![Meteorologisk institutt met.no logo]

Developments on the operational systems at met.no

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Overview

- The Profet grid editor
- Automated text forecasts with Prosa
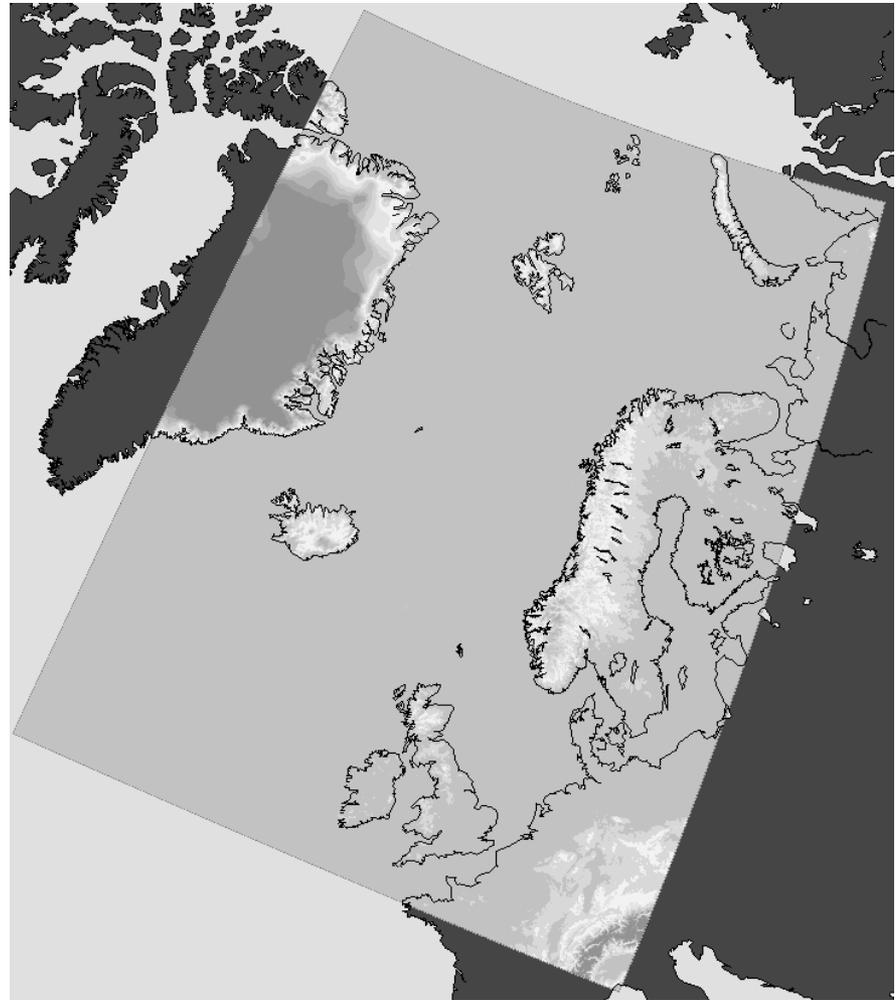- Prover, verification document production
- Web Map Services

Profet Grid Editor

- Grid editor- integral part of Diana
- Supports simultaneous editing sessions on one data set
- Area + script = modification object
- In operational use since late autumn 2009
- Used on grids for http://yr.no
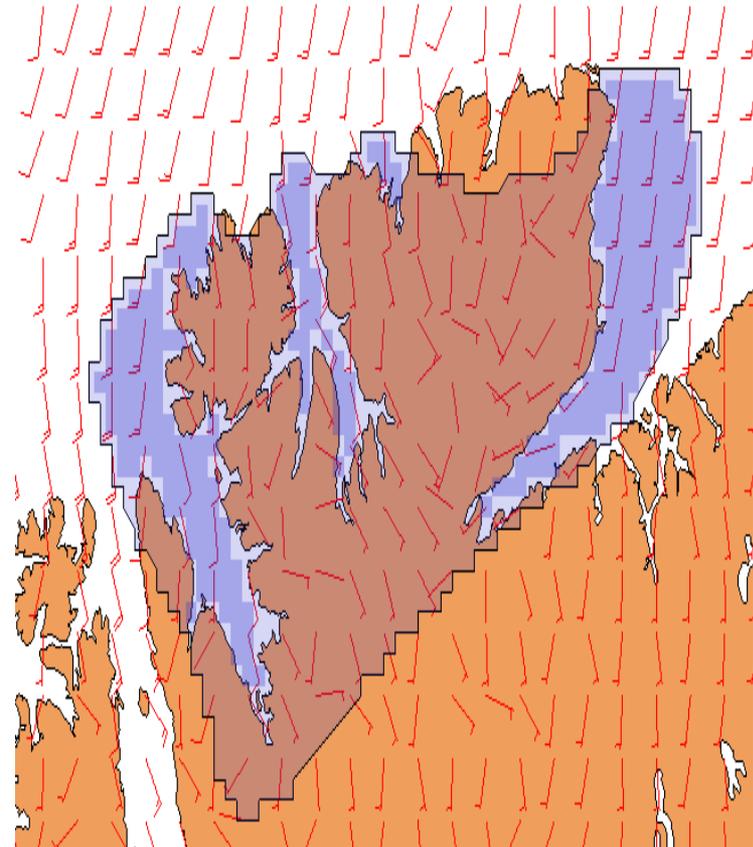
The Profet grid

- 4x4 km
- 850x1100
- = 935000
- All models interpolated to this grid

Object editing

- Select script
- Draw/select polygon
- Select masks
- Modify object properties
- Smooth/space
- Smooth/time

Modification objects

- Advantages of using objects
  - Traceable (author/reason)
  - Reversible
  - Easy to copy
  - Scalable in the network
  - Flexible

Outlook

- Support for variable grids
- Speed up retrieval of data from wdb
- Improved modification algorithms (precipitation)

Automated Text Forecasts

- Text forecasts from grid database
- Existing systems
  - Did not meet our requirements
  - Integrated part of a larger production system
  - Too expensive to buy without a tender offer
- Decided on a simple design for "easy" targets
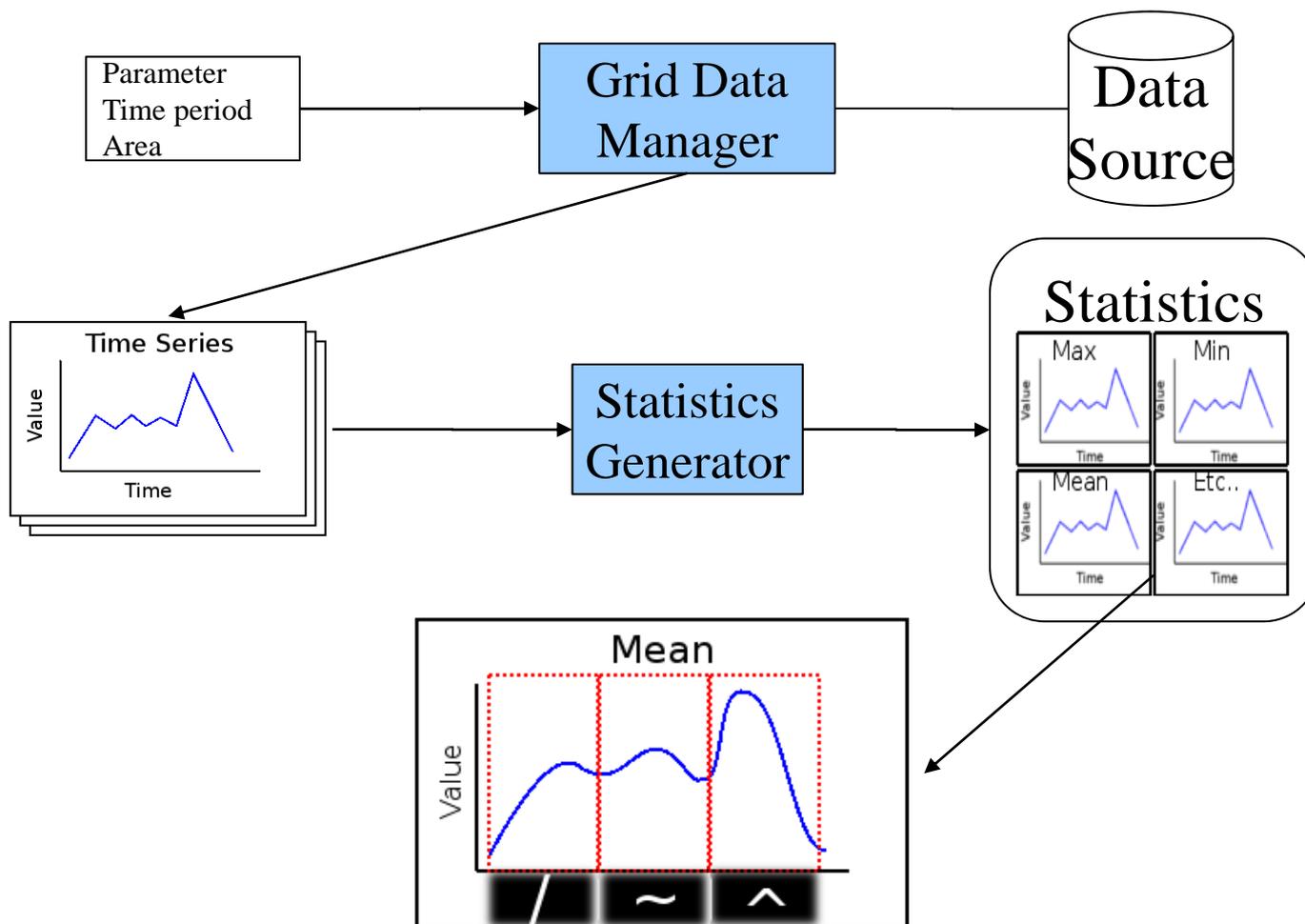 - Sea area forecasts, relatively small areas

PROSA

- Development started in 2008 at met.no
- Open source project written in C++
- Can be used as a framework
- Very limited documentation
- Runs semi-automated in operational use, generating text proposals
- Biggest challenge so far: slow data retrieval from the database

How does it work

Verification Document Production

- Verification of NWP and subjective forecasts
- Data retrieval and R-scripts on a server
- Web based interface – Prover Web
  - Subscription service
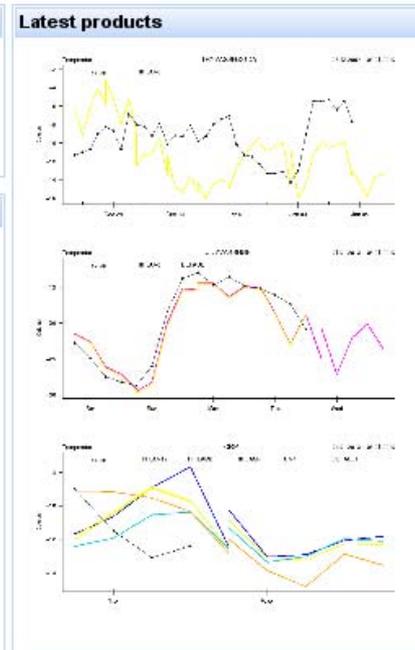 - Customization of products, user profiles

Prover Web - Menu

prover
beta version

| 🏠 | Profile | View | Order | Station | Schedule | Language | | Logged in as: bjornkl | Log out |

Order Products

Timeseries 24h Precipitation	Timeseries Pressure
Timeseries Temperature	Timeseries Wind speed
Timeseries Wind direction	

My products

Name	Data	Generated	View	Remove
Continous Statistics TT	4 Continous Stat. 1 Data Tables.	16 Dec 09:32	View	Remove
Timeseries TT	15 Timeseries. 15 Data Tables.	16 Dec 09:17	View	Remove
Categorical Statistics RR24	6 Categorical Stat. 1 Data Tables.	15 Dec 02:51	View	Remove
Continous Statistics RR24	4 Continous Stat. 1 Data Tables.	15 Dec 02:49	View	Remove
Timeseries TT	2 Timeseries. 2 Data Tables.	15 Dec 02:41	View	Remove
Timeseries RR24	57 Timeseries. 57 Data Tables.	15 Dec 02:38	View	Remove
Timeseries TT	15 Timeseries. 15 Data Tables.	15 Dec 02:34	View	Remove
Timeseries TT	2 Timeseries. 2 Data Tables.	08 Dec 01:50	View	Remove
Categorical Statistics FF	18 Categorical Stat. 2 Data Tables.	07 Dec 12:59	View	Remove
Categorical Statistics RR12	18 Categorical Stat. 1 Data Tables.	07 Dec 10:49	View	Remove
Continous Statistics FF	4 Continous Stat. 1 Data Tables.	04 Dec 07:48	View	Remove
Timeseries T2M	3 Timeseries. 3 Data Tables.	30 Nov 10:44	View	Remove
Timeseries T2M	1 Timeseries. 1 Data Tables.	17 Nov 09:33	View	Remove
Timeseries MSLP	2 Timeseries. 2 Data Tables.	17 Nov 07:48	View	Remove
Timeseries T2M	2 Timeseries. 2 Data Tables.	12 Nov 06:54	View	Remove

Latest products

Web Map Services

- WMS-Diana
  - CGI-wrapper for batch-Diana
  - Receives WMS-request
  - Generates input-file for batch-Diana
  - Batch-Diana creates image
  - WMS-Diana returns image to client
- Tiling and caching used for yr.no

Thank you