

- Method

The SGLI climatology data are made by using MODIS product average in 2000-2019 (2002-2019 for CHLA) and SGLI-MODIS difference in the overlap period, 2018-2022

- Land surface temperature, LST: NASA MOD21C3 in 2000-2019
- Normalized Difference Vegetation Index, NDVI: NASA MOD13C2 (global), MOD13Q1 (around Japan) in 2000-2019
- Sea surface temperature, SST: Terra NASA OBPG MODIS in 2000-2019, day and night time separately
- Chlorophyll-a concentration, CHLA: NASA OBPG Aqua MODIS chlor_a in 2002-2019
- Daily mean of shortwave radiation, SWR: JASMES Terra+Aqua MODIS in 2000-2019

- File name

Global : GC1SG1_YYYYMM00D01M_D0000_3MSG_KKKKM_CLIM.nc

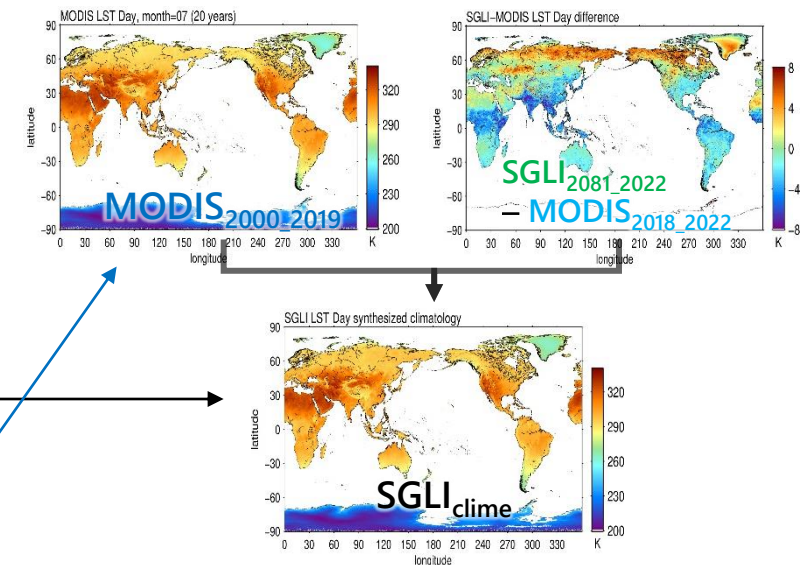
Around Japan : GC1SG1_YYYYMM00D01M_D0000_L2SG_KKKKQ_CLIM.nc

* MM : Target Month

* KKKK : Product ID: LST_, NDVI, SST_, CHLA, SWR_

- Datasets in the file

- KKK(K)_climatology: synthesized climatology for SGLI (offset corrected)
- KKK(K)_MODIS_average: MODIS average (can be used for MODIS anomaly)
- KKK(K)_SGLI_STD: Standard deviation of SGLI in the overlap period
- KKK(K)_MODIS_STD: Standard deviation of MODIS in the overlap period
- KKK(K)_NUM: Match- up sample number in the overlap period



$$\text{SGLI}_{\text{clime}} = \text{MODIS}_{2000_2019} + (\text{SGLI}_{2018_2022} - \text{MODIS}_{2018_2022})$$