

SHARC II Focusing Data

2002 November 21-24

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2002 December 6

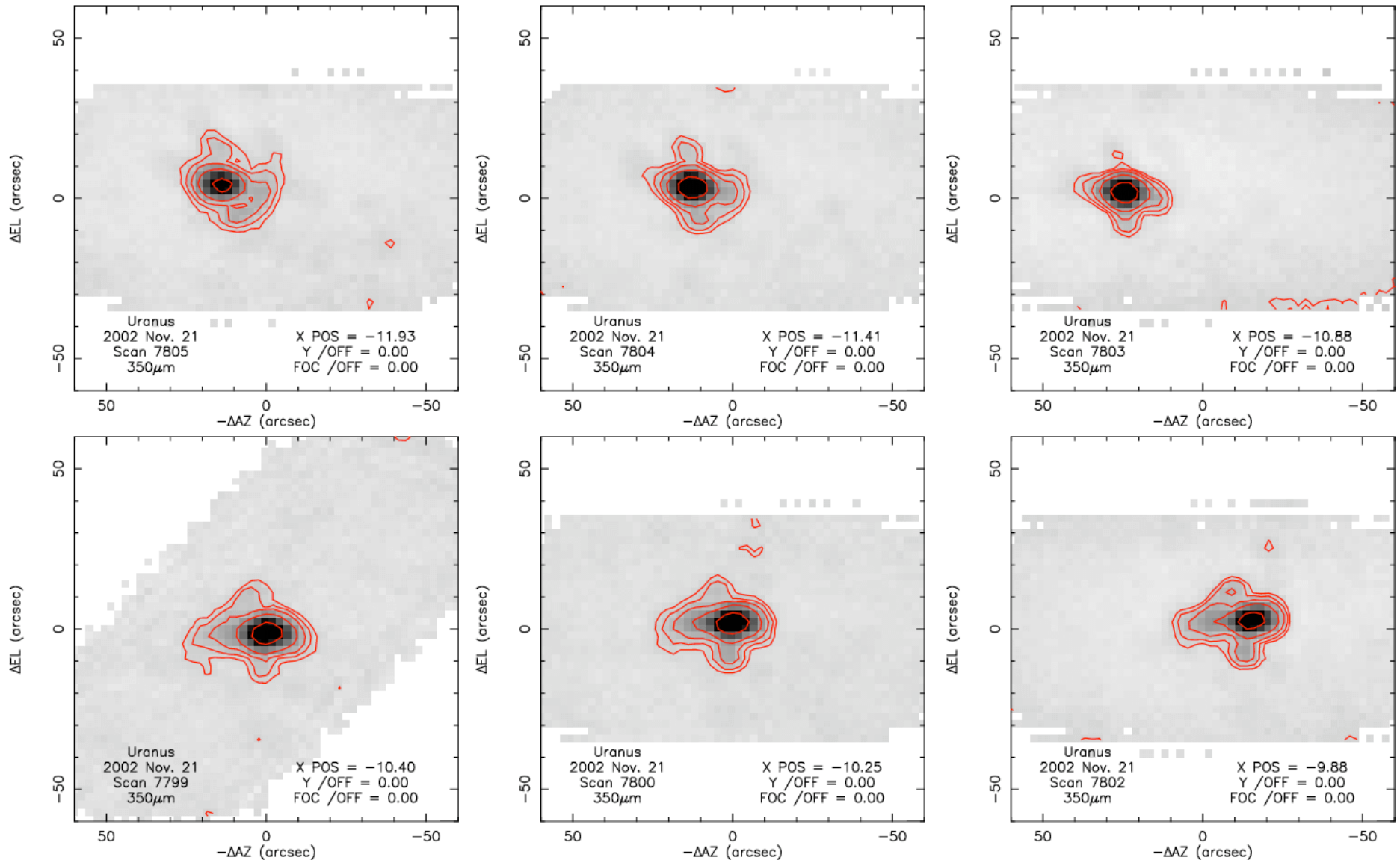
Data Acquisition, Reduction, and Presentation

- Scan mode: SWEEP 31.05 14.142 /YAMP=14.95 /YPER=20 /ALT
- 3 minute integration time per image
- Signals corrected to above atmosphere using $\tau(\text{SHARC II}) = 25 \tau(225 \text{ GHz})$
- 2.3 arcsec map gridding (half pixel)
- Grayscale is absolute – see next slide
- Contours are absolute – see next slide
- “DSOS” = Dish Surface Optimization System

Display Levels

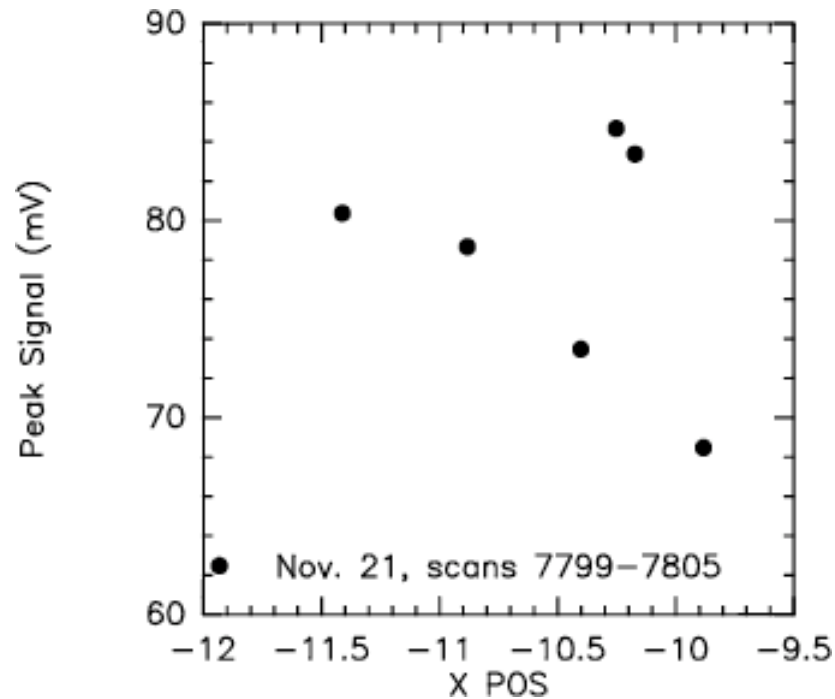
- Grayscale levels:
 - Uranus: -10 to 50 mV
 - Titan: -1 to 5 mV
 - Mars: -10 to 200 mV
 - 0420-014: -0.5 to 1 mV
 - Callisto: -5 to 20 mV
 - CRL 618: -1 to 5 mV
- Contour levels:
 - Uranus: 2, 5, 10, 50, 100 mV
 - Titan: 1, 2, 5 mV
 - Mars: 5, 10, 20, 50, 100, 200, 500 mV
 - 0420-014: 0.2, 0.5, 1 mV
 - Callisto: 1, 2, 5, 10, 20 mV
 - CRL 618: 0.5, 1, 2, 5 mV

X_POS Optimiz., Nov. 21, ZA = 33-35, DSOS off



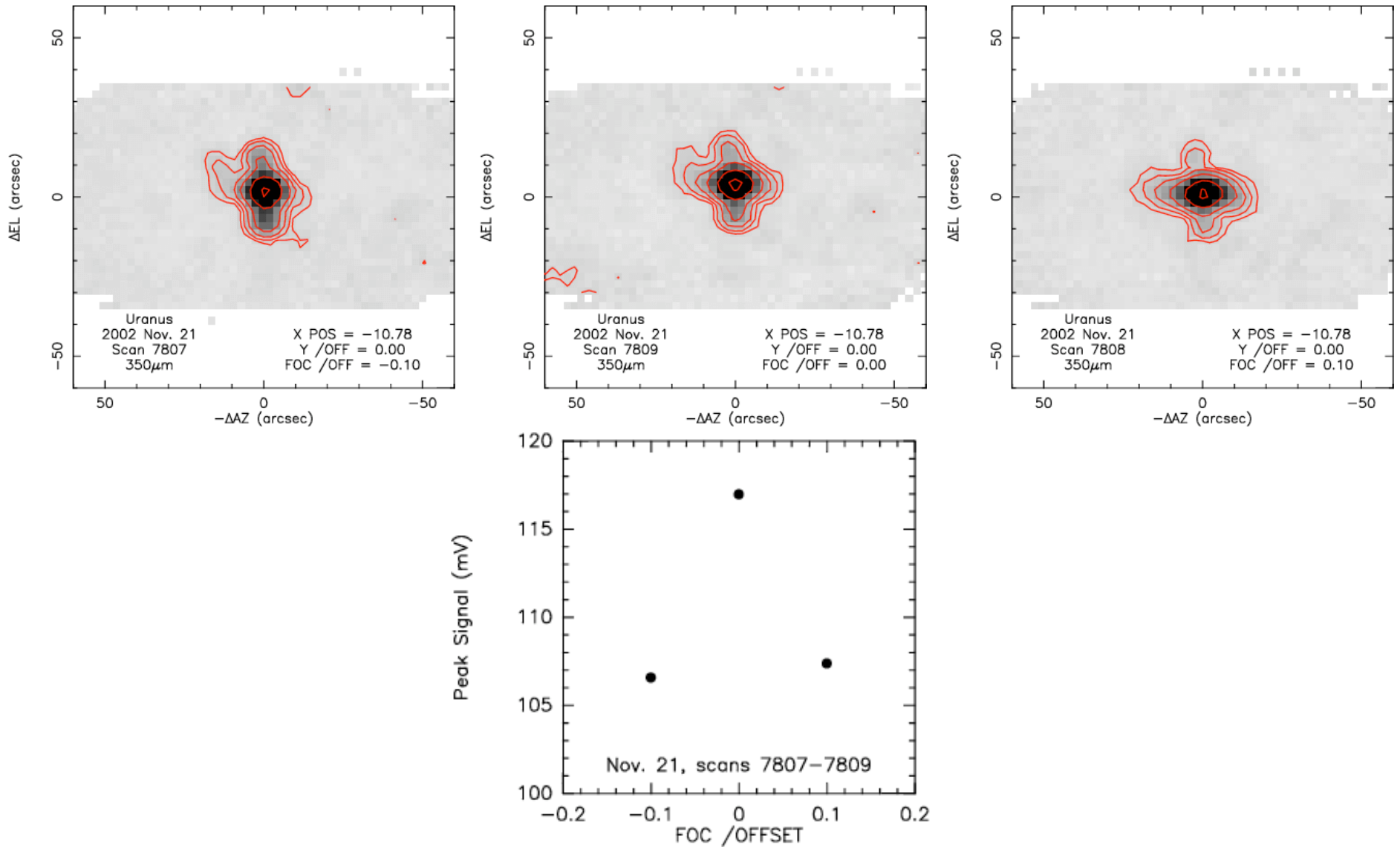
- Best value is X_POS = -10.8 ± 0.1

X_POS Optimiz., Nov. 21, ZA = 33-35, DSOS off



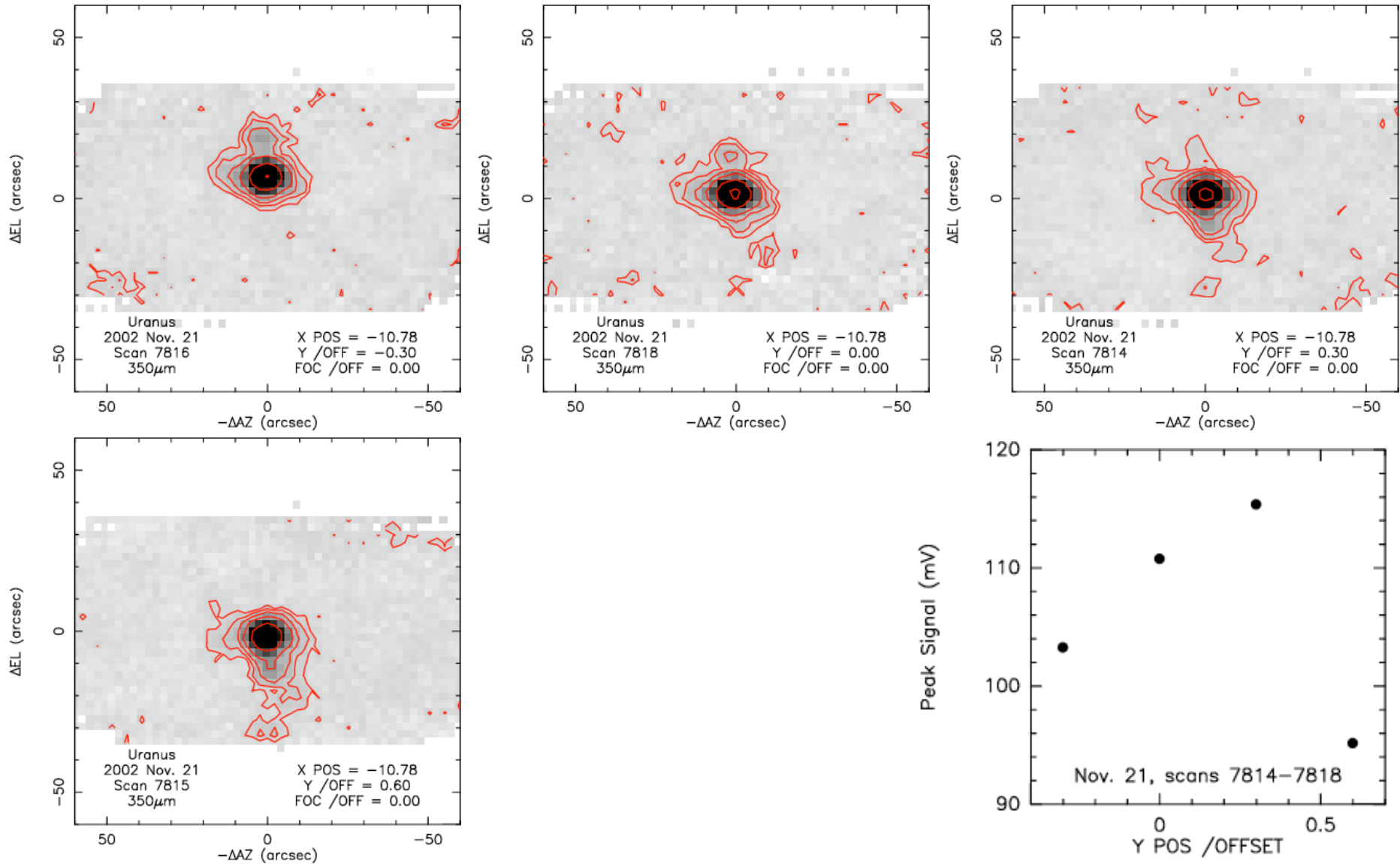
- (Best value is $X_POS = -10.8 \pm 0.1$)

Z/OFF Optimiz., Nov. 21, ZA = 35-36, DSOS off



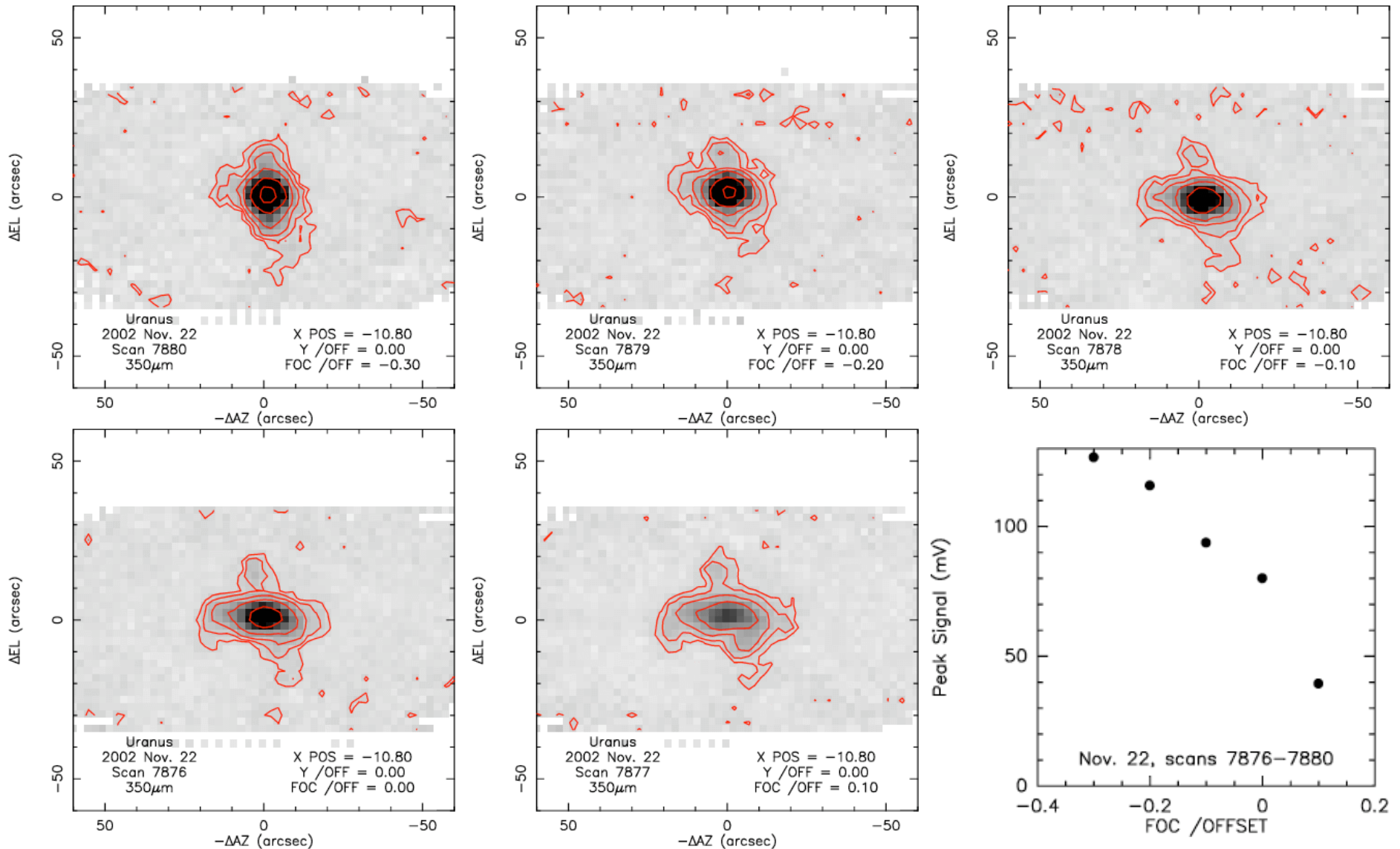
- Best value is $FOC/OFF = -0.05 \pm 0.05$

Y/OFF Optimiz., Nov. 21, ZA = 45-47, DSOS on



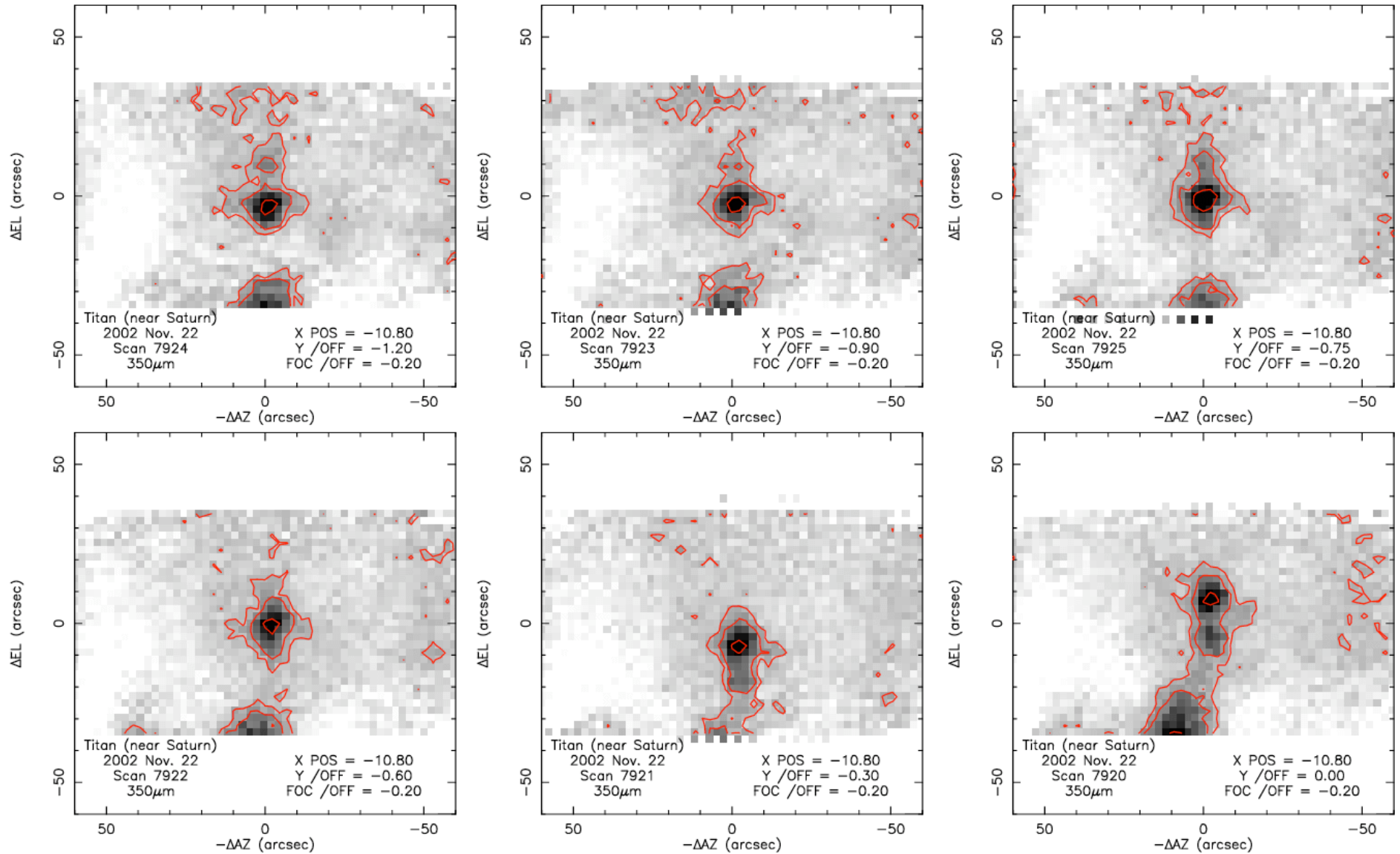
- Best value is $Y/OFF = 0.10 \pm 0.10$

Z/OFF Optimiz., Nov. 22, ZA = 45-48, DSOS on



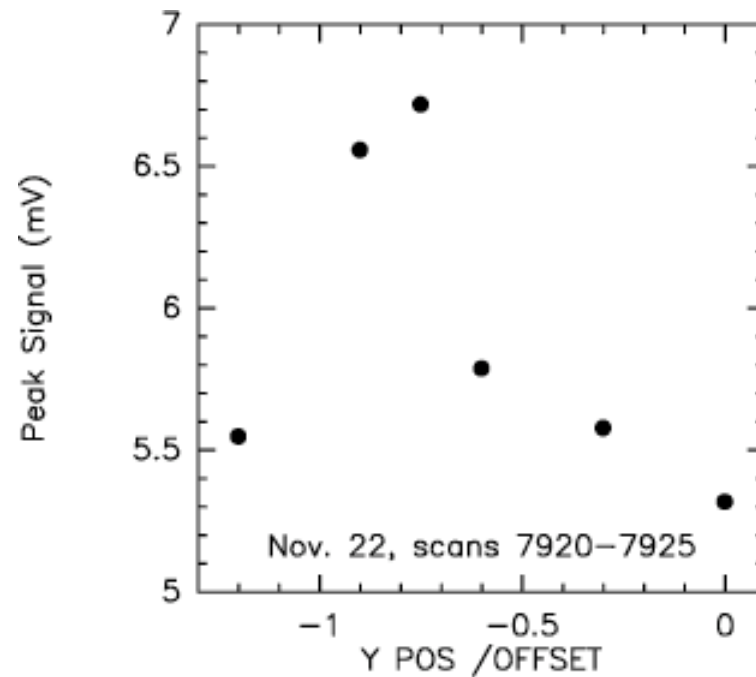
- Best value is $\text{FOC/OFF} = -0.25 \pm 0.05$

Y/OFF Optimiz., Nov. 22, ZA = 16-22, DSOS on



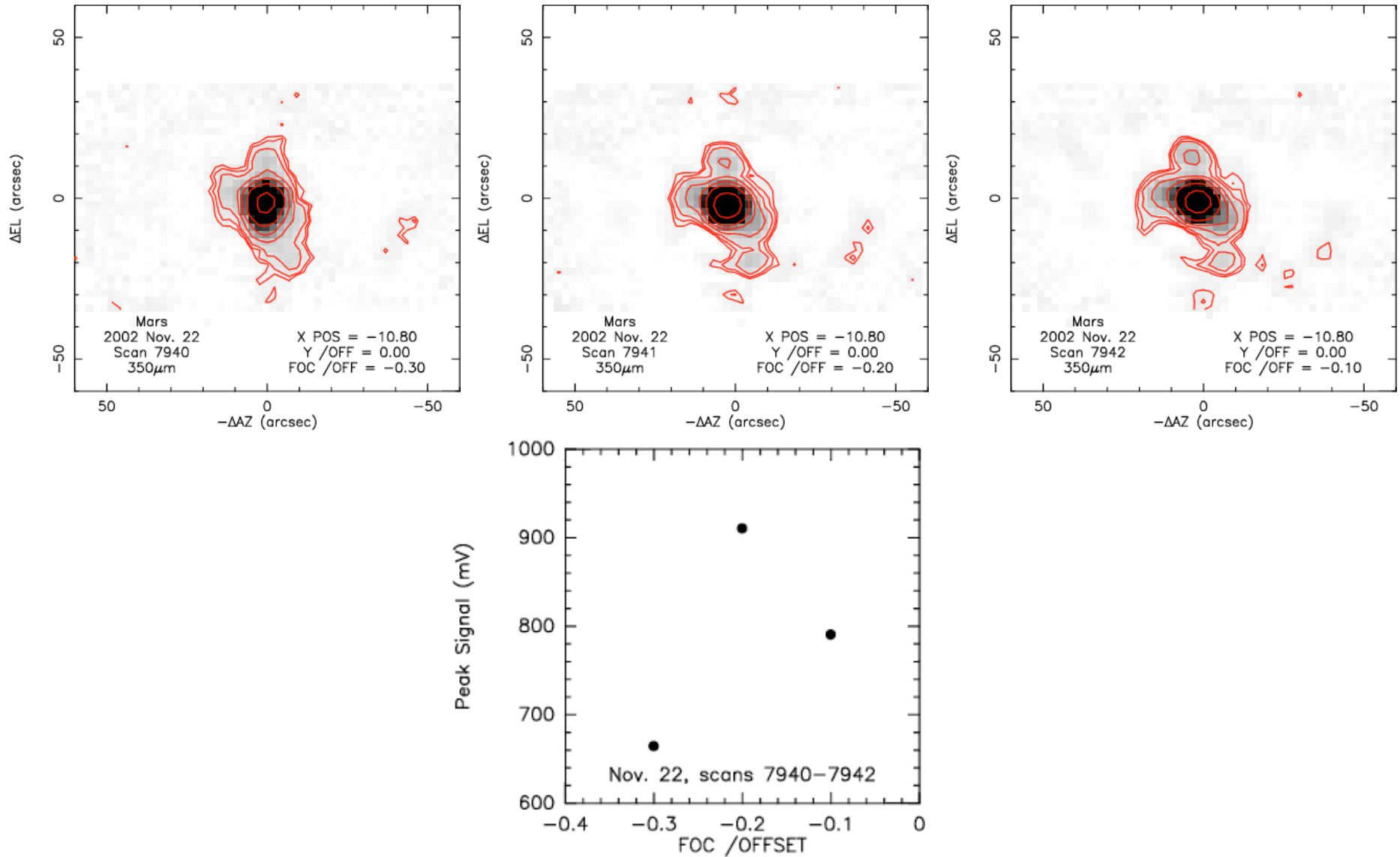
- Best value is $Y/OFF = -0.65 \pm 0.10$

Y/OFF Optimiz., Nov. 22, ZA = 16-22, DSOS on



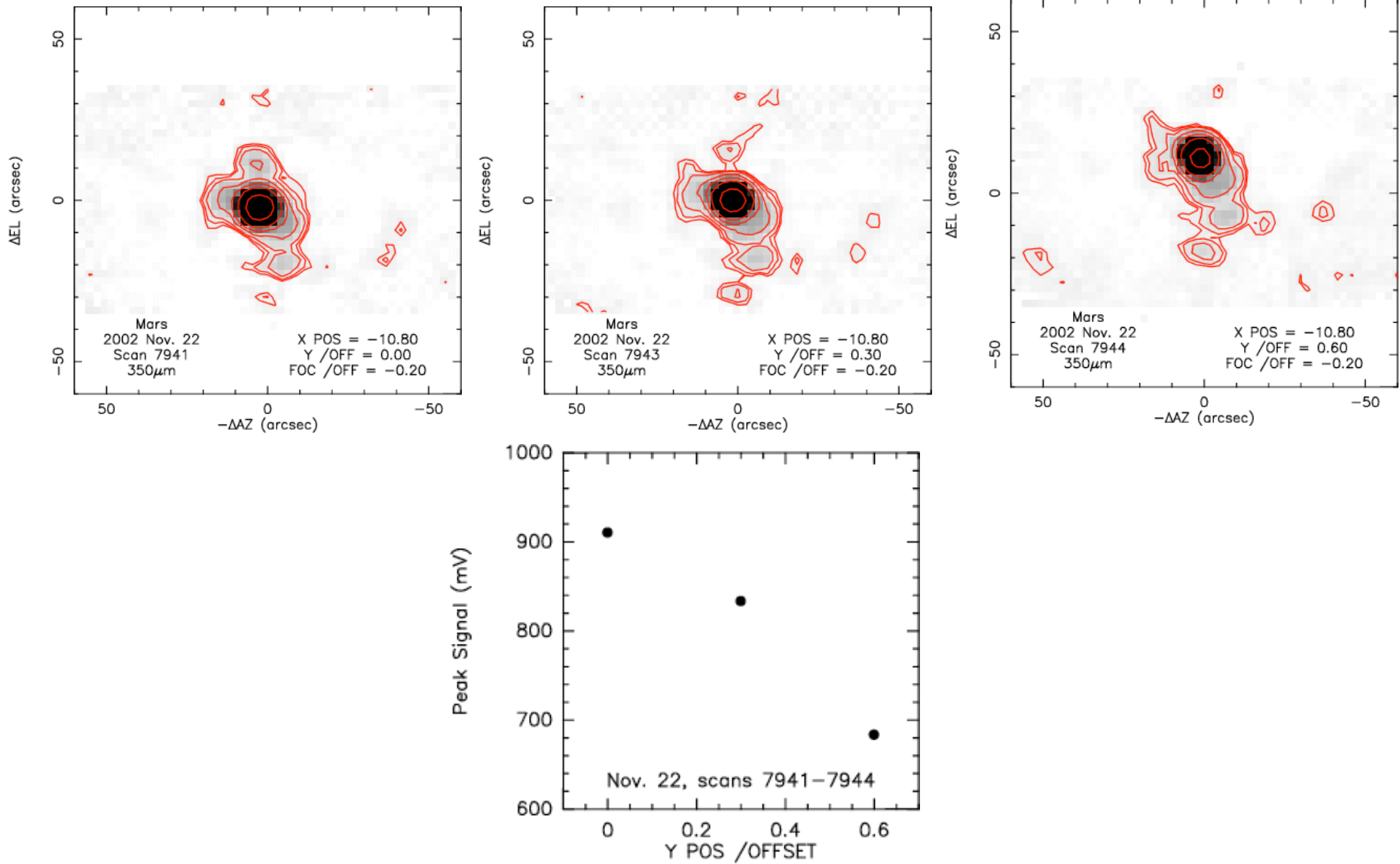
- (Best value is $Y/OFF = -0.65 \pm 0.10$)

Z/OFF Optimiz., Nov. 22, ZA = 61-63, DSOS on



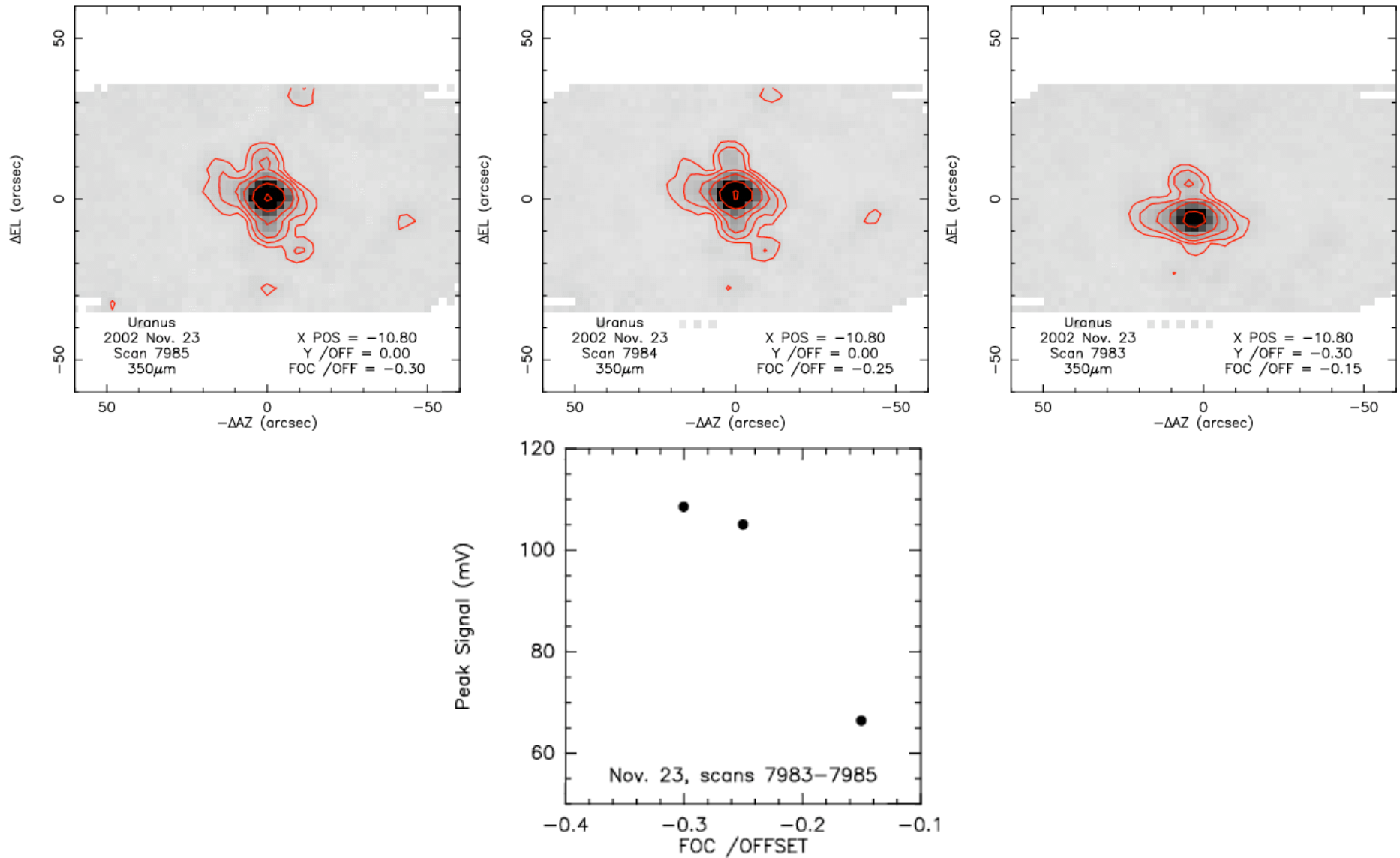
- Best value is $\text{FOC/OFF} = -0.20 \pm 0.05$

Y/OFF Optimiz., Nov. 22, ZA = 59-62, DSOS on



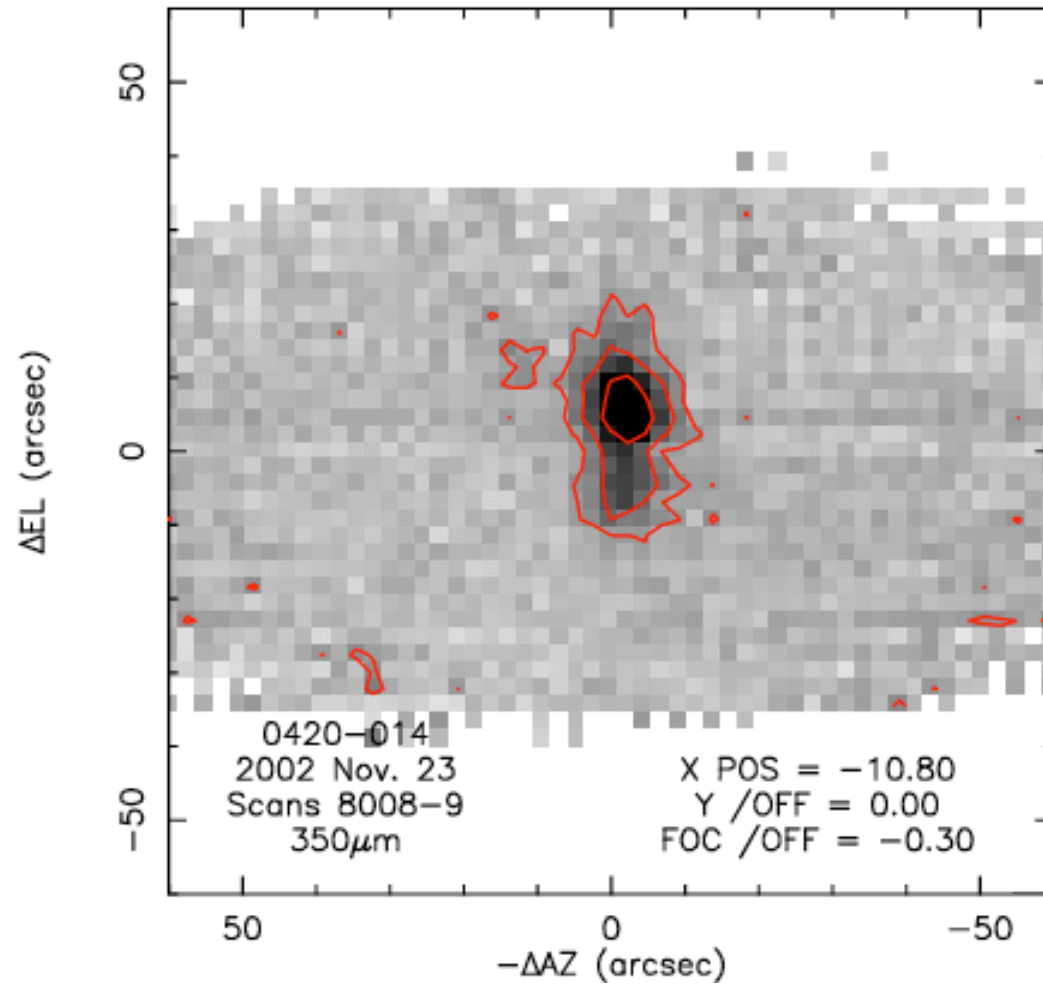
- Best value is $Y/OFF = 0.30 \pm 0.20$

Z, Y Optimiz., Nov. 23, ZA = 39-41, DSOS off



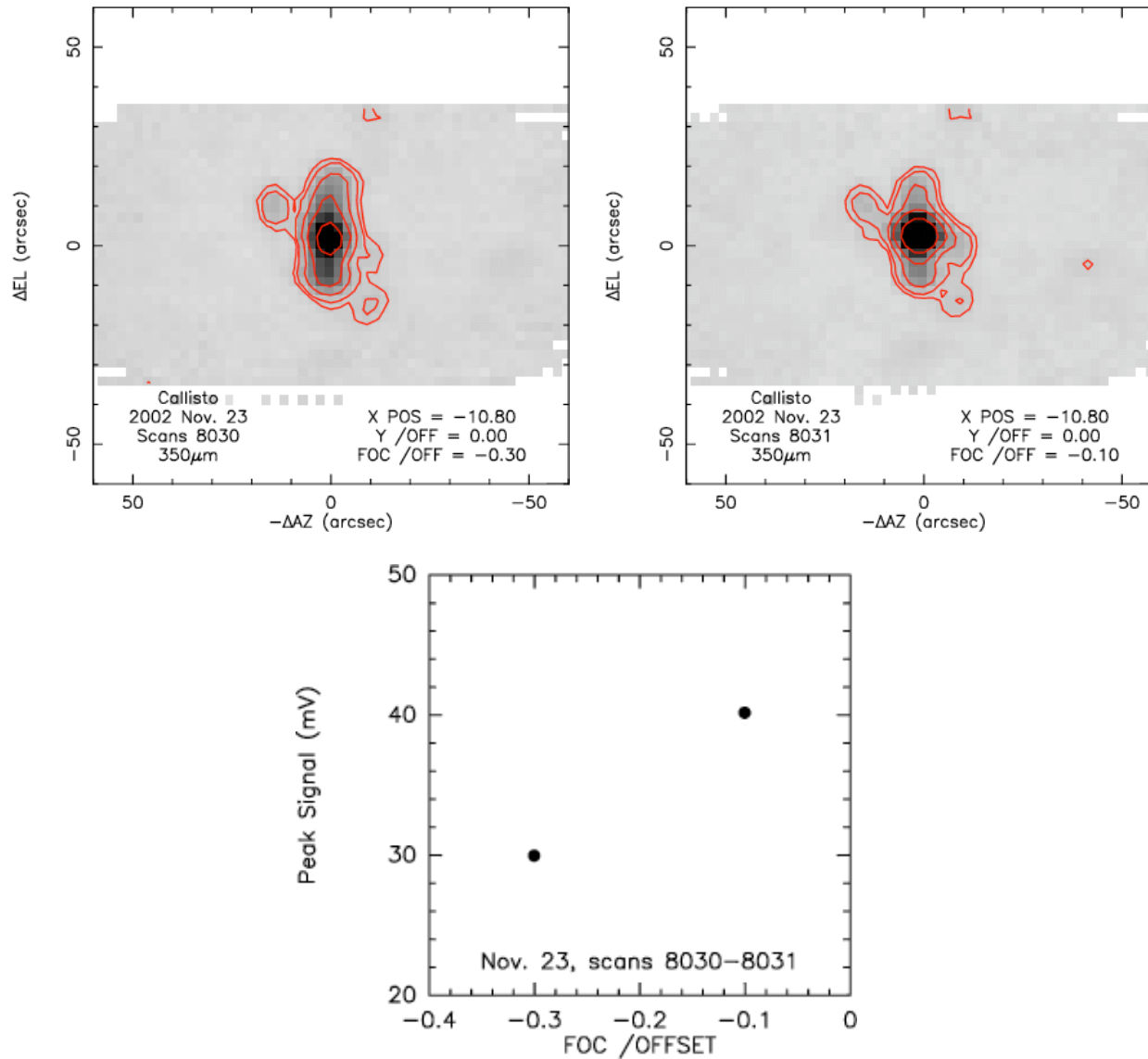
- Best value is $\text{FOC/OFF} = -0.30 \pm 0.05$, $\text{Y/OFF} = 0.00 \pm 0.10$

Y/OFF Optimiz., Nov. 23, ZA = 25-26, DSOS on



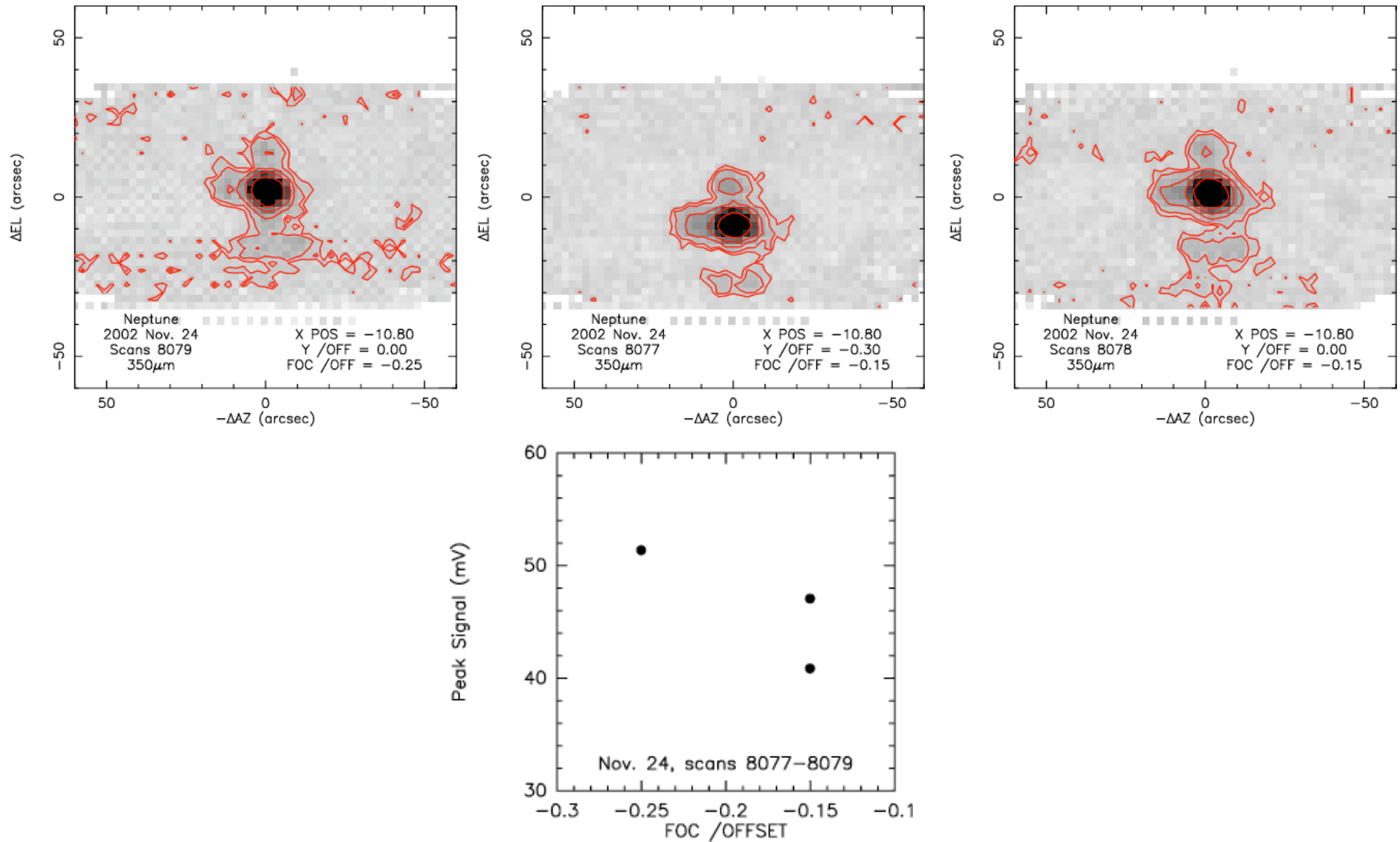
- Best value is $Y/OFF = -0.50 \pm 0.30$

Z/OFF Optimiz., Nov. 23, ZA = 34-35, DSOS off



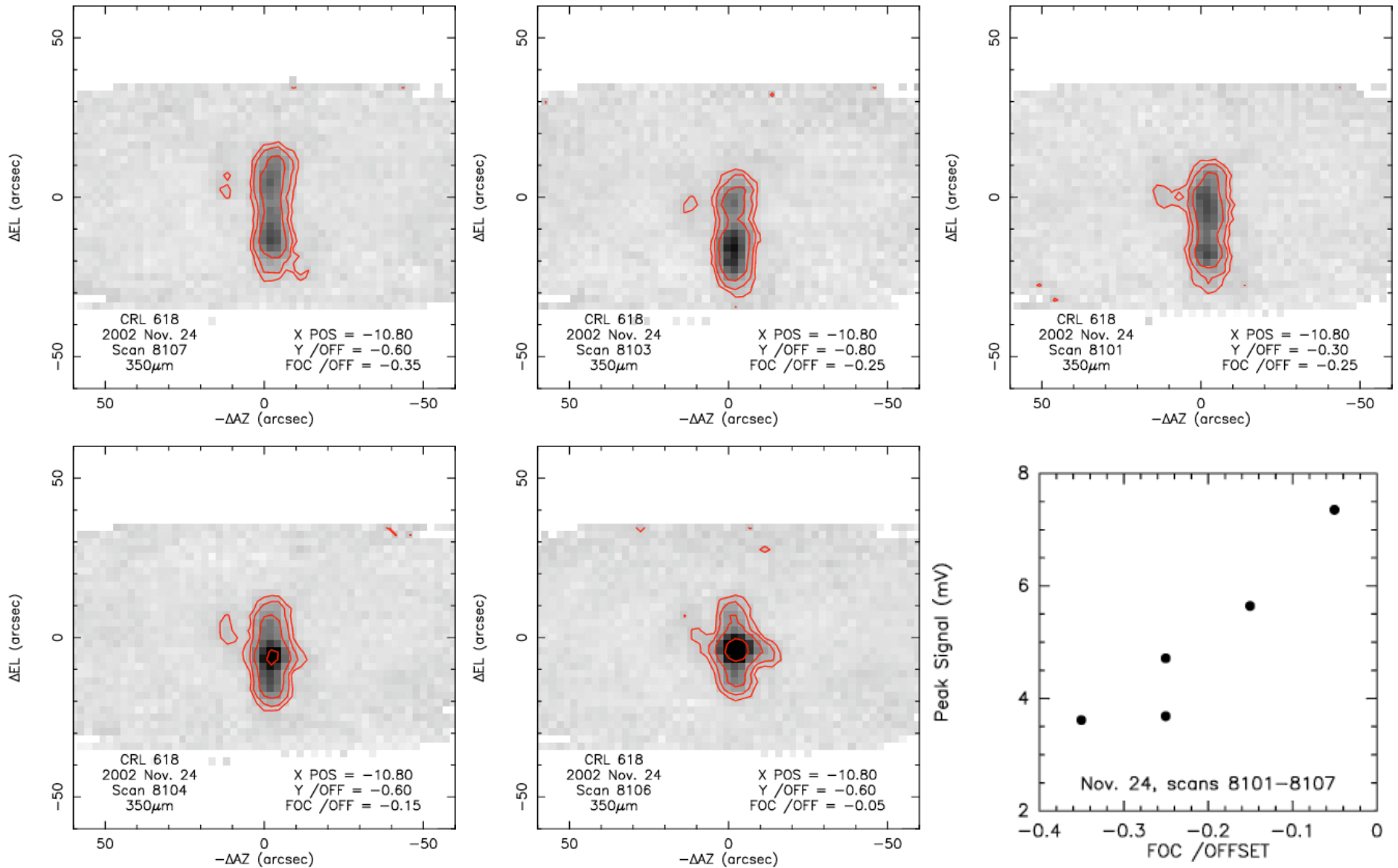
- Best value is $FOC/OFF = -0.10 \pm 0.05$

Z, Y Optimiz., Nov. 24, ZA = 56-58, DSOS off



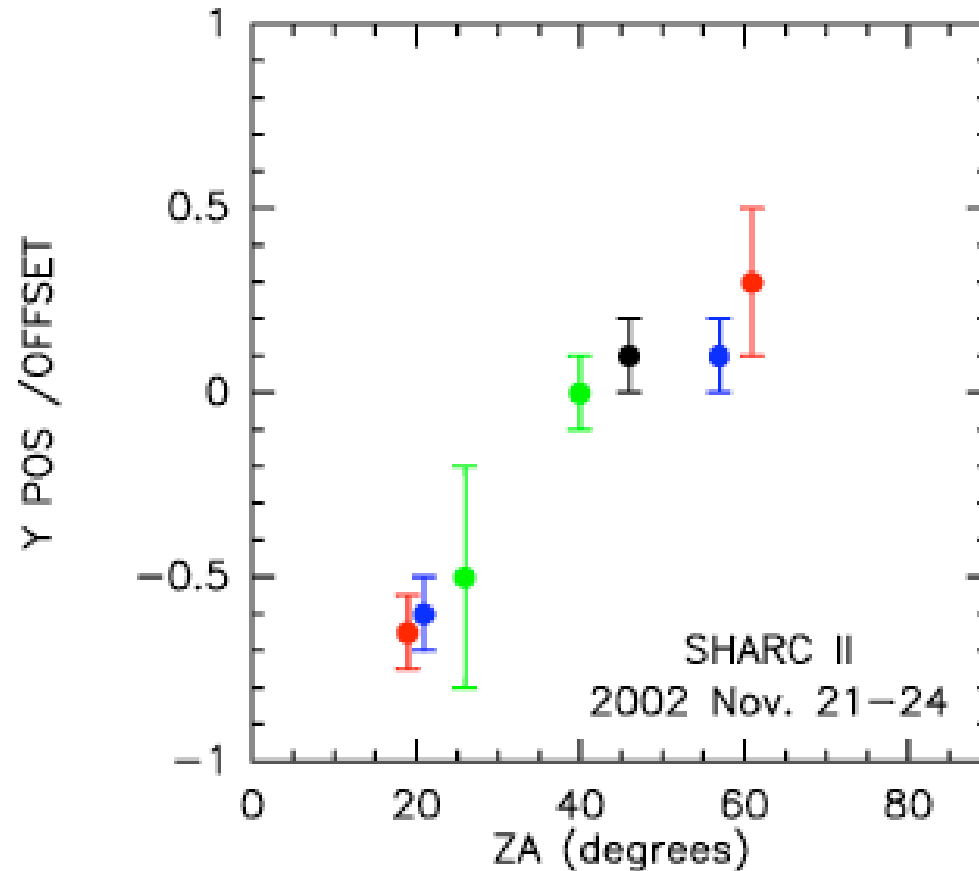
- Best value is FOC/OFF = -0.25 ± 0.05 , Y/OFF = 0.10 ± 0.10

Z, Y Optimiz., Nov. 24, ZA = 19-23, DSOS off



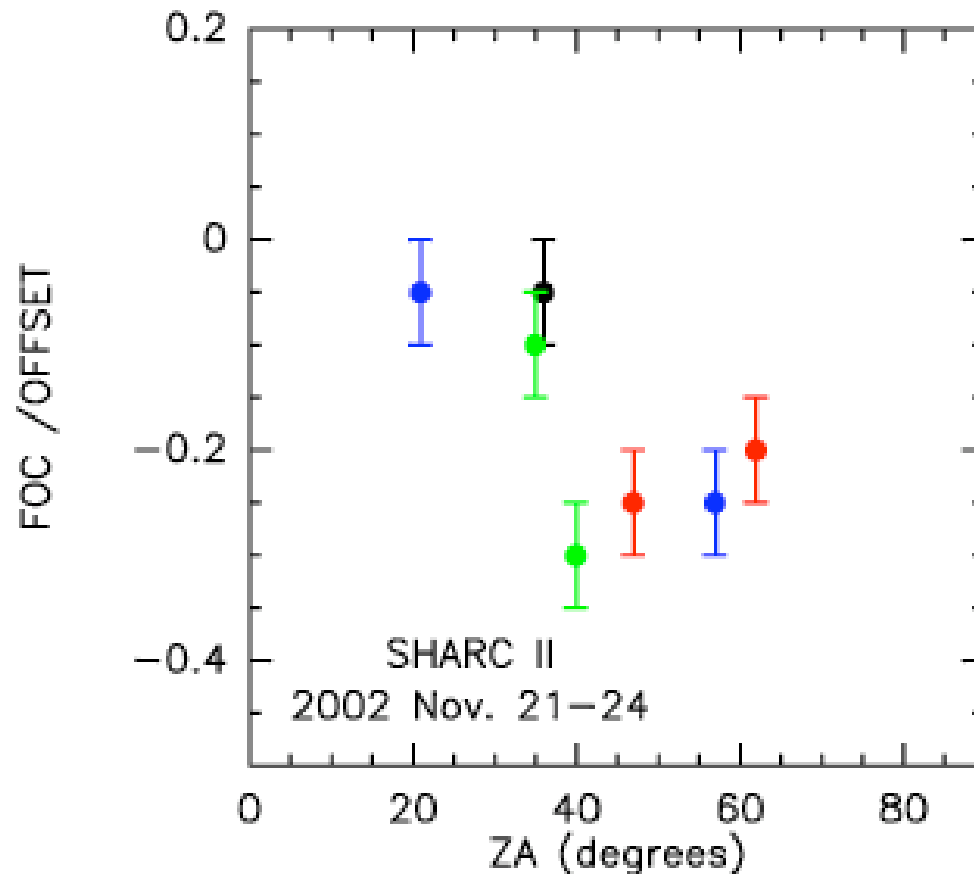
- Best value is $\text{FOC/OFF} = -0.05 \pm 0.05$, $\text{Y/OFF} = -0.60 \pm 0.10$

Dependence of Y/OFF on ZA



- Different colors are different nights.
- Clear trend

Dependence of FOC/OFF on ZA



- Possible trend of FOC/OFF decreasing with increasing ZA.