# ATL14 Product Data Dictionary

Date Generated : 2021-11-29T13:28:44

| | | |
|---|---|---|
| description | (Attribute) | This data set (ATL14) contains seasonal gridded land ice elevation. |
| level | (Attribute) | L3B |
| short_name | (Attribute) | ATL14 |
| title | (Attribute) | SET_BY_META |
| **Group: /** | | This data set (ATL14) contains seasonal gridded land ice elevation. |
| Conventions | (Attribute) | CF-1.7 |
| GDAL_AREA_OR_POINT | (Attribute) | Area |
| _NCProperties | (Attribute) | version=2,netcdf=4.7.4,hdf5=1.10.6 |
| asas_release | (Attribute) | SET_BY_PGE |
| citation | (Attribute) | Cite these data in publications as follows: The data used in this study were produced by the ICESat-2 Science Office at NASA/GSFC. The data archive site is the NASA National Snow and Ice Data Center Distributed Active Archive Center. |
| contributor_name | (Attribute) | Benjamin Smith (besmith@uw.edu), Tyler Sutterley (tsutter@uw.edu), Suzanne Dickinson (sdickins@uw.edu), Benjamin Jelley (benjamin.p.jelley@nasa.gov), Denis Felikson (denis.felikson@nasa.gov), Thomas E Neumann (thomas.neumann@nasa.gov), Helen Fricker (hafricker@ucsd.edu), Alex Gardner (alex.s.gardner@jpl.nasa.gov), Laurence Padman (padman@esr.org), Thorsten Markus (thorsten.markus@nasa.gov), Nathan Kurtz (nathan.t.kurtz@nasa.gov), Suneel Bhardwaj (suneel.bhardwaj@nasa.gov), David W Hancock III (david.w.hancock@nasa.gov), Jeffrey Lee (jeffrey.e.lee@nasa.gov) |
| contributor_role | (Attribute) | Investigator, Investigator, Investigator, Investigator, Investigator, Algorithm Developer, Algorithm Developer, Algorithm Developer |
| creator_name | (Attribute) | GSFC I-SIPS > ICESat-2 Science Investigator-led Processing System |
| date_created | (Attribute) | 2021-11-23T19:38:42.521102Z |
| date_type | (Attribute) | UTC |
| fileName | (Attribute) | ATL14_CN_0311_100m_001_01.nc |
| geospatial_lat_max | (Attribute) | [85.20242531] |
| geospatial_lat_min | (Attribute) | [70.58233402] |
| geospatial_lat_units | (Attribute) | degrees_north |
| geospatial_lon_max | (Attribute) | [-62.10272897] |
| geospatial_lon_min | (Attribute) | [-127.0928373] |
| geospatial_lon_units | (Attribute) | degrees_east |
| granule_type | (Attribute) | ATL14 |
| hdfversion | (Attribute) | SET_BY_PGE |
| history | (Attribute) | SET_BY_PGE |
| identifier_product_doi | (Attribute) | doi:10.5067/ATLAS/ATL14.001 |
| identifier_product_doi_authority | (Attribute) | http://dx.doi.org |
| identifier_product_format_version | (Attribute) | SET_BY_PGE |
| identifier_product_type | (Attribute) | ATL14 |
| institution | (Attribute) | National Aeronautics and Space Administration (NASA) |
| instrument | (Attribute) | ATLAS > Advanced Topographic Laser Altimeter System |
| keywords | (Attribute) | EARTH SCIENCE > CRYOSPHERE > GLACIERS/ICE SHEETS > GLACIER ELEVATION/ICE SHEET ELEVATION > NONE > NONE > NONE |
| keywords_vocabulary | (Attribute) | NASA/GCMD Science Keywords |
| license | (Attribute) | Data may not be reproduced or distributed without including the citation for this product included in this metadata. Data may not be distributed in an altered form without the written permission of the ICESat-2 Science Project Office at NASA/GSFC. |
| naming_authority | (Attribute) | http://dx.doi.org |
| netcdfversion | (Attribute) | 4.7.4 |
| platform | (Attribute) | ICESat-2 > Ice, Cloud, and land Elevation Satellite-2 |
| processing_level | (Attribute) | 3B |
| project | (Attribute) | ICESat-2 > Ice, Cloud, and land Elevation Satellite-2 |
| publisher_email | (Attribute) | nsidc@nsidc.org |
| publisher_name | (Attribute) | NSIDC DAAC > NASA National Snow and Ice Data Center Distributed Active Archive Center |
| publisher_url | (Attribute) | http://nsidc.org/daac/ |
| reference_frame | (Attribute) | ITRF2014 |
| references | (Attribute) | http://nsidc.org/data/icesat2/data.html |
| shortName | (Attribute) | ATL14_META |
| source | (Attribute) | Spacecraft |
| spatial_coverage_type | (Attribute) | Horizontal |
| standard_name_vocabulary | (Attribute) | CF-1.6 |
| summary | (Attribute) | The purpose of ATL14 is to provide an IceSat-2 gridded satellite summary of heights of land-based ice. |
| time_coverage_duration | (Attribute) | [70587713.40189457] |
| time_coverage_end | (Attribute) | 2021-06-23T10:51:09.697181Z |
| time_coverage_start | (Attribute) | 2019-03-29T11:09:16.295287Z |
| time_type | (Attribute) | CCSDS UTC-A |
| uuid | (Attribute) | 1fce5534-34d6-4cfc-b44e-98cac78362e3 |
| vertical_datum | (Attribute) | WGS84 |

| Label (Layout) | Datatype(Dims) Fillvalue | long_name standard_name | units | description |
|---|---|---|---|---|
| Polar_Stereographic CONTIGUOUS | INTEGER_1([]) -127 | None Polar_Stereographic | None | None (Source: None) |
| GeoTransform | (Attribute) | [-1.56e+06 1.00e+02 0.00e+00 -4.80e+05 0.00e+00 -1.00e+02] | | |
| crs_wkt | (Attribute) | PROJCS["WGS 84 / NSIDC Sea Ice Polar Stereographic North",GEOGCS["WGS 84",DATUM["WGS_1984",SPHEROID["WGS 84",6378137,298.257223563,AUTHORITY["EPSG","7030"]],AUTHORITY["EPSG","6326"]],PRIMEM["Greenwich",0,AUTHORITY["EPSG","8901"]],UNIT["degree",0.0174532925199433,AUTHORITY["EPSG","9122"]],AUTHORITY["EPSG","4326"]],PROJECTION["Polar_Stereographic"],PARAMETER["latitude_of_origin",70],PARAMETER["central_meridian",-45],PARAMETER["scale_factor",1],PARAMETER["false_easting",0],PARAMETER["false_northing",0],UNIT["metre",1,AUTHORITY["EPSG","9001"]],AXIS["X",EAST],AXIS["Y",NORTH],AUTHORITY["EPSG","3413"]] | | |
| false_easting | (Attribute) | [0.] | | |
| false_northing | (Attribute) | [0.] | | |
| grid_mapping_name | (Attribute) | polar_stereographic | | |
| inverse_flattening | (Attribute) | [298.25722356] | | |
| latitude_of_projection_origin | (Attribute) | [90.] | | |
| scale_factor_at_projection_origin | (Attribute) | [1.] | | |
| semi_major_axis | (Attribute) | [6378.137] | | |
| semi_minor_axis | (Attribute) | [6356.752] | | |
| spatial_epsg | (Attribute) | 3413 | | |
| spatial_ref | (Attribute) | PROJCS["WGS 84 / NSIDC Sea Ice Polar Stereographic North",GEOGCS["WGS 84",DATUM["WGS_1984",SPHEROID["WGS 84",6378137,298.257223563,AUTHORITY["EPSG","7030"]],AUTHORITY["EPSG","6326"]],PRIMEM["Greenwich",0,AUTHORITY["EPSG","8901"]],UNIT["degree",0.0174532925199433,AUTHORITY["EPSG","9122"]],AUTHORITY["EPSG","4326"]],PROJECTION["Polar_Stereographic"],PARAMETER["latitude_of_origin",70],PARAMETER["central_meridian",-45],PARAMETER["scale_factor",1],PARAMETER["false_easting",0],PARAMETER["false_northing",0],UNIT["metre",1,AUTHORITY["EPSG","9001"]],AXIS["X",EAST],AXIS["Y",NORTH],AUTHORITY["EPSG","3413"]] | | |
| standard_parallel | (Attribute) | [70.] | | |
| straight_vertical_longitude_from_pole | (Attribute) | [-45.] | | |
| cell_area CHUNKED | FLOAT(:,:) INVALID_R4B | DEM grid cell area None | meters^2 | Area of each grid cell, accounting for the area distortion in the polar-stereographic projections (Source: 3.4) |
| _Netcdf4Coordinates | (Attribute) | [3 2] | | |
| _Netcdf4Dimid | (Attribute) | 3 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| data_count CHUNKED | FLOAT(:,:) INVALID_R4B | DEM data count None | counts | Weighted number of data contributing to each node in the DEM. (Source: 5.2.4.4) |
| _Netcdf4Coordinates | (Attribute) | [3 2] | | |
| _Netcdf4Dimid | (Attribute) | 3 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| h CHUNKED | FLOAT(:,:) INVALID_R4B | DEM height None | meters | DEM surface height, referenced to WGS84 (Source: 3.2) |
| _Netcdf4Coordinates | (Attribute) | [3 2] | | |
| _Netcdf4Dimid | (Attribute) | 3 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| least_significant_digit | (Attribute) | 4 | | |
| h_sigma CHUNKED | FLOAT(:,:) INVALID_R4B | DEM uncertainty None | meters | Uncertainty in the DEM surface height (Source: 4.1) |
| _Netcdf4Coordinates | (Attribute) | [3 2] | | |
| _Netcdf4Dimid | (Attribute) | 3 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| least_significant_digit | (Attribute) | 4 | | |
| ice_mask CHUNKED | INTEGER_1(:,:) INVALID_I1B | ice mask None | counts | Mask indicating 1: ice, 0: ocean or bare land (Source: 3.3.2) |

| Name | Type | Value | Units | Description |
|---|---|---|---|---|
| _Netcdf4Coordinates | (Attribute) | [3 2] | | |
| _Netcdf4Dimid | (Attribute) | 3 | | |
| datatype | (Attribute) | int8 | | |
| dimensions | (Attribute) | y, x | | |
| misfit_rms CHUNKED | FLOAT(:,:) INVALID_R4B | DEM per-node data residual None | meters | Root-mean_square of the residuals associated with each DEM node (Source: 5.2.4.4) |
| _Netcdf4Coordinates | (Attribute) | [3 2] | | |
| _Netcdf4Dimid | (Attribute) | 3 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| misfit_scaled_rms CHUNKED | FLOAT(:,:) INVALID_R4B | DEM per-node scaled data uncertainty None | counts | Root-mean_square of the error-scaled residuals associated with each DEM node (Source: 5.2.4.4) |
| _Netcdf4Coordinates | (Attribute) | [3 2] | | |
| _Netcdf4Dimid | (Attribute) | 3 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| x CHUNKED | DOUBLE(:) INVALID_R8B | Polar stereographic x projection_x_coordinate | meters | x coordinate of the DEM cell centers, in projected coordinates (Source: 3.2) |
| _Netcdf4Dimid | (Attribute) | 2 | | |
| datatype | (Attribute) | float64 | | |
| dimensions | (Attribute) | x | | |
| y CHUNKED | DOUBLE(:) INVALID_R8B | Polar stereographic y projection_y_coordinate | meters | y coordinate of the DEM cell centers, in projected coordinates (Source: 3.2) |
| _Netcdf4Dimid | (Attribute) | 3 | | |
| datatype | (Attribute) | float64 | | |
| dimensions | (Attribute) | y | | |
| **Group: /METADATA** | | ISO19115 Structured Metadata Represented within HDF5 | | |
| iso_19139_dataset_xml | (Attribute) | SET_BY_META | | |
| iso_19139_series_xml | (Attribute) | SET_BY_META | | |
| **Group: /METADATA/AcquisitionInformation** | | Describe the group | | |
| **Group: /METADATA/AcquisitionInformation/lidar** | | Describe the group | | |
| description | (Attribute) | ATLAS on ICESat-2 determines the range between the satellite and the Earth's surface by measuring the two-way time delay of short pulses of laser light that it transmits in six beams. It is different from previous operational ice-sheet altimeters in that it is a photon-counting LIDAR. ATLAS records a set of arrival times for individual photons, which are then analyzed to derive surface, vegetation, and cloud properties. ATLAS has six beams arranged in three pairs, so that it samples each of three reference pair tracks with a pair of beams; ATLAS transmits pulses at 10 kHz, giving approximately one pulse every 0.7 m along track; ATLAS's expected pointing control will be better than 90 m RMS. | | |
| identifier | (Attribute) | ATLAS | | |
| pulse_rate | (Attribute) | 10000 pps | | |
| type | (Attribute) | Laser Altimeter | | |
| wavelength | (Attribute) | 532 nm | | |
| **Group: /METADATA/AcquisitionInformation/lidar/Document** | | Describe the group | | |
| edition | (Attribute) | Pre-Release | | |
| publicationDate | (Attribute) | 12/31/17 | | |
| title | (Attribute) | A document describing the ATLAS instrument will be provided by the ICESat-2 Project Science Office. | | |
| **Group: /METADATA/AcquisitionInformation/platform** | | Describe the group | | |
| description | (Attribute) | Ice, Cloud, and land Elevation Satellite-2 | | |
| identifier | (Attribute) | ICESat-2 | | |
| type | (Attribute) | Spacecraft | | |
| **Group: /METADATA/AcquisitionInformation/platformDocument** | | Describe the group | | |
| edition | (Attribute) | 31-Dec-16 | | |
| publicationDate | (Attribute) | 31-Dec-16 | | |
| title | (Attribute) | The Ice, Cloud, and land Elevation Satellite-2 (ICESat-2): Science requirements, concept, and implementation. Thorsten Markus, Tom Neumann, Anthony Martino, Waleed Abdalati, Kelly Brunt, Beata Csatho, Sinead Farrell, Helen Fricker, Alex Gardner, David Harding, Michael Jasinski, Ron Kwok, Lori Magruder, Dan Lubin, Scott Luthcke, James Morison, Ross Nelson, Amy Neuenschwander, Stephen Palm, Sorin Popescu, CK Shum, Bob E. Schutz, Benjamin Smith, Yuekui Yang, Jay Zwally. http://dx.doi.org/10.1016/j.rse.2016.12.029 | | |
| **Group: /METADATA/DataQuality** | | Describe the group | | |
| scope | (Attribute) | NOT_SET | | |
| **Group: /METADATA/DataQuality/CompletenessOmission** | | Describe the group | | |
| evaluationMethodType | (Attribute) | directInternal | | |
| measureDescription | (Attribute) | TBD | | |
| nameOfMeasure | (Attribute) | TBD | | |
| unitofMeasure | (Attribute) | TBD | | |
| value | (Attribute) | NOT_SET | | |
| **Group: /METADATA/DataQuality/DomainConsistency** | | Describe the group | | |
| evaluationMethodType | (Attribute) | directInternal | | |
| measureDescription | (Attribute) | TBD | | |
| nameOfMeasure | (Attribute) | TBD | | |
| unitofMeasure | (Attribute) | TBD | | |
| value | (Attribute) | NOT_SET | | |
| **Group: /METADATA/DatasetIdentification** | | Describe the group | | |
| VersionID | (Attribute) | SET_BY_PGE | | |
| abstract | (Attribute) | The ICESat-2 ATL14 standard data product reports a high resolution (100 m) digital elevation model (DEM) which is a spatially continuous view of surface height for the ice sheet. | | |
| characterSet | (Attribute) | utf8 | | |
| creationDate | (Attribute) | 2021-11-23 | | |
| credit | (Attribute) | The software that generates the ATL14 product was designed and implemented within the ICESat-2 Science Investigator-led Processing System at the NASA Goddard Space Flight Center in Greenbelt, Maryland. | | |
| fileName | (Attribute) | ATL14_CN_0311_100m_001_01.nc | | |
| language | (Attribute) | eng | | |
| originatorOrganizationName | (Attribute) | GSFC I-SIPS > ICESat-2 Science Investigator-led Processing System | | |
| purpose | (Attribute) | The purpose of ATL14 is to provide an IceSat-2 gridded satellite summary of heights of land-based ice. | | |
| shortName | (Attribute) | ATL14 | | |
| spatialRepresentationType | (Attribute) | along-track | | |
| status | (Attribute) | onGoing | | |
| topicCategory | (Attribute) | geoscientificInformation | | |
| uuid | (Attribute) | 48b04528-981a-48c4-a104-26cfb4de72ff | | |
| **Group: /METADATA/Extent** | | Describe the group | | |
| eastBoundLongitude | (Attribute) | [-62.10272897] | | |
| northBoundLatitude | (Attribute) | [85.20242531] | | |
| rangeBeginningDateTime | (Attribute) | 2019-03-29T11:09:16.295287Z | | |
| rangeEndingDateTime | (Attribute) | 2021-06-23T10:51:09.697181Z | | |
| southBoundLatitude | (Attribute) | [70.58233402] | | |
| westBoundLongitude | (Attribute) | [-127.0928373] | | |
| **Group: /METADATA/Lineage** | | Describe the group | | |
| **Group: /METADATA/Lineage/ANC19** | | Describe the group | | |
| description | (Attribute) | TAI to UTC leapsecond file retrieved from ftp://maia.usno.navy.mil/ser7/tai-utc.dat | | |
| fileName | (Attribute) | SET_BY_PGE | | |
| shortName | (Attribute) | SET_BY_PGE | | |
| uuid | (Attribute) | SET_BY_PGE | | |
| version | (Attribute) | SET_BY_PGE | | |
| **Group: /METADATA/Lineage/ANC36-14** | | Describe the group | | |
| description | (Attribute) | ISO 19139 XML file containing Series-level metadata information. | | |
| fileName | (Attribute) | DsESDTAtATL14.001.series.xml | | |
| shortName | (Attribute) | ANC36-14 | | |
| uuid | (Attribute) | 5BFCCB48-D68E-4897-92C6-389DE6A1C32B | | |
| version | (Attribute) | 001 | | |
| **Group: /METADATA/Lineage/ANC38-14** | | Describe the group | | |
| description | (Attribute) | ISO 19139 XML file containing DataSet-level metadata information. | | |
| fileName | (Attribute) | DsESDTAtATL14.001.dataset.xml | | |
| shortName | (Attribute) | ANC38-14 | | |
| uuid | (Attribute) | 95BF65A6-F1E7-445E-9E94-ADD030917038 | | |
| version | (Attribute) | 001 | | |
| **Group: /METADATA/Lineage/ATL11** | | Describe the group | | |
| description | (Attribute) | ATLAS/L3B Land Ice Height | | |

| Label | Datatype(Dims) Fillvalue | long_name standard_name | units | description |
|---|---|---|---|---|
| end_cycle | (Attribute) | SET_BY_PGE | | |
| end_geoseg | (Attribute) | SET_BY_PGE | | |
| end_orbit | (Attribute) | SET_BY_PGE | | |
| end_region | (Attribute) | SET_BY_PGE | | |
| end_rgt | (Attribute) | SET_BY_PGE | | |
| fileName | (Attribute) | SET_BY_PGE | | |
| shortName | (Attribute) | SET_BY_PGE | | |
| start_cycle | (Attribute) | SET_BY_PGE | | |
| start_geoseg | (Attribute) | SET_BY_PGE | | |
| start_orbit | (Attribute) | SET_BY_PGE | | |
| start_region | (Attribute) | SET_BY_PGE | | |
| start_rgt | (Attribute) | SET_BY_PGE | | |
| uuid | (Attribute) | SET_BY_PGE | | |
| version | (Attribute) | SET_BY_PGE | | |
| **Group: /METADATA/Lineage/Control** | | Describe the group | | |
| description | (Attribute) | Text-based keyword=value file generated automatically within the ICESat-2 data system that specifies all of the conditions required for each individual run of the software. | | |
| fileName | (Attribute) | SET_BY_PGE | | |
| shortName | (Attribute) | SET_BY_PGE | | |
| version | (Attribute) | SET_BY_PGE | | |
| **Group: /METADATA/ProcessStep** | | Describe the group | | |
| **Group: /METADATA/ProcessStep/Browse** | | Describe the group | | |
| identifier | (Attribute) | SET_BY_PGE | | |
| processDescription | (Attribute) | Browse processing is performed for each granule SIPS produces. The browse utility reads data from the granule and produces browse images as defined in the respective product ATBD. The utility then embeds each browse image into the product within the /Browse group. | | |
| runTimeParameters | (Attribute) | SET_BY_PGE | | |
| softwareDate | (Attribute) | SET_BY_PGE | | |
| softwareTitle | (Attribute) | SET_BY_PGE | | |
| softwareVersion | (Attribute) | SET_BY_PGE | | |
| stepDateTime | (Attribute) | SET_BY_PGE | | |
| **Group: /METADATA/ProcessStep/Metadata** | | Describe the group | | |
| identifier | (Attribute) | atlas_meta | | |
| processDescription | (Attribute) | Metadata information is processed by the metadata utility for each granule produced by SIPS. During PGE processing, dynamic metadata are written to the product. Additional static information is provided with the metadata template. The metadata utility reads ISO Dataset and Series metadata files and updates the product with static information from within those files. The utility then merges the static and dynamic metadata to creates output ISO19139 Dataset and Series XML files. Finally the utility reads the ISO19139 Dataset and Series XML files into memory and stores the textual representations as attributes attached to the /METADATA group. | | |
| runTimeParameters | (Attribute) | ATL14_CN_0311_100m_001_01.ctl | | |
| softwareDate | (Attribute) | Nov 18 2021 | | |
| softwareTitle | (Attribute) | Creates ATLAS XML metadata files | | |
| softwareVersion | (Attribute) | Version 5.0 | | |
| stepDateTime | (Attribute) | 2021-11-29T13:41:02.000000Z | | |
| **Group: /METADATA/ProcessStep/PGE** | | Describe the group | | |
| ATBDDate | (Attribute) | 12/04/2019 | | |
| ATBDTitle | (Attribute) | Algorithm Theoretical Basis Document (ATBD) For Sea Ice Products | | |
| ATBDVersion | (Attribute) | N/A | | |
| documentDate | (Attribute) | Feb 2020 | | |
| documentation | (Attribute) | ATLAS Science Algorithm Software Design Description (SDD) - Volume 14 (atlas_l3b_is) | | |
| identifier | (Attribute) | SET_BY_PGE | | |
| processDescription | (Attribute) | Computes estimates of daily and monthly average of freeboard heights. | | |
| runTimeParameters | (Attribute) | SET_BY_PGE | | |
| softwareDate | (Attribute) | SET_BY_PGE | | |
| softwareTitle | (Attribute) | SET_BY_PGE | | |
| softwareVersion | (Attribute) | SET_BY_PGE | | |
| stepDateTime | (Attribute) | SET_BY_PGE | | |
| **Group: /METADATA/ProcessStep/QA** | | Describe the group | | |
| identifier | (Attribute) | atl14_qa_util | | |
| processDescription | (Attribute) | QA processing is performed by an external utility on each granule produced by SIPS. The utility reads the granule, performs both generic and product-specific quality-assessment calculations, and writes a text-based quality assessment report. The name and creation data of this report are identified within the QADatasetIdentification metadata | | |
| runTimeParameters | (Attribute) | ATL14_CN_0311_100m_001_01.ctl | | |
| softwareDate | (Attribute) | Nov 23 2021 | | |
| softwareTitle | (Attribute) | ATL14 QA Utility | | |
| softwareVersion | (Attribute) | Version 1.0 | | |
| stepDateTime | (Attribute) | 2021-11-29T13:41:03.000000Z | | |
| **Group: /METADATA/ProductSpecificationDocument** | | Describe the group | | |
| ShortName | (Attribute) | ATL14_SDP | | |
| characterSet | (Attribute) | utf8 | | |
| edition | (Attribute) | v1.0 | | |
| language | (Attribute) | eng | | |
| publicationDate | (Attribute) | Feb 2020 | | |
| title | (Attribute) | ICESat-2-SIPS-SPEC-4268 - ATLAS Science Algorithm Standard Data Product (SDP) Volume 13 (ATL14). Revision -. | | |
| **Group: /METADATA/QADatasetIdentification** | | Describe the group | | |
| abstract | (Attribute) | An ASCII product that contains statistical information on data product results. These statistics enable data producers and users to assess the quality of the data in the data product granule | | |
| creationDate | (Attribute) | 2021-11-29T13:41:03.000000Z | | |
| fileName | (Attribute) | ATL14_CN_0311_100m_001_01.nc.qa | | |
| **Group: /METADATA/SeriesIdentification** | | Describe the group | | |
| VersionID | (Attribute) | SET_BY_PGE | | |
| abstract | (Attribute) | The ICESat-2 ATL14 standard data product reports a high resolution (100 m) digital elevation model (DEM) which is a spatially continuous view of surface height for the ice sheet. | | |
| characterSet | (Attribute) | utf8 | | |
| credit | (Attribute) | The software that generates the ATL14 product was designed and implemented within the ICESat-2 Science Investigator-led Processing System at the NASA Goddard Space Flight Center in Greenbelt, Maryland. | | |
| format | (Attribute) | HDF | | |
| formatVersion | (Attribute) | 5 | | |
| identifier_product_DOI | (Attribute) | doi:10.5067/ATLAS/ATL14.001 | | |
| language | (Attribute) | eng | | |
| longName | (Attribute) | ATLAS/ICESat-2 L3B Land Ice Height | | |
| maintenanceAndUpdateFrequency | (Attribute) | asNeeded | | |
| maintenanceDate | (Attribute) | SET_BY_META | | |
| mission | (Attribute) | ICESat-2 > Ice, Cloud, and land Elevation Satellite-2 | | |
| pointOfContact | (Attribute) | NSIDC DAAC > NASA National Snow and Ice Data Center Distributed Active Archive Center | | |
| purpose | (Attribute) | The purpose of ATL14 is to provide an IceSat-2 gridded satellite summary of heights of land-based ice. | | |
| resourceProviderOrganizationName | (Attribute) | National Aeronautics and Space Administration (NASA) | | |
| revisionDate | (Attribute) | 2021-06-07 | | |
| shortName | (Attribute) | ATL14 | | |
| status | (Attribute) | onGoing | | |
| topicCategory | (Attribute) | geoscientificInformation | | |
| **Group: /orbit_info** | | | | |
| Label (Layout) | Datatype(Dims) Fillvalue | long_name standard_name | units | description |
| bounding_polygon_dim1 CONTIGUOUS | INTEGER(4) -2147483647 | None None | None | None (Source: None) |
| _Netcdf4Dimid | (Attribute) | 5 | | |
| bounding_polygon_lat1 CONTIGUOUS | FLOAT(4) 9.969209968386869e+36 | None None | None | None (Source: None) |
| _Netcdf4Dimid | (Attribute) | 5 | | |
| bounding_polygon_lon1 CONTIGUOUS | FLOAT(4) 9.969209968386869e+36 | None None | None | None (Source: None) |
| _Netcdf4Dimid | (Attribute) | 5 | | |
| **Group: /quality_assessment** | | | | |
| Label (Layout) | Datatype(Dims) Fillvalue | long_name standard_name | units | description |
| phony_dim_1 CONTIGUOUS | None(1) None | None None | None | None (Source: None) |
| _Netcdf4Dimid | (Attribute) | 4 | | |
| qa_granule_fail_reason CONTIGUOUS | INTEGER(1) -2147483647 | None None | None | None (Source: None) |
| _Netcdf4Dimid | (Attribute) | 4 | | |

| Label (Layout) | Datatype(Dims) Fillvalue | long_name standard_name | units | description |
|---|---|---|---|---|
| qa_granule_pass_fail CONTIGUOUS | INTEGER(1) -2147483647 | None None | None | None (Source: None) |
| _Netcdf4Dimid | (Attribute) | 4 | | |

| **Group: /tile_stats** | | | | |
|---|---|---|---|---|

| Label (Layout) | Datatype(Dims) Fillvalue | long_name standard_name | units | description |
|---|---|---|---|---|
| N_bias CHUNKED | INTEGER(:,:) INVALID_I4B | N_bias None | counts | number of bias values solved for (Source: 4.1.2.1) |
| _Netcdf4Coordinates | (Attribute) | [0 1] | | |
| _Netcdf4Dimid | (Attribute) | 0 | | |
| datatype | (Attribute) | int32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| N_data CHUNKED | INTEGER(:,:) INVALID_I4B | N_data None | counts | number of data used in fit (Source: 4.1.2.1) |
| _Netcdf4Coordinates | (Attribute) | [0 1] | | |
| _Netcdf4Dimid | (Attribute) | 0 | | |
| datatype | (Attribute) | int32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| RMS_bias CHUNKED | FLOAT(:,:) INVALID_R4B | RMS_bias None | meters | root mean of squared, scaled bias values (Source: 4.1.2.1) |
| _Netcdf4Coordinates | (Attribute) | [0 1] | | |
| _Netcdf4Dimid | (Attribute) | 0 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| RMS_d2z0dx2 CHUNKED | FLOAT(:,:) INVALID_R4B | RMS_d2z0dx2 None | meters^-1 | root mean square of the constraint equation residuals for the second spatial derivative of z0 (Source: 4.1.2.1) |
| _Netcdf4Coordinates | (Attribute) | [0 1] | | |
| _Netcdf4Dimid | (Attribute) | 0 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| RMS_d2zdt2 CHUNKED | FLOAT(:,:) INVALID_R4B | RMS_d2zdt2 None | meters years^-2 | root mean square of the constraint equation residuals for the second temporal derivative of dz (Source: 4.1.2.1) |
| _Netcdf4Coordinates | (Attribute) | [0 1] | | |
| _Netcdf4Dimid | (Attribute) | 0 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| RMS_d2zdx2dt CHUNKED | FLOAT(:,:) INVALID_R4B | RMS_d2zdx2dt None | meters^-1 years^-1 | root mean square of the constraint equation residuals for the second temporal derivative of dz/dt (Source: 4.1.2.1) |
| _Netcdf4Coordinates | (Attribute) | [0 1] | | |
| _Netcdf4Dimid | (Attribute) | 0 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| RMS_data CHUNKED | FLOAT(:,:) INVALID_R4B | RMS_data None | meters | root mean of squared, scaled data misfits (Source: 4.1.2.1) |
| _Netcdf4Coordinates | (Attribute) | [0 1] | | |
| _Netcdf4Dimid | (Attribute) | 0 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| sigma_tt CHUNKED | FLOAT(:,:) INVALID_R4B | sigma_tt None | meters years^-2 | weighting values for the constraint equations on the second temporal derivatives of the surface height (Source: 4.1.2.1) |
| _Netcdf4Coordinates | (Attribute) | [0 1] | | |
| _Netcdf4Dimid | (Attribute) | 0 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| sigma_xx0 CHUNKED | FLOAT(:,:) INVALID_R4B | sigma_xx0 None | meters^-1 | weighting values for the constraint equations on the second spatial derivatives of the DEM (Source: 4.1.2.1) |
| _Netcdf4Coordinates | (Attribute) | [0 1] | | |
| _Netcdf4Dimid | (Attribute) | 0 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| sigma_xxt CHUNKED | FLOAT(:,:) INVALID_R4B | sigma_xxt None | meters^-1 years^-1 | weighting values for the constraint equations on the second spatial derivatives of the height-change rate (Source: 4.1.2.1) |
| _Netcdf4Coordinates | (Attribute) | [0 1] | | |
| _Netcdf4Dimid | (Attribute) | 0 | | |
| datatype | (Attribute) | float32 | | |
| dimensions | (Attribute) | y, x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| x CHUNKED | DOUBLE(:) INVALID_R8B | x None | meters | tile-center x-coordinate, in projected coordinates (Source: 4.1.2.1) |
| _Netcdf4Dimid | (Attribute) | 1 | | |
| datatype | (Attribute) | float64 | | |
| dimensions | (Attribute) | x | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |
| y CHUNKED | DOUBLE(:) INVALID_R8B | y None | meters | tile-center y-coordinate, in projected coordinates (Source: 4.1.2.1) |
| _Netcdf4Dimid | (Attribute) | 0 | | |
| datatype | (Attribute) | float64 | | |
| dimensions | (Attribute) | y | | |
| grid_mapping | (Attribute) | Polar_Stereographic | | |