

FOV direction and image size calibration of Fluorescence Detector using light source on UAV

A. Nakazawa, T. Tomida, K. Sano, Y. Tameda, Y. Oku, D. Ikeda for the Telescope Array collaboration

- What is the contribution about?
 - Calibration of the Fluorescence Detector (FD) using light source on the UAV (drone).
- Why is it relevant / interesting?
 - We can measure the optical properties of FD in detail by using light source on the UAV.
- What have we done?
 - We have estimated the difference of the actual FOV direction to the assumed FOV direction of the FD.
 - We have evaluated the image size on surface of the sensor array by comparing the simulation with measurement data.
- What is the result?
 - Some of the FDs were pointing downward more than expected.
 - TA experiments have a good understanding of the image size of the FD.