

Preliminary Estimated Accuracy of GLI Higher Level Product (Level 2, 3), Version1 (Dec. 2003)

No	Discipline	Product Name	Estimated Accuracy (Preliminary)
1	Atmosphere (Note 1)	Aerosol Optical Thickness at 500nm	150 %
2		Aerosol Angstrom Exponent	35 %
3		Cloud Flag	50 %
4		Cloud Effective Particle Radius	300 %
5		Cloud Optical Thickness	70 %
6		Cloud Top Height	2.5 km
7		Cloud Top Temperature	15 K
8		Cloud Liquid Water Path	300 %
9		Cloud Fraction for Each Cloud Type	50 %
10	Ocean (Note 2)	Normalized water-leaving radiance	16~47 %(Ch. 1~9) 82~284 %(Ch. 10~12)
11		Photosynthetically Available Radiation	11 %
12		Chlorophyll-a concentration	130 %
13		Absorption of Colored Dissolved Organic Matter	82 %
14		Attenuation Coefficient at 490nm	78 %
15		Suspended Solid Weight	34 %
16		Sea Surface Temperature	0.67 K
17	Land (Note 3)	Atmospherically Corrected Reflectance	available
18		Precise Geometric Correction Parameter	< 1 pixel
19		Vegetation Index	available
20	Cryosphere (Note 4)	Snow Grain Size	100 %
21		Snow Impurities	400 %
22		Snow/Sea Ice Covered Area	30 %

Note 1: Validation methods has been under investigated. The results are qualitatively consistent with AVHRR/NOAA and/or MODIS/Terra data.

Note 2: We need more ground observations of CDOM, K490, and SS, and more investigations of coastal algorithms.

Note 3: This product is atmospherically corrected for only rayleigh scattering and ozone absorption. Therefore it has capability of aerosol effect, especially in shorter wavelength. User can apply own algorithm to this product.

Note 4: Due to the lack of sufficient truth data the accuracy of snow grain size and impurities products is still preliminary. Further ground truth observations coincident with MODIS (GLI-alternative) observation are to be carried out for more precise estimation of the product accuracy.