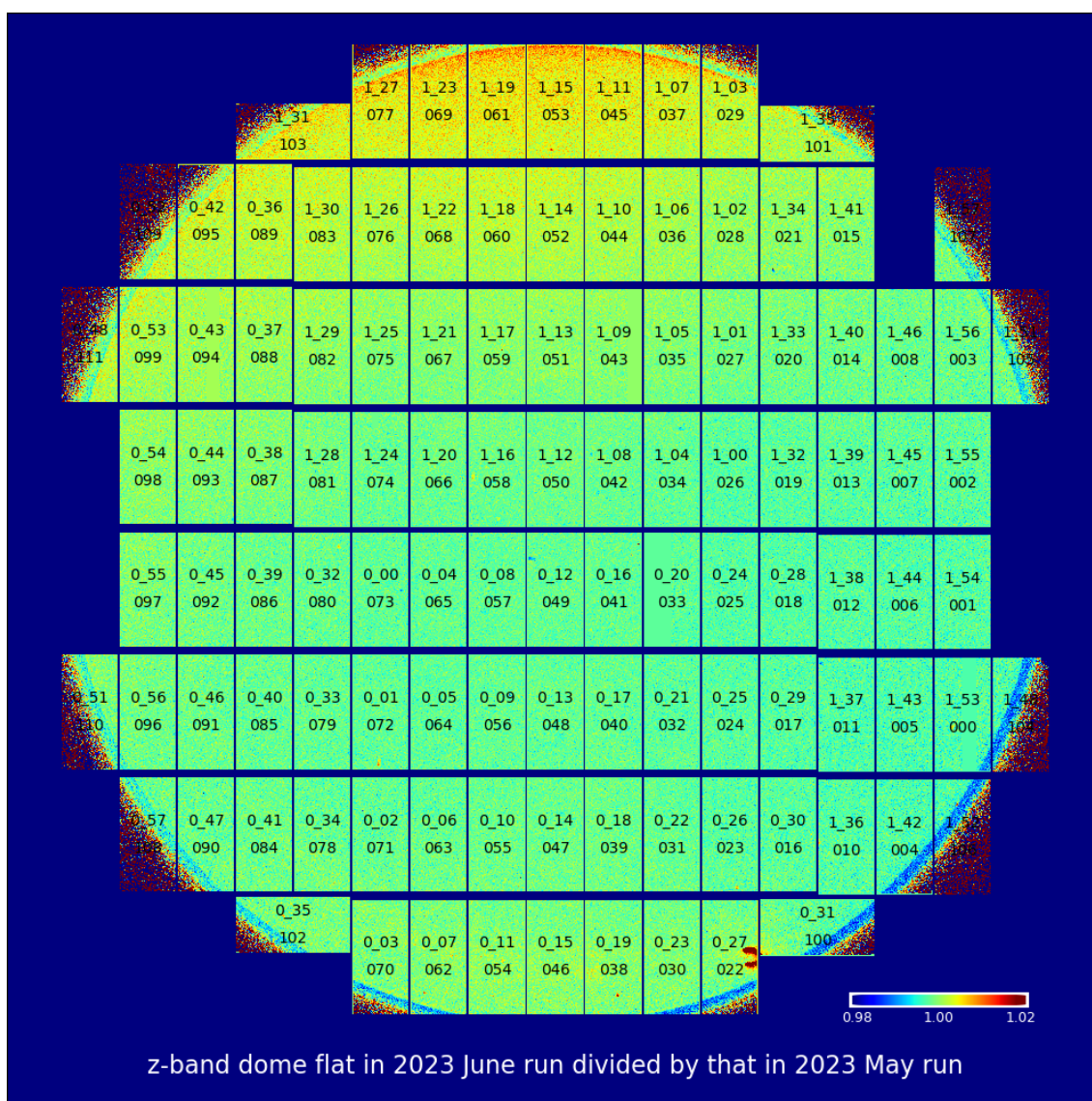


Inspection of HSC images after vacuum leak accident

T.Terai (Subaru Telescope)

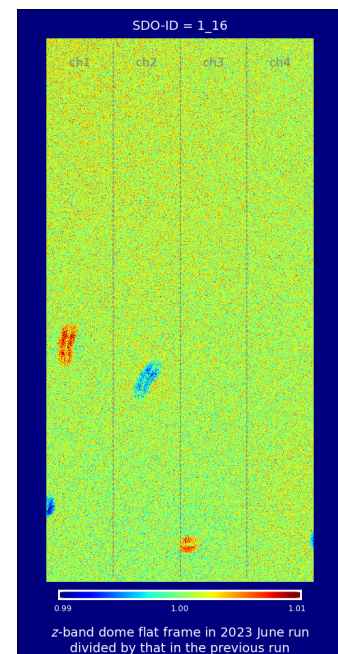
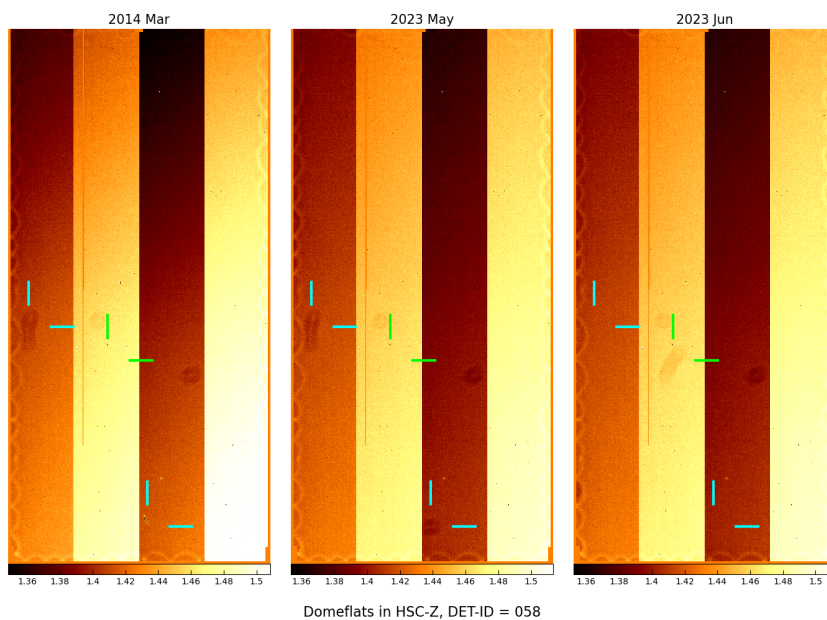
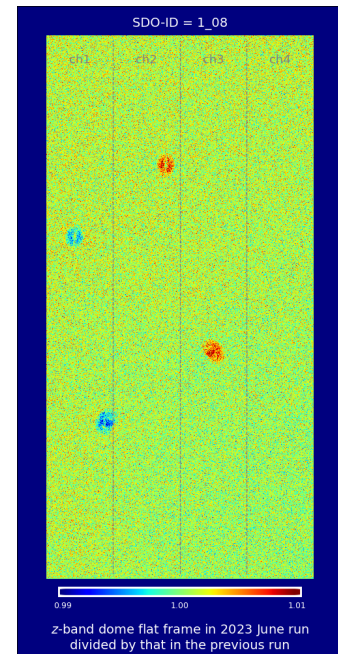
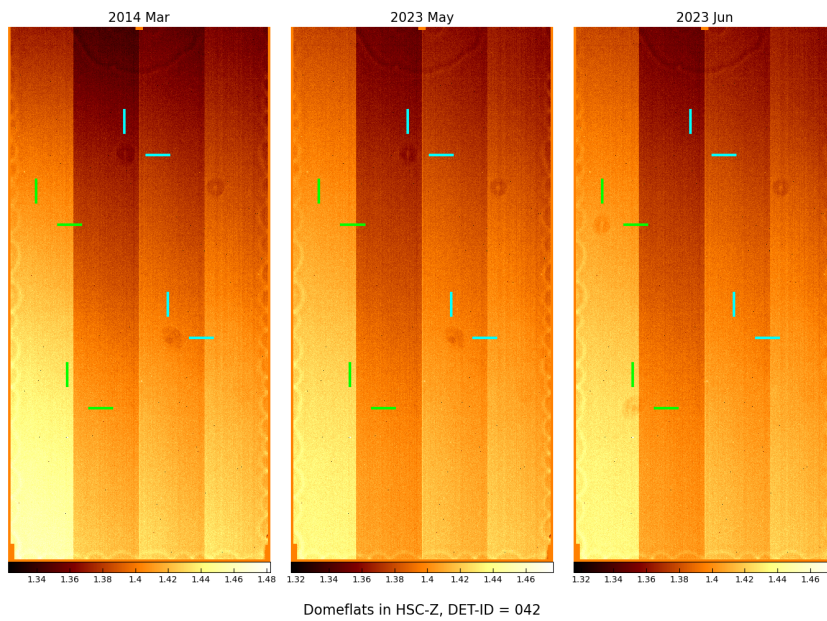
June 2023

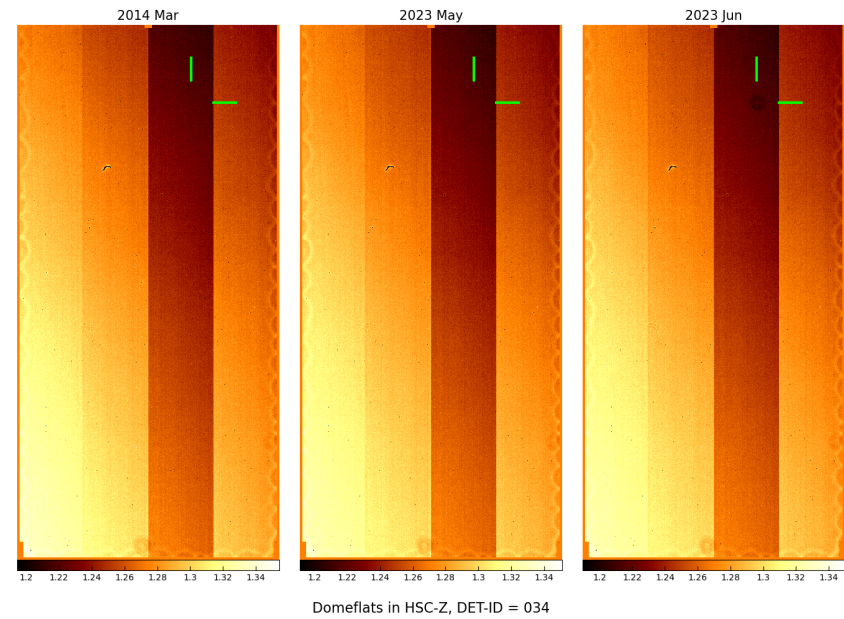
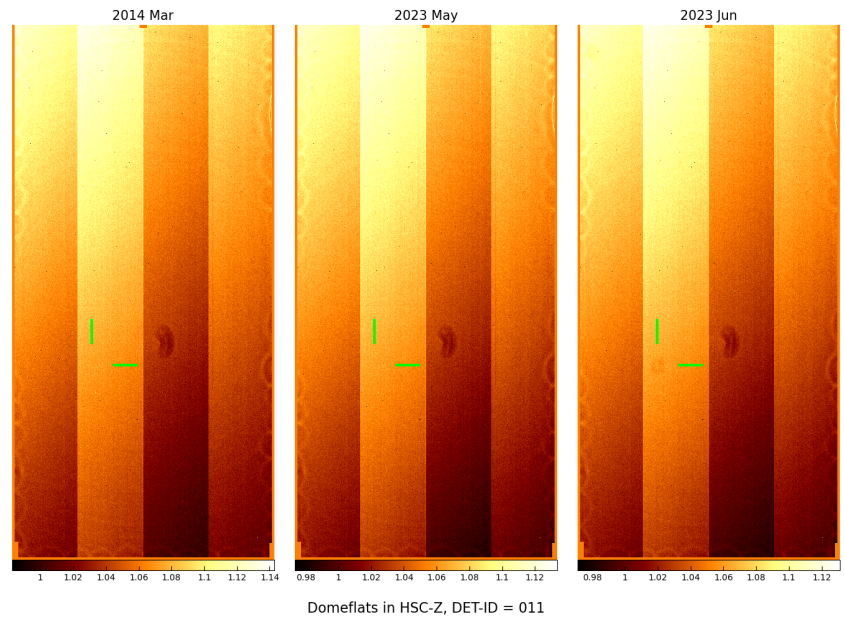
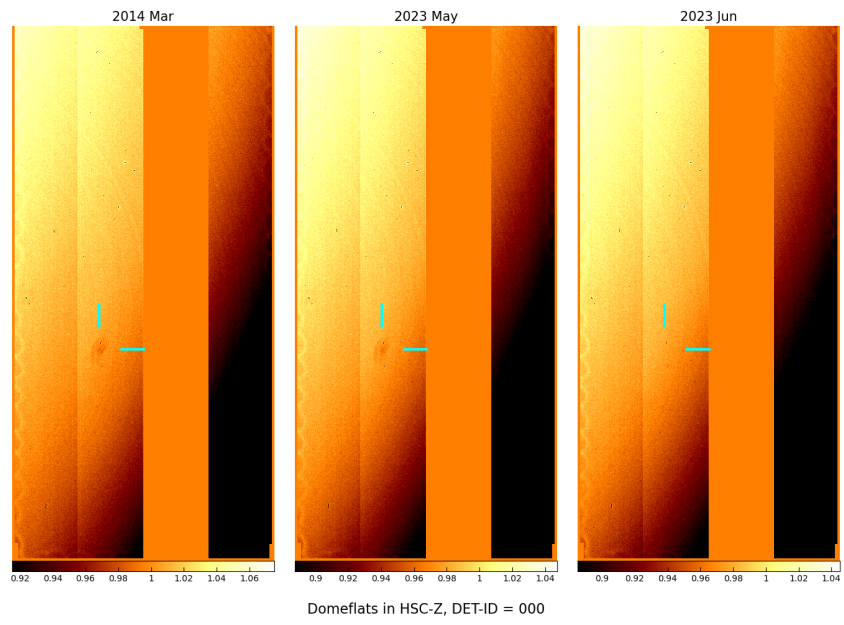
- HSC's CCD dewar experienced a vacuum leak accident on June 8, 2023.
- As a result of comparison of the dome flat images between the two observing runs before/after this incident (i.e., 2023 May and June runs), we confirmed no significant global change.

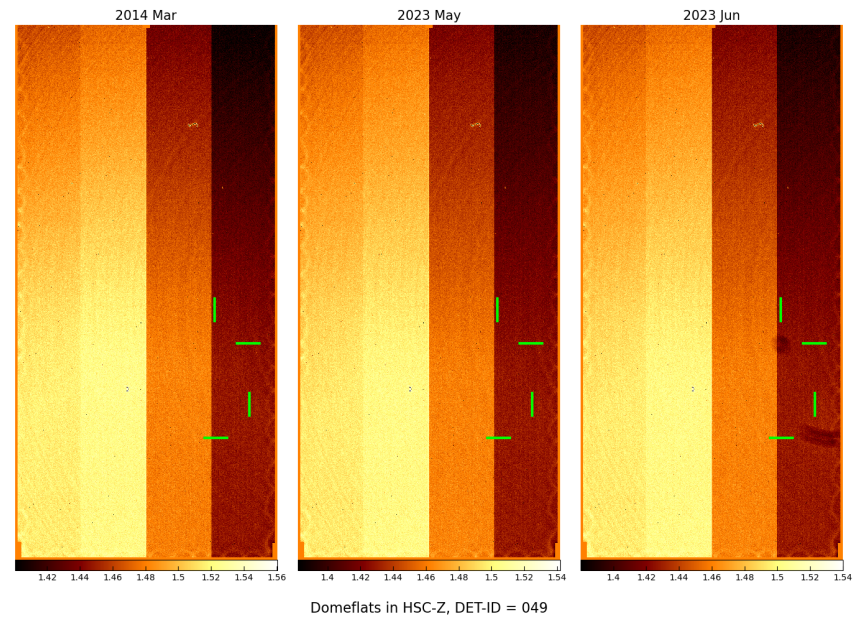
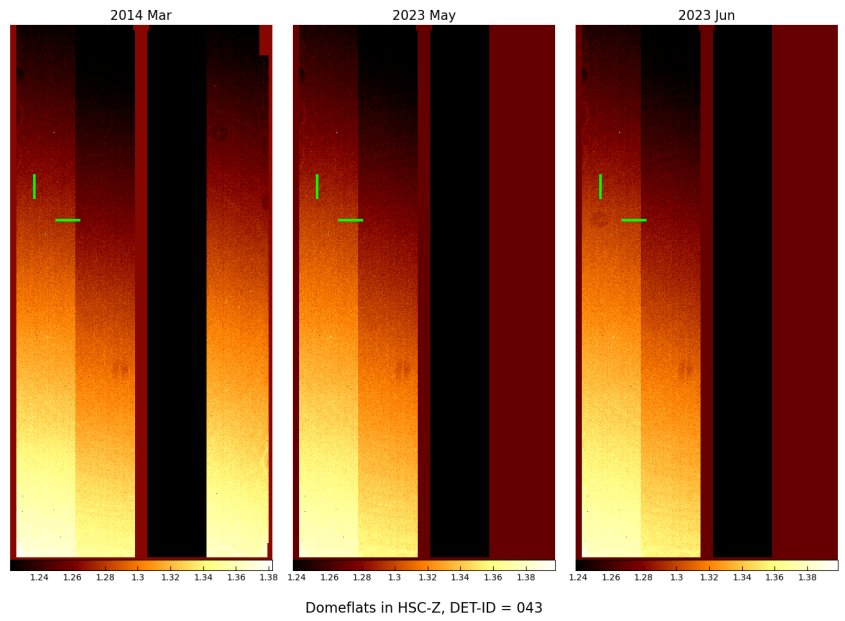
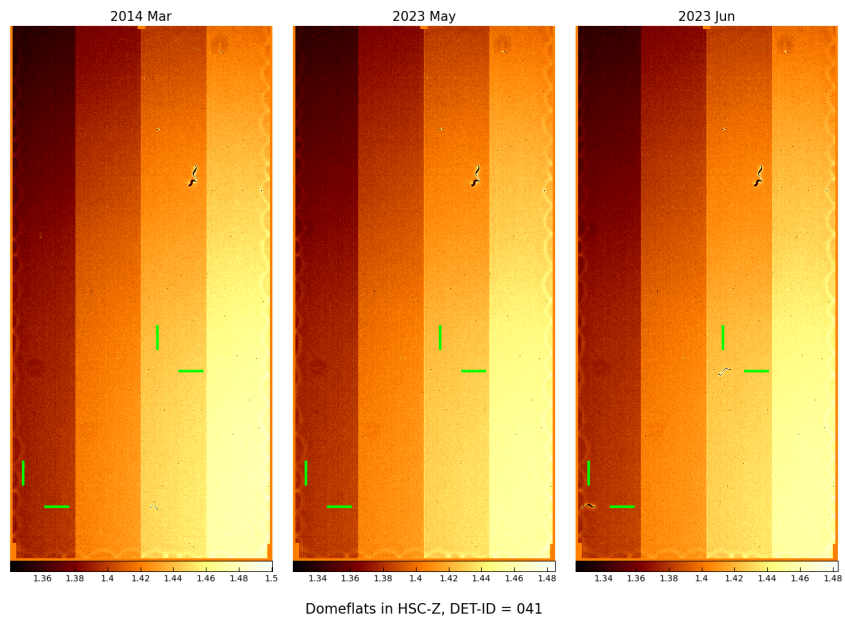


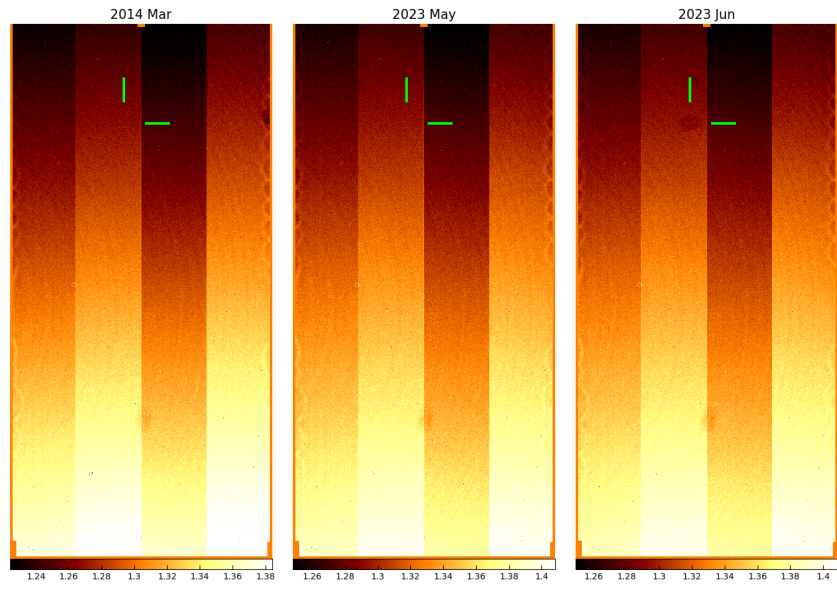
Note: An abnormal pattern on CCD #022 (0.27) is a cable-tie shadow appeared in the May run.

- It was found that several shadow spots ($\sim 100\text{--}200$ pixels in width) newly appeared (9 spots) or disappeared (7 spots) in the images after the accident (see the following pages).
- In addition, on CCDs #042 (1.08) and #058 (1.16), a couple of the spots seem to have slightly moved between the two runs.
→ These spots are likely to be due to tiny contaminants on the inside surface of the dewar.
- Such spots can be removed from the images by flat fielding. Their influence on the image quality is very limited.

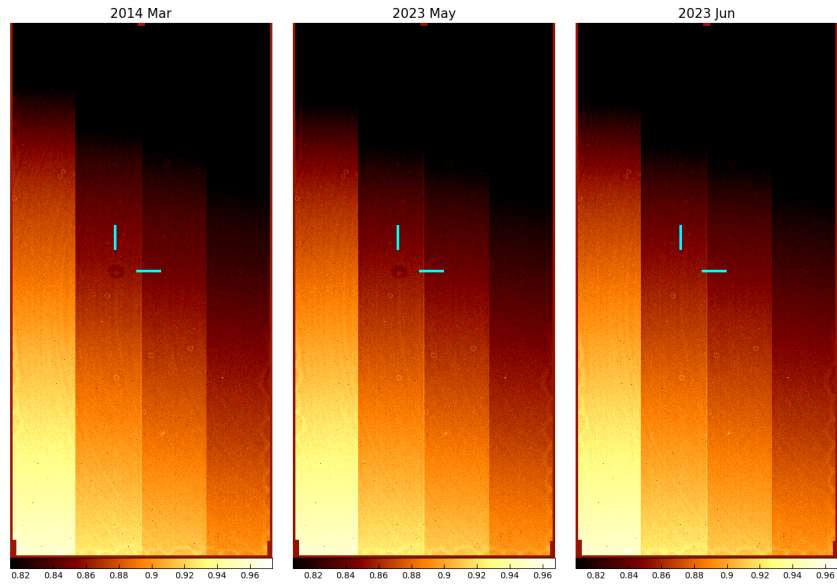




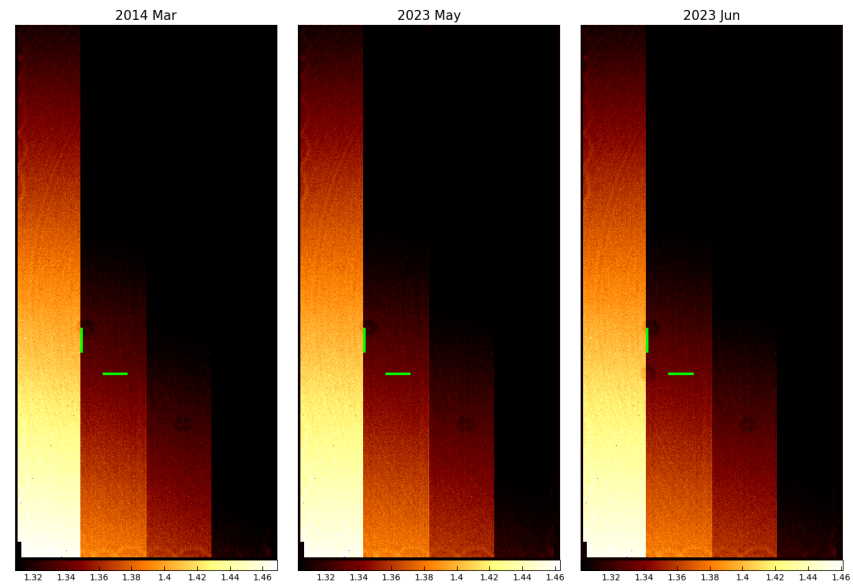




Domeflats in HSC-Z, DET-ID = 051



Domeflats in HSC-Z, DET-ID = 054



Domeflats in HSC-Z, DET-ID = 056

