

### 5.4.3. Post-processing Quantitative Numbers

The qualitative numbers for Q1a and Q1b are

- Integral of ON-OFF curve
- % of ON - OFF values  $> 0$
- Standard deviation of ON-OFF

An example Q1a difference curve can be seen in Figure 12

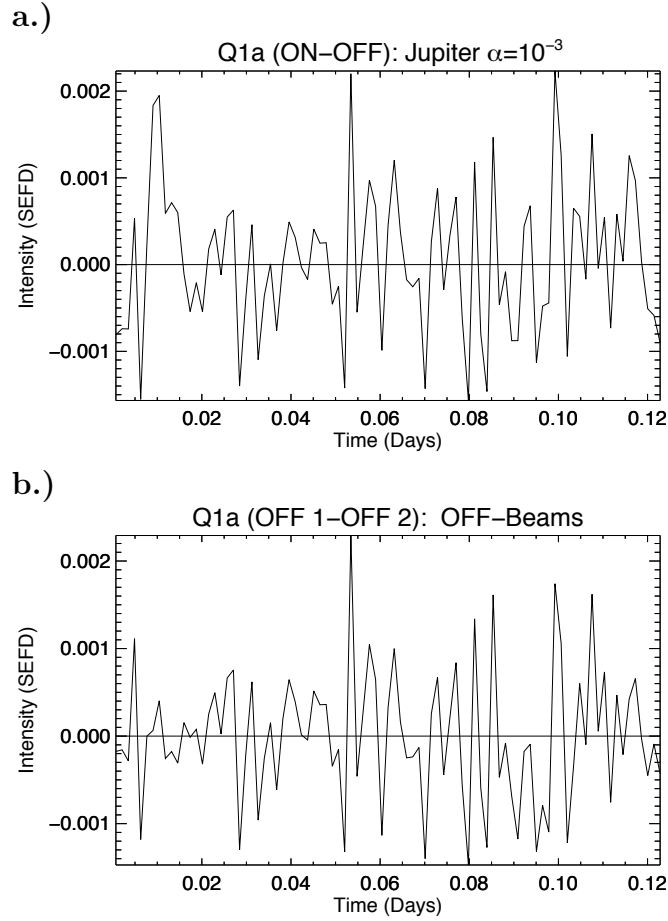


Fig. 12.— Example Q1a difference curves for **(a)** Jupiter with  $\alpha = 10^{-3}$  and **(b)** two OFF beams

The qualitative numbers for Q4a to Q4f are

- Integral of ON-OFF curve
- Ratio of the ON-OFF curve to the 1, 2, 3 sigma Gaussian curve
- % of ON - OFF values  $> 0$
- Number of ON-OFF values above 1, 2, 3 sigma Gaussian curves
- Minimum ( $\tau_{min}$ ) and maximum ( $\tau_{max}$ ) threshold value where ON-OFF  $> 0$
- % of ON-OFF values between  $\tau_{min}$  and  $\tau_{max}$  and  $> 0$
- % of ON-OFF values between  $> \tau_{max}$  and  $\neq 0$

An example curve of Q4f difference plots for Jupiter and two sky beams can be found in Figure 13.

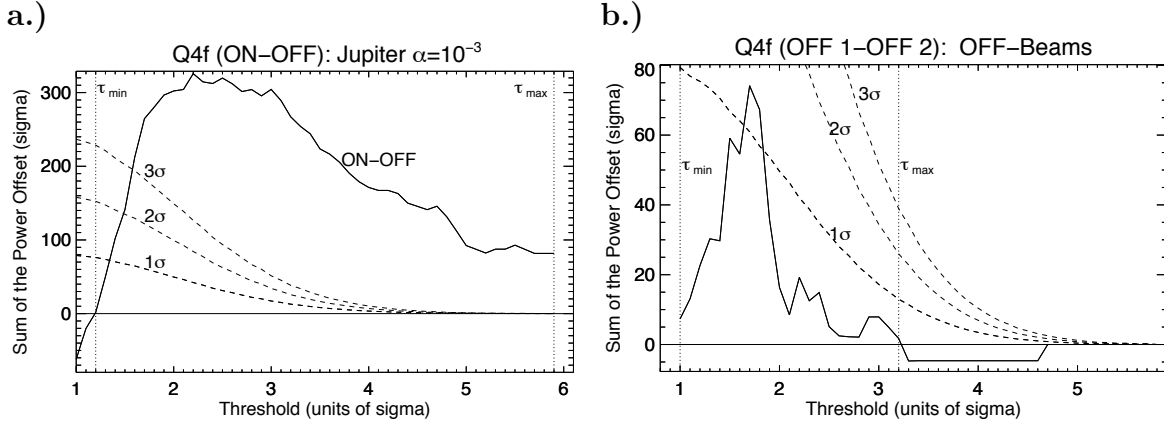


Fig. 13.— Example Q4f difference curves for (a) Jupiter with  $\alpha = 10^{-3}$  and (b) two OFF beams. The dashed lines are the 1, 2,  $3\sigma$  statistical limits of the difference between all the Q values derived from two different Gaussian distributions (each run 10000 times).