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**COPS, GOP and D-PHASE**  
**Joint Data Archive**  
**at**  
**WDCC**  
(World Data Center Climate)



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**Model&Data (M&D)**



## Status of joint data archive

Successfully archived:

- ~13 TB D-PHASE model data  
ready for download at  
<http://cera.wdc-climate.de>

Ongoing/expected:

- ~ 7 TB COPS/GOP observation data
- + X PQP 3 Higher value data products

**Common data policy for COPS/GOP/D-PHASE is applied**





## Lessons learnt from D-PHASE data management

- Dense and sophisticated **upload survey**:
  - succeeded in „close to operational“ archiving mode.
- High performance **time gap warning and feedback control**:
  - resulted in time series as complete as possible.
  - permanent gaps exclusively due to forecast system failures,  
no gaps due to transfer failures.



**Meta data description needed  
well before data upload**

**Meta data descriptions are  
**essential**  
for long term archiving!**

**Strict technical priorities in upload data management:**

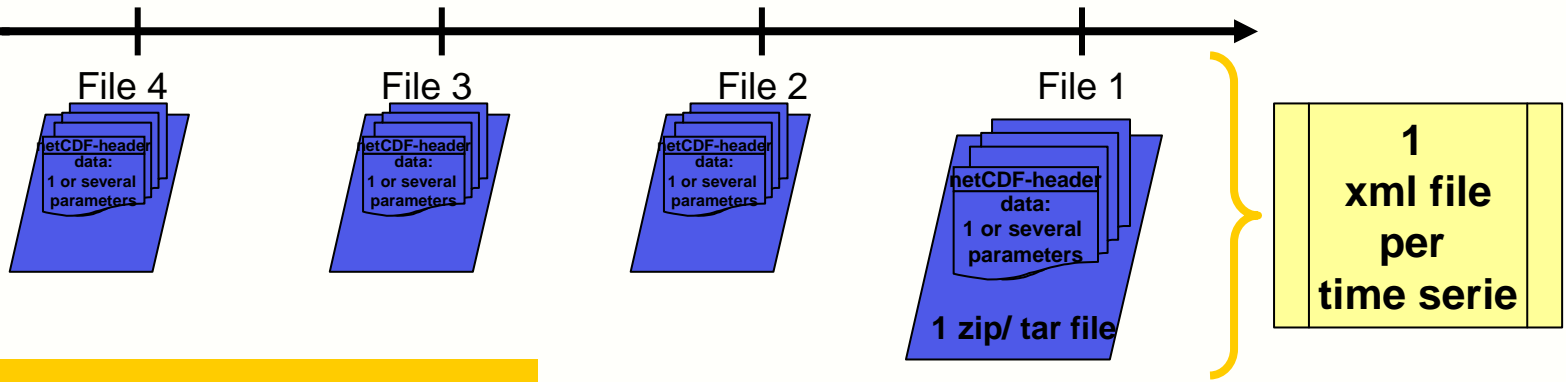
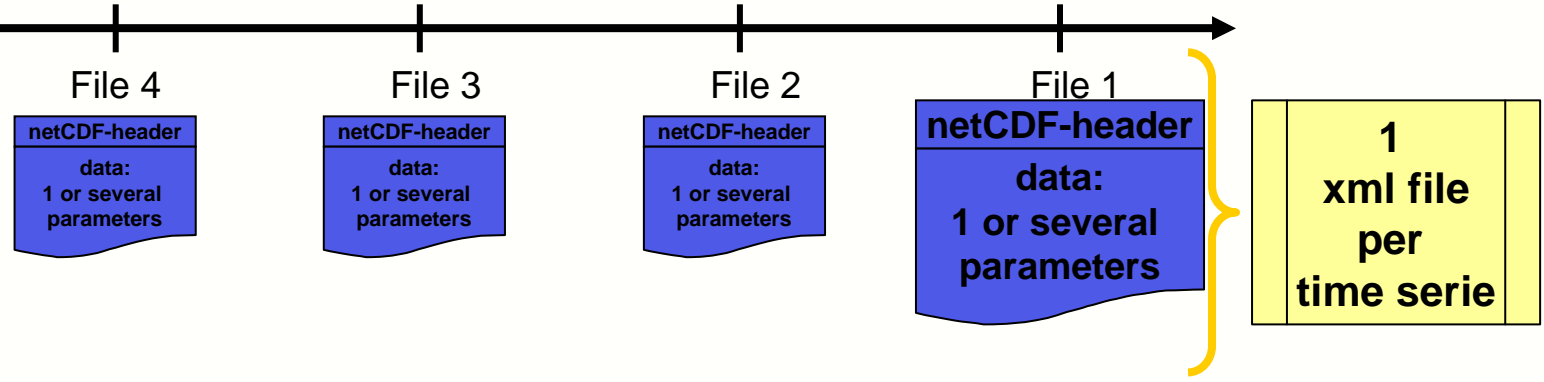
- 1) **meta data** is needed **before** data upload  
(to prepare space and tables in data base)
- 2) only then:  
user account is provided and  
access to upload area is opened



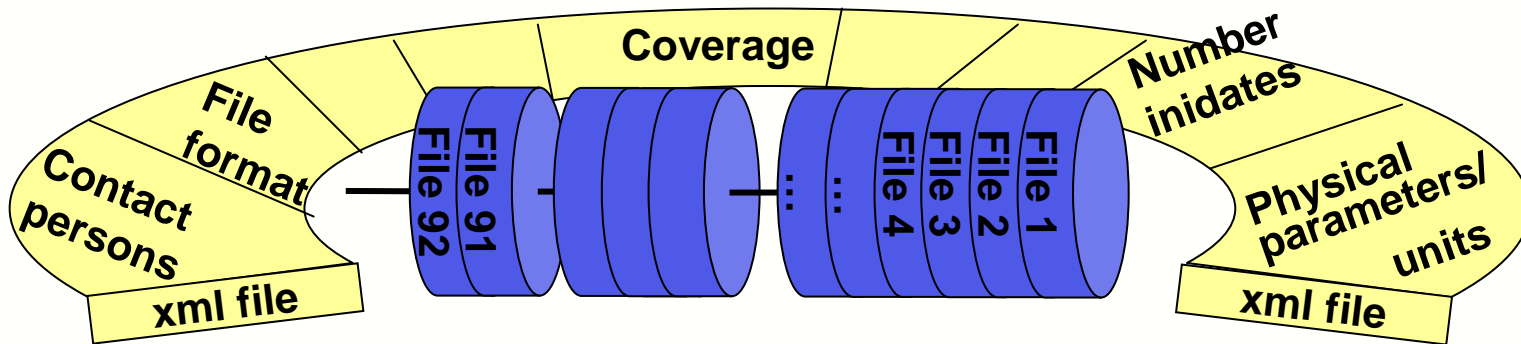
# Upload data time series:

$\Delta T = \text{granularity}$

Meta data description for each time series of data



# Time series in data base:





## Which set of measured **parameters** shall be **archived**?

- is **defined by data providers** themselves
- should be coordinated by the PI's of the instruments/groups
- which higher level data products in PQP3?

### Remember to:

- find a **common structure / parameter set**
  - together with similar groups/instruments
  - advantage for verification, assimilation groups etc.
- find **common names of the physical parameters**
  - follow CF-convention wherever possible
  - advantage for verification and assimilation groups etc.



**Guidelines from archive team  
and COPS coordinators**



- **File size:** single upload files < 1 GB
- **File names:** see `general_info.pdf` at <http://cops.wdc-climate.de>
- **Maximum time span:** 1 day per upload file
  - results in 92 files or more for COPS period
  - 1 data file covering the whole COPS period ? NO.
  - smaller granularities allowed (...12h, 6h, 3h, 1h)
- Use common missing value =  $-9e^{+33}$  (float, not character)
- Use common **time stamp definition** for time variable:
  - **double precision** (allows precision up to milliseconds)
  - **units = seconds since 1970-01-01 00:00 0:00 UTC**
    - this is not the AMF-method !



**Take the advantage now!**

**We ask every data provider to get in contact with us  
as soon as possible !!!**

**Dead line for data upload: 31-March-2008**

**Meta data tool:**

**Advise is given during the breaks of this workshop !!!**

**Thanks for your attention!**

