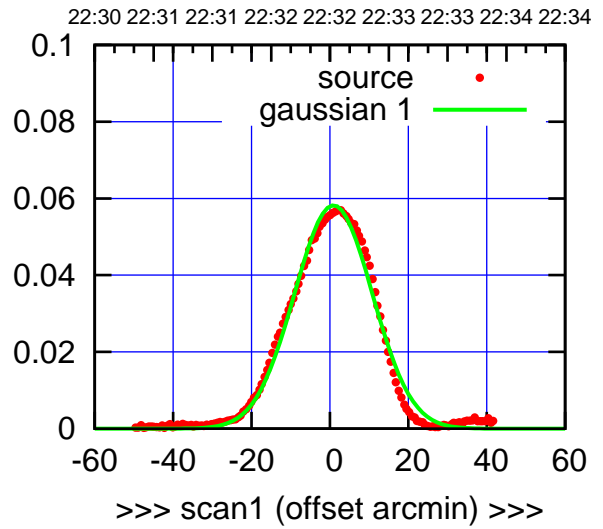
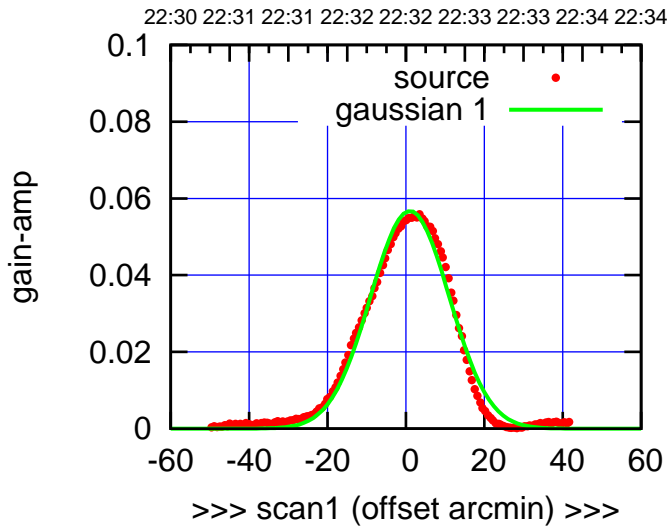


C00-130-EL OFF= 1.0' ( 23.7')

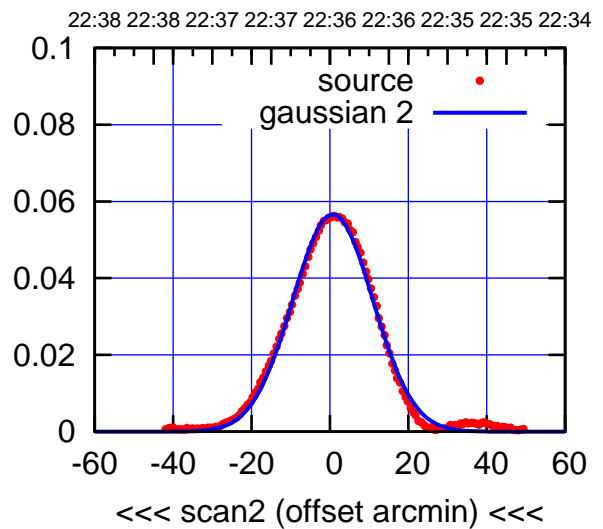
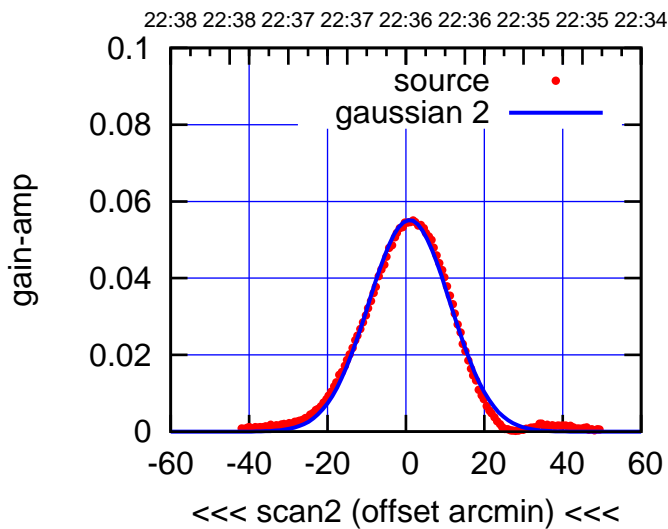
C00-175-EL OFF= 0.9' ( 23.3')



(+30'/m) 02Dec2022 22:32:30

C00-130-EL OFF= 0.9' ( 24.5')

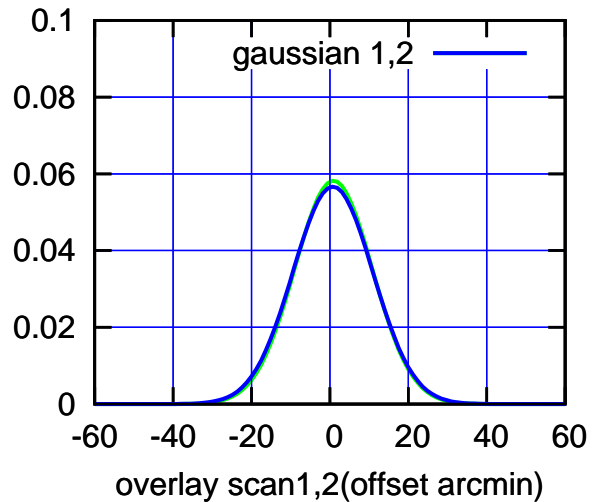
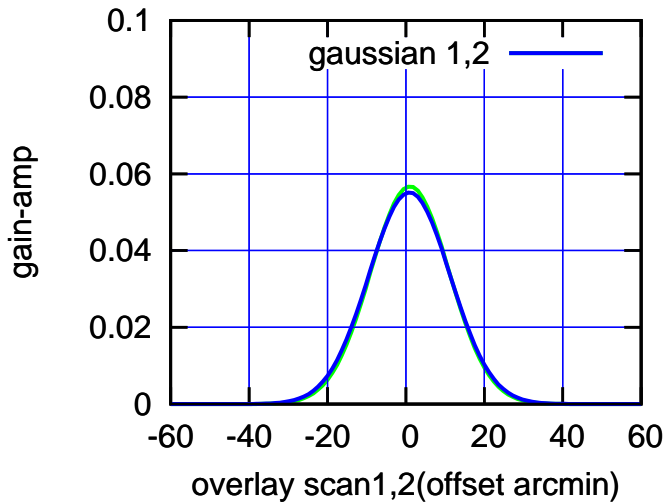
C00-175-EL OFF= 0.8' ( 24.1')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.1'

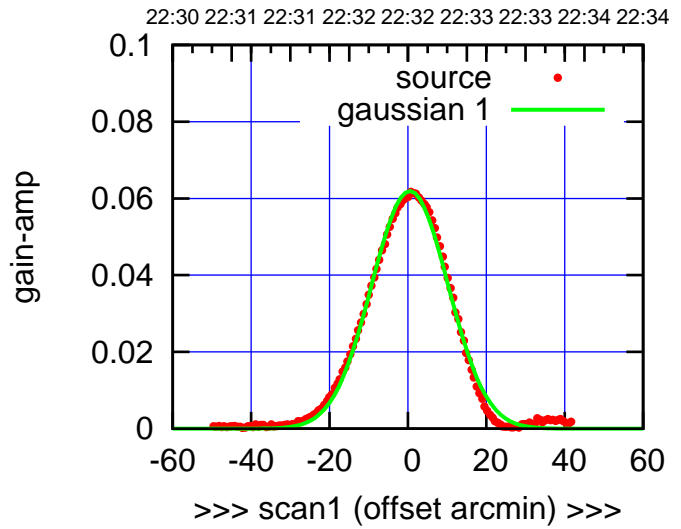
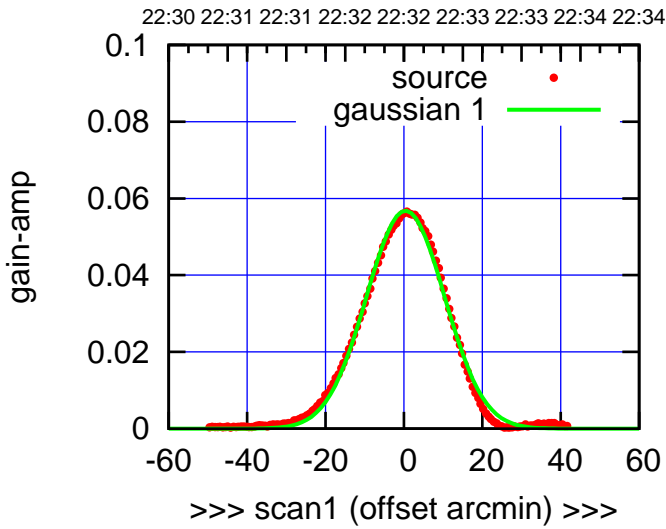
BACKLASH ERROR= 0.1'



(1460 MHz.)

C01-130-EL OFF= 0.4' ( 23.5')

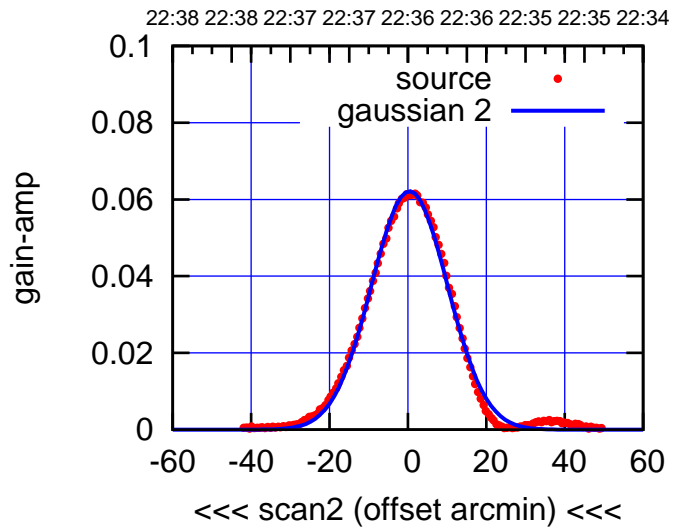
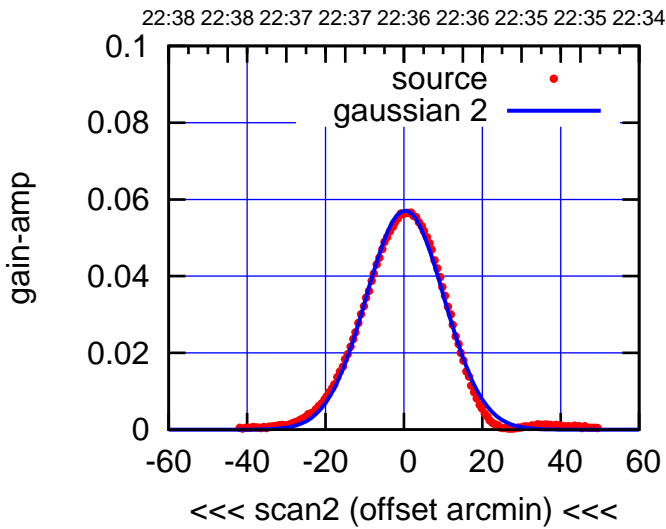
C01-175-EL OFF= 0.5' ( 22.9')



(+30'/m) 02Dec2022 22:32:30

C01-130-EL OFF= 0.3' ( 23.3')

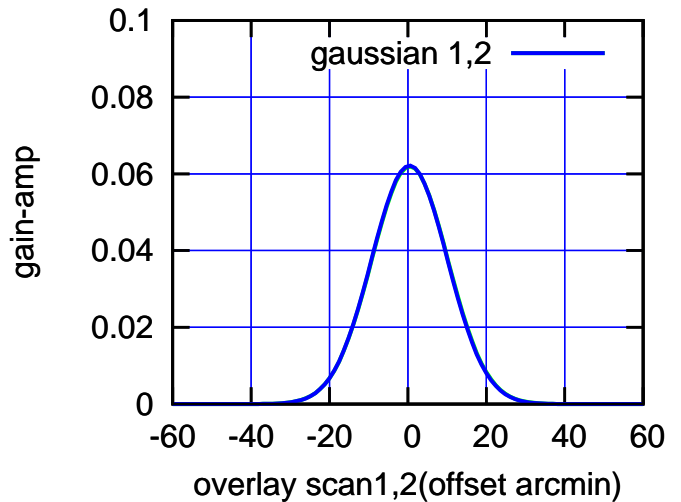
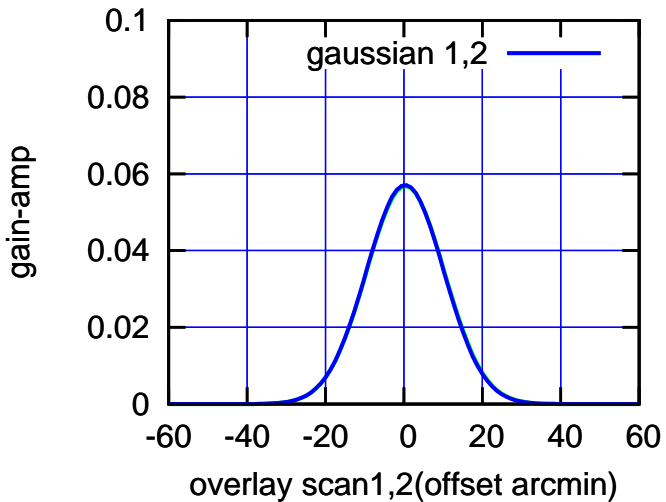
C01-175-EL OFF= 0.4' ( 22.8')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.1'

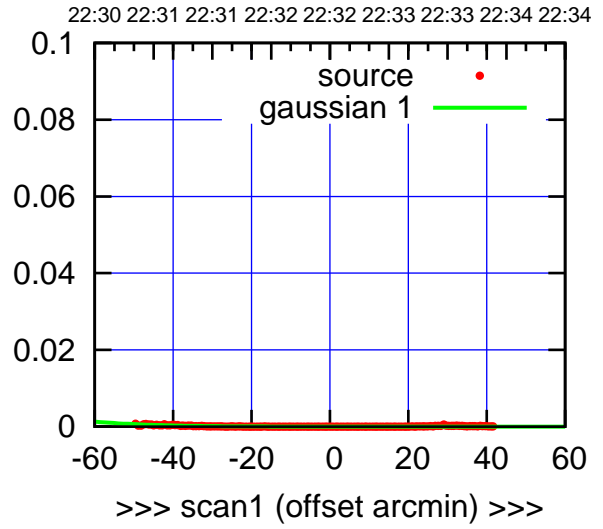
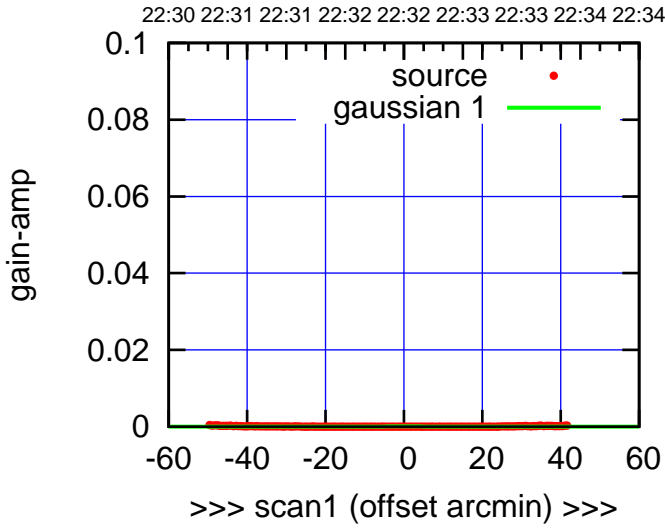
BACKLASH ERROR= 0.1'



(1460 MHz.)

C02-130-EL OFF= 0.0' ( 42.4')

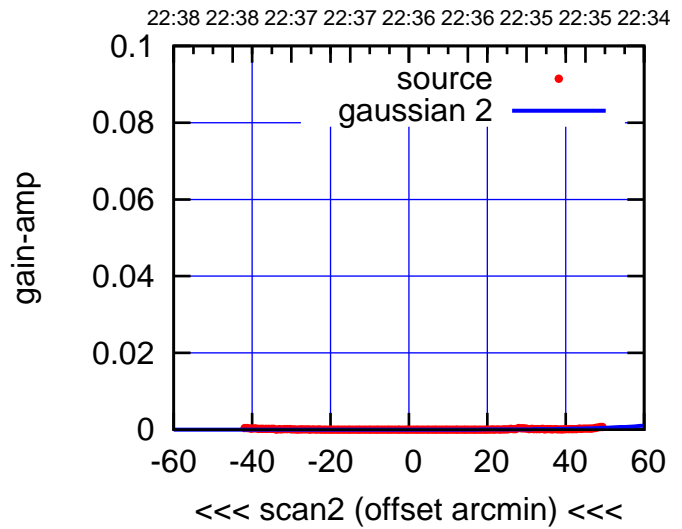
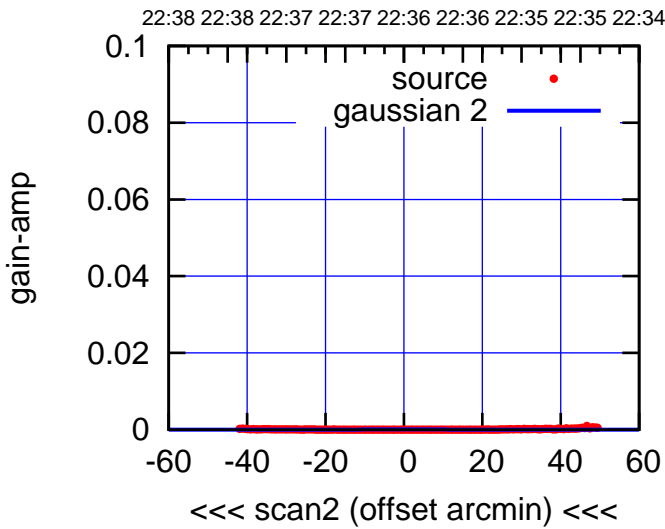
C02-175-EL OFF= 0.0' ( 83.9')



(+30'/m) 02Dec2022 22:32:30

C02-130-EL OFF= 0.0' ( 42.4')

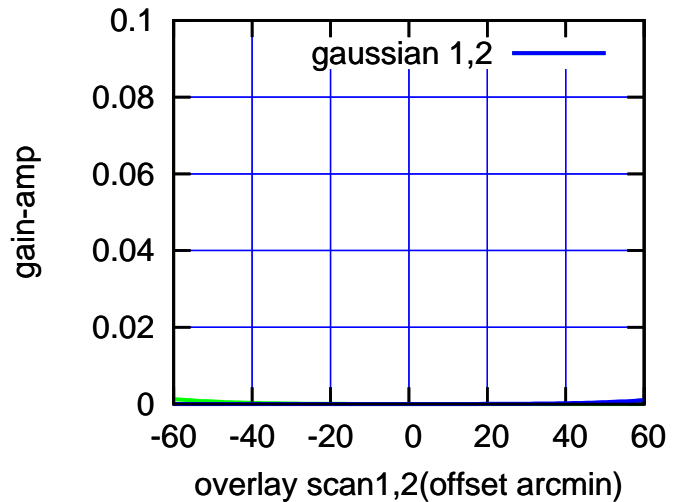
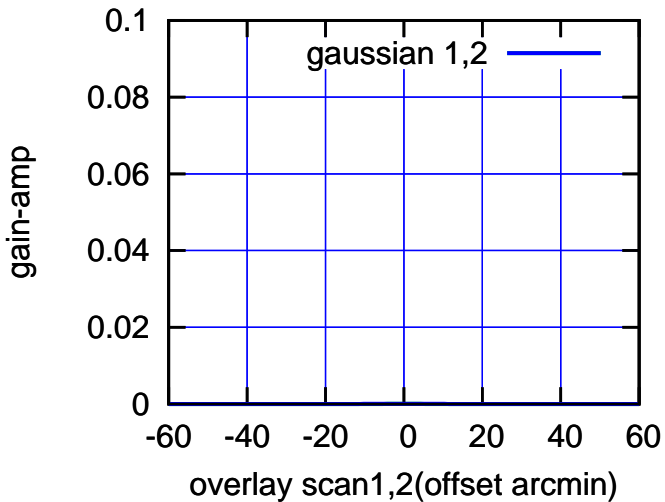
C02-175-EL OFF= 0.0' (111.1')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.0'

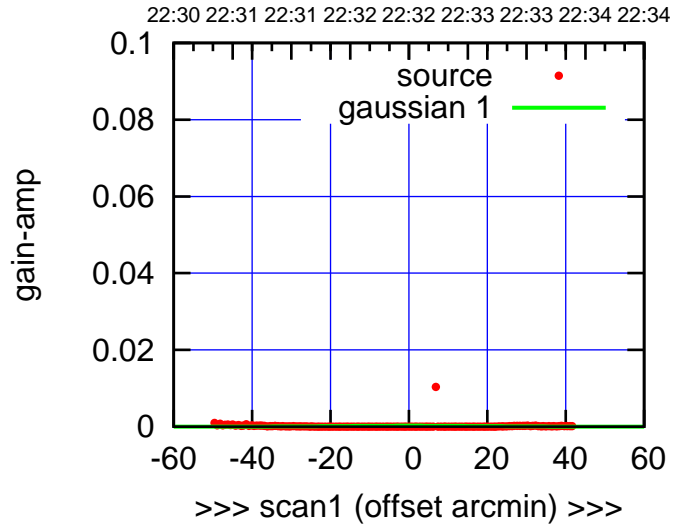
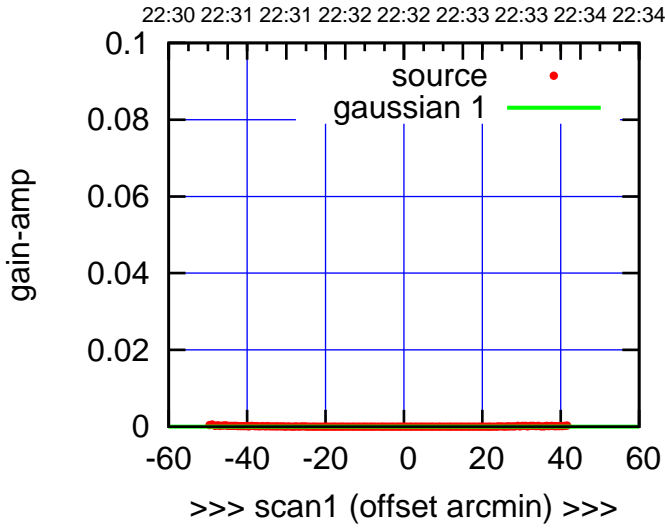
BACKLASH ERROR= 0.0'



(1460 MHz.)

C03-130-EL OFF= 0.0' ( 42.4')

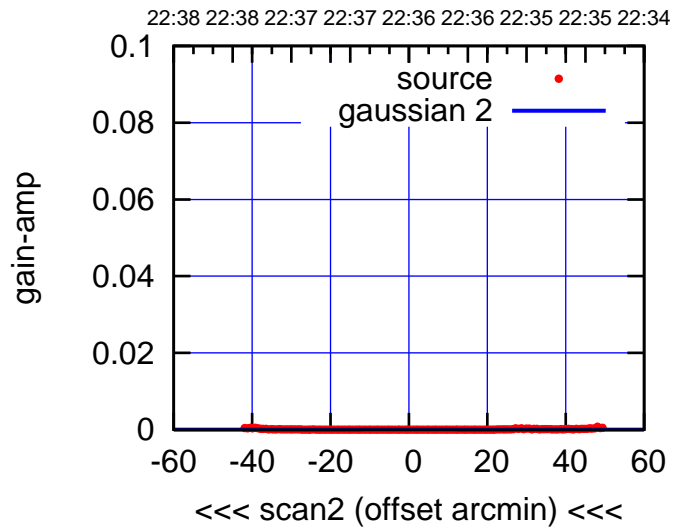
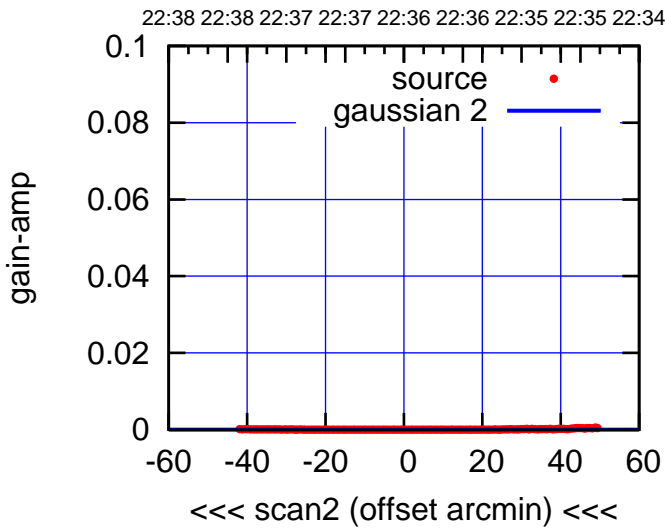
C03-175-EL OFF= 0.0' ( 42.4')



(+30'/m) 02Dec2022 22:32:30

C03-130-EL OFF= 0.0' ( 42.4')

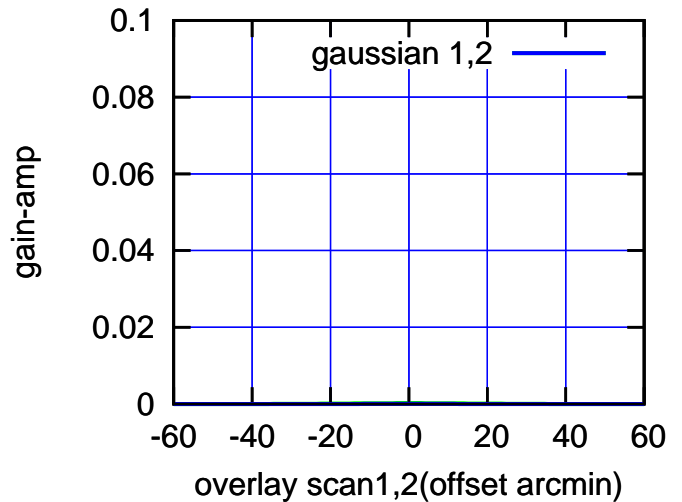
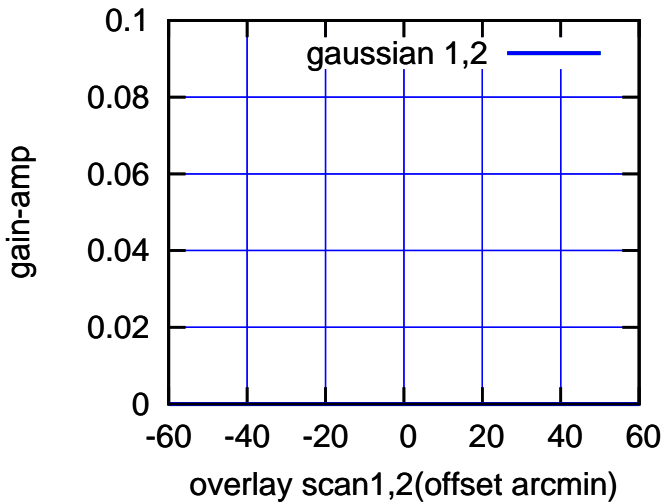
C03-175-EL OFF= 0.0' ( 42.4')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.0'

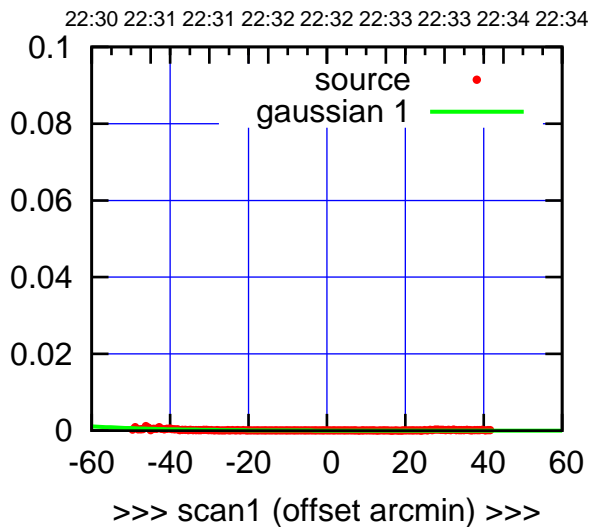
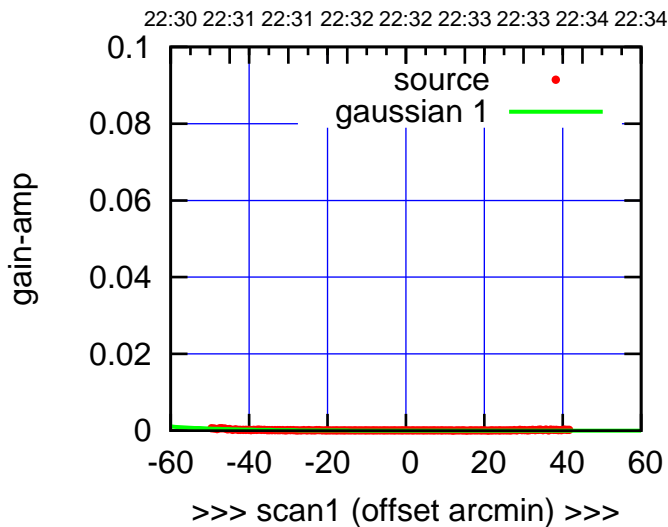
BACKLASH ERROR= 0.0'



(1460 MHz.)

C04-130-EL OFF= 0.0' (113.7')

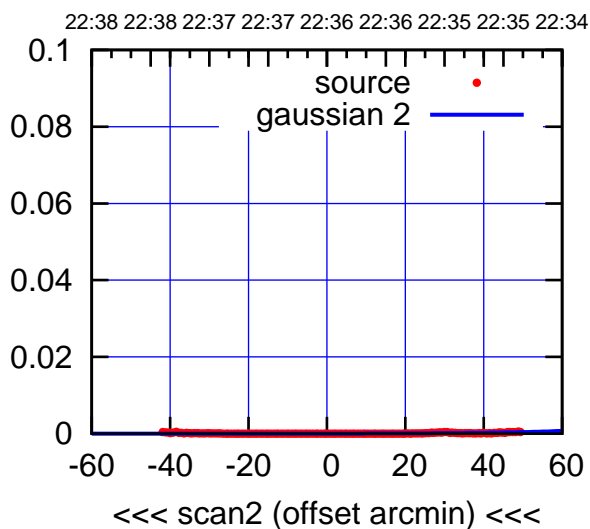
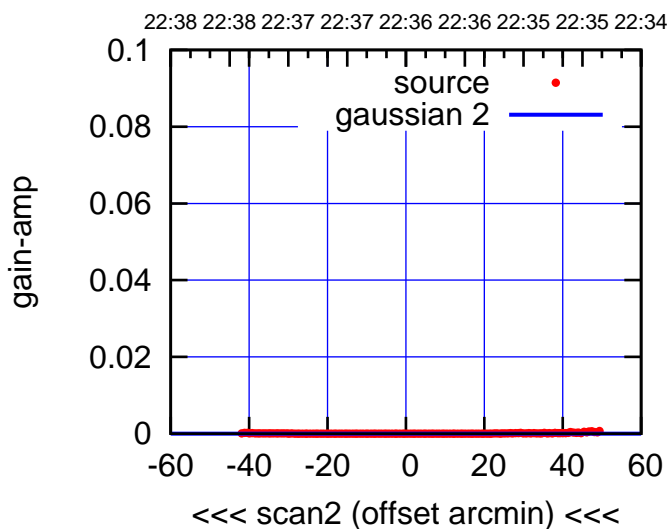
C04-175-EL OFF= 0.0' (133.1')



(+30'/m) 02Dec2022 22:32:30

C04-130-EL OFF= 0.0' (42.4')

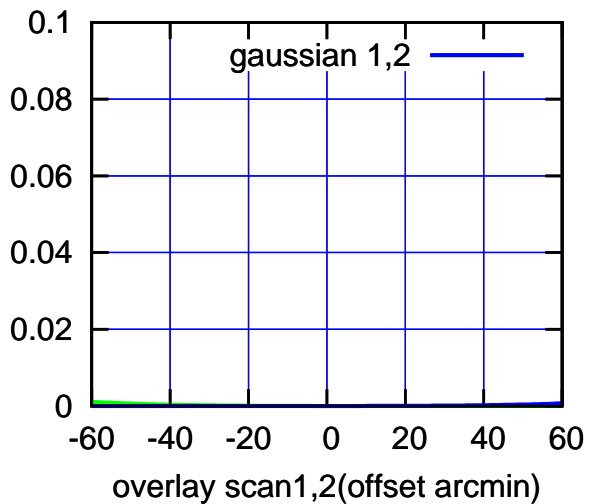
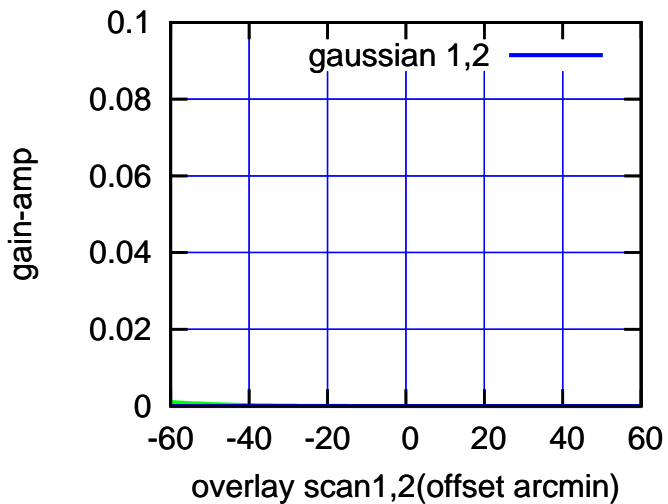
C04-175-EL OFF= 0.0' (0.0')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.0'

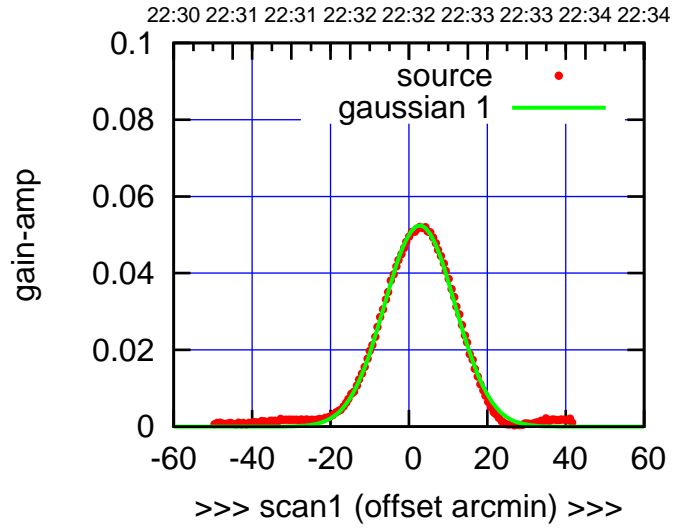
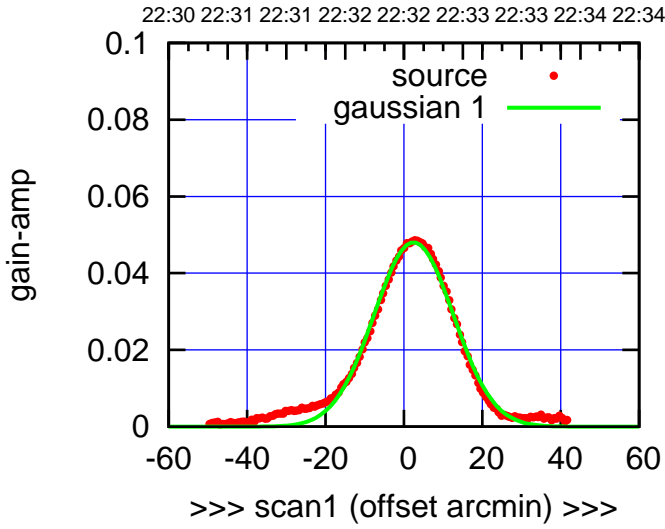
BACKLASH ERROR= 0.0'



(1460 MHz.)

C05-130-EL OFF= 2.5' (23.8')

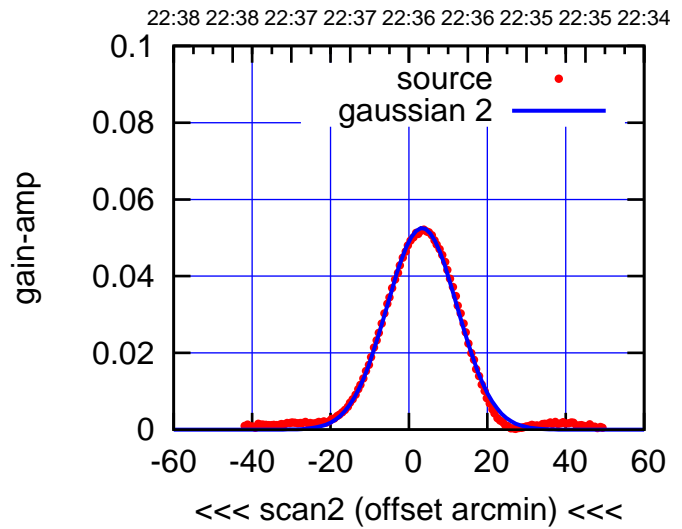
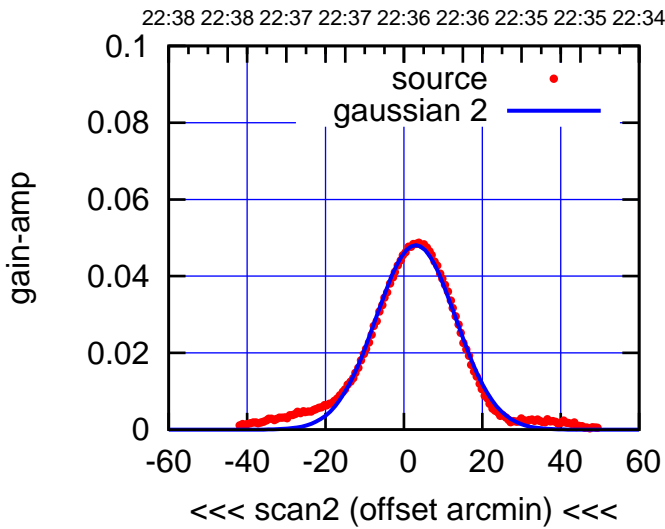
C05-175-EL OFF= 2.8' (21.2')



(+30'/m) 02Dec2022 22:32:30

C05-130-EL OFF= 3.0' (23.9')

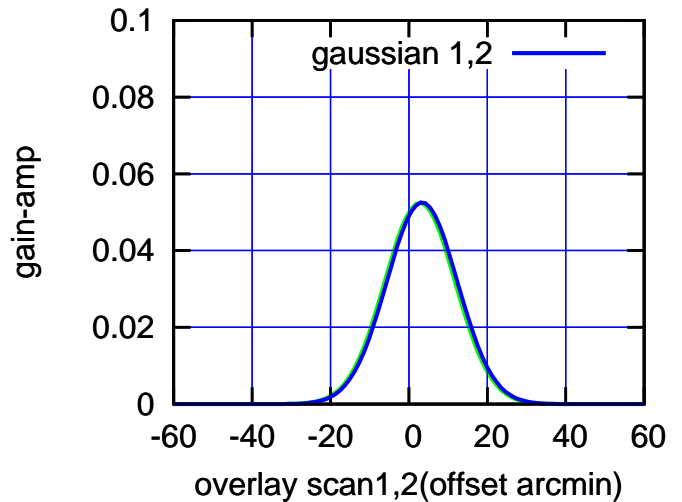
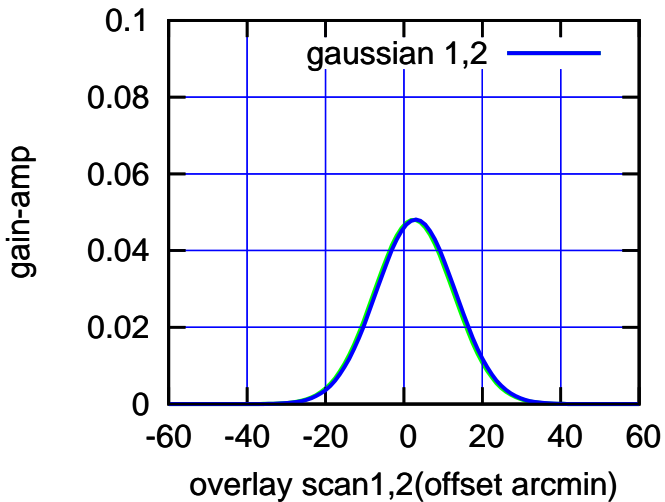
C05-175-EL OFF= 3.4' (21.2')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.5'

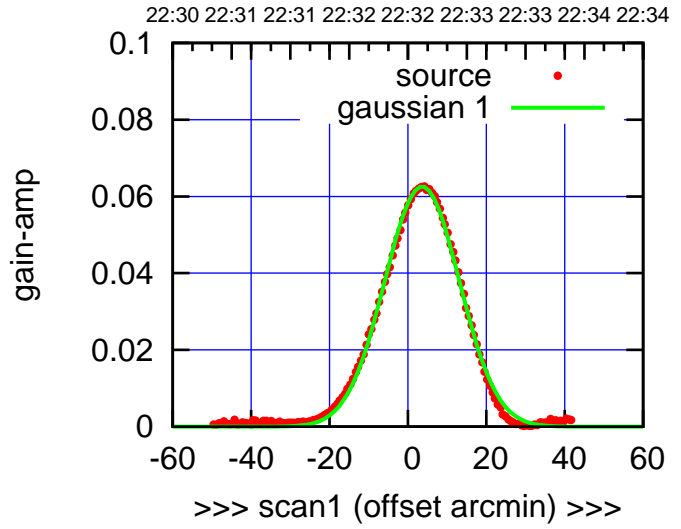
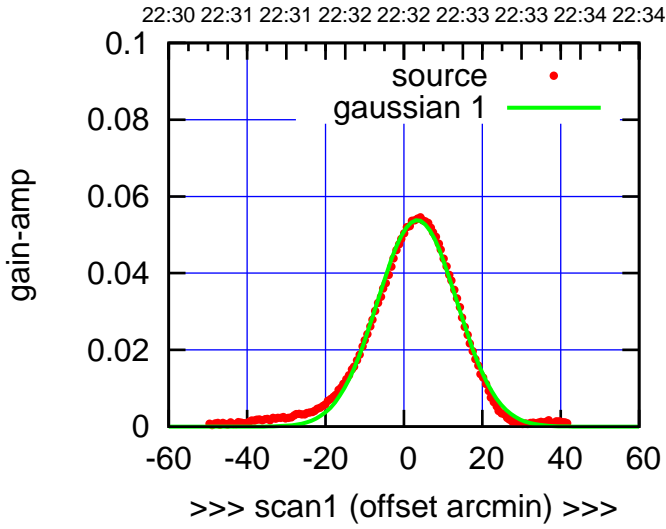
BACKLASH ERROR= 0.6'



(1460 MHz.)

C06-130-EL OFF= 3.4' ( 23.8')

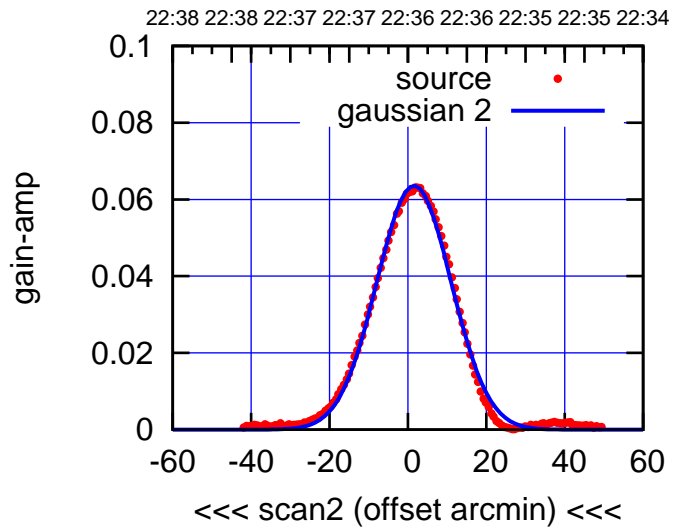
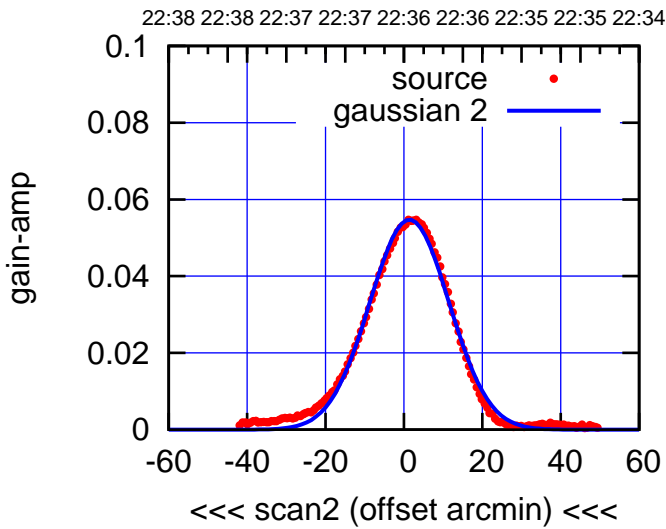
C06-175-EL OFF= 3.6' ( 22.4')



(+30'/m) 02Dec2022 22:32:30

C06-130-EL OFF= 1.4' ( 23.8')

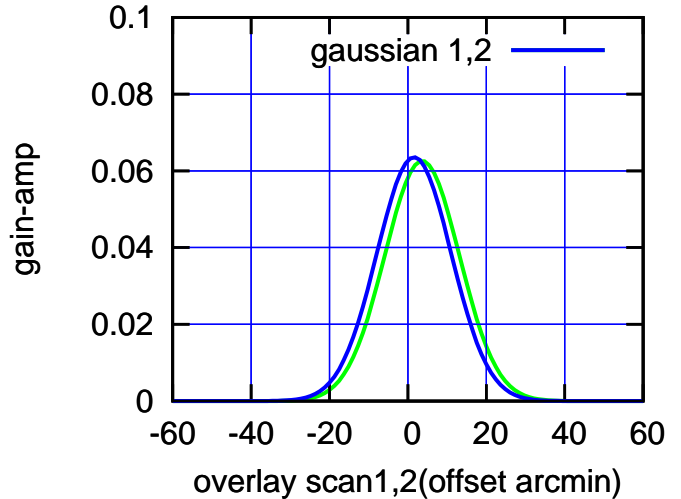
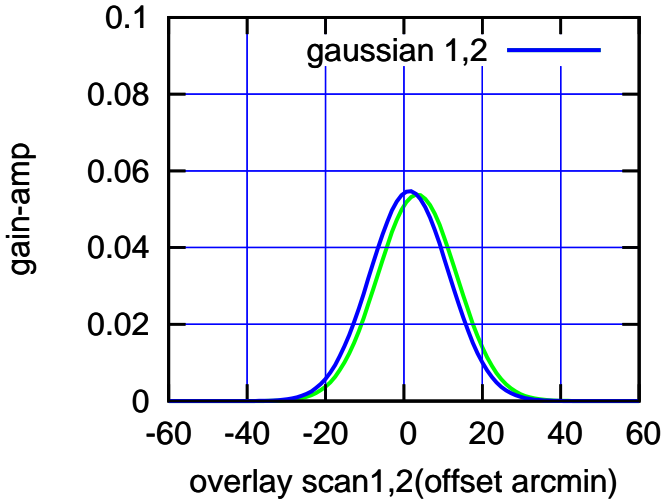
C06-175-EL OFF= 1.6' ( 22.3')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 2.0'

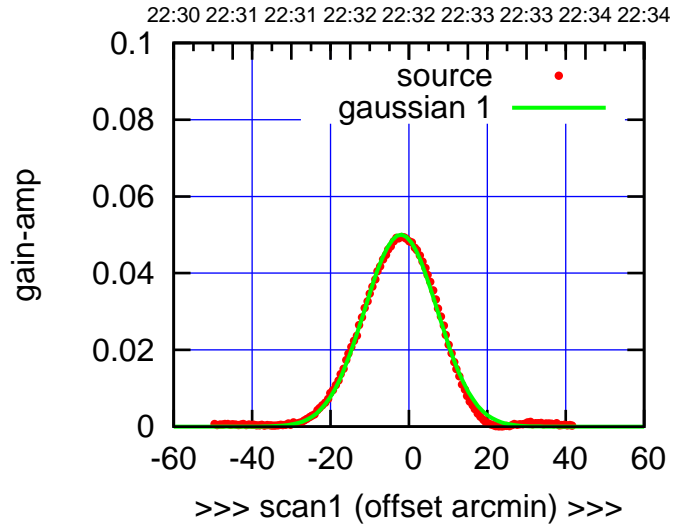
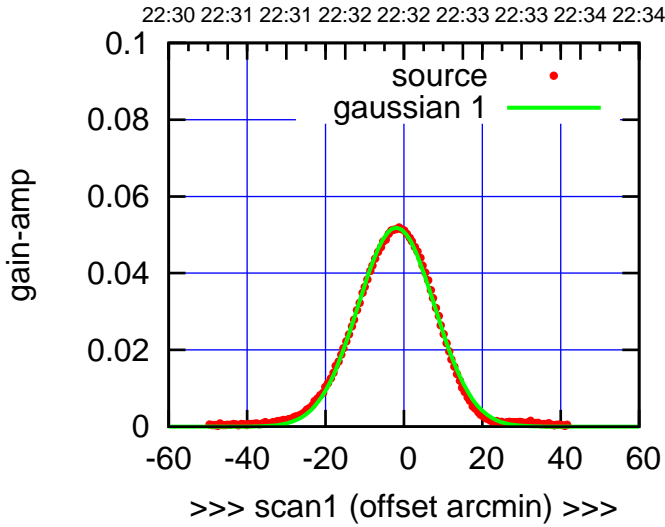
BACKLASH ERROR= 2.0'



(1460 MHz.)

C08-130-EL OFF= -1.9' ( 23.0')

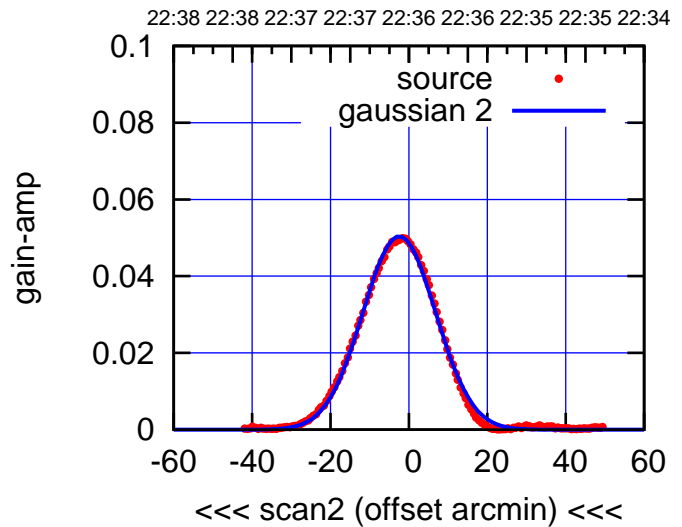
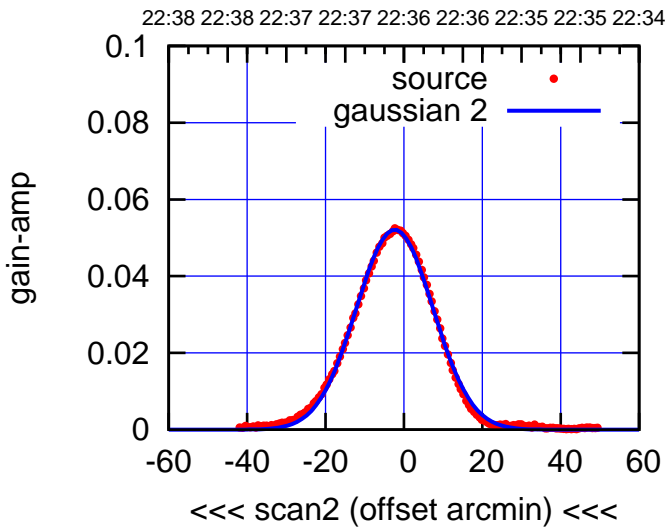
C08-175-EL OFF= -2.1' ( 21.9')



(+30'/m) 02Dec2022 22:32:30

C08-130-EL OFF= -2.4' ( 23.0')

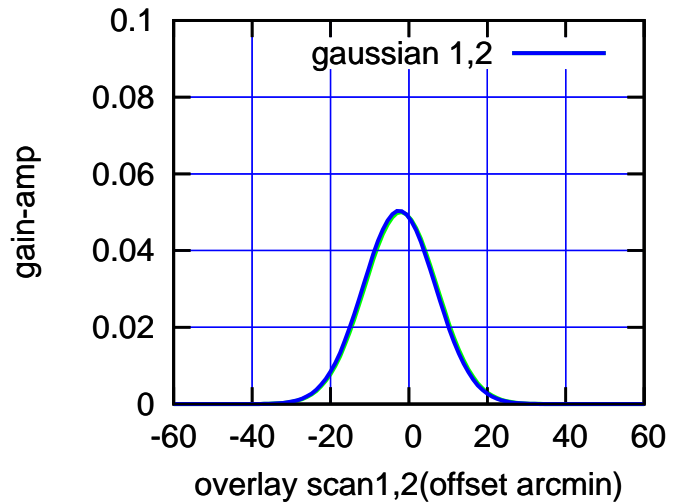
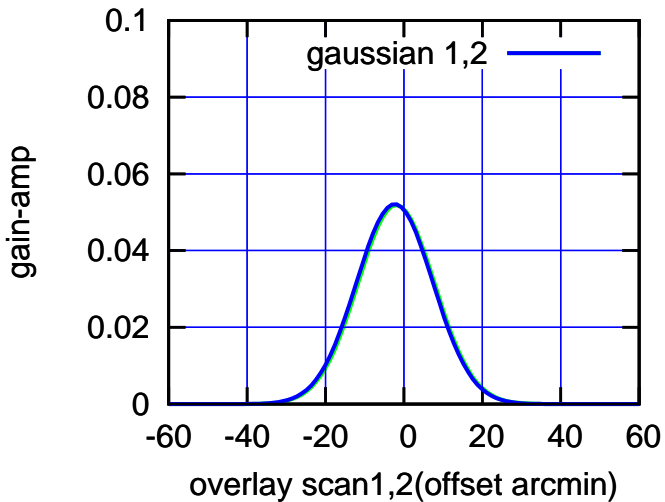
C08-175-EL OFF= -2.5' ( 21.8')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.5'

BACKLASH ERROR= 0.4'

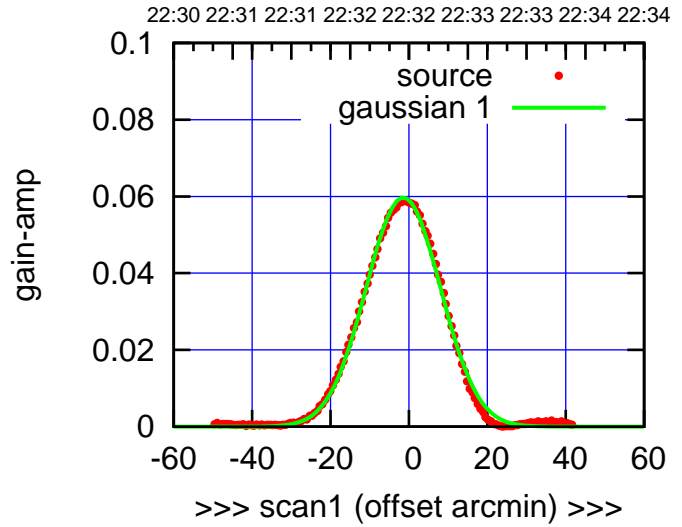
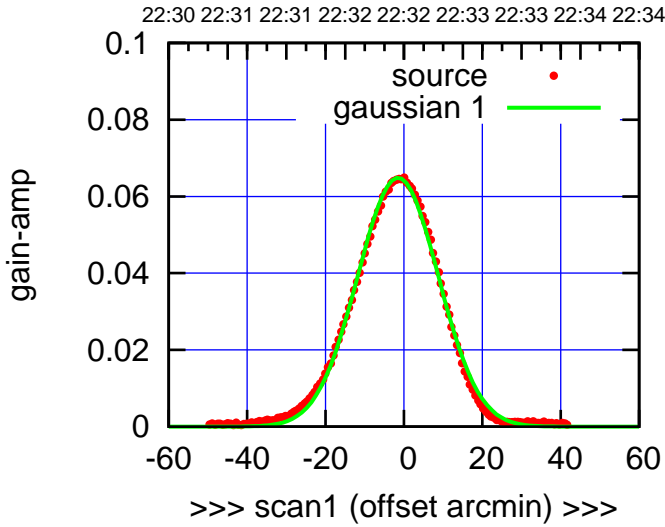


(1460 MHz.)



C09-130-EL OFF= -1.5' ( 24.2')

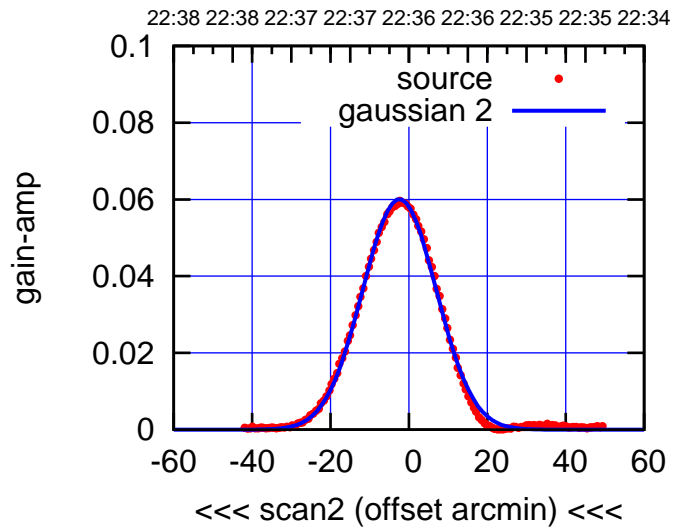
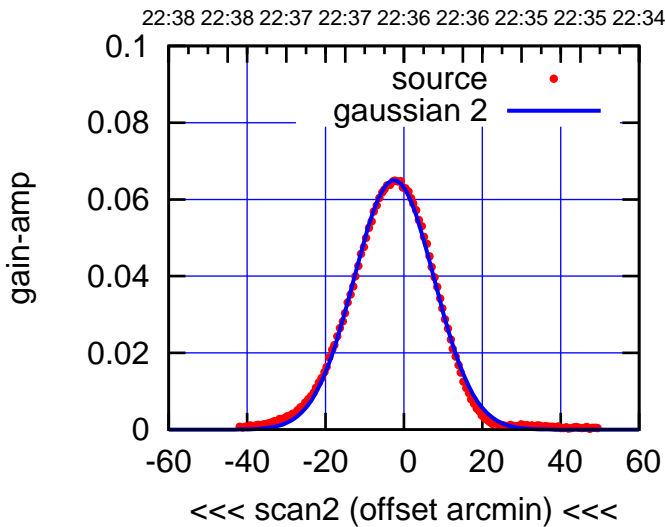
C09-175-EL OFF= -1.4' ( 22.3')



(+30'/m) 02Dec2022 22:32:30

C09-130-EL OFF= -2.5' ( 24.0')

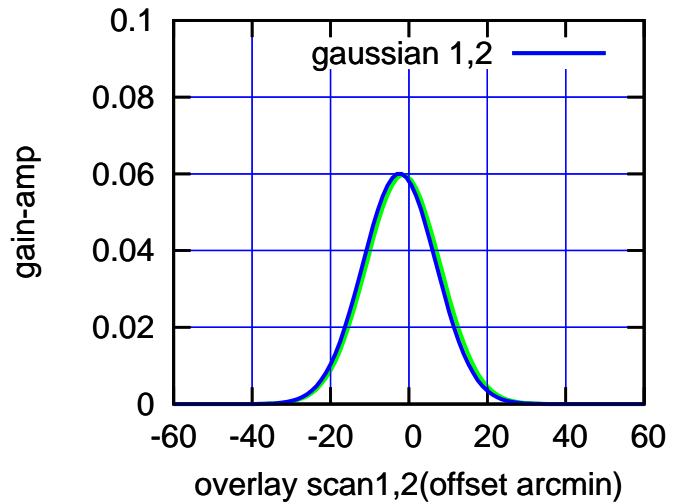
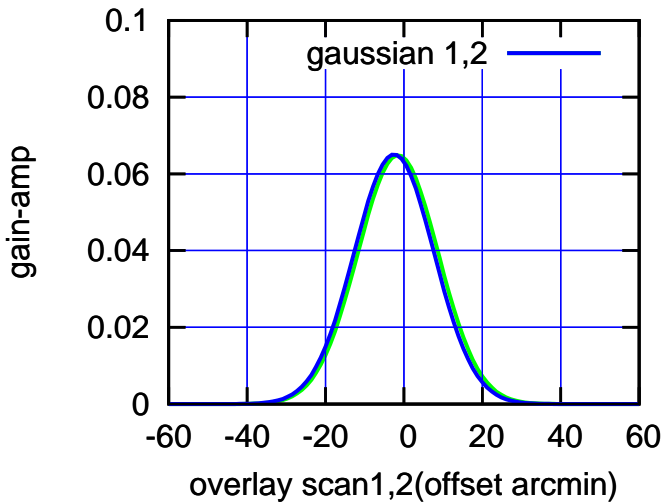
C09-175-EL OFF= -2.4' ( 22.1')



(-30'/m) 02Dec2022 22:36:30

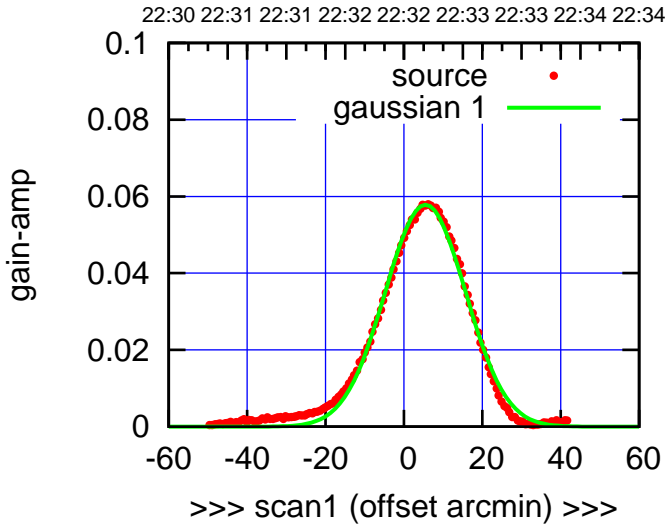
BACKLASH ERROR= 1.0'

BACKLASH ERROR= 1.0'

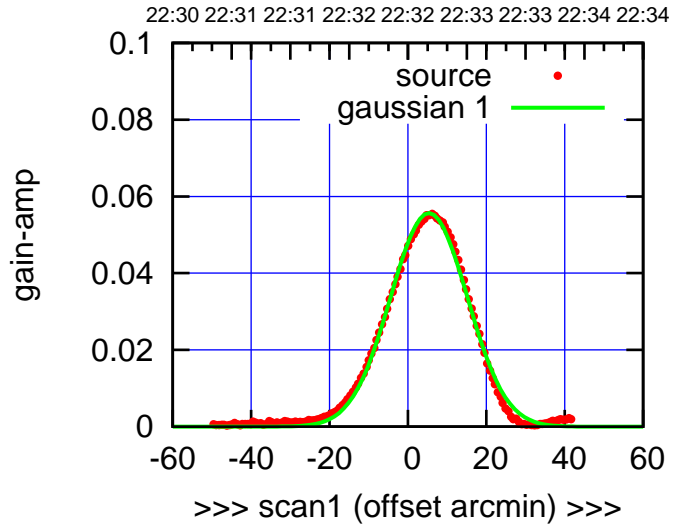


(1460 MHz.)

C10-130-EL OFF= 5.5' ( 24.2')

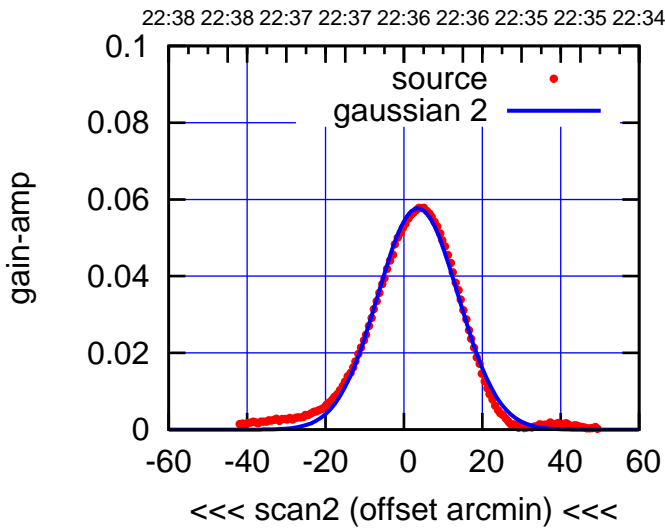


C10-175-EL OFF= 5.4' ( 23.0')

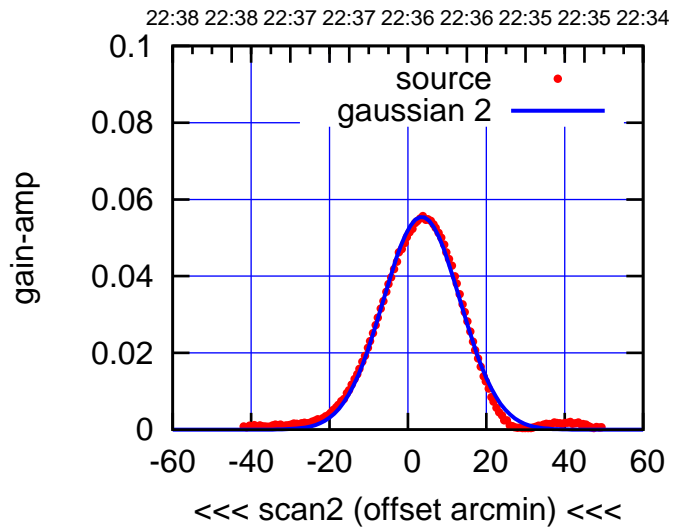


(+30'/m) 02Dec2022 22:32:30

C10-130-EL OFF= 3.6' ( 24.1')

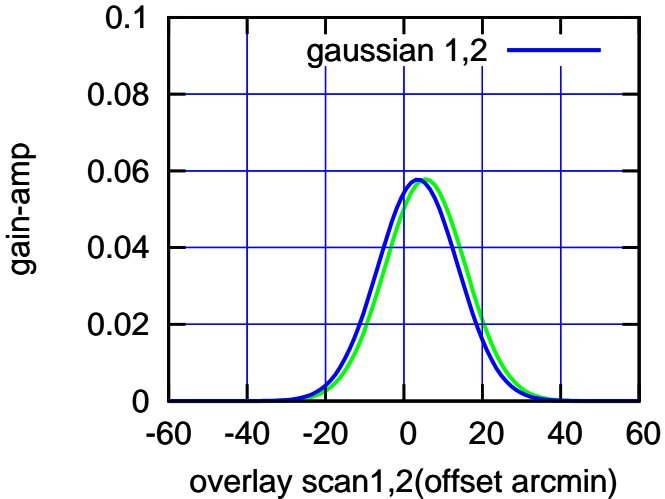


C10-175-EL OFF= 3.5' ( 23.1')

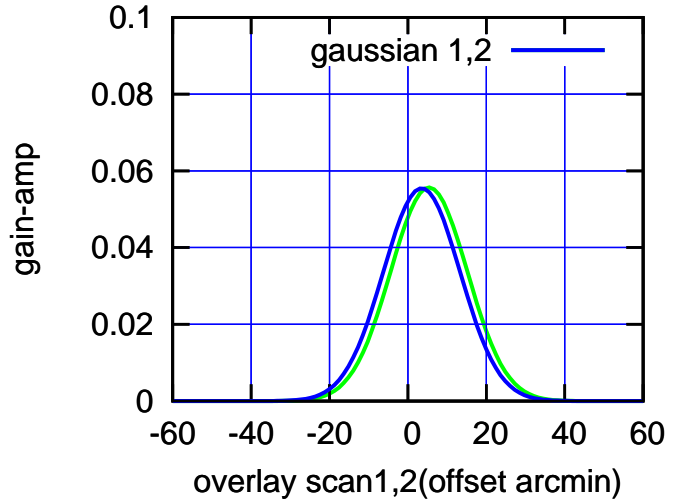


(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 1.9'



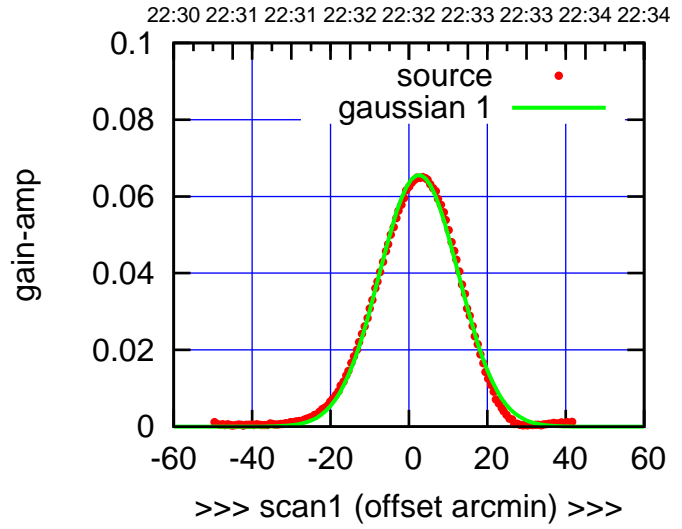
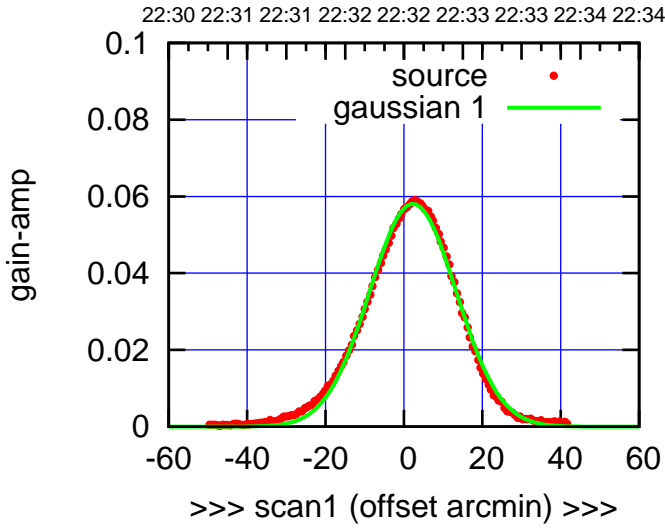
BACKLASH ERROR= 1.9'



(1460 MHz.)

C11-130-EL OFF= 2.3' ( 26.0')

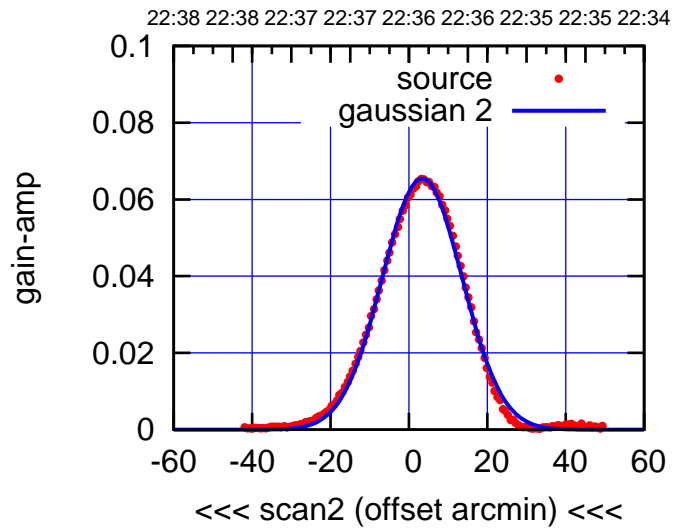
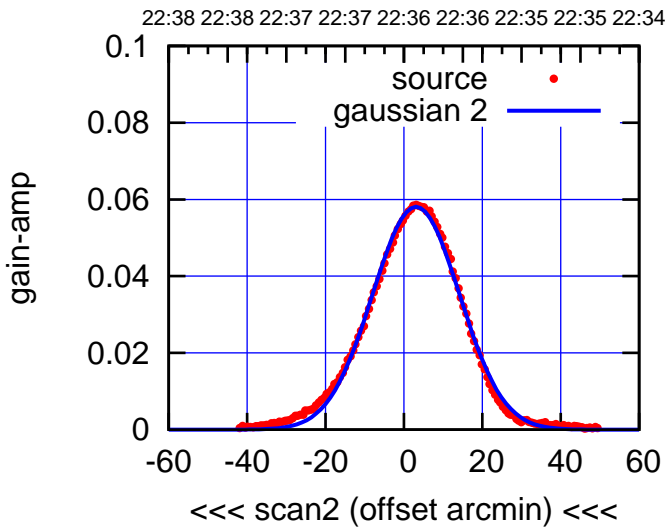
C11-175-EL OFF= 2.6' ( 23.8')



(+30'/m) 02Dec2022 22:32:30

C11-130-EL OFF= 3.1' ( 26.1')

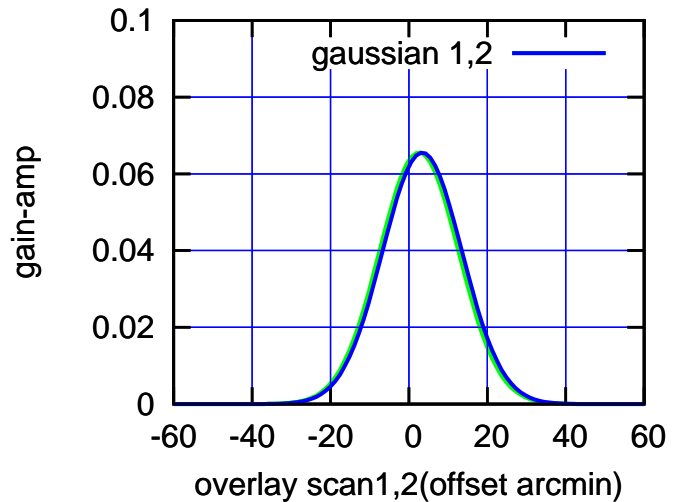
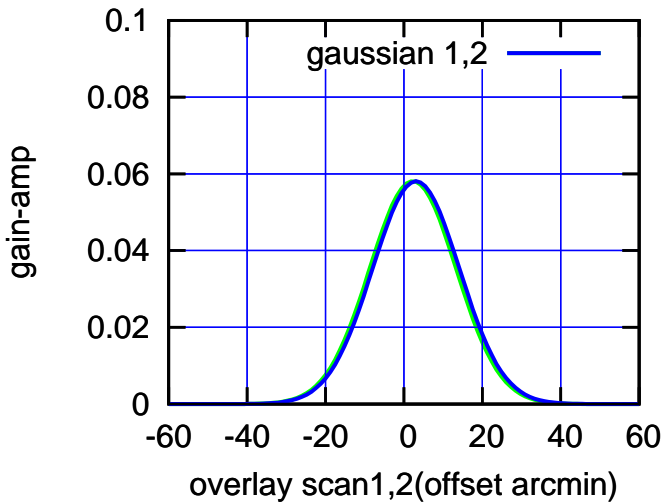
C11-175-EL OFF= 3.4' ( 23.9')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.8'

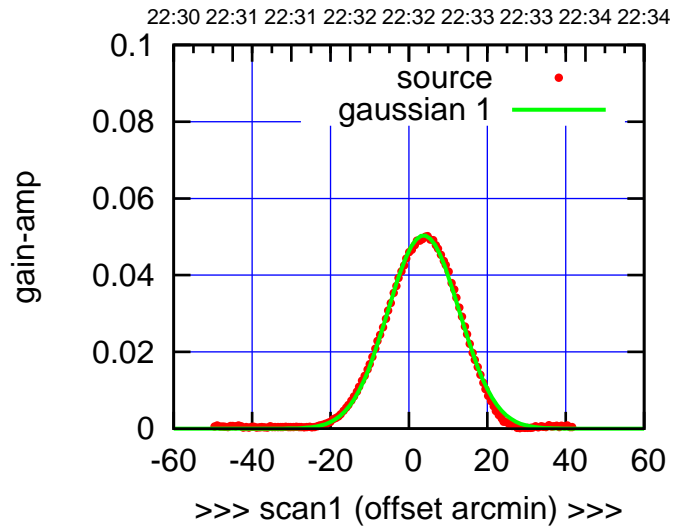
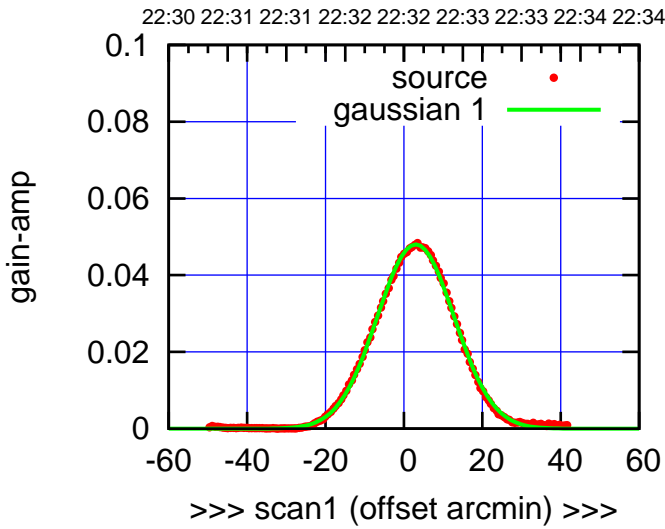
BACKLASH ERROR= 0.8'



(1460 MHz.)

C12-130-EL OFF= 3.0' ( 23.1')

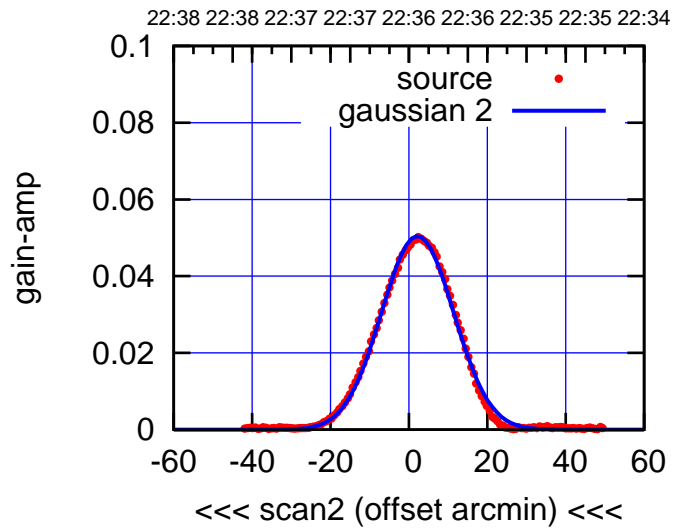
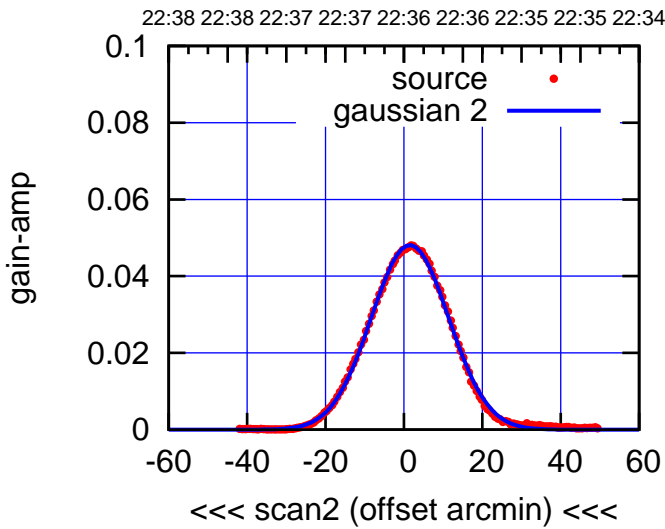
C12-175-EL OFF= 3.7' ( 21.5')



(+30'/m) 02Dec2022 22:32:30

C12-130-EL OFF= 1.5' ( 23.3')

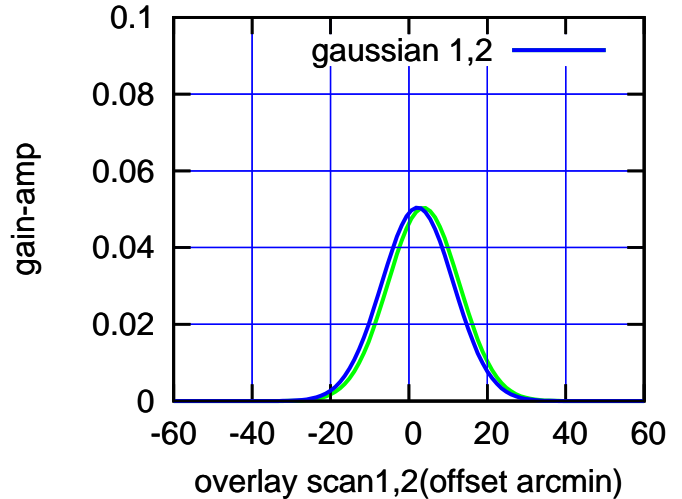
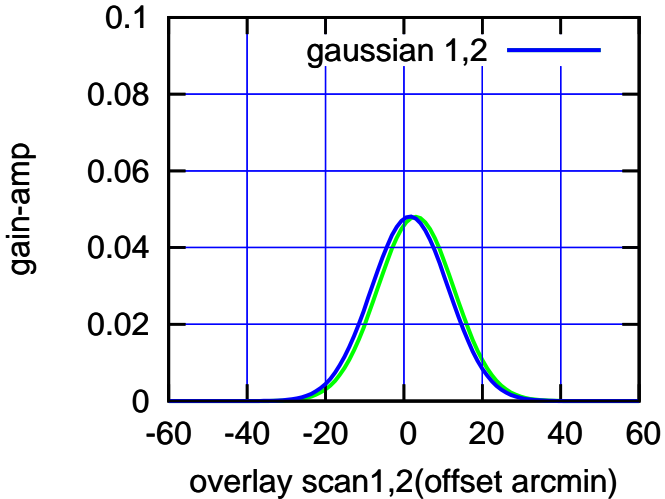
C12-175-EL OFF= 2.2' ( 21.6')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 1.5'

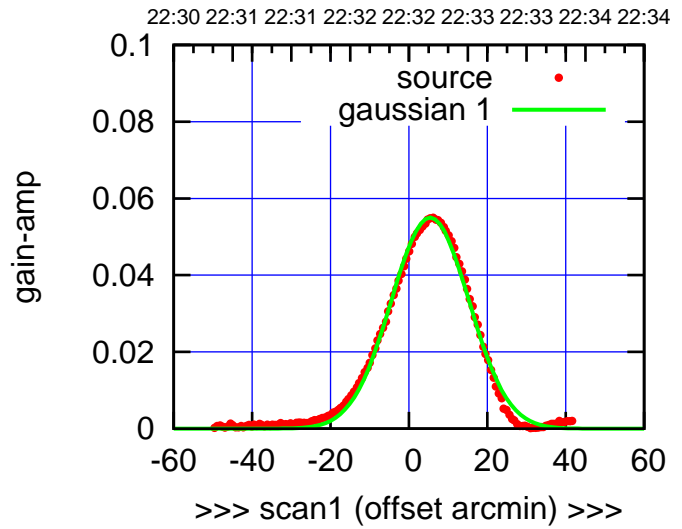
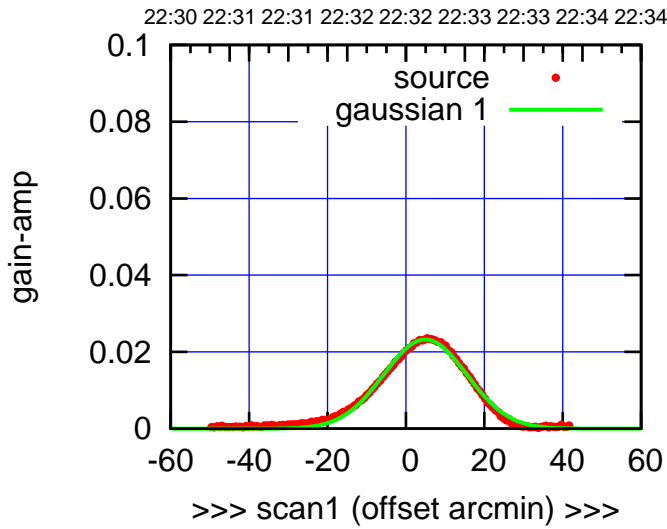
BACKLASH ERROR= 1.5'



(1460 MHz.)

C13-130-EL OFF= 4.9' (24.9')

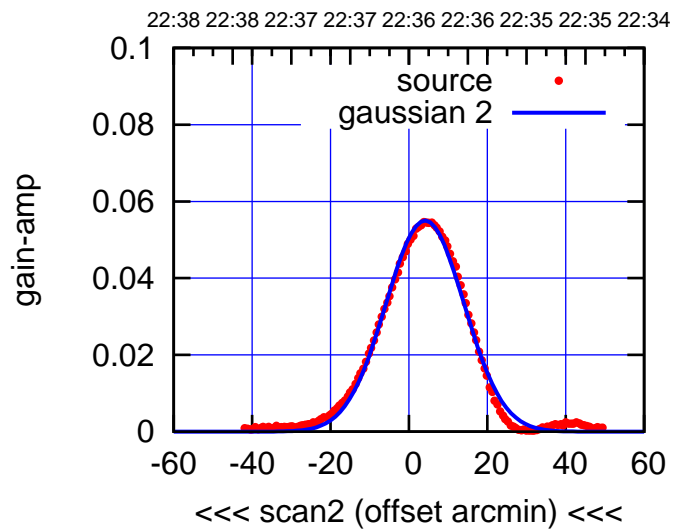
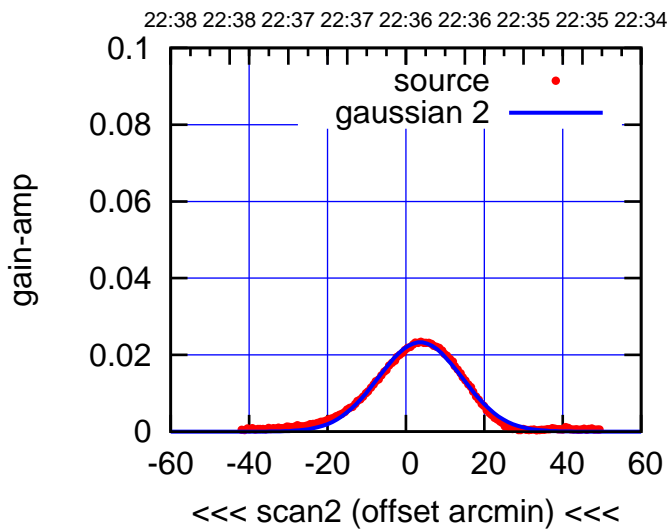
C13-175-EL OFF= 5.4' (23.3')



(+30'/m) 02Dec2022 22:32:30

C13-130-EL OFF= 3.6' (25.1')

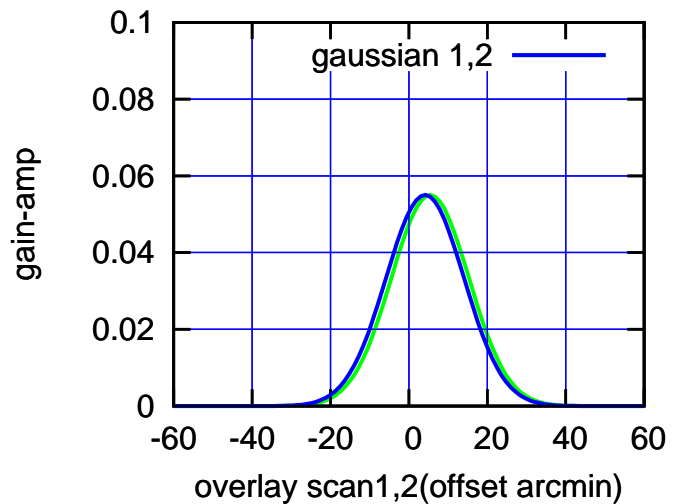
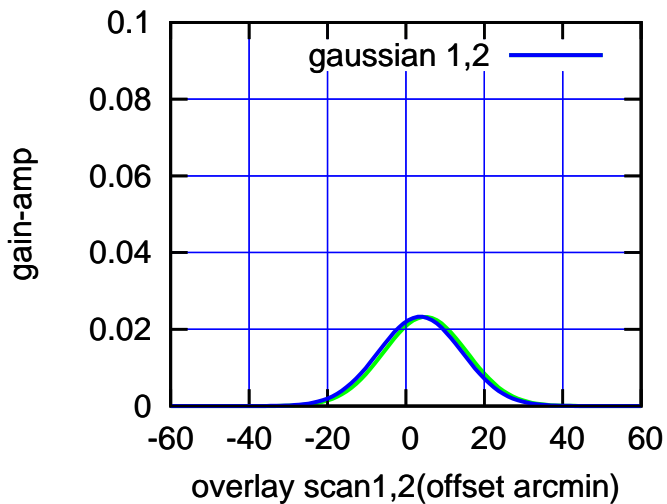
C13-175-EL OFF= 4.1' (23.4')



(-30'/m) 02Dec2022 22:36:30

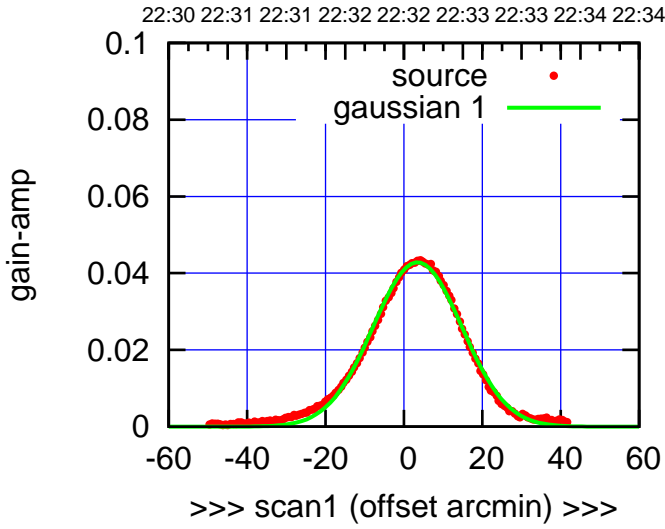
BACKLASH ERROR= 1.3'

BACKLASH ERROR= 1.3'

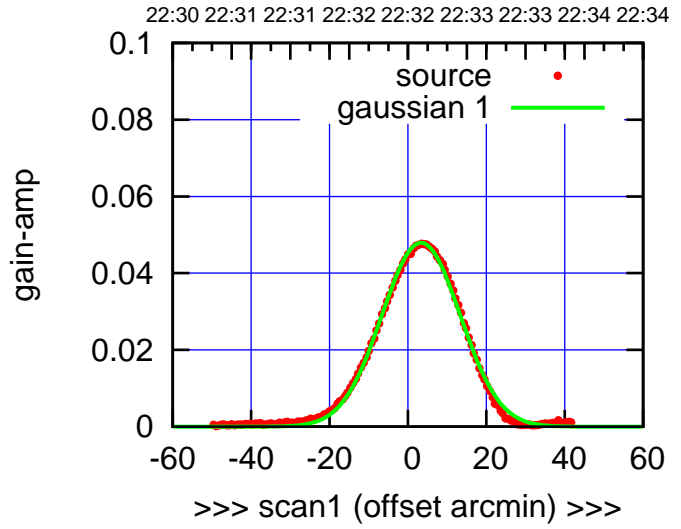


(1460 MHz.)

C14-130-EL OFF= 3.5' (26.7')

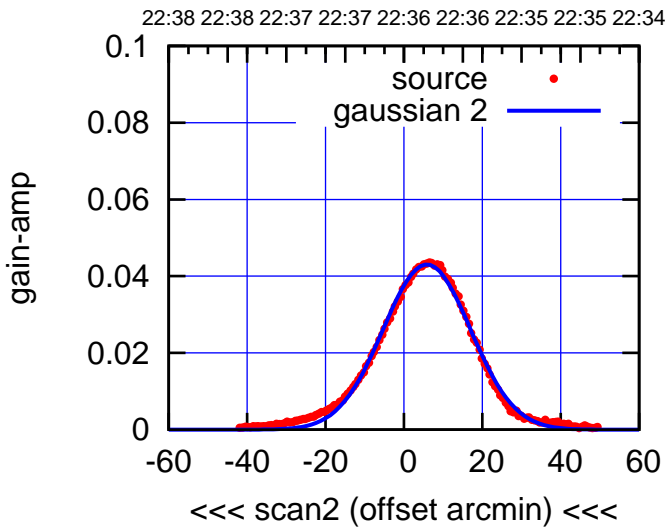


C14-175-EL OFF= 3.4' (23.5')

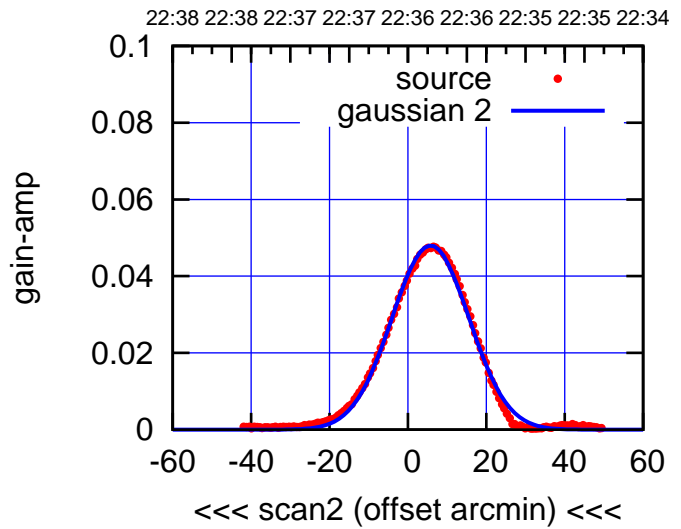


(+30'/m) 02Dec2022 22:32:30

C14-130-EL OFF= 5.8' (26.3')

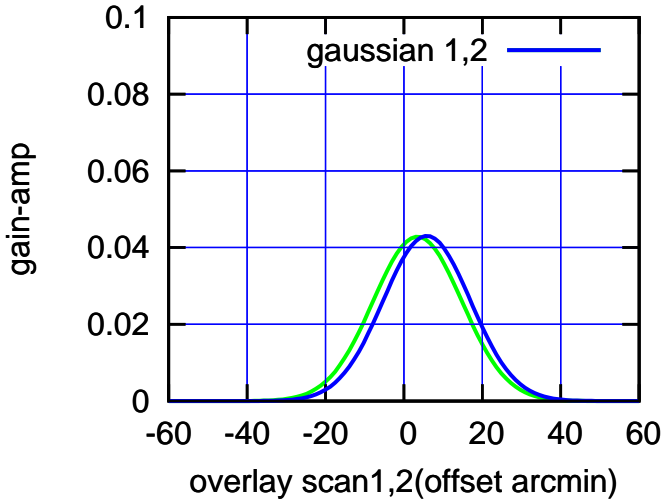


C14-175-EL OFF= 5.8' (23.1')

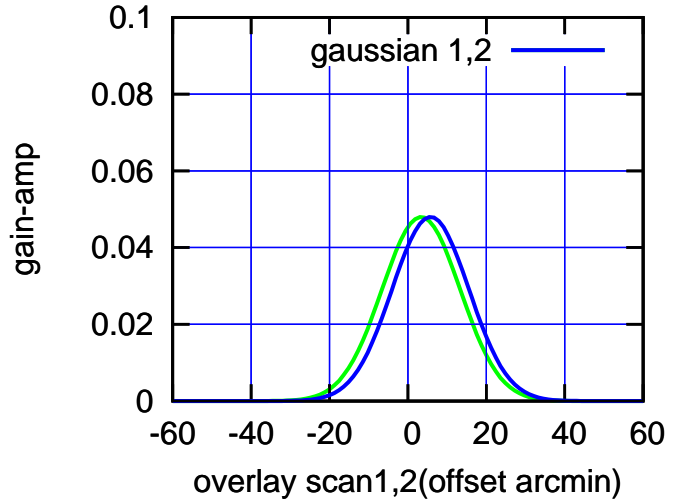


(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 2.3'



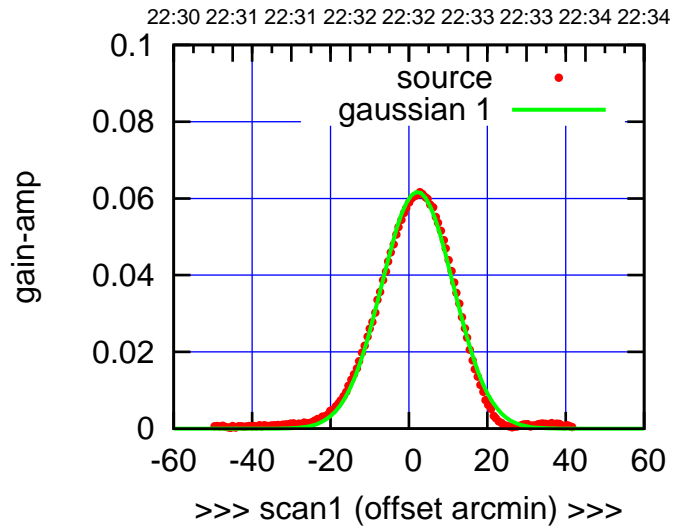
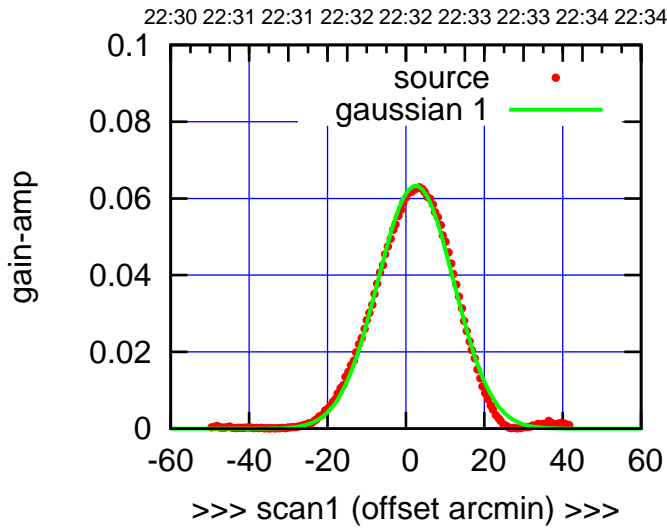
BACKLASH ERROR= 2.4'



(1460 MHz.)

E02-130-EL OFF= 2.5' (22.8')

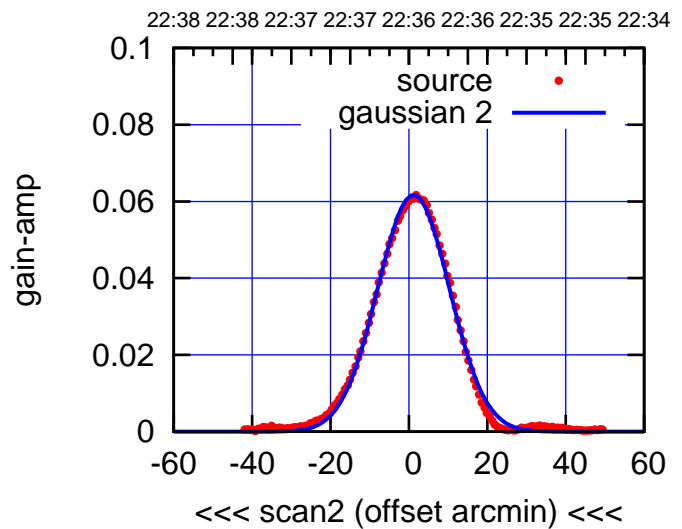
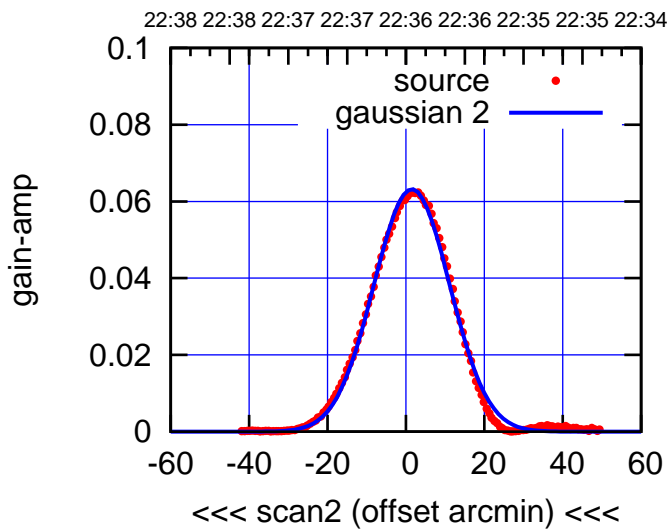
E02-175-EL OFF= 2.2' (21.5')



(+30'/m) 02Dec2022 22:32:30

E02-130-EL OFF= 1.5' (22.8')

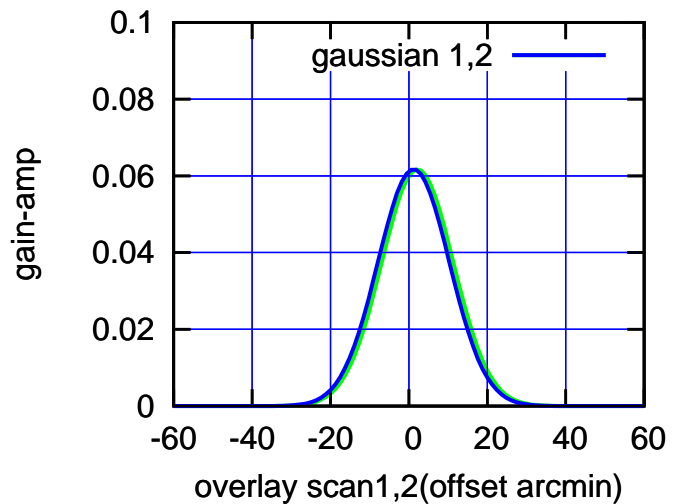
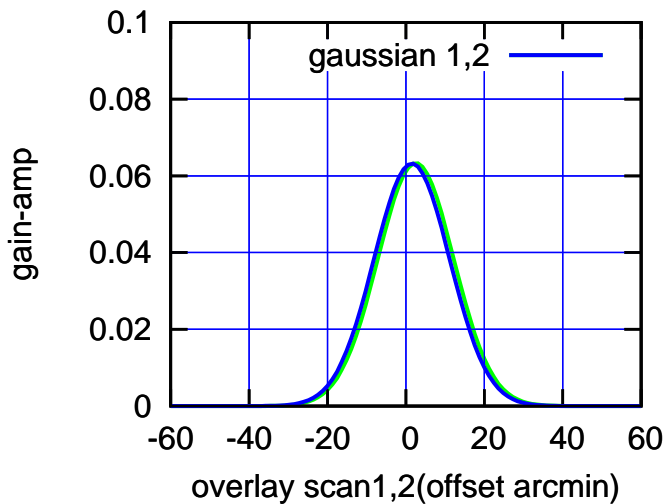
E02-175-EL OFF= 1.2' (21.5')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 1.0'

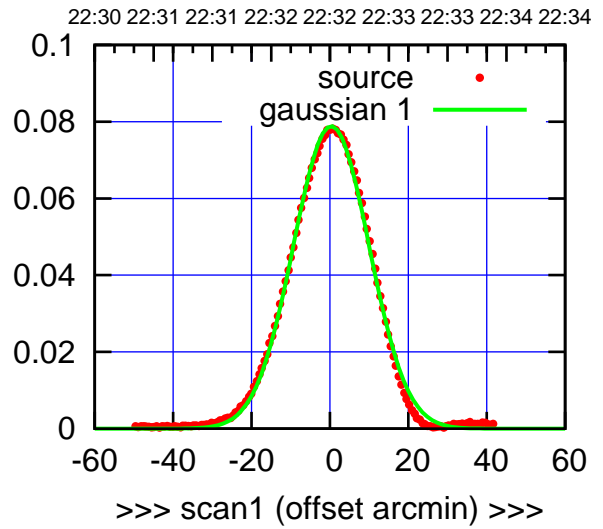
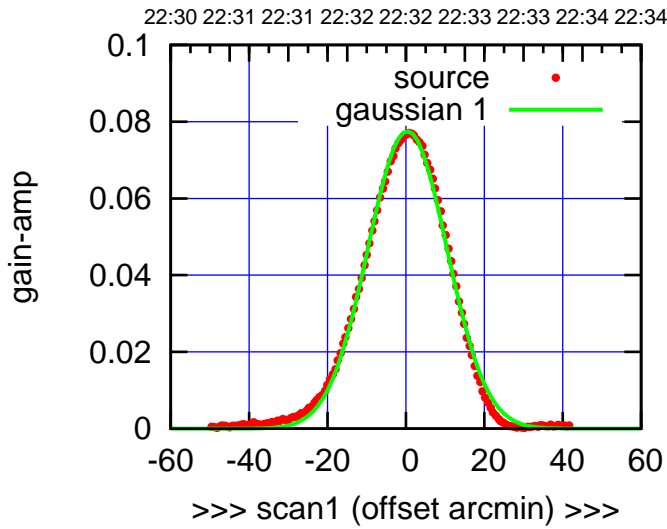
BACKLASH ERROR= 1.0'



(1460 MHz.)

E03-130-EL OFF= 0.4' (23.7')

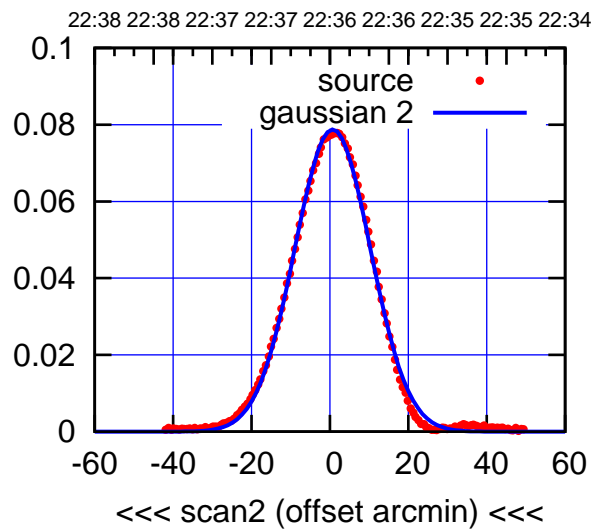
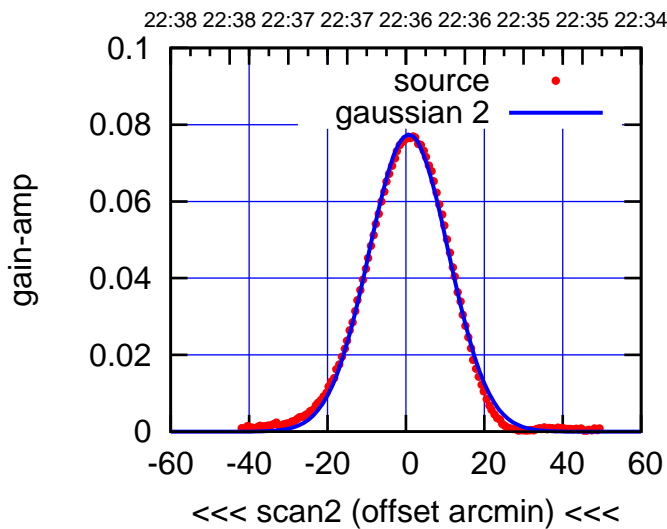
E03-175-EL OFF= 0.3' (22.7')



(+30'/m) 02Dec2022 22:32:30

E03-130-EL OFF= 0.7' (23.8')

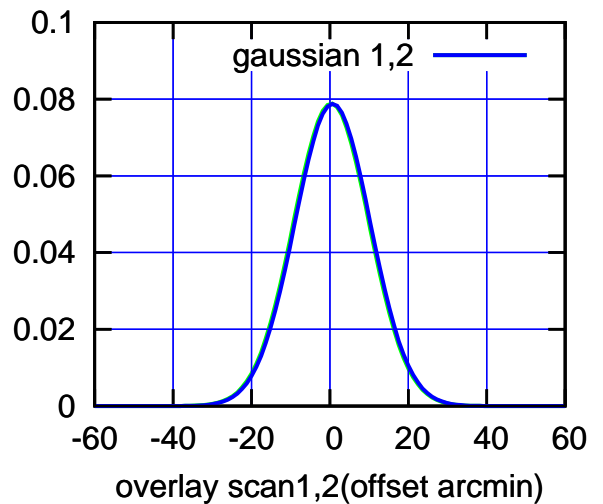
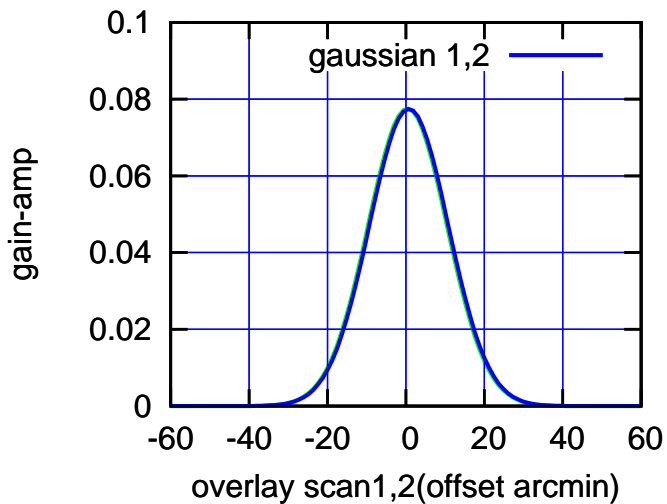
E03-175-EL OFF= 0.7' (22.7')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.3'

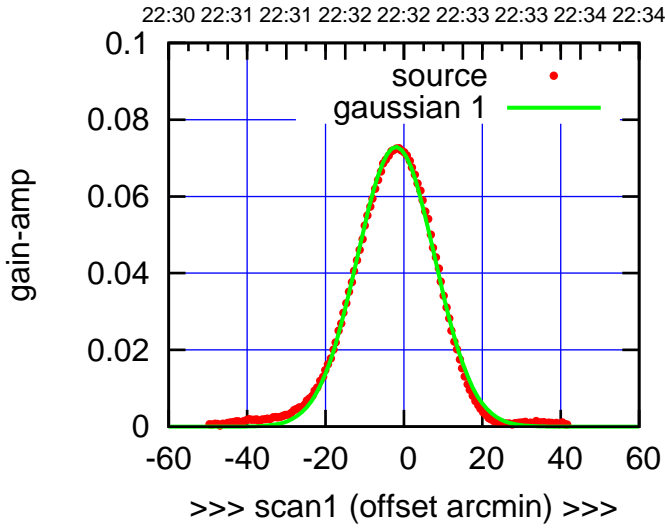
BACKLASH ERROR= 0.4'



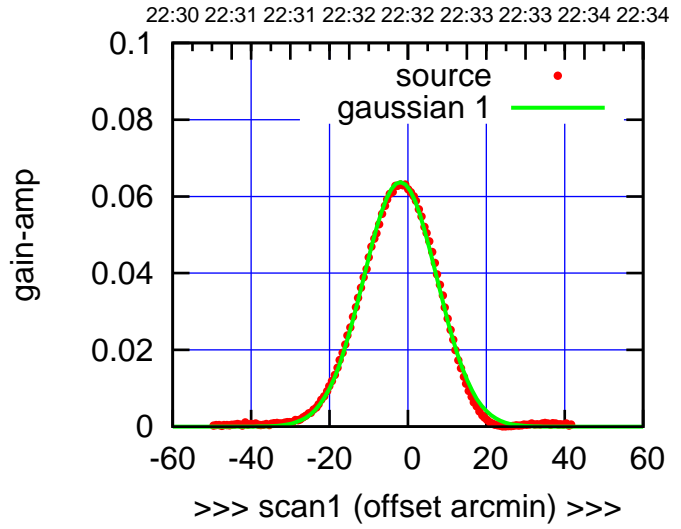
(1460 MHz.)



E04-130-EL OFF= -2.0' ( 23.2')

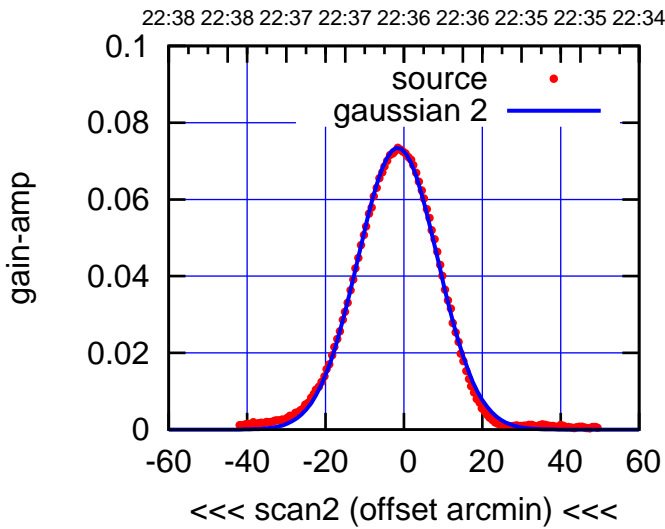


E04-175-EL OFF= -2.0' ( 22.1')

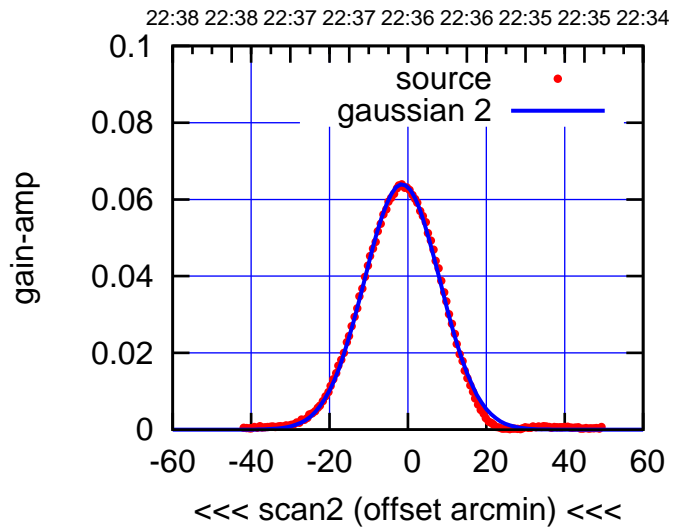


(+30'/m) 02Dec2022 22:32:30

E04-130-EL OFF= -1.6' ( 23.9')

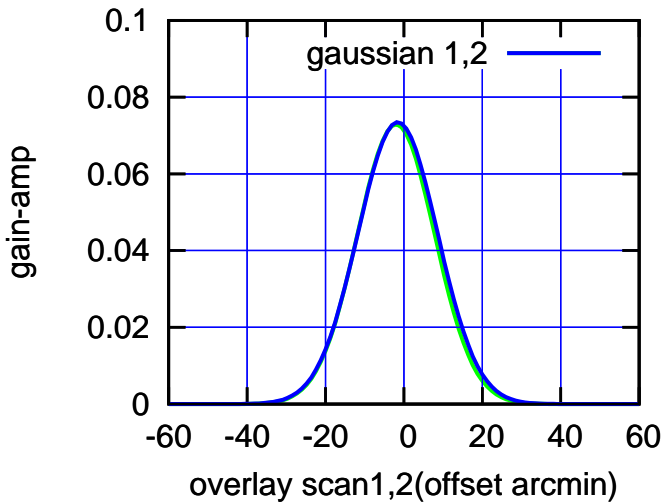


E04-175-EL OFF= -1.5' ( 22.8')

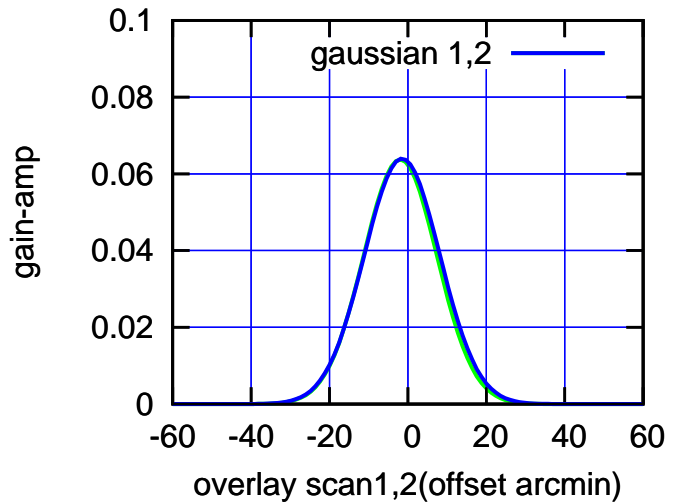


(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.4'

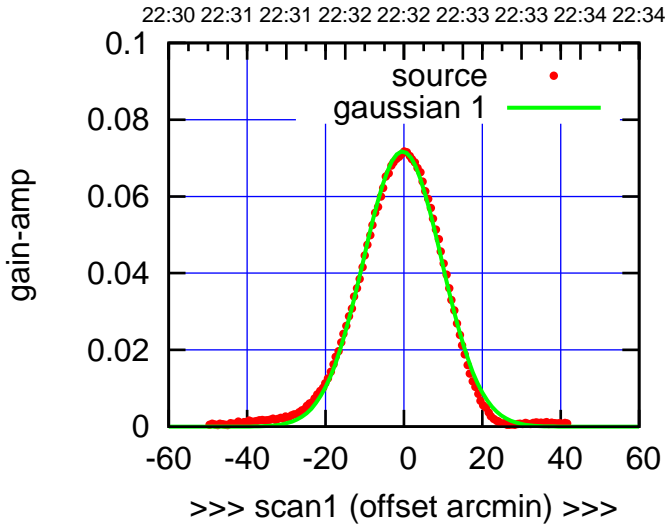


BACKLASH ERROR= 0.5'

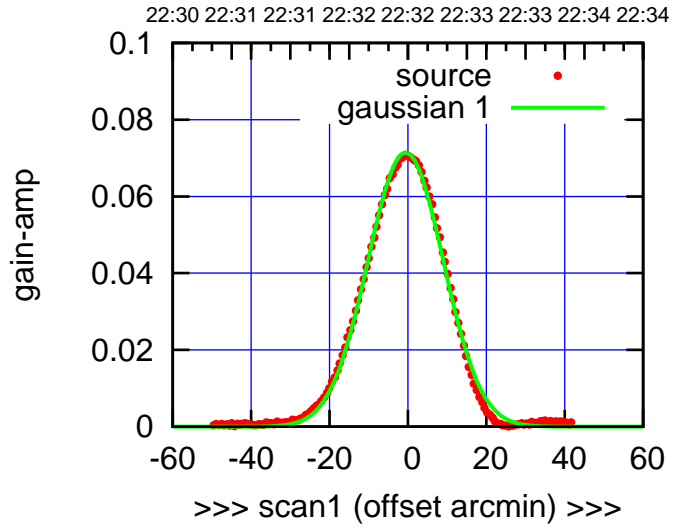


(1460 MHz.)

E05-130-EL OFF= -0.4' ( 23.5')

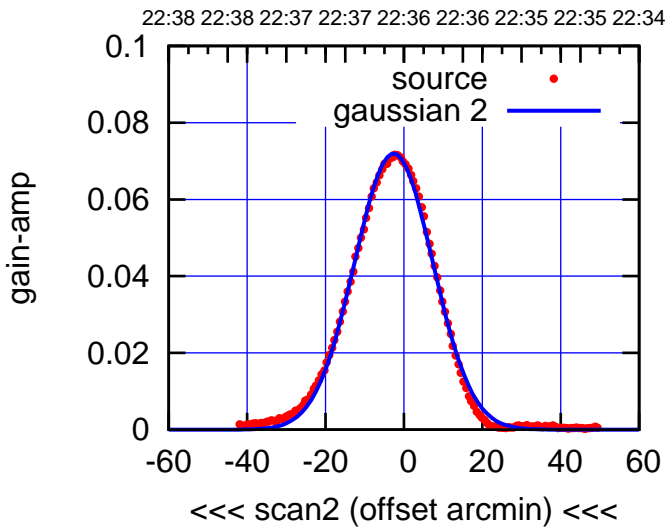


E05-175-EL OFF= -0.6' ( 22.6')

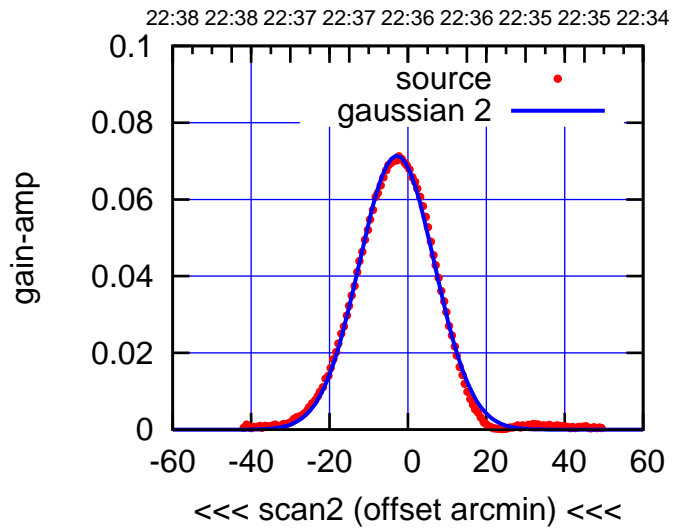


(+30'/m) 02Dec2022 22:32:30

E05-130-EL OFF= -2.6' ( 23.5')

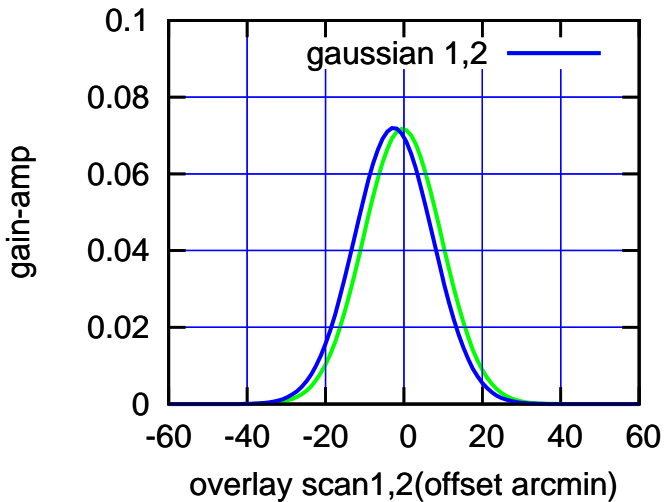


E05-175-EL OFF= -2.8' ( 22.6')

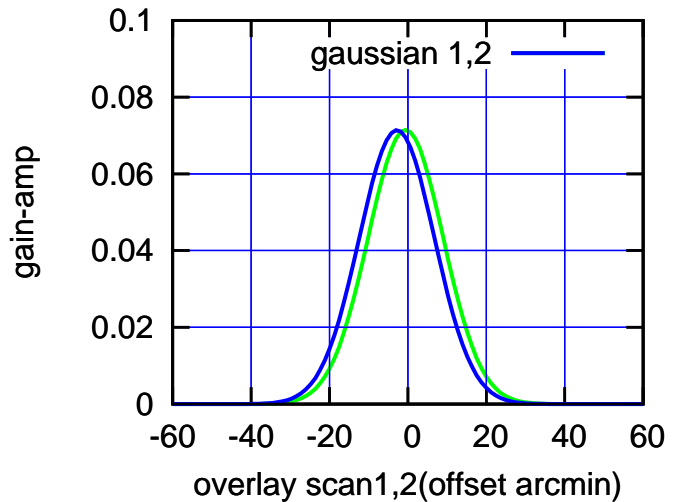


(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 2.2'



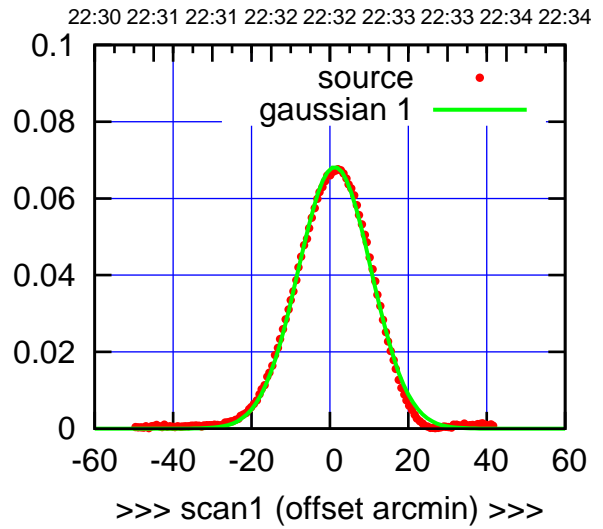
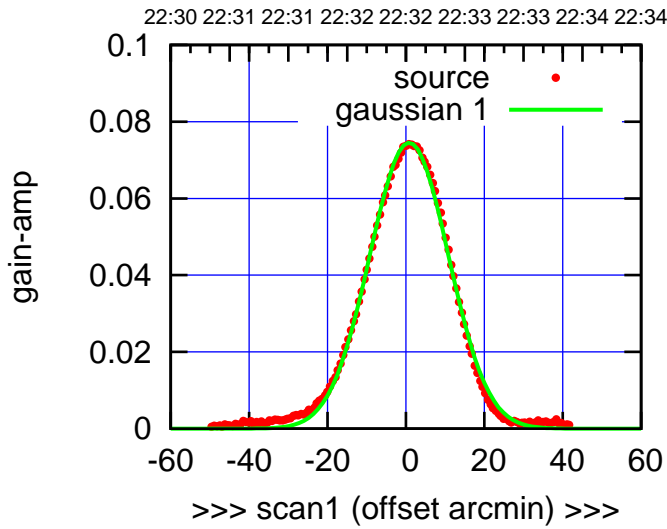
BACKLASH ERROR= 2.2'



(1460 MHz.)

E06-130-EL OFF= 0.8' (23.6')

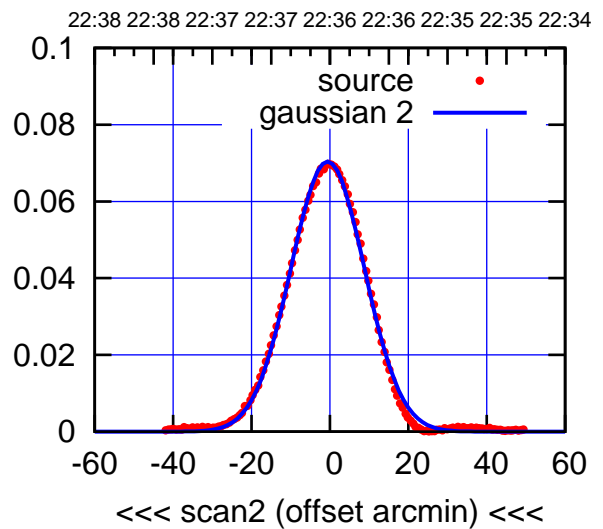
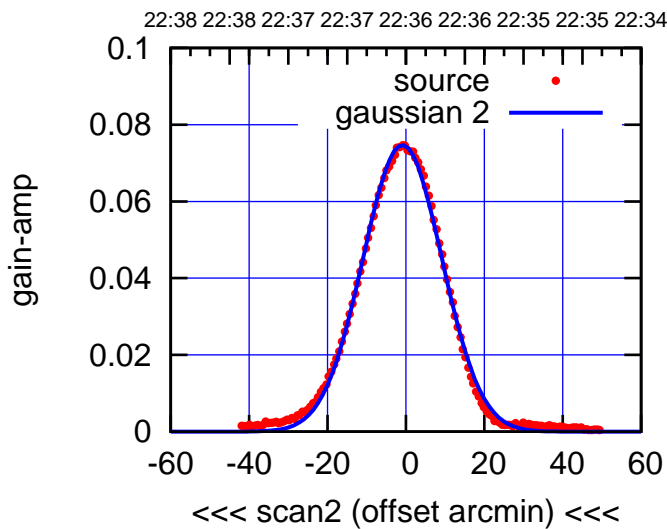
E06-175-EL OFF= 1.2' (21.9')



(+30'/m) 02Dec2022 22:32:30

E06-130-EL OFF= -0.9' (23.6')

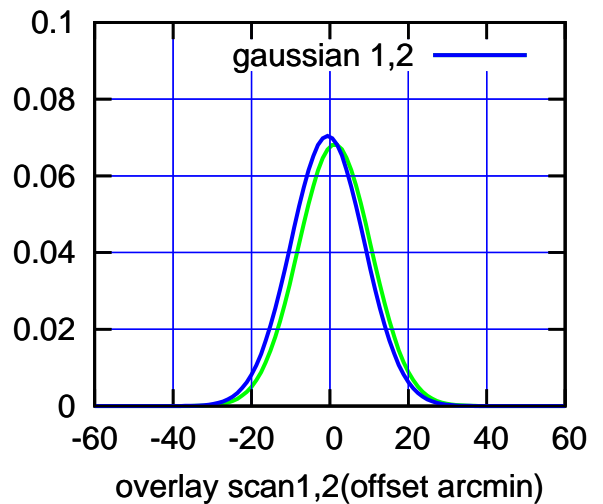
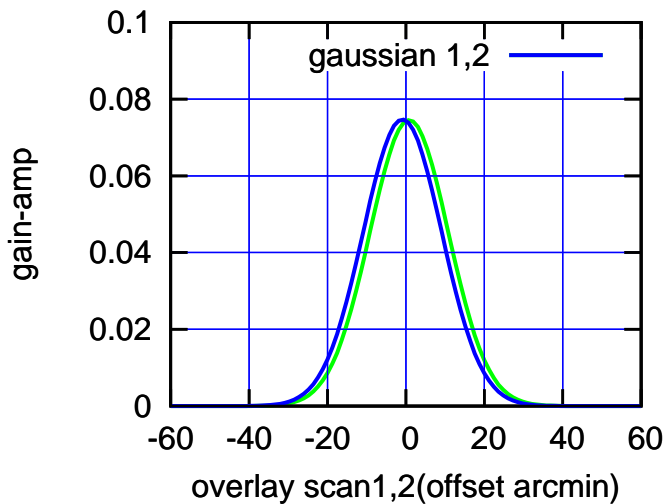
E06-175-EL OFF= -0.6' (22.0')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 1.7'

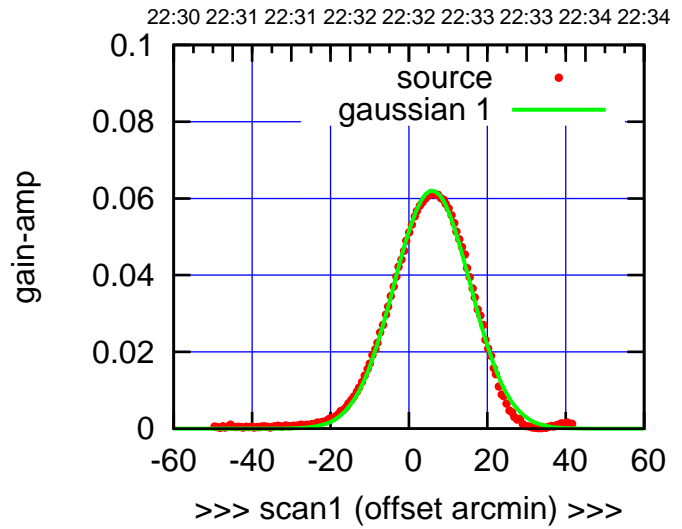
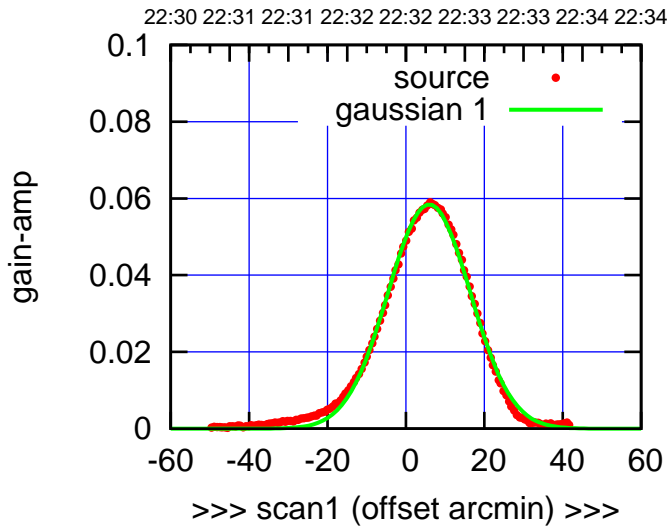
BACKLASH ERROR= 1.8'



(1460 MHz.)

S01-130-EL OFF= 5.9' (24.7')

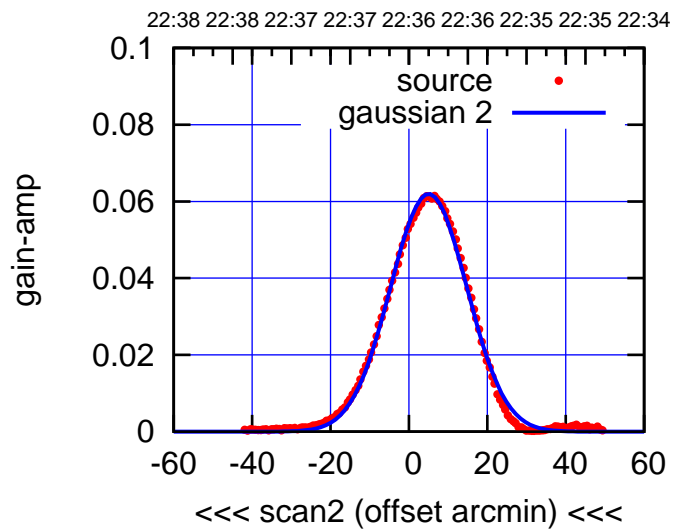
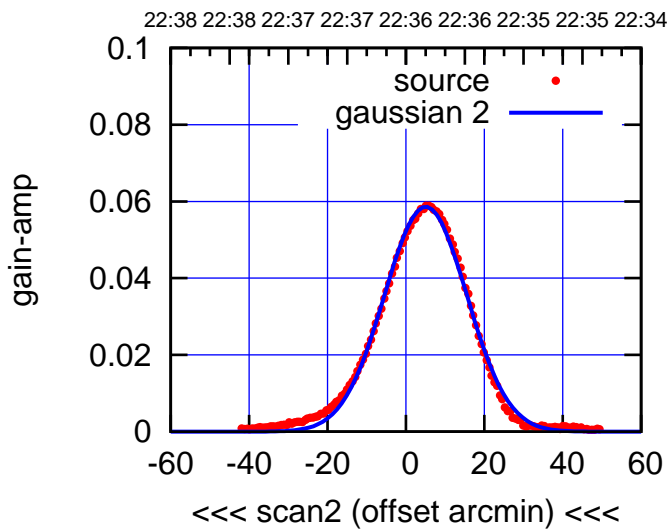
S01-175-EL OFF= 5.9' (22.9')



(+30'/m) 02Dec2022 22:32:30

S01-130-EL OFF= 5.0' (24.8')

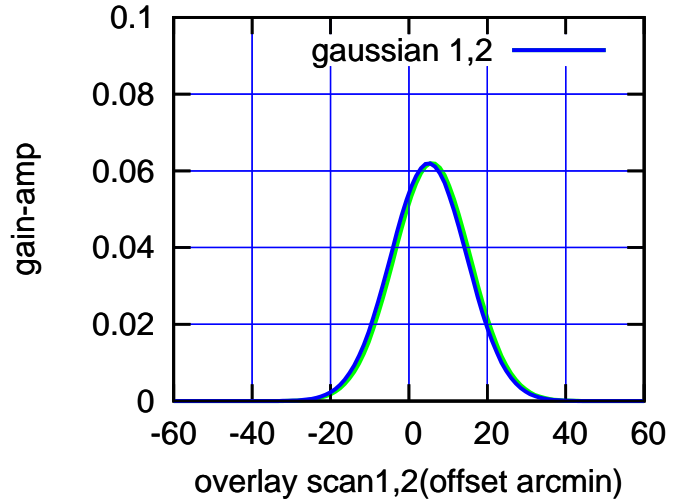
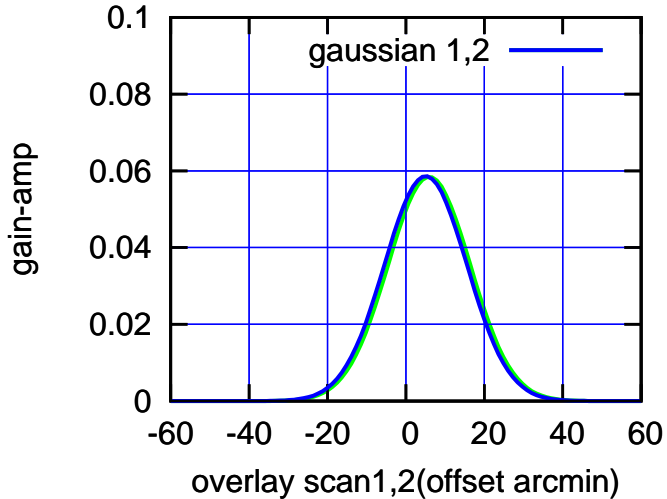
S01-175-EL OFF= 5.0' (23.0')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.9'

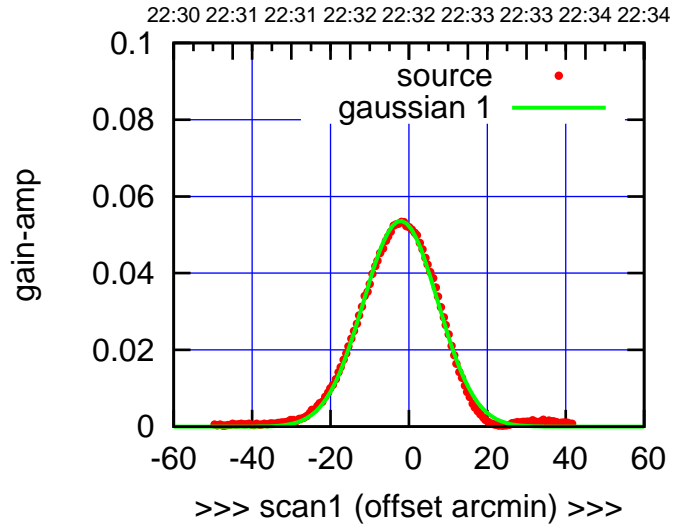
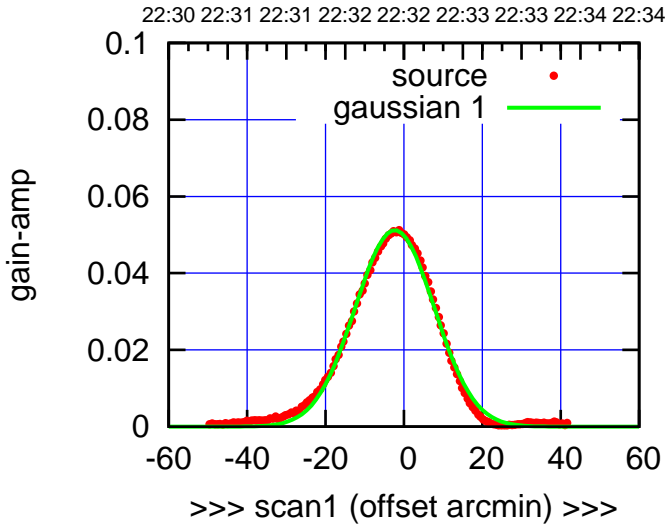
BACKLASH ERROR= 0.9'



(1460 MHz.)

S02-130-EL OFF= -2.3' ( 23.7')

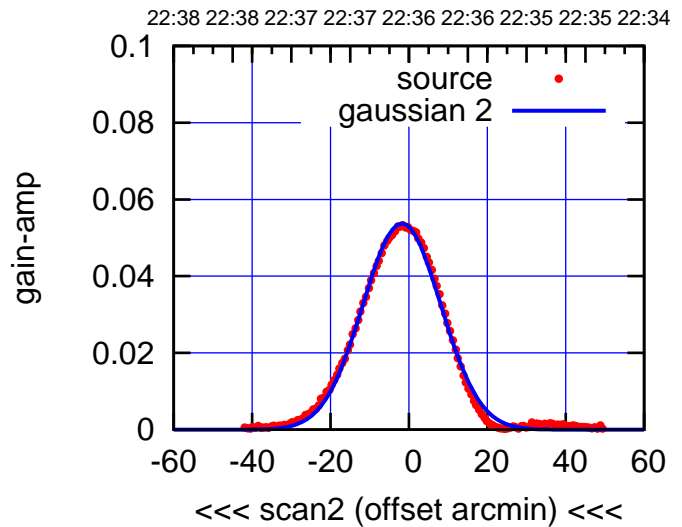
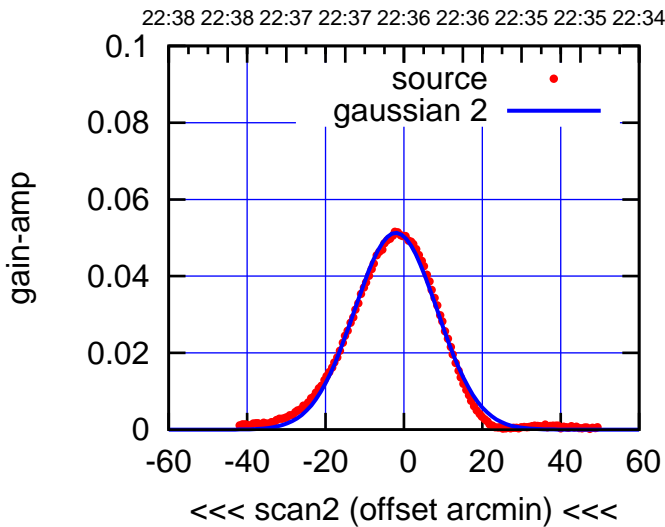
S02-175-EL OFF= -2.1' ( 22.4')



(+30'/m) 02Dec2022 22:32:30

S02-130-EL OFF= -2.1' ( 24.8')

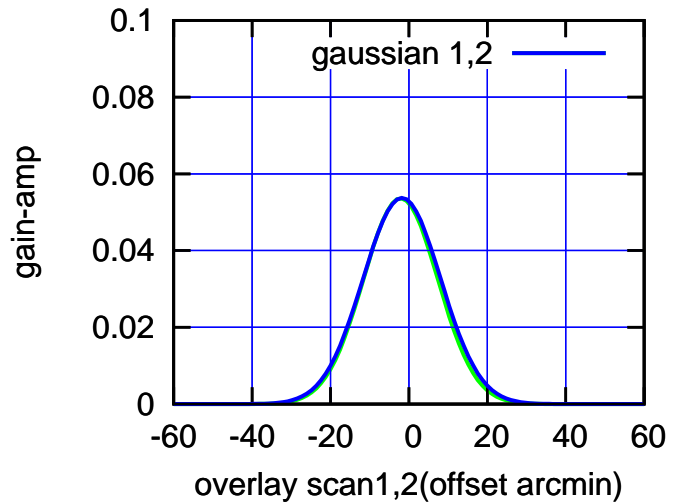
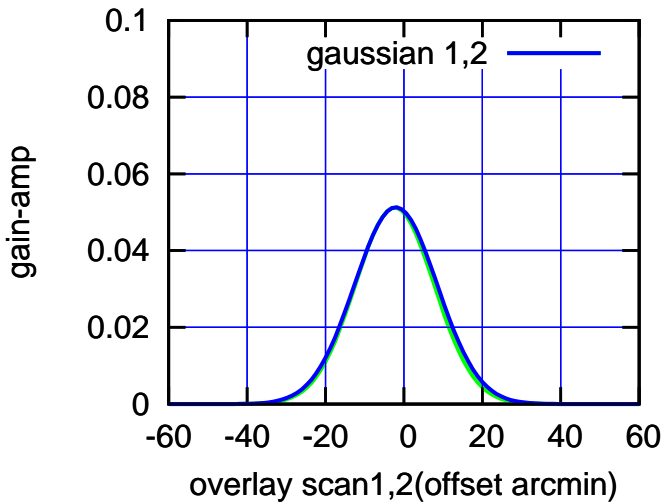
S02-175-EL OFF= -1.8' ( 23.4')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.2'

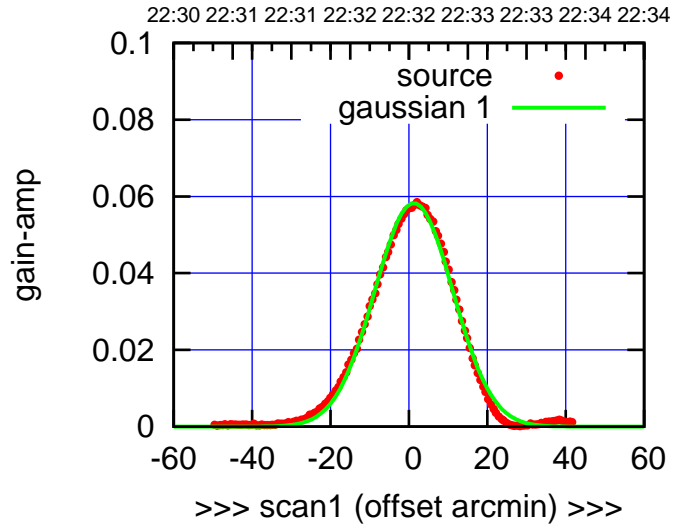
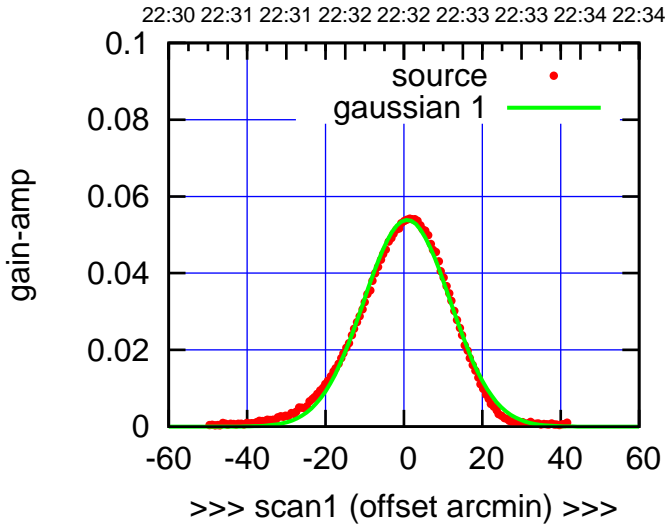
BACKLASH ERROR= 0.3'



(1460 MHz.)

S03-130-EL OFF= 0.8' ( 26.1')

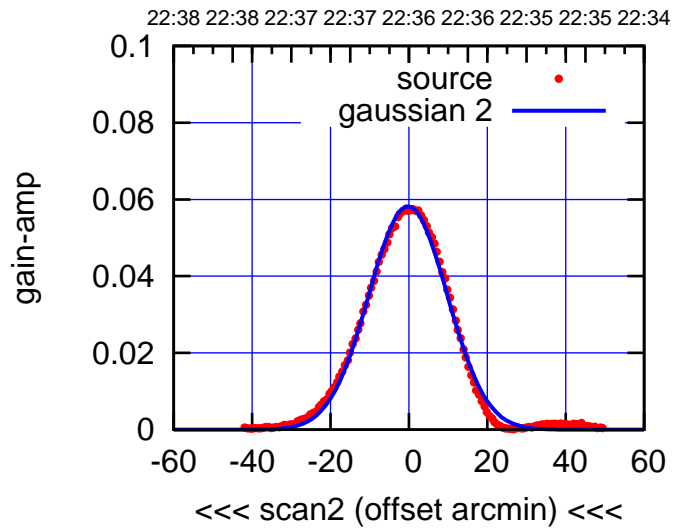
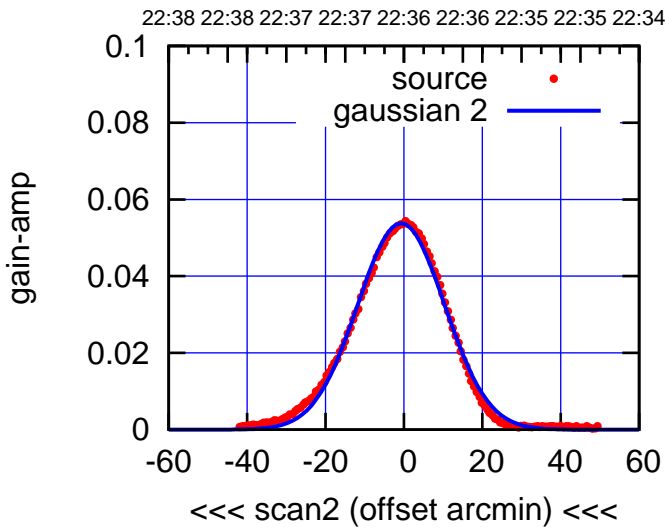
S03-175-EL OFF= 1.3' ( 23.5')



(+30'/m) 02Dec2022 22:32:30

S03-130-EL OFF= -0.7' ( 26.1')

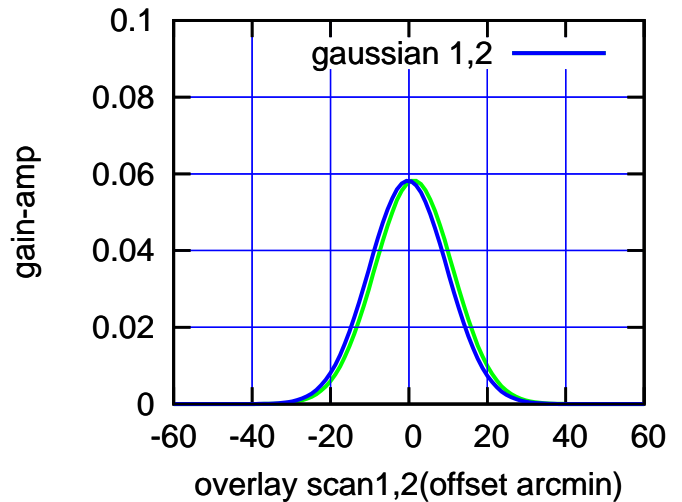
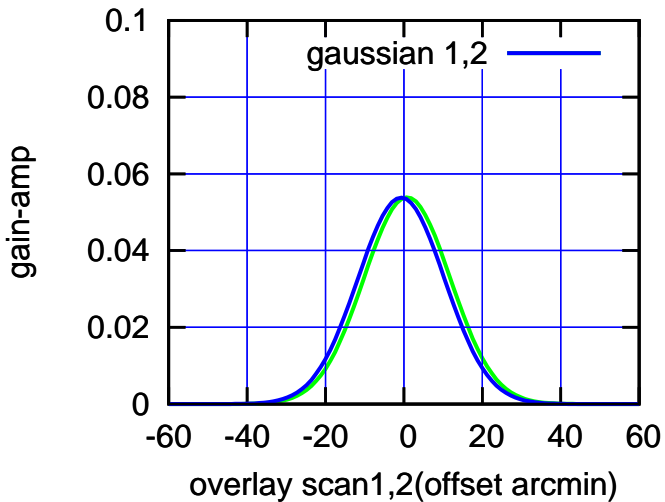
S03-175-EL OFF= -0.2' ( 23.4')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 1.5'

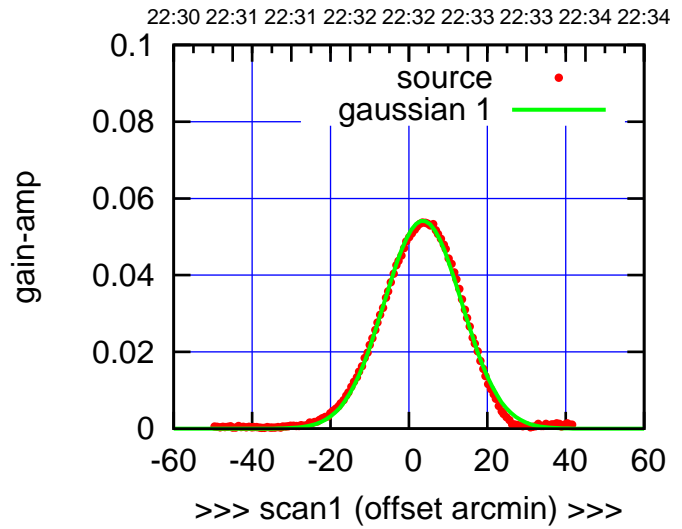
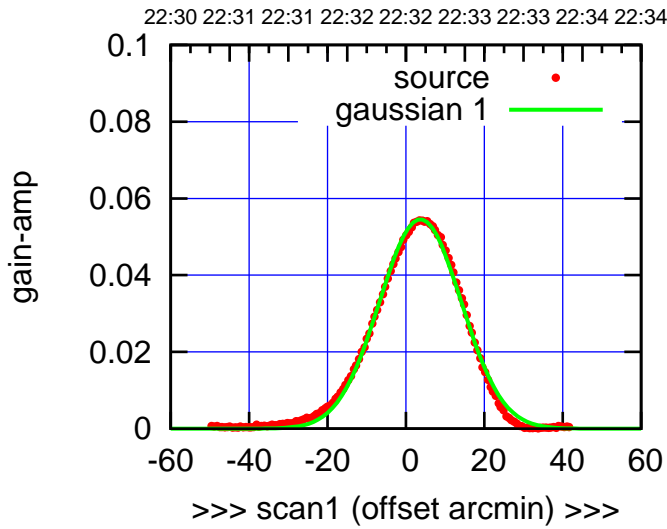
BACKLASH ERROR= 1.5'



(1460 MHz.)

S04-130-EL OFF= 3.7' (24.5')

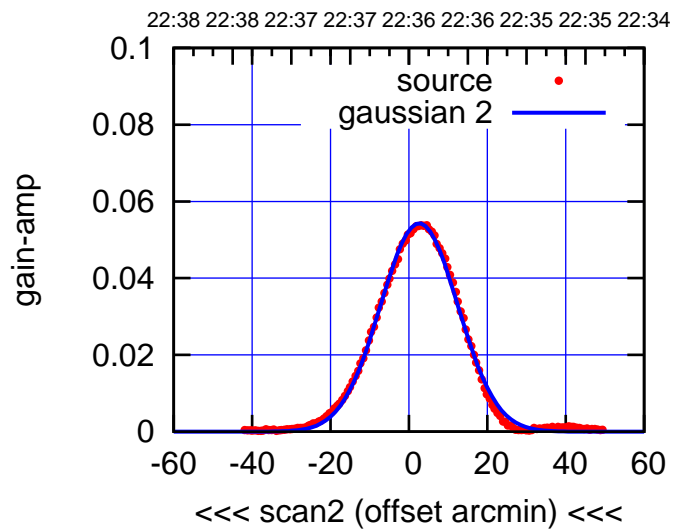
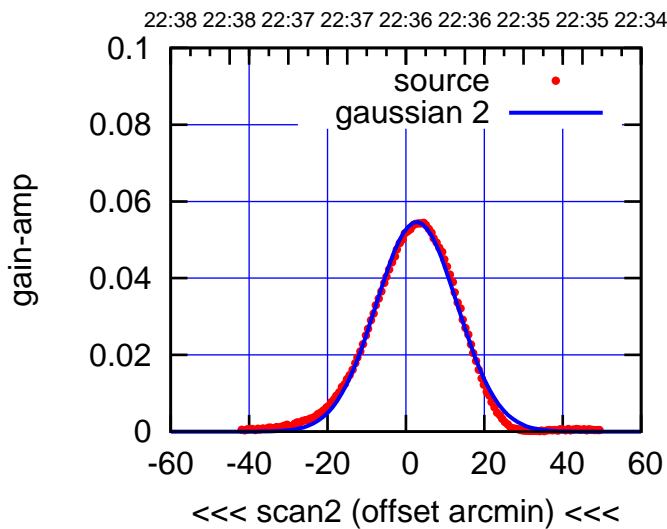
S04-175-EL OFF= 3.6' (23.3')



(+30'/m) 02Dec2022 22:32:30

S04-130-EL OFF= 2.7' (24.4')

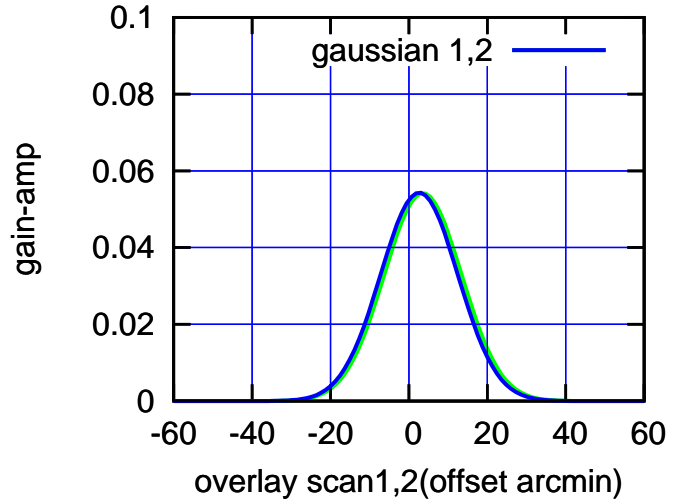
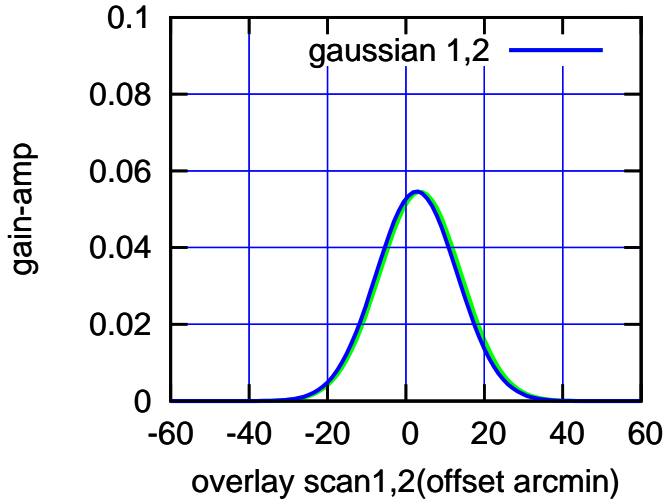
S04-175-EL OFF= 2.6' (23.2')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 1.0'

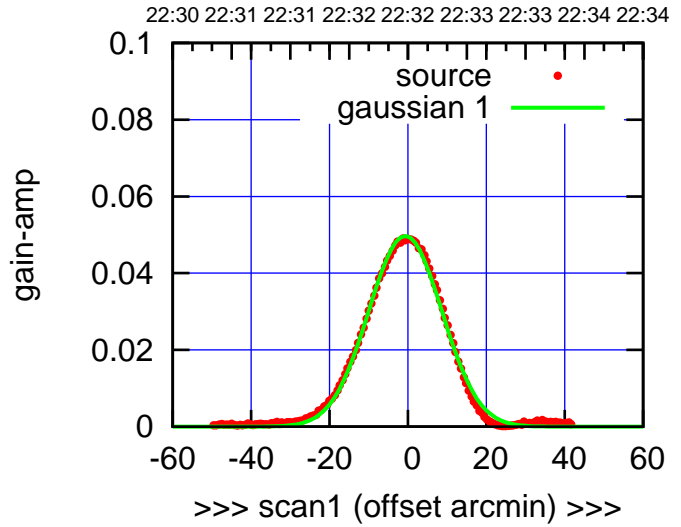
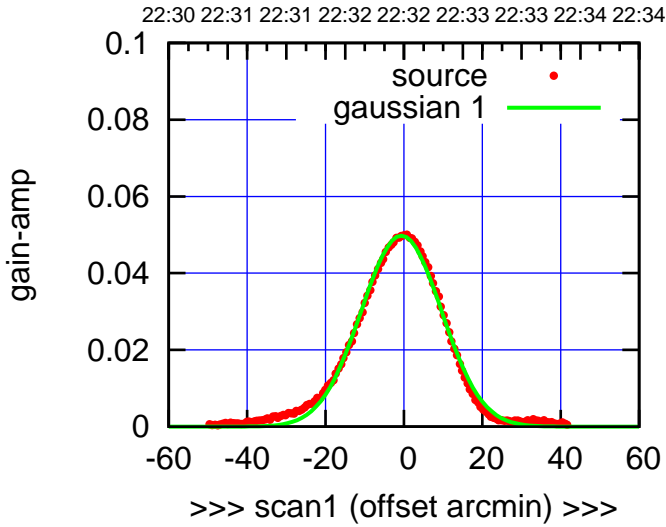
BACKLASH ERROR= 1.0'



(1460 MHz.)

S06-130-EL OFF= -0.6' ( 24.1')

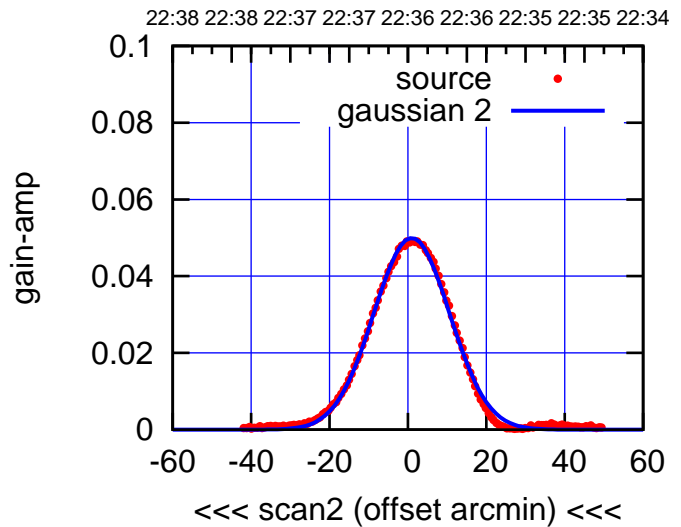
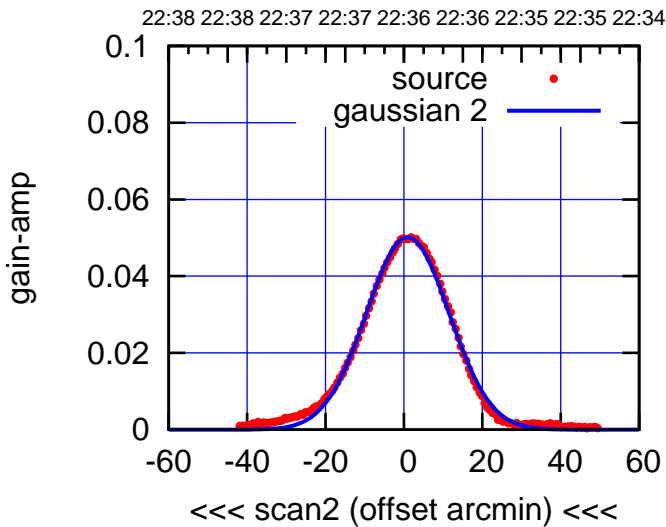
S06-175-EL OFF= -0.7' ( 22.0')



(+30'/m) 02Dec2022 22:32:30

S06-130-EL OFF= 1.0' ( 24.8')

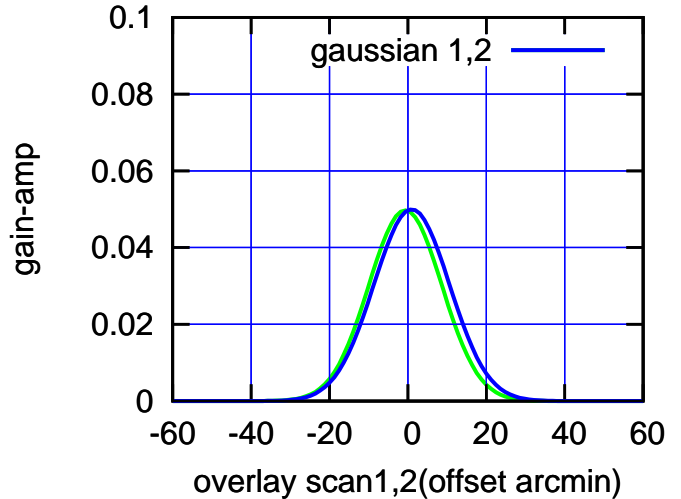
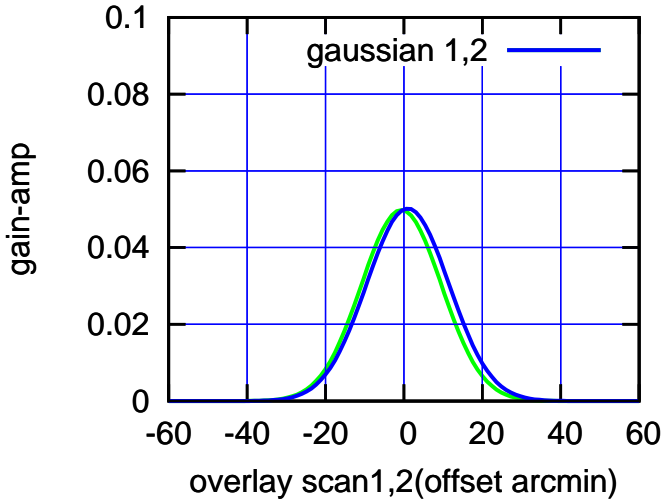
S06-175-EL OFF= 1.0' ( 22.8')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 1.6'

BACKLASH ERROR= 1.7'

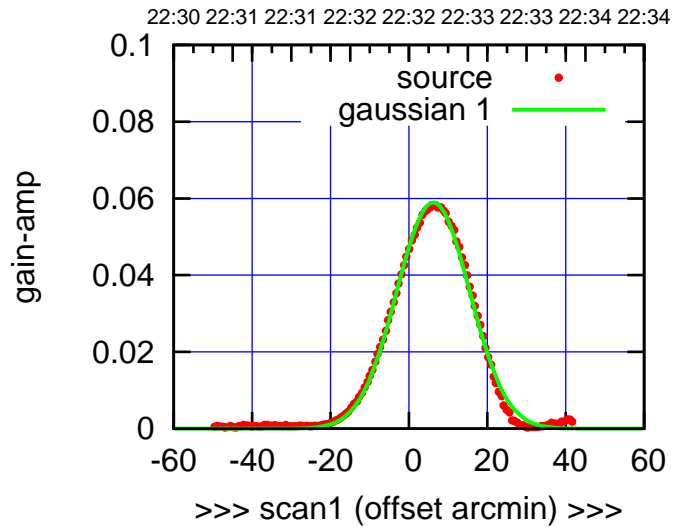
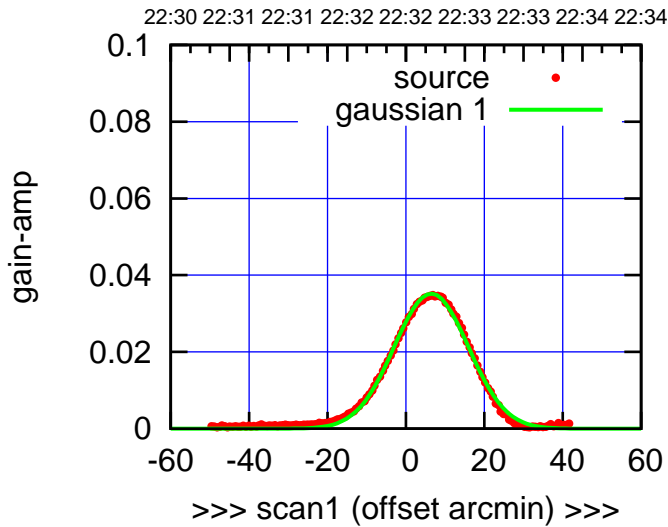


(1460 MHz.)



W01-130-EL OFF= 6.5' ( 22.3')

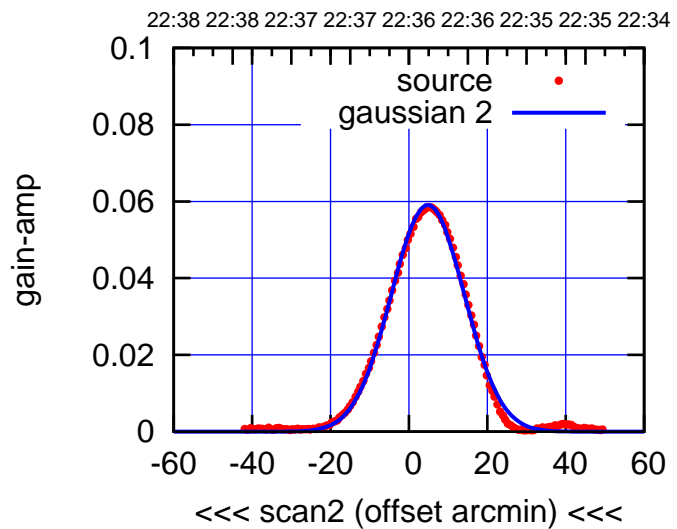
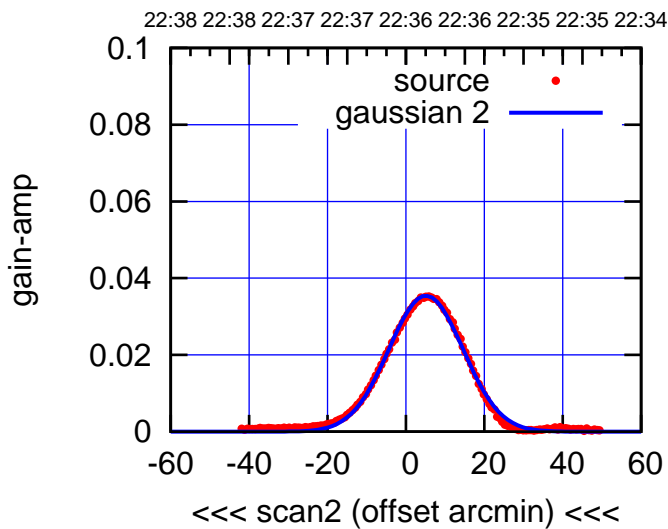
W01-175-EL OFF= 6.2' ( 21.9')



(+30'/m) 02Dec2022 22:32:30

W01-130-EL OFF= 5.1' ( 22.3')

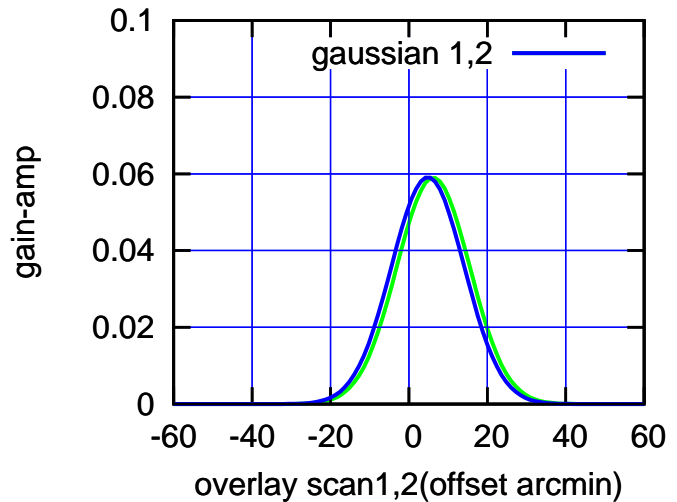
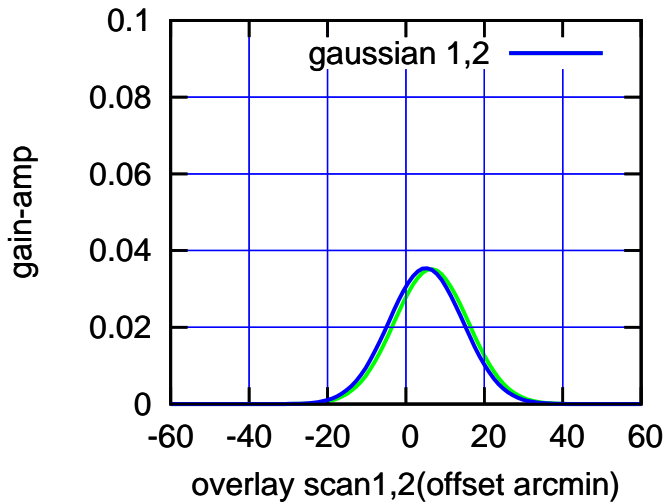
W01-175-EL OFF= 4.8' ( 21.9')



(-30'/m) 02Dec2022 22:36:30

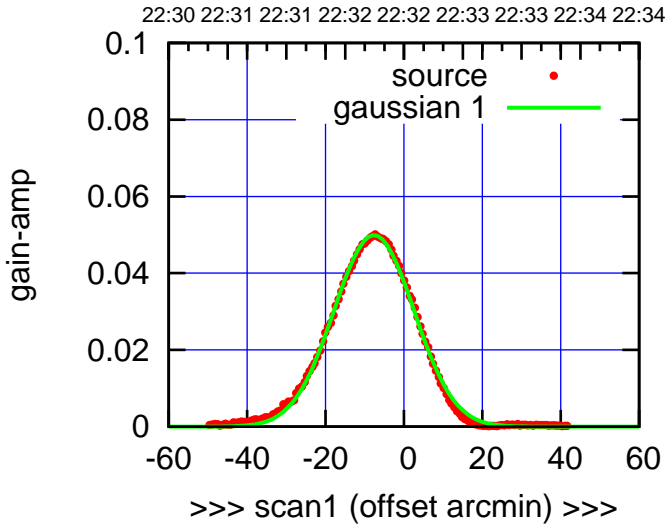
BACKLASH ERROR= 1.4'

BACKLASH ERROR= 1.4'

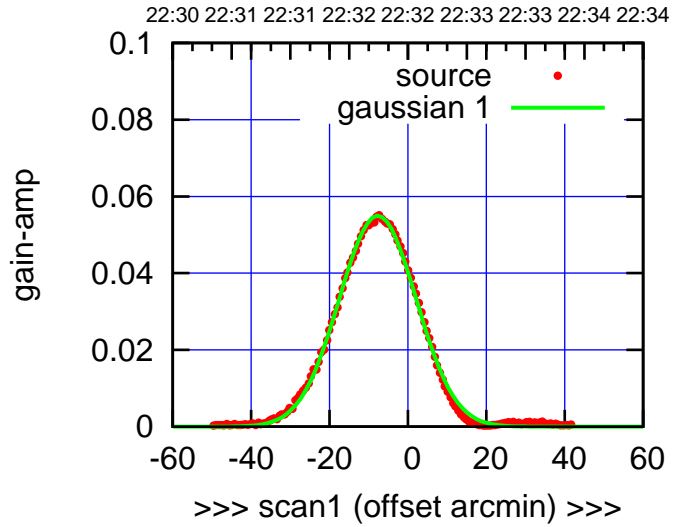


(1460 MHz.)

W02-130-EL OFF= -7.6' ( 24.1')

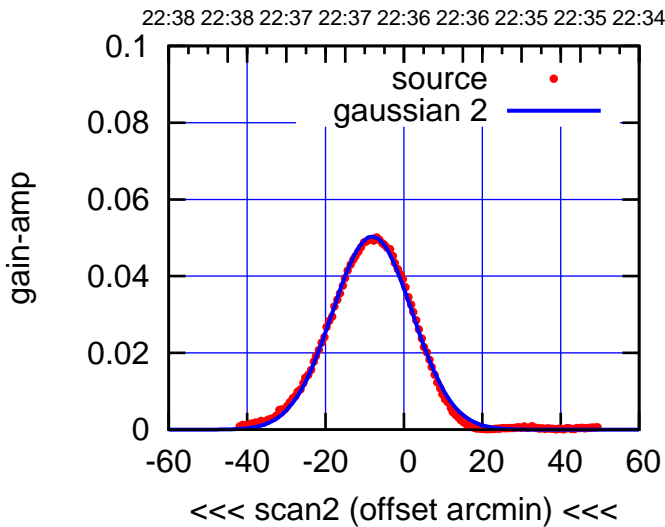


W02-175-EL OFF= -7.7' ( 23.1')

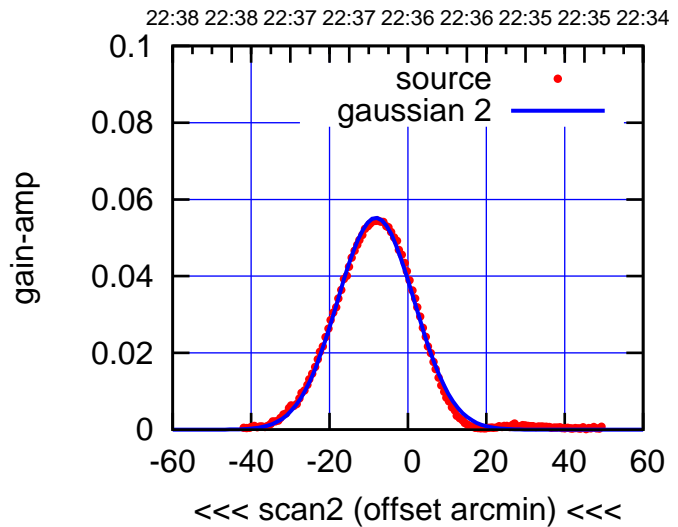


(+30'/m) 02Dec2022 22:32:30

W02-130-EL OFF= -8.1' ( 24.0')

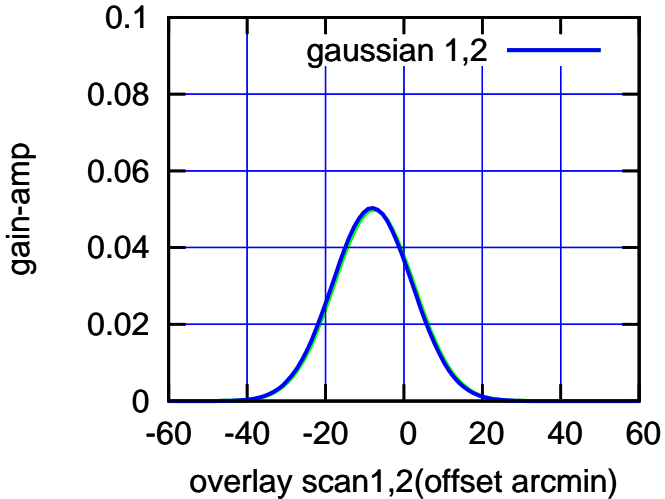


W02-175-EL OFF= -8.2' ( 23.1')

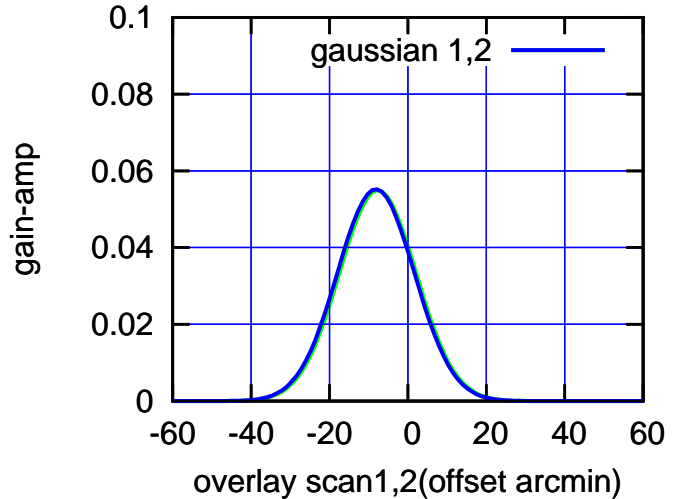


(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 0.5'

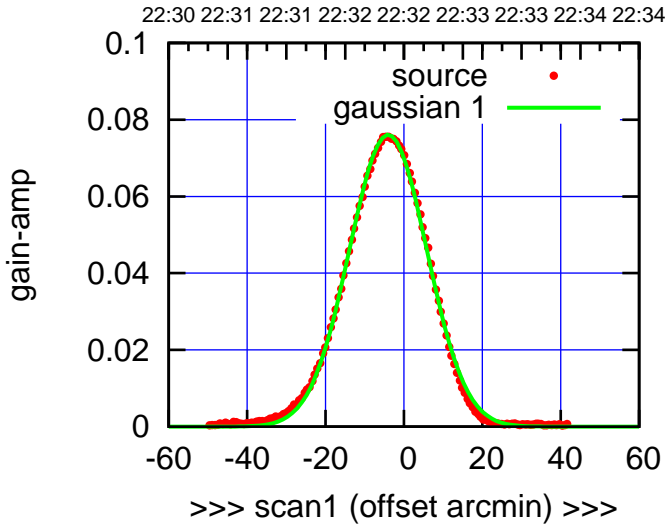


BACKLASH ERROR= 0.5'

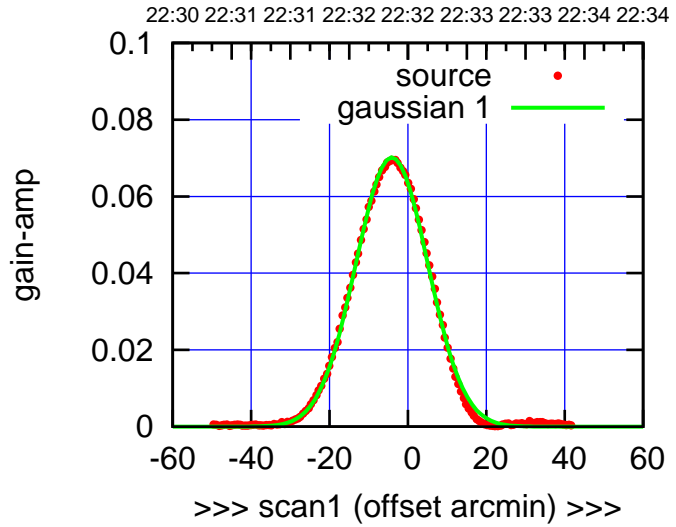


(1460 MHz.)

W03-130-EL OFF= -4.0' ( 23.2')

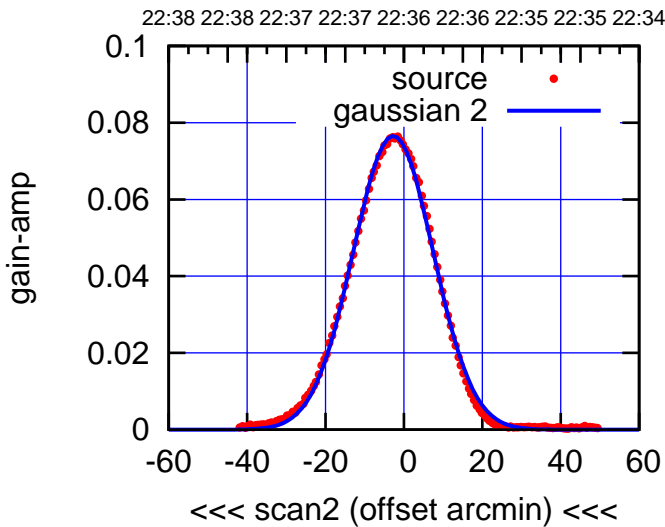


W03-175-EL OFF= -4.1' ( 21.6')

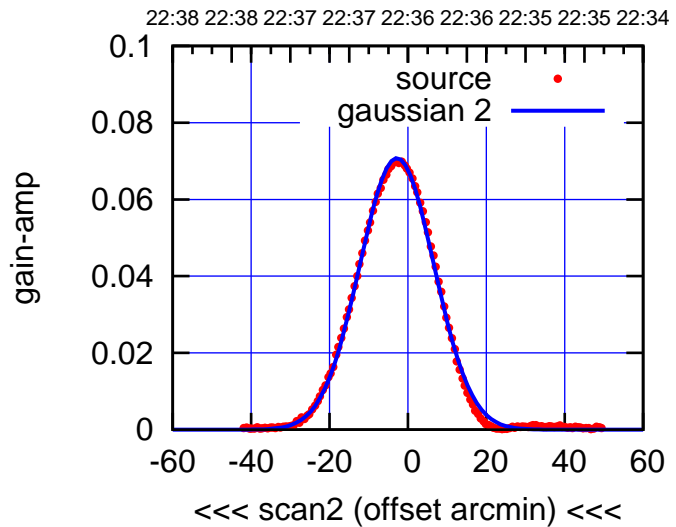


(+30'/m) 02Dec2022 22:32:30

W03-130-EL OFF= -2.7' ( 24.0')

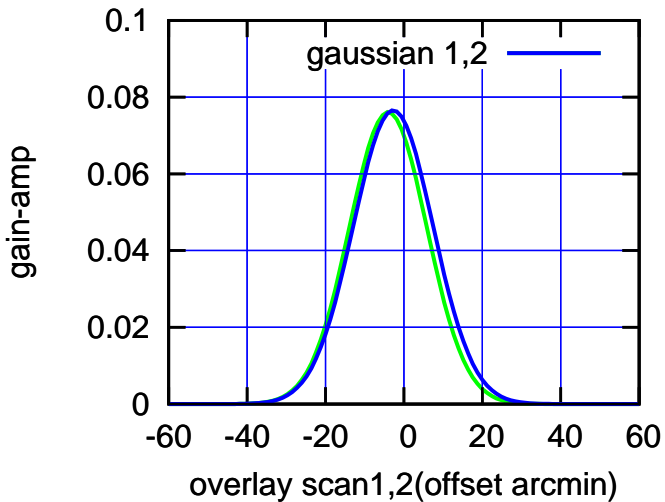


W03-175-EL OFF= -2.8' ( 22.3')

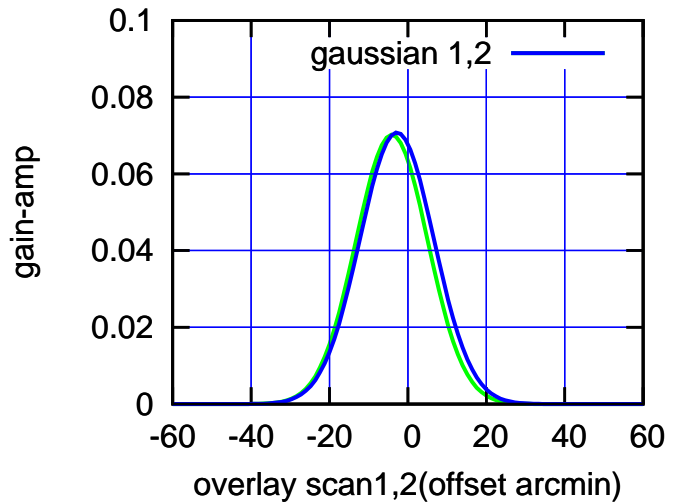


(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 1.3'



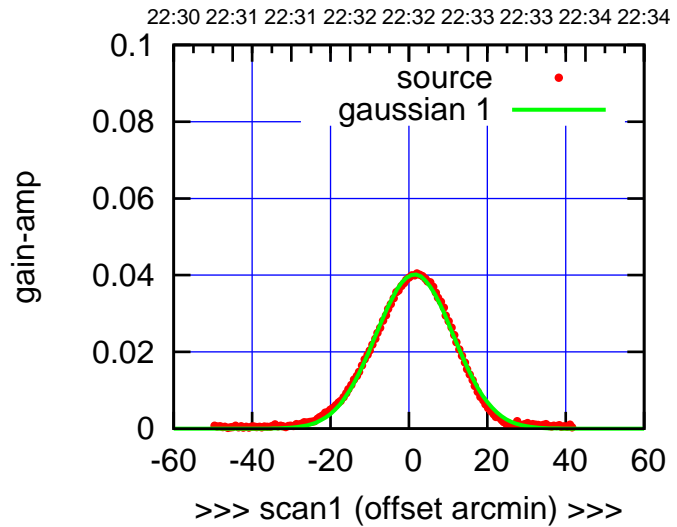
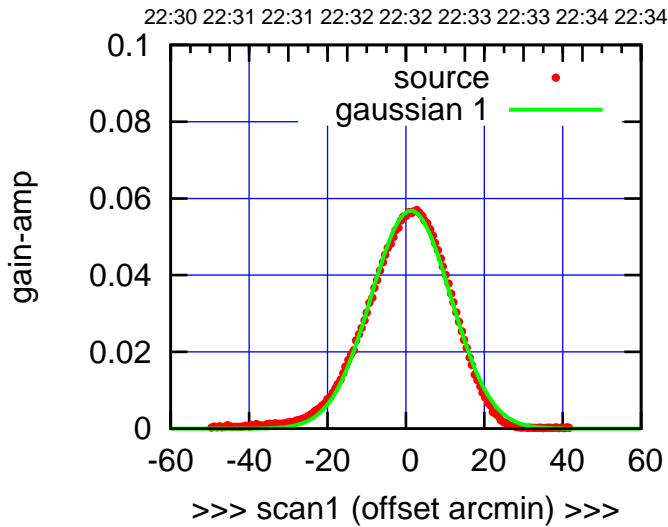
BACKLASH ERROR= 1.3'



(1460 MHz.)

W04-130-EL OFF= 1.3' ( 23.9')

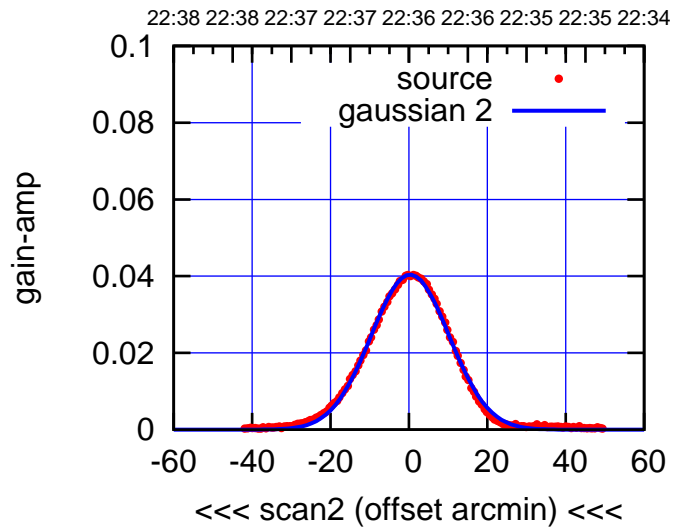
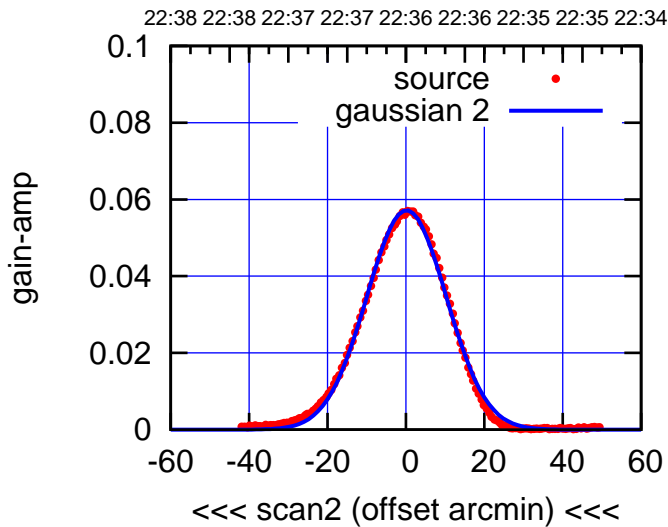
W04-175-EL OFF= 1.4' ( 23.3')



(+30'/m) 02Dec2022 22:32:30

W04-130-EL OFF= 0.2' ( 23.9')

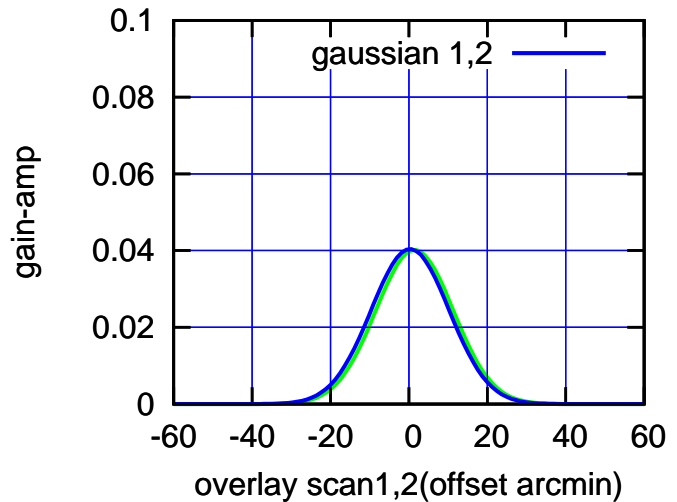
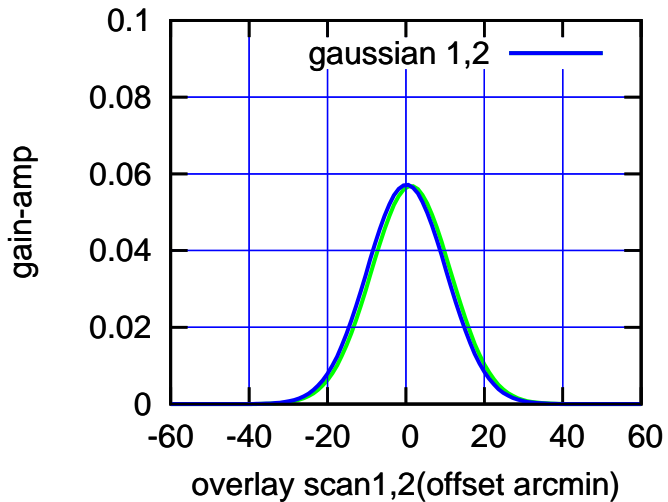
W04-175-EL OFF= 0.3' ( 23.4')



(-30'/m) 02Dec2022 22:36:30

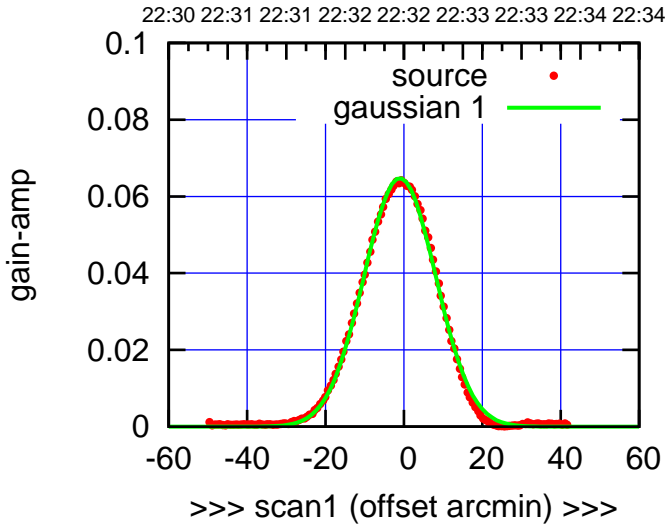
BACKLASH ERROR= 1.1'

BACKLASH ERROR= 1.1'

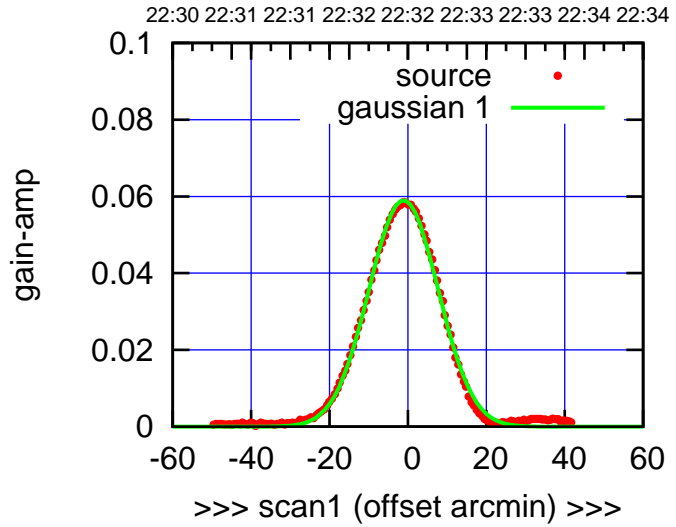


(1460 MHz.)

W05-130-EL OFF= -1.0' ( 21.5')

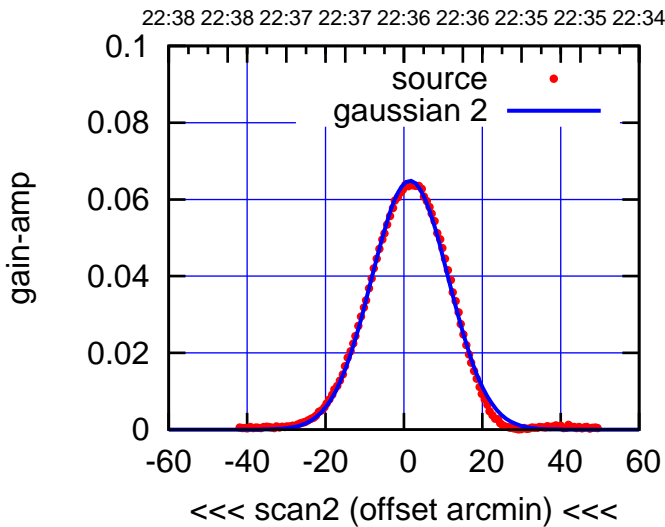


W05-175-EL OFF= -1.1' ( 20.8')

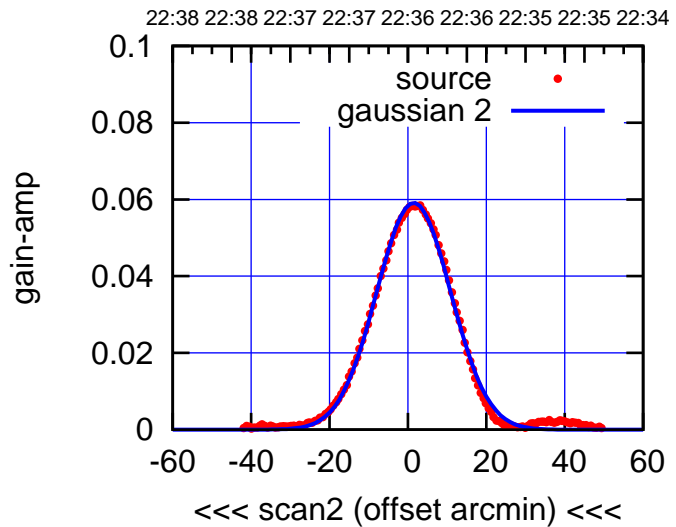


(+30'/m) 02Dec2022 22:32:30

W05-130-EL OFF= 1.6' ( 23.1')

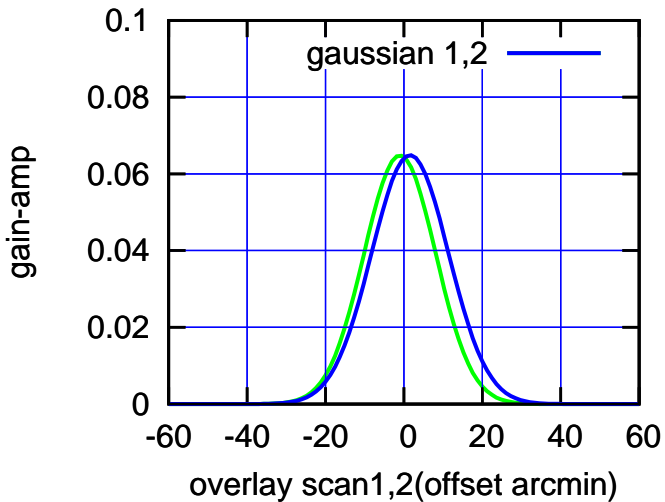


W05-175-EL OFF= 1.5' ( 22.2')

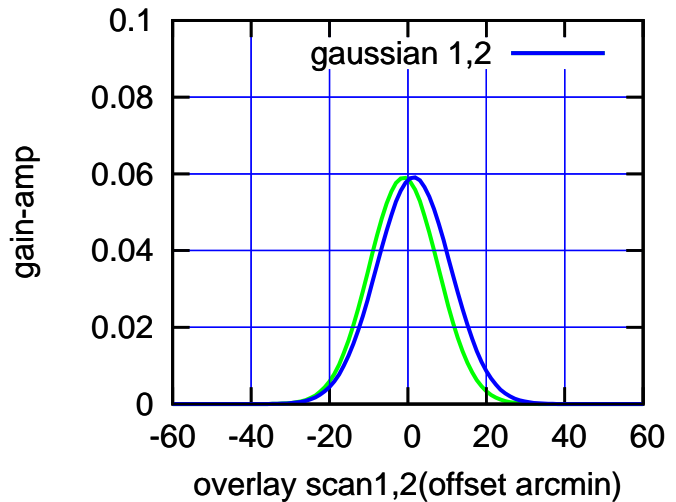


(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 2.6'



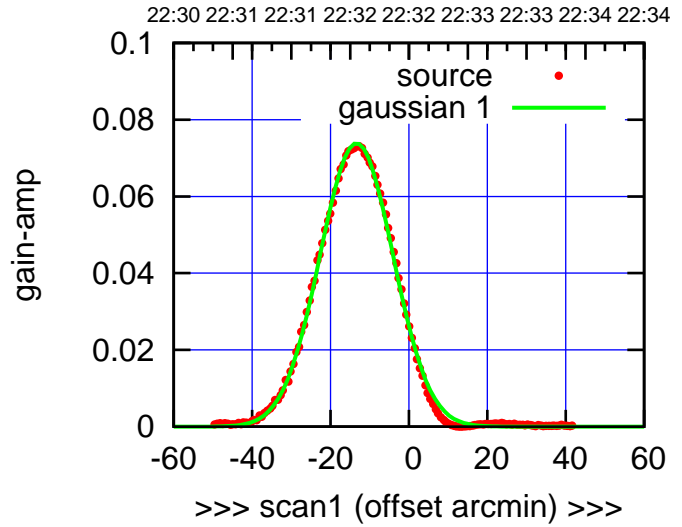
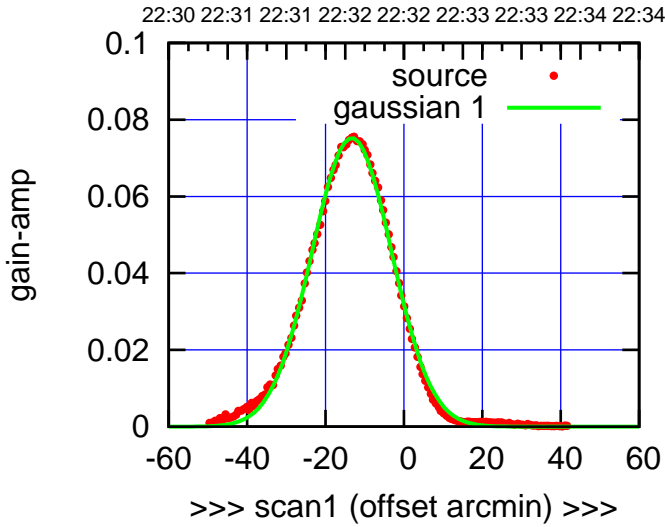
BACKLASH ERROR= 2.6'



(1460 MHz.)

W06-130-EL OFF= -13.3' ( 23.9')

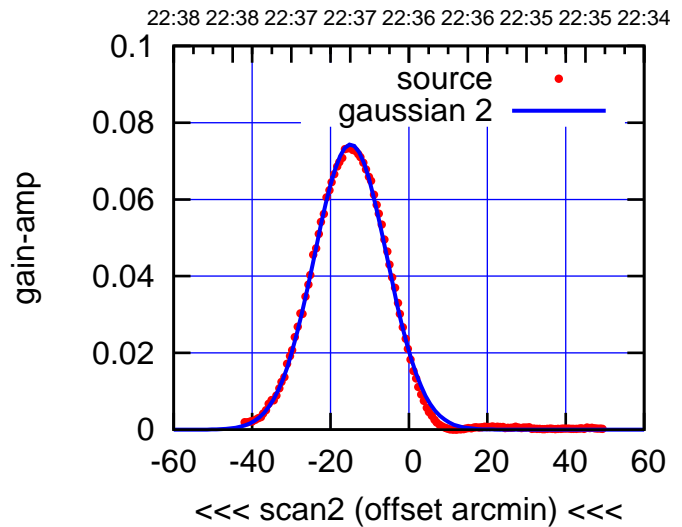
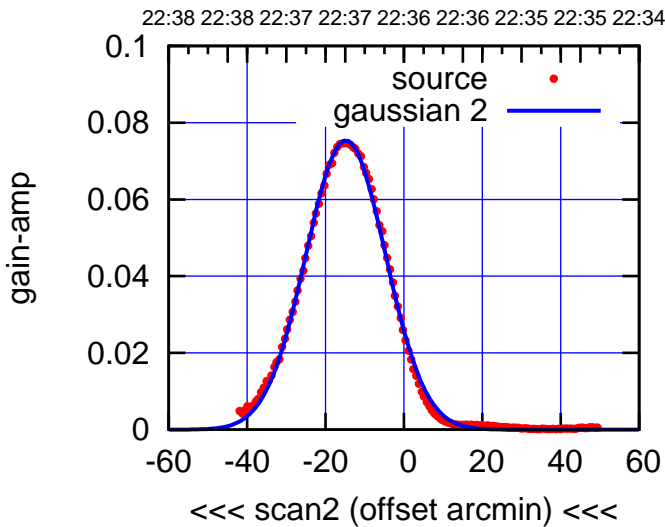
W06-175-EL OFF= -13.4' ( 21.9')



(+30'/m) 02Dec2022 22:32:30

W06-130-EL OFF= -14.8' ( 23.9')

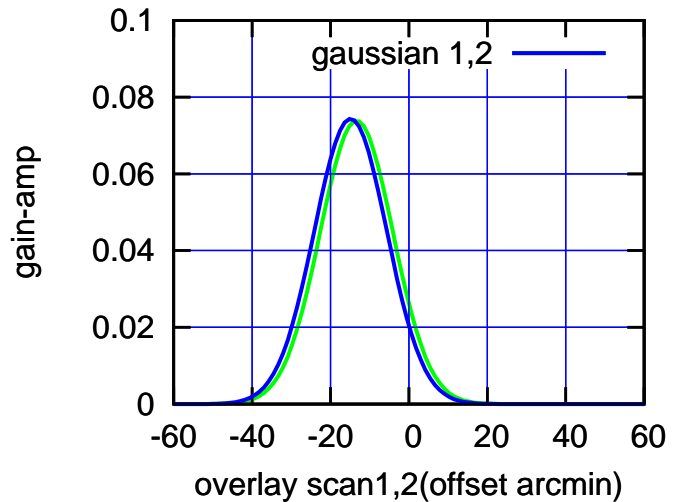
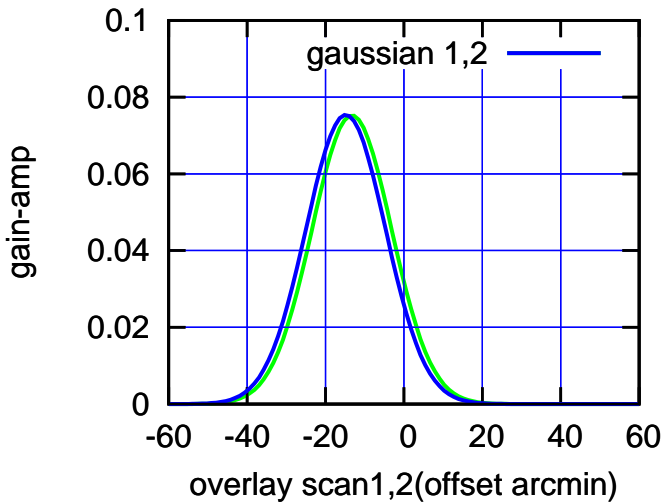
W06-175-EL OFF= -14.9' ( 21.8')



(-30'/m) 02Dec2022 22:36:30

BACKLASH ERROR= 1.5'

BACKLASH ERROR= 1.5'



(1460 MHz.)

```

# backlash test : 02Dec2022 22:32:30, 02Dec2022 22:36:30
# lta file      : /scratch/ltacomb_out_el.lta
# lta scan no(s) : 0,1
# lta chan range : [500,510]
# scan1 start time: 02Dec2022 22:30:30
# scan1 peak time: 02Dec2022 22:32:30
# scan1 end time: 02Dec2022 22:34:30
# scan2 start time: 02Dec2022 22:34:30
# scan2 peak time: 02Dec2022 22:36:30
# scan2 end time: 02Dec2022 22:38:30
# scan1 rate/speed: 30'/m
# scan2 rate/speed: -30'/m
# xrange posn : [-60':60']
# yrange gain-amp : [0:0.1]
# frequency (MHz) : 1460
# axis : EL
# elevation(deg) : 40.4
# antenna flag : 1 - working, 0 - non working

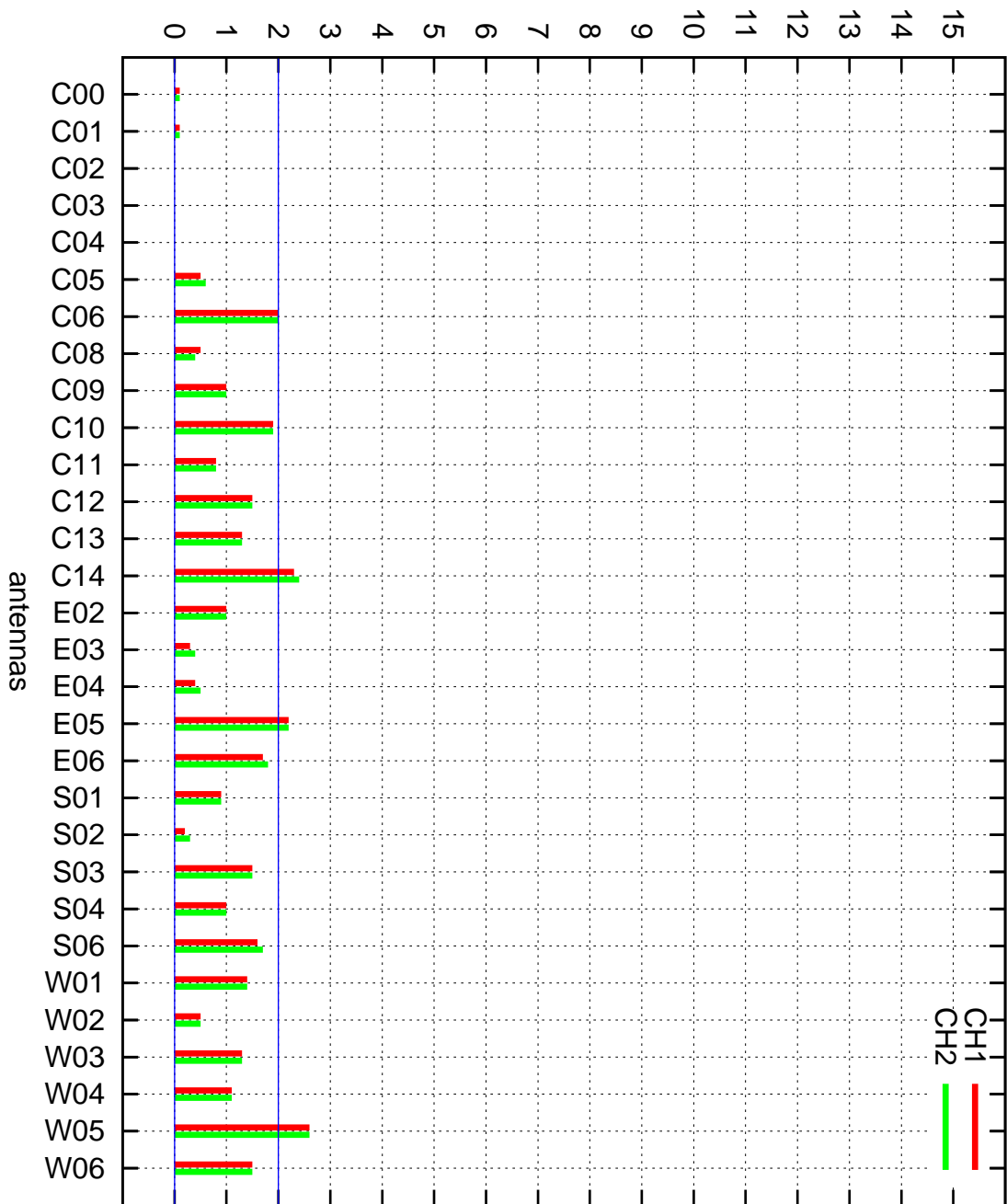
```

|            |             |      |             |      |        |     |       |   |
|------------|-------------|------|-------------|------|--------|-----|-------|---|
| C00-130-EL | OFF(scan1)= | 1.0  | OFF(scan2)= | 0.9  | ERROR= | 0.1 | FLAG= | 1 |
| C00-175-EL | OFF(scan1)= | 0.9  | OFF(scan2)= | 0.8  | ERROR= | 0.1 | FLAG= | 1 |
| C01-130-EL | OFF(scan1)= | 0.4  | OFF(scan2)= | 0.3  | ERROR= | 0.1 | FLAG= | 1 |
| C01-175-EL | OFF(scan1)= | 0.5  | OFF(scan2)= | 0.4  | ERROR= | 0.1 | FLAG= | 1 |
| C02-130-EL | OFF(scan1)= | 0.0  | OFF(scan2)= | 0.0  | ERROR= | 0.0 | FLAG= | 0 |
| C02-175-EL | OFF(scan1)= | 0.0  | OFF(scan2)= | 0.0  | ERROR= | 0.0 | FLAG= | 0 |
| C03-130-EL | OFF(scan1)= | 0.0  | OFF(scan2)= | 0.0  | ERROR= | 0.0 | FLAG= | 0 |
| C03-175-EL | OFF(scan1)= | 0.0  | OFF(scan2)= | 0.0  | ERROR= | 0.0 | FLAG= | 0 |
| C04-130-EL | OFF(scan1)= | 0.0  | OFF(scan2)= | 0.0  | ERROR= | 0.0 | FLAG= | 0 |
| C04-175-EL | OFF(scan1)= | 0.0  | OFF(scan2)= | 0.0  | ERROR= | 0.0 | FLAG= | 0 |
| C05-130-EL | OFF(scan1)= | 2.5  | OFF(scan2)= | 3.0  | ERROR= | 0.5 | FLAG= | 1 |
| C05-175-EL | OFF(scan1)= | 2.8  | OFF(scan2)= | 3.4  | ERROR= | 0.6 | FLAG= | 1 |
| C06-130-EL | OFF(scan1)= | 3.4  | OFF(scan2)= | 1.4  | ERROR= | 2.0 | FLAG= | 1 |
| C06-175-EL | OFF(scan1)= | 3.6  | OFF(scan2)= | 1.6  | ERROR= | 2.0 | FLAG= | 1 |
| C08-130-EL | OFF(scan1)= | -1.9 | OFF(scan2)= | -2.4 | ERROR= | 0.5 | FLAG= | 1 |
| C08-175-EL | OFF(scan1)= | -2.1 | OFF(scan2)= | -2.5 | ERROR= | 0.4 | FLAG= | 1 |
| C09-130-EL | OFF(scan1)= | -1.5 | OFF(scan2)= | -2.5 | ERROR= | 1.0 | FLAG= | 1 |
| C09-175-EL | OFF(scan1)= | -1.4 | OFF(scan2)= | -2.4 | ERROR= | 1.0 | FLAG= | 1 |
| C10-130-EL | OFF(scan1)= | 5.5  | OFF(scan2)= | 3.6  | ERROR= | 1.9 | FLAG= | 1 |
| C10-175-EL | OFF(scan1)= | 5.4  | OFF(scan2)= | 3.5  | ERROR= | 1.9 | FLAG= | 1 |
| C11-130-EL | OFF(scan1)= | 2.3  | OFF(scan2)= | 3.1  | ERROR= | 0.8 | FLAG= | 1 |
| C11-175-EL | OFF(scan1)= | 2.6  | OFF(scan2)= | 3.4  | ERROR= | 0.8 | FLAG= | 1 |
| C12-130-EL | OFF(scan1)= | 3.0  | OFF(scan2)= | 1.5  | ERROR= | 1.5 | FLAG= | 1 |
| C12-175-EL | OFF(scan1)= | 3.7  | OFF(scan2)= | 2.2  | ERROR= | 1.5 | FLAG= | 1 |
| C13-130-EL | OFF(scan1)= | 4.9  | OFF(scan2)= | 3.6  | ERROR= | 1.3 | FLAG= | 1 |
| C13-175-EL | OFF(scan1)= | 5.4  | OFF(scan2)= | 4.1  | ERROR= | 1.3 | FLAG= | 1 |
| C14-130-EL | OFF(scan1)= | 3.5  | OFF(scan2)= | 5.8  | ERROR= | 2.3 | FLAG= | 1 |
| C14-175-EL | OFF(scan1)= | 3.4  | OFF(scan2)= | 5.8  | ERROR= | 2.4 | FLAG= | 1 |
| E02-130-EL | OFF(scan1)= | 2.5  | OFF(scan2)= | 1.5  | ERROR= | 1.0 | FLAG= | 1 |
| E02-175-EL | OFF(scan1)= | 2.2  | OFF(scan2)= | 1.2  | ERROR= | 1.0 | FLAG= | 1 |
| E03-130-EL | OFF(scan1)= | 0.4  | OFF(scan2)= | 0.7  | ERROR= | 0.3 | FLAG= | 1 |
| E03-175-EL | OFF(scan1)= | 0.3  | OFF(scan2)= | 0.7  | ERROR= | 0.4 | FLAG= | 1 |
| E04-130-EL | OFF(scan1)= | -2.0 | OFF(scan2)= | -1.6 | ERROR= | 0.4 | FLAG= | 1 |
| E04-175-EL | OFF(scan1)= | -2.0 | OFF(scan2)= | -1.5 | ERROR= | 0.5 | FLAG= | 1 |
| E05-130-EL | OFF(scan1)= | -0.4 | OFF(scan2)= | -2.6 | ERROR= | 2.2 | FLAG= | 1 |
| E05-175-EL | OFF(scan1)= | -0.6 | OFF(scan2)= | -2.8 | ERROR= | 2.2 | FLAG= | 1 |
| E06-130-EL | OFF(scan1)= | 0.8  | OFF(scan2)= | -0.9 | ERROR= | 1.7 | FLAG= | 1 |
| E06-175-EL | OFF(scan1)= | 1.2  | OFF(scan2)= | -0.6 | ERROR= | 1.8 | FLAG= | 1 |
| S01-130-EL | OFF(scan1)= | 5.9  | OFF(scan2)= | 5.0  | ERROR= | 0.9 | FLAG= | 1 |
| S01-175-EL | OFF(scan1)= | 5.9  | OFF(scan2)= | 5.0  | ERROR= | 0.9 | FLAG= | 1 |
| S02-130-EL | OFF(scan1)= | -2.3 | OFF(scan2)= | -2.1 | ERROR= | 0.2 | FLAG= | 1 |
| S02-175-EL | OFF(scan1)= | -2.1 | OFF(scan2)= | -1.8 | ERROR= | 0.3 | FLAG= | 1 |
| S03-130-EL | OFF(scan1)= | 0.8  | OFF(scan2)= | -0.7 | ERROR= | 1.5 | FLAG= | 1 |
| S03-175-EL | OFF(scan1)= | 1.3  | OFF(scan2)= | -0.2 | ERROR= | 1.5 | FLAG= | 1 |
| S04-130-EL | OFF(scan1)= | 3.7  | OFF(scan2)= | 2.7  | ERROR= | 1.0 | FLAG= | 1 |
| S04-175-EL | OFF(scan1)= | 3.6  | OFF(scan2)= | 2.6  | ERROR= | 1.0 | FLAG= | 1 |
| S06-130-EL | OFF(scan1)= | -0.6 | OFF(scan2)= | 1.0  | ERROR= | 1.6 | FLAG= | 1 |
| S06-175-EL | OFF(scan1)= | -0.7 | OFF(scan2)= | 1.0  | ERROR= | 1.7 | FLAG= | 1 |

|            |             |       |             |       |        |     |       |   |
|------------|-------------|-------|-------------|-------|--------|-----|-------|---|
| W01-130-EL | OFF(scan1)= | 6.5   | OFF(scan2)= | 5.1   | ERROR= | 1.4 | FLAG= | 1 |
| W01-175-EL | OFF(scan1)= | 6.2   | OFF(scan2)= | 4.8   | ERROR= | 1.4 | FLAG= | 1 |
| W02-130-EL | OFF(scan1)= | -7.6  | OFF(scan2)= | -8.1  | ERROR= | 0.5 | FLAG= | 1 |
| W02-175-EL | OFF(scan1)= | -7.7  | OFF(scan2)= | -8.2  | ERROR= | 0.5 | FLAG= | 1 |
| W03-130-EL | OFF(scan1)= | -4.0  | OFF(scan2)= | -2.7  | ERROR= | 1.3 | FLAG= | 1 |
| W03-175-EL | OFF(scan1)= | -4.1  | OFF(scan2)= | -2.8  | ERROR= | 1.3 | FLAG= | 1 |
| W04-130-EL | OFF(scan1)= | 1.3   | OFF(scan2)= | 0.2   | ERROR= | 1.1 | FLAG= | 1 |
| W04-175-EL | OFF(scan1)= | 1.4   | OFF(scan2)= | 0.3   | ERROR= | 1.1 | FLAG= | 1 |
| W05-130-EL | OFF(scan1)= | -1.0  | OFF(scan2)= | 1.6   | ERROR= | 2.6 | FLAG= | 1 |
| W05-175-EL | OFF(scan1)= | -1.1  | OFF(scan2)= | 1.5   | ERROR= | 2.6 | FLAG= | 1 |
| W06-130-EL | OFF(scan1)= | -13.3 | OFF(scan2)= | -14.8 | ERROR= | 1.5 | FLAG= | 1 |
| W06-175-EL | OFF(scan1)= | -13.4 | OFF(scan2)= | -14.9 | ERROR= | 1.5 | FLAG= | 1 |



EL backlash error (arcmin)



EL backlash test (02Dec2022 22:32:30)