

Format of Common Data Base

Wolfgang Wagner, DLR-HF
November 19, 1999
Revised November 23, 1999

1. *Introduction*

As you know I have volunteered to make the plots for all test sites. In order to do this with IDL routines for the entire data base, all data must have the same format and the same meta data information.

When you generate the data files for our common data base, please follow the rules laid out below. Obviously, for your extended analysis of your own test sites, you will include a number of additional forest parameters, but as agreed, for the common data base analysis only land cover and growing stock volume are considered.

2. *General structure of files*

Please always generate CSV data files, i.e. the data fields should be separated by a ";". Floating point numbers should have the format "23.34" and not "23,34". For example, one line could look like:

```
252228041131;113;1;935;28;1101;10;0.1398;0.0451;0.1064;0.0334;0.1554
```

I hope that nobody has problems with that. Otherwise we could use a TAB as separator.

3. *Number of pixels*

Please include in the data base all polygons with a number of pixels ≥ 20 .

4. *Missing value*

Do not omit data fields for which you have no data, rather use "-9999" to indicate that data are missing.

5. What data should one data file contain?

Each data file should contain data from one test site from one of the forest enterprise study areas for one ERS image triplet. If for example, a test site is covered by two ERS scenes generate two data files.

6. Metadata information

For each data file please provide the following metadata information:

- Name of forest Enterprise
- Test site number within forest enterprise study area starting with 1 for the first test site. For example, in the Bolshemurtinskii study area there are four test sites. In this example we numbered the test sites according to our own choice with 1, 2, 3, or 4.
- Longitude of approximate location of the centre of test site
- Latitude of approximate location of the centre of test site
- Name of responsible partner, i.e. DLR-HF, CESBIO, SCEOS, UWS, or NERC
- Track of ERS
- Frame of ERS
- Product type: GEC or GTC
- RSP Number of (right hand side) JERS track
- If applicable RSP Number of left hand side JERS track (if the test area defined by the overlap of the test site area and the ERS scene is covered by a second JERS track)

For example, one line could look like:

Bolshemurtinskii;2;92.30;57.15;DLR-HF;348;2457;GTC;-9999;-9999

Remark: Providing track and frame number of the ERS scene is enough for me to know also orbit number and acquisitions dates etc.. The same applies to JERS RSP numbers

The name of the file containing the meta data information will be "meta_db.csv"

7. Data file format

The name of each data file should be: "forest_enterprise-test_site_number-track-frame.csv". For example: "bolshemurtinskii-1-348-2457.csv".

Omit polygons for which neither ERS nor JERS data are available.

Each line contains the following fields separated by a ";":

- Unique number
- GIR: forest district

- KV: kvartal
- SKNR: stand
- Area in ha
- ZK: land category
- TUR1H: growing stock volume in m³/ha
- Number of pixels (only ≥ 20)
- local incidence angle (degree) (in case of a GEC -9999)
- ERS Int1 mean: Mean of ERS-1 tandem pair image in m²m⁻²
- ERS Int1 stdev
- ERS Int2 mean: Mean of ERS-2 tandem pair image in m²m⁻²
- ERS Int2 stdev
- ERS Int3 mean: mean of third image in m²m⁻²
- ERS Int3 stdev
- ERS Coherence 20 pixels mean
- ERS Coherence 20 pixels stdev
- ERS Coherence 80 pixels mean
- ERS Coherence 80 pixels stdev
- JERS Int1 mean: Mean of first JERS image in m²m⁻²
- JERS Int1 stdev
- JERS Int2 mean: Mean of first JERS image in m²m⁻² (If applicable, otherwise -9999)
- JERS Int2 stdev (If applicable, otherwise -9999)
- JERS Coherence mean (If applicable, otherwise -9999)
- JERS Coherence stdev (If applicable, otherwise -9999)
- Strange Flag: 0 = nothing strange, 1 = something is strange