

# CEOP Model Output Data at WDC-Climate

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## GRID data

- available as raw data from WDC-Climate DB (as far as we got it)

## MOLTS data

- ECPC as NetCDF available from WDC-Climate DB
- ECMWF, NCEP, UKMO  
conversion ASCII → NetCDF started (thanks to Beate! GKSS)
- data from other NWP: in progress

Received until now:

- only JMA data – well fitting the format agreements
- available from WDC-Climate DB  
Jan 2007 to Jun 2008
- Information: [ceop.wdc-climate.de](http://ceop.wdc-climate.de)
- Download: get account &  
goto [cera.wdc-climate.de](http://cera.wdc-climate.de)



## MODEL & DATA

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## CEOP Phase II

### The structure of the model output

For CEOP Phase II WDC-Climate proposes a more homogeneous [PDF](#) data structure for gridded data and MOLTS. The WMO-GRIB format is used for the gridded data. MOLTS can be stored in NetCDF-CF format as an [example header](#) of JMA data shows. Find a set of example NetCDF files (Also JMA) here: [\(tar\) example](#). The tarball contains 4 NetCDF files for one day with the 12:00 file containing 72 forecast steps. The [PDF](#) Stationlist list of the station names with proposals for changes.

### MOLTS

The Information of the MOLTS (Model Output Location TimeSeries) is available as a [PDF](#) map and as a [PDF](#) list as well.

### Data Sets included into the CERA Database

Center	MOLTS Data	GRID DATA
JMA	1-JAN-2007 - 30-JUN-2008	1-JAN-2007 - 30-JUN-2008

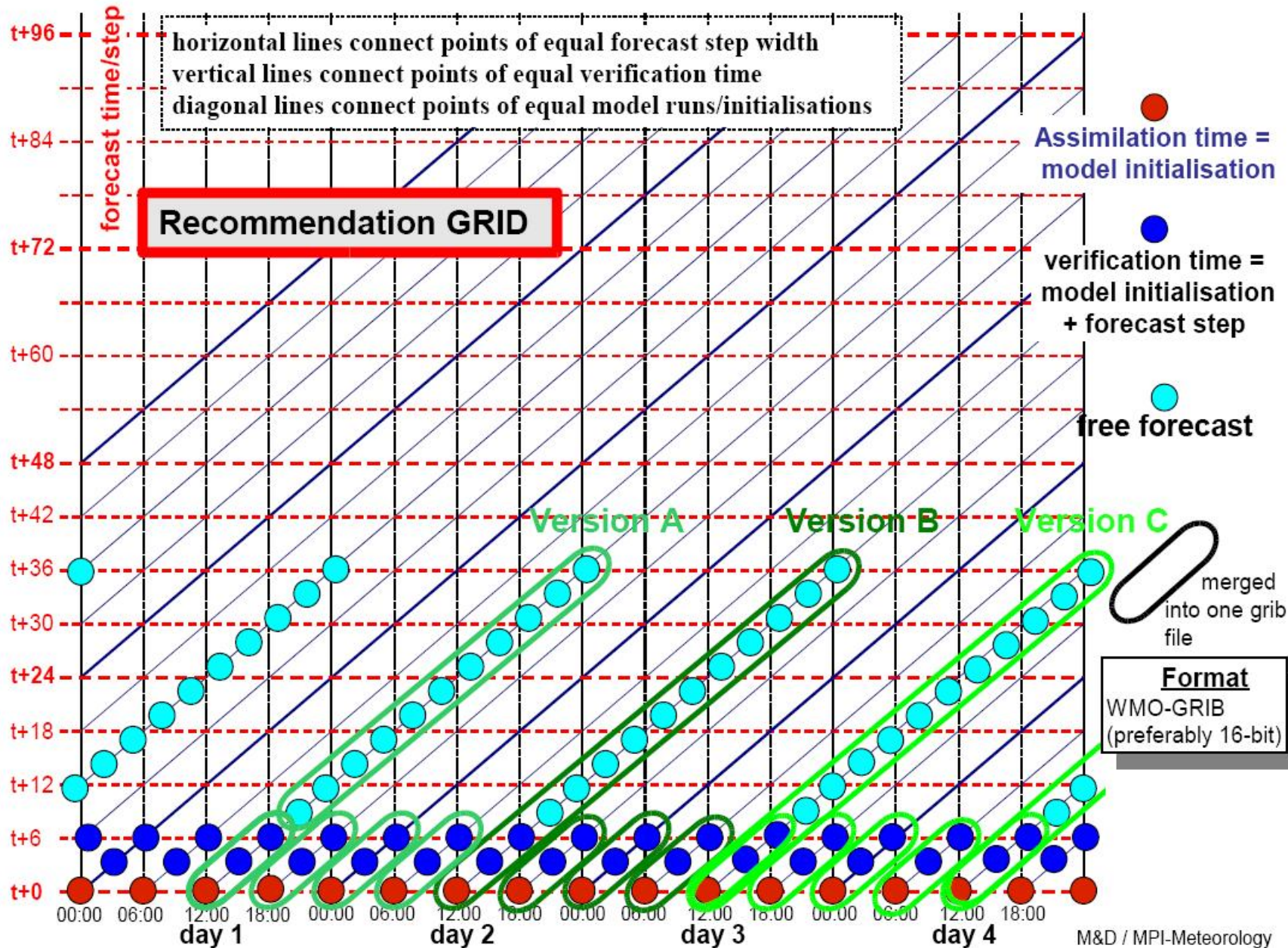
### Data size

Currently the data base contains **618.6 GByte** of data.

latest update: 2008-08-20 15:37







## GRID data

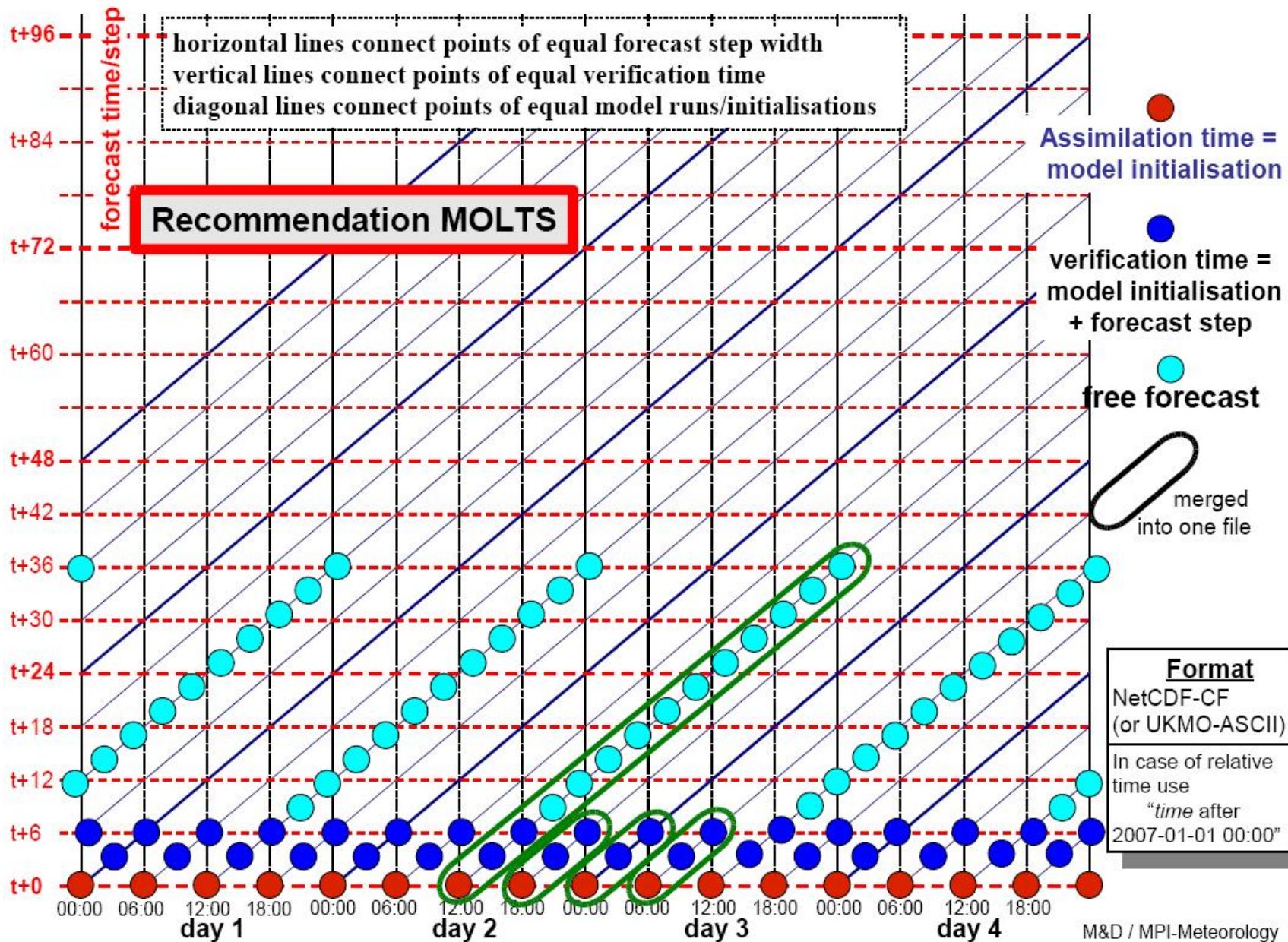
- can be ingested into DB  
*time step by time step*

## MOLTS data

- increased number of stations  
→ need for data homogenisation

handling, processing, comparison is easier!





Thank you!

Questions?





# CEOP



Data Timeline

CEOP data		2001			2002			2003			2004			included	Size									
16-JAN-2008		7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12					
		Prelim												Building phase			1. Annual Cycle			2. Annual Cycle				
NCEP	GRID																			-> JUN-2005	574.2 GB			
	MOLTS																			-> JUN-2005	5.4 GB			
	CDAS_GRID																				7.4 GB			
	CDAS_MOLTS																							
UKMO	GRID																			***	558.6 GB			
	MOLTS																				9.7 GB			
JMA	GRID																				465.7 GB			
	MOLTS																				15 GB			
ECMWF	GRID																				42.9 GB			
	MOLTS																							
ECPC	SFM_GRID																				1282 GB			
	SFM_MOLTS																				12.2 GB			
	RII_GRID																				1282 GB			
	RII_MOLTS																				12.2 GB			
	RSM/ICTS																				8.9 GB			
BMRC	GRID																				1.8 GB			
	MOLTS																				14.3 GB			
NASA/GMAO	GRID																				0.1 GB			
	MOLTS																				215.3 GB			
NASA/GLDAS	GRID																				0.2 GB			
	MOLTS																				20.5 GB			
NCMRWF	GRID																				160.2 GB			
	MOLTS																				0.05 GB			
CPTEC/INPE	GRID																				946.5 GB			
	MOLTS																				0.6 GB			
MSC	GRID																							
	MOLTS																							
EMC	GRID																							
	MOLTS																							

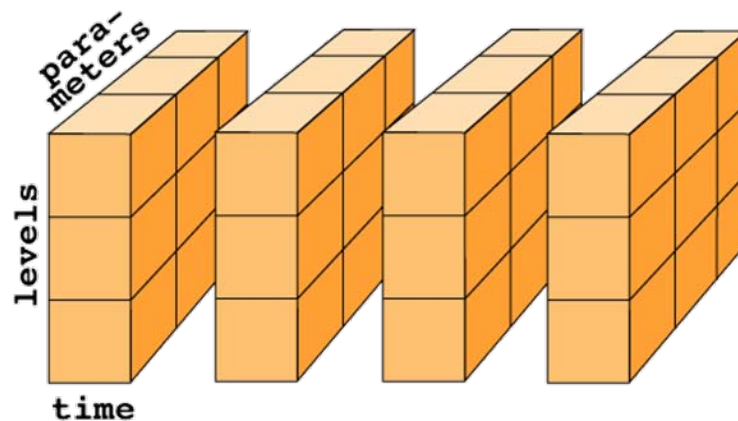
■ Gridded data     
 ■ MOLTS data     
 ■ WTF – tables  
■ Data partially included  
■ Data arrived in the Hamburg file archive but not yet included into the data base  
 \*\*\* Data will shortly be replace by an updated version

Hans Luthardt M&D/MPI-M

5635.75 GB

- Formats:
  - gridded data are ok (WMO-GRIB)
  - MOLTS data are inhomogeneous:
    - inhomogeneous text files
    - inhomogeneous NetCDF formats
    - some binary files

- data structures are too inhomogeneous:
  - what we get:
    - multi-parameter,
    - multi-level data



- what most users want:
  - single level time series

