ICESAT/GLAS
Science Computing Facility

File Naming Conventions Document

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1. The mSCF File Naming Convention

The names of the files at the mSCF will be dependent on the I-SIPS naming convention. The I-SIPS file naming convention is as follows:

GLAxx_ymm_prkk_ccc_tttt_s_nn_ffff.eee
where

- xx = Type ID number
- y = "Y" code that indicates calibration levels of POD and PAD. Refer to the "YXX Release Number Convention Document" for details.
- mm = Release number for GSAS version that created the product.
- p =Repeat ground track phase
- r= Reference orbit number
- kk=instance # incremented every time we enter a different reference orbit
- ccc = Cycle (000-999)
- tttt = Track (0000-2600)
- s = Segment, (0=none, 1-4 correspond to 50° lat/lon breaks)
- nn = granule version number (the number of times this granule is created for a specific release)
- ffff =file type. (numerical, CCB assigned for multiple files as needed for data of same time period for a specific HHHxx, i.e. multi-file granule)
- eee = file extension- dat for GLA01-15; qap for corresponding qap file; hdf for HDF browse packages; png for corresponding non-hdf browse files; vav for corresponding validation and verification file; met for metadata files

There are 4 segments in a track. The first one is from latitude 50 degrees towards the north to latitude 50 degrees moving south. The second one is from 50 degrees to –50 degrees. The third one is from –50 degrees to –50 degrees. The last one is from –50 degrees to 50 degrees.

The multiple .png file for GLA01, 02, 03 and 05-15 will use the ffff to denote the different files.

For the consolidated HDF browse product, one per GLAxx product file, the format is:

GLAxx _ymm_prkk_ccc_tttt_s_nn_dddd_ffff.eee

Where dddd = brws and eee = hdf.

For files that are exact duplicates of the I-SIPS files, i.e. the GLAS standard data products and the browse products, the name will be the I-SIPS name with the extension eee removed and "P" and PID appended.

Where

- PID is the unique product set ID of the format Pnnnn where nnnn is a unique number identifying that product set formed by incrementing the previous product set PID by one.

The Data base tables will be named as follows:

- pass table - same as the corresponding GLAS standard data product name with the GLA changed to PS and appended with PID
- Unique_rec_index table - same as the corresponding GLAS standard data product name with the GLA changed to UR and appended with PID

- Bin tables – same as the corresponding GLAS standard data product name with the GLA changed to BNA for altimetry products (GLA01,3-6,12-15) or BNL for lidar products (GLA02, 7-11) and appended with PID
- Georeference table - same as the corresponding Bin table name

2. The rSCF File Naming Convention

The rSCF file naming convention is as follows:

- GLAS standard data products - GLAxx_yymmddhh_tiiii_rww_lll.Pnnnn_pp_vv
- Intermediate QA product – GLAxx_yymmddhh_tiiii_rww_lll.Pnnnn_pp_vv.QAP
- Browse products – GLAxx_yymmddhh_tiiii_rww_lll.Pnnnn_pp_vv_ffff.png
- Bin table - BNzxx_yymmddhh_tiiii_rww_lll.Pnnnn_pp_vv
- Georeference table - GRzxx_ yymmddhh_tiiii_rww_lll.Pnnnn_pp_vv
- Pass table - PSxx_ yymmddhh_tiiii_rww_lll.Pnnnn_pp_vv
- Unique_rec_index table - URxx_ yymmddhh_tiiii_rww_lll.Pnnnn_pp_vv

Where

xx = GLAS Standard data product number (1-15)
yymmddhh -
For subscription data: date of the first data received from I-SIPS in the 14 rev product set
For special request data: date of the beginning of the first granule that is used to create the subset
t=type of request; s for subscription, r for special request
iiii is the subscription number or special request number
r = is the POD/PAD "Y" code of the first input file in the subsetted file. Refer to the "YXX Release Number Convention Document" for details.
ww is the GSAS release number of the first input file in the subsetted file.
lll is the laser campaign; i.e. L1A, L2A, L2B, etc.
Pnnnn – unique product set ID number, PID
ffff – file number to account for multi-file browse products
pp – part number of product file so multiple files can be created if a single file will exceed the 2 GB file size limit
vv- version of this file starting at 00
z- A for altimetry or L for lidar
png – indicates PNG file

Note for quick-look products: If the products were expedited by I-SIPS due to a quick-look request, then "ql" will appear in the names of all the files in the product set after the laser campaign and before the "." (i.e. GLAxx_yymmddhh_tiiii_rww_lllql.Pnnnn_pp_vv).

For subscriptions, the PID will be the same as for the corresponding I-SIPS files used to fulfill the subscription. For special requests, the PID will be unique.

If a data product file is calculated to exceed the 2 GB file size limit, it will divided into separate product files with incrementing part numbers.

Header records in each GLAS standard data product file will list the specific input parameters used to fill the request, and the I-SIPS input files used so the user can keep track of what I-SIPS versions went into each data set.

3. Definition of Orbit parameters

Pass ID = prkkccctttt

Where

p = Repeat ground track phase
p = 1 for 8-day
p = 2 for 91-day
p = 3 for transfer orbit

Reference orbit number, r
This number, r, will start at 1 and increment each time we receive a new reference orbit groundtrack file

Instance # kk, kk will increment by one every time we change from one reference orbit to another one.

Cycle, ccc, the cycle number will restart at 1 every time the instance number, kk, changes. The cycle number will then increment within the instance every time track 1 for that orbit is reached. Note that most instances will begin in an arbitrary track (not 1) because of how we are numbering the tracks.

Track, tttt, Tracks are defined from a reference orbit. Each track begins and ends at the ascending equator crossing. Tracks will be numbered such that track number one is the closest track to Greenwich from the east and then contiguous in time after that. For transfer orbits, for which we have no predefined reference orbit, track 1 is the first track for which we have data for that instance, k.

Repeat ground track phase, p	Ref orbit #	Instance	Beg time mm/dd/yyyy hhmmss	End time	Beg track #	# tracks per cycle	Beg rev #	Track file name
1	1	1	1/20/2002 011540	8/1/2002 194302	50	121	1	Tf1
3	2	2	8/1/2002 194302	8/2/2002 062130	1		2380	Tf2
2	3	3	8/2/2002 062130	8/2/2004 032458	1200	2200	2396	Tf3
3	4	4	8/2/2004 032458	8/3/2004 201408	1		13013	Tf4
1	5	5	8/3/2004 201408	9/3/2004 221506	43	121	13028	Tf5
3	6	6	9/3/2004 221506	9/5/2004 051358	1		13178	Tf6
2	3	7	9/5/2004 051358	1/6/2007 221345	534	2200	13207	Tf3

The above table shows what may happen for this mission. The altimeter is turned on after we have achieved the 8-day cal/val groundtrack, so this is p=1, r=1, kk=1, and we use track file tf1 to define track numbers for this. On 8/1/2002 at 194302 we are no longer within the tolerance of that reference orbit as defined by UTCSR and we are in a transfer orbit, so p=3, r=2, and instance,kk=2. Then when we get to within tolerance of our 91-day mission groundtrack, p=2, r=3, kk=3. Then we decide to transfer to an 8-day repeat on 8/3/2004 but it is not the same groundtrack as the cal/val 8-day repeat, so for the transfer orbit, p=3,r=4,kk=4 and for the new 8-day repeat starting on 9/3/2004, p=1,r=5,kk=5. We then go through another transfer orbit, p=3,r=6,kk=6, and return to the mission 91 day repeat, so p=2,r=3,kk=7 until the instrument is turned off.