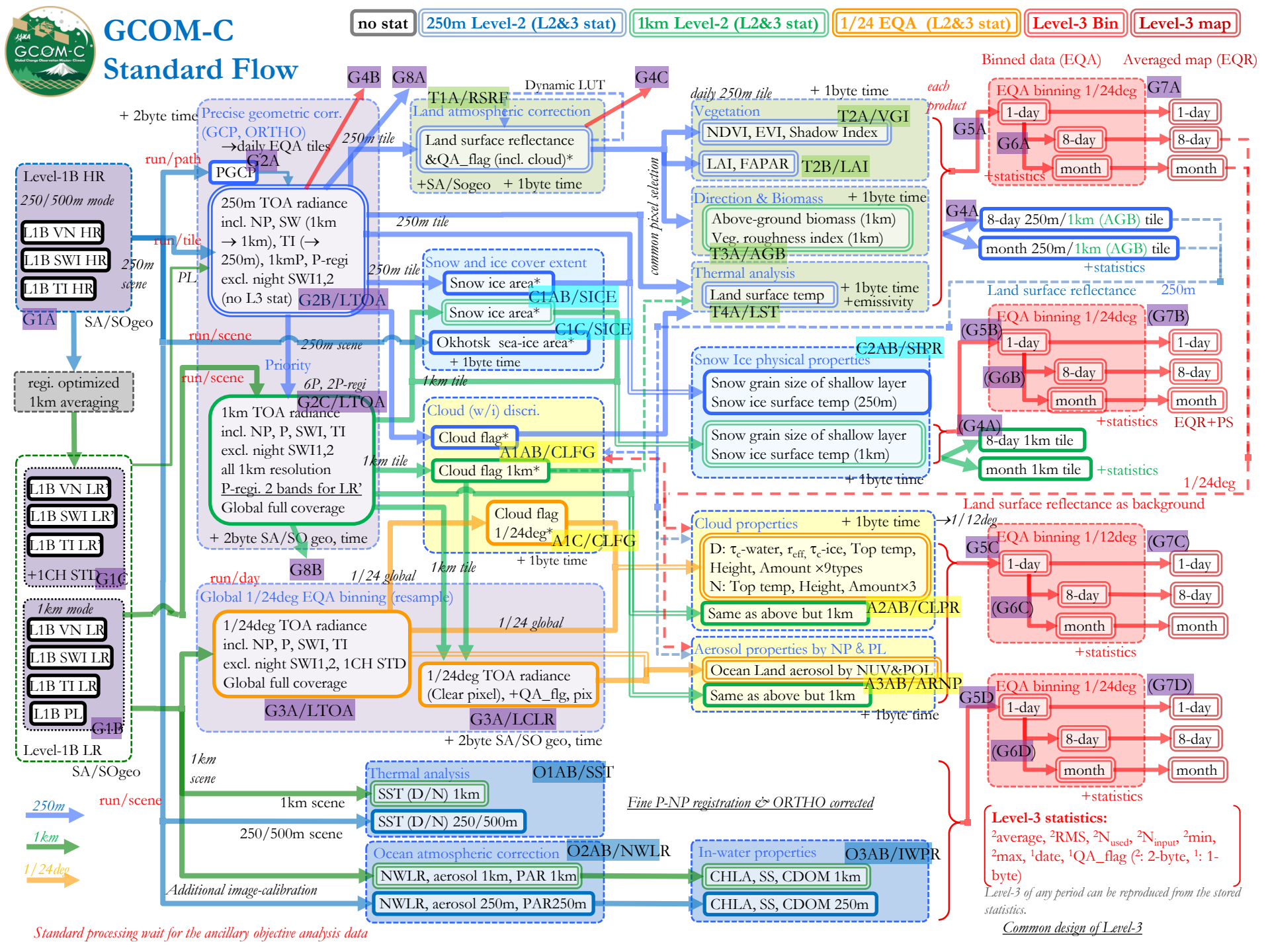
GCOM-C
Standard Flow
no stat
250m Level-2 (L2&3 stat)
1km Level-2 (L2&3 stat)
1/24 EQA (L2&3 stat)
Level-3 Bin
Level-3 map
Binned data (EQA)
Averaged map (EQR)
+ 2byte time
Precise geometric corr. (GCP, ORTHO)
→daily EQA tiles
run/path
PGCP
G2A
G4B
G8A
250m tile
T1A/RSRF
Land atmospheric correction
Land surface reflectance &QA_flag (incl. cloud)*
+SA/Sogeo + 1byte time
Dynamic LUT
G4C
common pixel selection
daily 250m tile
+ 1byte time
each product
Vegetation
T2A/VGI
NDVI, EVI, Shadow Index
LAI, FAPAR
T2B/LAI
Direction & Biomass
+ 1byte time
Above-ground biomass (1km)
Veg. roughness index (1km)
T3A/AGB
Thermal analysis
Land surface temp
+ 1byte time
+emissivity
T4A/LST
Level-1B HR
250/500m mode
L1B VN HR
L1B SWI HR
L1B TI HR
250m scene
G1A
SA/SOgeo
run/tile
PL
250m TOA radiance incl. NP, SW (1km → 1km), TI (→ 250m), 1kmP, P-regi excl. night SWI1,2 (no L3 stat)
G2B/LTOA
250m tile
Snow and ice cover extent
Snow ice area*
C1AB/SICE
Snow ice area*
C1C/SICE
Okhotsk sea-ice area*
+ 1byte time
run/scene
250m scene
Priority
6P, 2P-regi
regi. optimized 1km averaging
1km tile
G2C/LTOA
1km TOA radiance incl. NP, P, SWI, TI excl. night SWI1,2 all 1km resolution
P-regi. 2 bands for LR'
Global full coverage
+ 2byte SA/SO geo, time
Cloud (w/i) discri.
Cloud flag*
A1AB/CLFG
Cloud flag 1km*
Cloud flag 1/24deg*
A1C/CLFG
+ 1byte time
C2AB/SIPR
Snow Ice physical properties
Snow grain size of shallow layer
Snow ice surface temp (250m)
Snow grain size of shallow layer
Snow ice surface temp (1km)
+ 1byte time
L1B VN LR'
L1B SWI LR'
L1B TI LR'
+1CH STD
G1C
1km mode
L1B VN LR
L1B SWI LR
L1B TI LR
L1B PL
G1B
Level-1B LR
SA/SOgeo
run/day
1/24 global
G8B
Global 1/24deg EQA binning (resample)
1/24deg TOA radiance incl. NP, P, SWI, TI excl. night SWI1,2, 1CH STD
Global full coverage
G3A/LTOA
1/24deg TOA radiance (Clear pixel), +QA_flg, pix
G3A/LCLR
+ 2byte SA/SO geo, time
Cloud properties
+ 1byte time
D: τc-water, reff, τc-ice, Top temp, Height, Amount ×9types
N: Top temp, Height, Amount×3
Same as above but 1km
A2AB/CLPR
Aerosol properties by NP & PL
Ocean Land aerosol by NUV&POL
Same as above but 1km
A3AB/ARNP
+ 1byte time
→1/12deg
Land surface reflectance as background
EQA binning 1/24deg
G7A
G5A
G6A
1-day
8-day
month
+statistics
G4A
8-day 250m/1km (AGB) tile
month 250m/1km (AGB) tile
+statistics
Land surface reflectance 250m
(G7B)
(G5B)
(G6B)
EQR+PS
8-day 1km tile
month 1km tile
1/24deg
EQA binning 1/12deg
(G7C)
G5C
(G6C)
EQA binning 1/24deg
(G7D)
G5D
(G6D)
Level-3 statistics:
²average, ²RMS, ²N_used, ²N_input, ²min, ²max, ¹date, ¹QA_flag (²: 2-byte, ¹: 1-byte)
Level-3 of any period can be reproduced from the stored statistics.
Common design of Level-3
1km scene
250/500m scene
Thermal analysis
O1AB/SST
SST (D/N) 1km
SST (D/N) 250/500m
Fine P-NP registration & ORTHO corrected
Ocean atmospheric correction
O2AB/NWLR
NWLR, aerosol 1km, PAR 1km
NWLR, aerosol 250m, PAR250m
In-water properties
O3AB/IWPR
CHLA, SS, CDOM 1km
CHLA, SS, CDOM 250m
Additional image-calibration
250m
1km
1/24deg
Standard processing wait for the ancillary objective analysis data

SGLI Data Processing Flow

L2 ⇒ L2 Statistics · Mosaic & L2⇒L3 Spatial Binning ⇒ L3 Temporal Binning ⇒ L3 Map