| | Version | Product | Description | Product reference | Product resolution |
|-------------------------------|---------|---------------------------------|---|---|--|
| Atmospheric profiles | Н | nnHIRS | Neural network analysis of High-resolution Infrared Radiometer Sounder (HIRS) and stratospheric water and ozone satellite homogenized data. Data are reported at 16 vertical levels. | Shi et al. (2016) | 3-hourly global 1° equivalent equal-area grid |
| | D | TOVS | Atmosphere and surface data including temperature structure, water, and ozone abundances obtained from the TIROS Operational Vertical Sounding (TOVS) Product and supplemented by two climatologies Sounding (TOVS) Product and supplemented by the NOAA GFDL temperature–humidity climatology (Oort, 1983) and an ozone climatology from the NIMBUS-4 BUV data (Hilsenrath and Schlesinger, 1981). Data are reported at 10 different levels. | | Daily 280 km equivalent equal-area grid |
| AEROSOL | Н | MAC-v1 | Merges surface-based aerosol emission data from AERONET and satellite products from MODIS and MISR, with the median results from an ensemble of emission-transport models. | Kinne et al. (2013) | Monthly 1° equivalent equal-area grid |
| | D | n/a | | | |
| OZONE abundance | Н | TOMS, TOVS, SMOBA, OMI | Daily variations of the global distribution of total column ozone abundance from a combination of satellite-based instruments. | Stolarski et al. (1991), Kroon et al. (2011), Chesters and Neuendorffer (1991), Neuendorffer et al. (1996), Yan et al. (2006) | Daily 1° equivalent equal-area grid |
| | D | TOVS | The main dataset used to produce a daily, global description of the ozone, temperature, and humidity distributions is that obtained from the analysis of data from the TIROS Operational Vertical Sounder (TOVS) System. | ISCCP Science Team https://doi.org/10.5067/ISCCP/TOVS_NAT | Daily 280 km equivalent equal-area grid |
| SNOW/ICE cover fraction | Н | | Northern Hemisphere EASE-Grid Weekly Snow Cover and Sea Ice Extent (Version3), NOAA NSIDC IMS Daily Northern Hemisphere Snow and Ice Analysis, OSI-SAF Global Sea Ice Concentration Reprocessing Dataset, GLIMS permanent glacier cover product. | Brown and Robinson (2011), Armstrong and Brodzik (2005) | Daily 0.25° equivalent equal-area grid |
| | D | | Averages of snow and sea ice fractional coverage deduced from ship or shore station reports and satellite visible, infrared, and microwave imagery data. | Rossow et al. (1996) | 1° equal area grid, 5-day, global |
| ТОРО | Н | | USGS Earth Resources Observation and Science (EROS) GTOPO30 product reconciled with the USGS Global Land 1 km AVHRR Project land–water mask. The data were modified to produce a reconciled product for use in ISCCP. | These data are available from the US Geological Survey | Fixed 0.1° equivalent equal-area grid |
| | D | | n/a | | |
| SURFACETYPE | Н | | MODIS International Geosphere–Biosphere Programme (IGBP) surface type classification. | Loveland et al. (2000) | Fixed 0.10° equivalent equal-area grid |
| | D | | Global Vegetation Types, 1971–1982; A global digital database of vegetation was compiled at 1° latitude by 1° longitude resolution, drawing on approximately 100 published sources. | Matthews (1983) https://doi.org/10.3334/ORNLDAAC/419 | Fixed 1.0° |