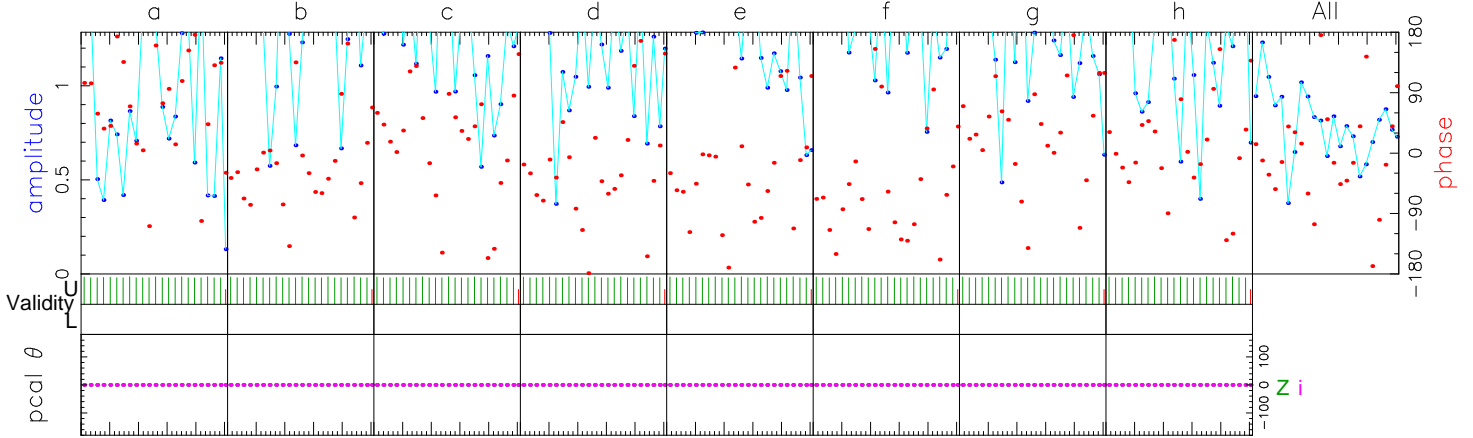
ph/frq (deg) 51.8 10.9 Inc. seg. avg. 0.703 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011

amp/frq (%) 47.1 19.0 Inc. frq. avg. 0.597 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00



Fringe quality 7
 SNR 14.1
 Int time 291.861
 Amp 0.428
 Phase -16.8
 PFD 2.3e-36
 Delays (us)
 SBD -0.064030
 MBD -0.014748
 Fringe rate (Hz) 0.011473
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085233
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

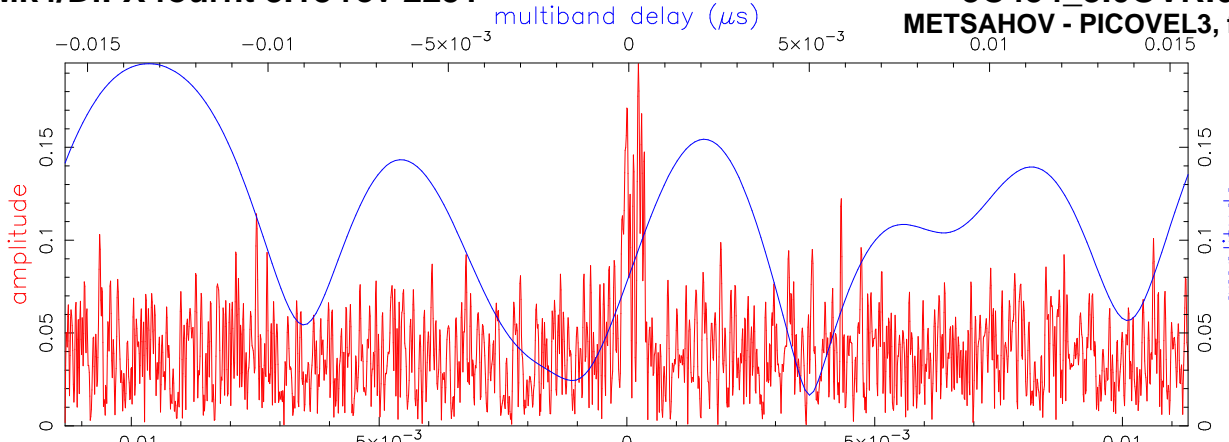
Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



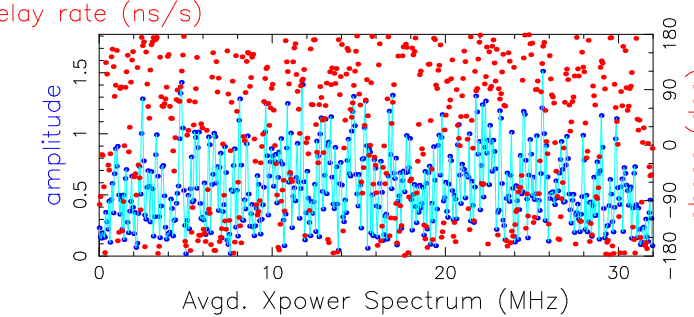
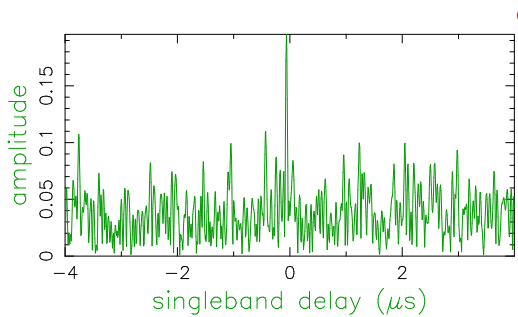
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	104.5	-40.8	43.0	-38.7	-51.4	-82.8	35.7	-1.9	Phase	-16.8
	0.4	1.0	0.6	0.6	0.7	0.8	0.6	0.6	Ampl.	0.7
	502.8	503.8	504.0	504.2	504.5	504.3	504.9	504.3	Sbd box	504.8
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
i	0	0	0	0	0	0	0	0	PC freqs	
Z:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:i	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	
i	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-7.08863904139E+03		Apriori delay (usec)		-7.08856179347E+03		Resid mbdelay (usec)		-1.47479E-02	+/- 1.5E-04
Sband delay (usec)	-7.08862582397E+03		Apriori clock (usec)		7.0823097E-01		Resid sbdelay (usec)		-6.40305E-02	+/- 1.2E-03
Phase delay (usec)	-7.08856179402E+03		Apriori clockrate (us/s)		6.4699998E-07		Resid phdelay (usec)		-5.42078E-07	+/- 2.6E-07
Delay rate (us/s)	7.65470383067E-02		Apriori rate (us/s)		7.65469051213E-02		Resid rate (us/s)		1.33185E-07	+/- 1.5E-09
Total phase (deg)	-337.1		Apriori accel (us/s/s)		4.60716722859E-05		Resid phase (deg)		-16.8	+/- 8.1

ph/seg (deg) 73.4 19.4 Theor. Amplitude 0.428 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 96.7 33.9 Search (2048X32) 0.426 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 68.2 11.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 66.2 20.0 Inc. seg. avg. 0.756 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.651 ion window (TEC) 0.00 0.00

Z: az 257.8 el 25.5 pa 30.4 i: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) -397.217 3313.526 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//Zi..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//Zi.W.32.0OVRI6

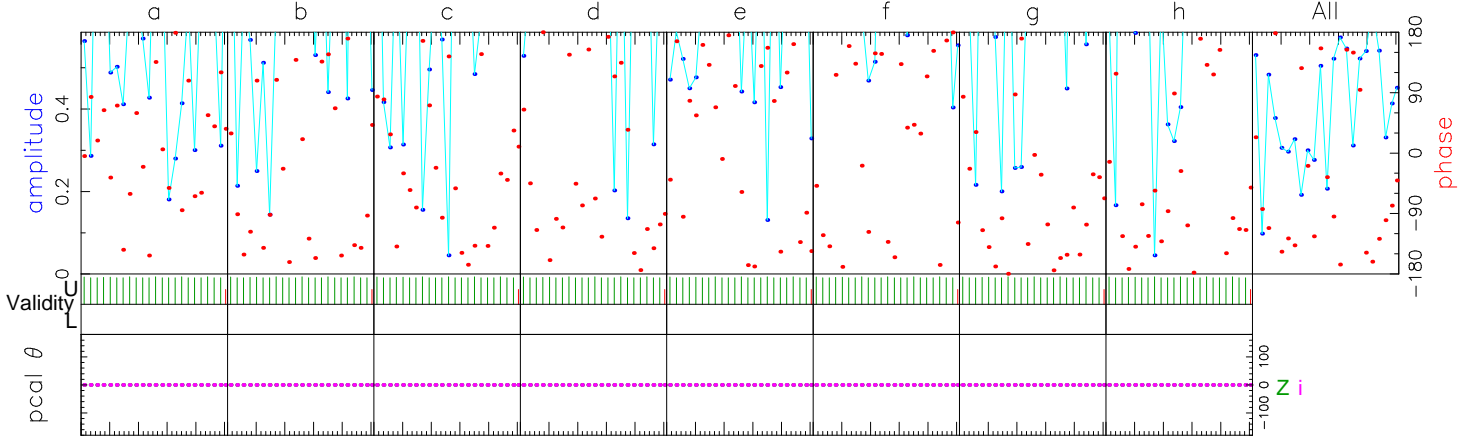


Fringe quality 0
 SNR 6.5
 Int time 291.861
 Amp 0.195
 Phase -144.2
 PFD 5.8e-02
 Delays (us)
 SBD -0.061432
 MBD -0.013340
 Fringe rate (Hz)
 0.019903
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085240
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

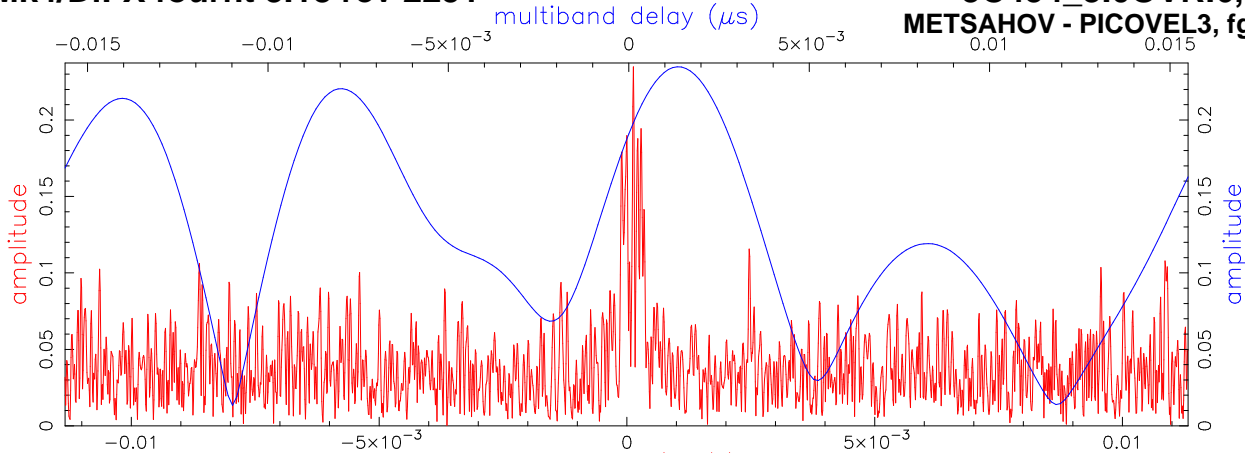


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	30.7	-160.6	-83.5	-135.9	145.2	165.0	-101.7	-138.3	Phase	-144.2
	0.2	0.3	0.2	0.4	0.2	0.4	0.4	0.4	Ampl.	0.3
	679.2	9.2	921.9	505.0	506.4	505.1	504.2	505.5	Sbd box	505.1
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
i	0	0	0	0	0	0	0	0	PC freqs	
Z:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
i	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	

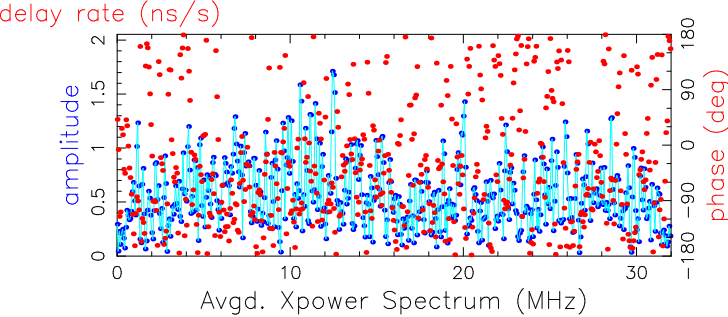
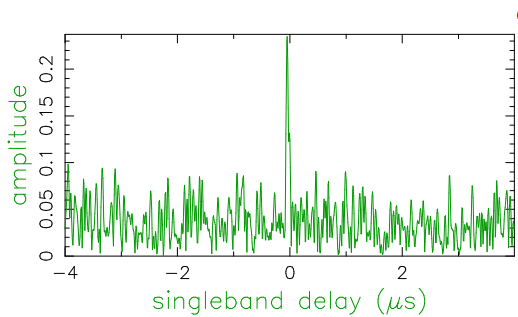
Group delay (usec)(sbd)	-7.08863763391E+03	Apriori delay (usec)	-7.08856179347E+03	Resid mbdelay (usec)	-1.33404E-02	+/-	3.4E-04
Sband delay (usec)	-7.08862322497E+03	Apriori clock (usec)	7.0823097E-01	Resid sbdelay (usec)	-6.14315E-02	+/-	2.7E-03
Phase delay (usec)	-7.08856179812E+03	Apriori clockrate (us/s)	6.4699998E-07	Resid phdelay (usec)	-4.65081E-06	+/-	5.7E-07
Delay rate (us/s)	7.65471361777E-02	Apriori rate (us/s)	7.65469051213E-02	Resid rate (us/s)	2.31056E-07	+/-	3.3E-09
Total phase (deg)	-104.6	Apriori accel (us/s/s)	4.60716722859E-05	Resid phase (deg)	-144.2	+/-	17.8

ph/seg (deg)	71.0	Theor.	42.6	Amplitude	0.195 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	128.6	Search (2048X32)	0.193	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000
ph/frq (deg)	85.6	Interp.	0.000	Inc. seg. avg.	0.316	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	74.7	Inc. frq. avg.	0.293	Inc. frq. avg.	0.293	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate (Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	512	ion window (TEC)	0.00 0.00

Z: az 257.8 el 25.5 pa 30.4 i: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) -397.217 3313.526 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//Zi..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//Zi.W.50.0OVRI6

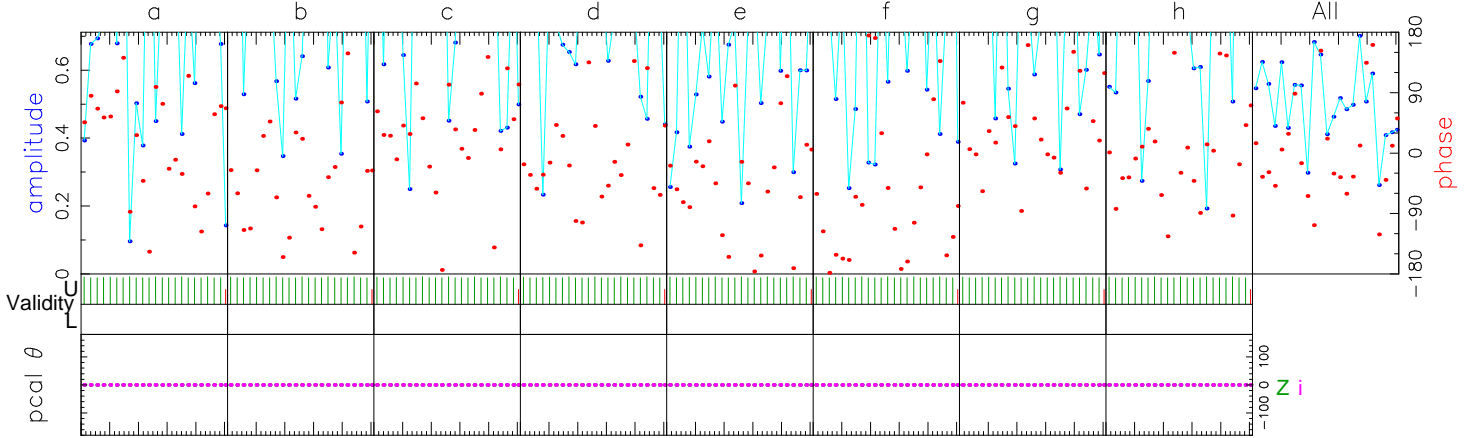


Fringe quality 9
 SNR 7.8
 Int time 291.861
 Amp 0.237
 Phase -15.2
 PFD 3.1e-06
 Delays (us)
 SBD -0.049750
 MBD 0.001410
 Fringe rate (Hz)
 0.011863
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512



Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125500.00
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085248
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	52.1	-68.7	48.0	-26.0	-39.9	-111.9	35.3	-13.1	Phase	-15.2
	0.2	0.5	0.4	0.5	0.3	0.4	0.5	0.4	Amp.	0.4
	996.3	505.6	506.9	507.0	505.5	506.9	506.9	505.8	Sbd box	506.6
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0	586/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
i	0	0	0	0	0	0	0	0	PC freqs	
Z:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:i	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	
i	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -7.08862288377E+03 Apriori delay (usec) -7.08856179347E+03 Resid mbdelay (usec) 1.40971E-03 +/- 2.8E-04
 Sband delay (usec) -7.08861154347E+03 Apriori clock (usec) 7.0823097E-01 Resid sbdelay (usec) -4.97500E-02 +/- 2.2E-03
 Phase delay (usec) -7.08856179396E+03 Apriori clockrate (us/s) 6.4699998E-07 Resid phdelay (usec) -4.90865E-07 +/- 4.7E-07
 Delay rate (us/s) 7.65470428337E-02 Apriori rate (us/s) 7.65469051213E-02 Resid rate (us/s) 1.37712E-07 +/- 2.7E-09
 Total phase (deg) -335.6 Apriori accel (us/s/s) 4.60716722859E-05 Resid phase (deg) -15.2 +/- 14.6

RMS Theor. Amplitude 0.237 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 75.2 35.1 Search (2048X32) 0.227 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 123.2 61.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 63.3 20.7 Inc. seg. avg. 0.428 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 73.0 36.1 Inc. frq. avg. 0.363 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 257.8 el 25.5 pa 30.4 i: az 249.4 el 49.9 pa 51.2 u,v (fr/asec) -397.217 3313.526 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//Zi..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//Zi.W.69.0OVRI6