

Add Space Event Procedure

1. A space event typically results in an all-sky or blanket closure. Typically, as of 2011, the durations are on the minutes timescales.
2. Space Event blanket closures are communicated to Keck via a phone call and/or by email. The closures are specified using start and stop times and UT date(s) or JDAY. There can be multiple closures for a particular day or a single closure can span more than one day. If there are multiple closures, enter the number of closures and the times for each as instructed below. If the closure spans more than one day, this procedure must be run separately for each of the J-Days that the closure takes place on.
3. Run `add_space_event` as `kNobsao@kNaoserver` via command line or AO VNC sessions (must have Xdisplay set properly)
 - a. AO VNC sessions, right-click for menu then
 - i. KN AO Tools -> LGSAO Ops -> Add Space Event
4. Enter
 - a. Number of closures
 - b. Start UT
 - c. End UT
5. An IDL dialog will prompt you to select the `idl_opensYYMMDD.sav` file (this file is the data base of cleared "PA open-widow" times for each laser target)
6. You will be prompted whether you wish to restart the Spiral and Backend Tools. Note that restarting will shutter the laser.
7. Output in AO nightly, will be
 - a. New:
 - i. `idl_opensYYMMDD.sav`
 - ii. `sat_opens.txt`
 - iii. `opensForSA.txt`
 - iv. `opensUnixYYMMDD.txt`
 - v. `opensDosYYMMDD.txt`
 - b. `add_space_event.log`
 - c. Old:
 - i. `idl_opensYYMMDD_HH:MM:SS.sav`
 - ii. `sat_opensYYMMDD_HH:MM:SS.txt`
 - iii. `opensForSAYYMMDD_HH:MM:SS.txt`
8. Email the `opensUnixYYMMDD.txt` and `opensDosYYMMDD.txt` to the OA, SA, and Astronomer.
9. Print Email the `opensUnixYYMMDD.txt` and `opensDosYYMMDD.txt`
 - a. manually verify the blanket closure has been properly input, that is there are no open times for the space event.
10. The Spiral and Backend tools MUST be restarted for the changes to take effect.
 - a. Verify that the closure appears on the Spiral tool graphic at the correct time and the correct duration.
11. Manually verify the laser is shuttered at the blanket closure start time.
12. Please enter a nightlog entry noting each space event closure.