The Danish Road Weather Information System

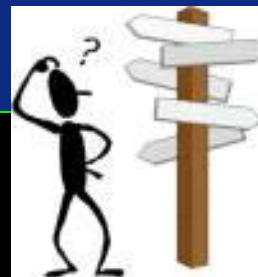Pernille Arnsfelt Hansen and Søren Brodersen *(Forecasters)*

Danish Meteorological Institute

ID = 13

The Challenge:

Provide complex meteorological information in a non-complex format

The Construction Syndicate:

Road People

Weather People

IT People

The Users:

Basicly everyone with interests in slippery road conditions…

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Basicly everyone with interests in slippery road conditions :

➢Road authorities, State, Region, Community, City….

➢Entrepreneurs

➢Airports

➢Harbours

➢Hospitals

➢Other authorities

…

User spectre :

Owner of truck or shovel, may have drivers license

Engineer, who is a full time computer- and weathernerd

Task:

Provide information, easy to interprete

Use graphics and colours – as little text as possible

Easy access, use www, even mobile broadband

Provide a good manual

Teach the user the basics in road weather…

Teach the user the basics in road weather…

Road temperature negative ?

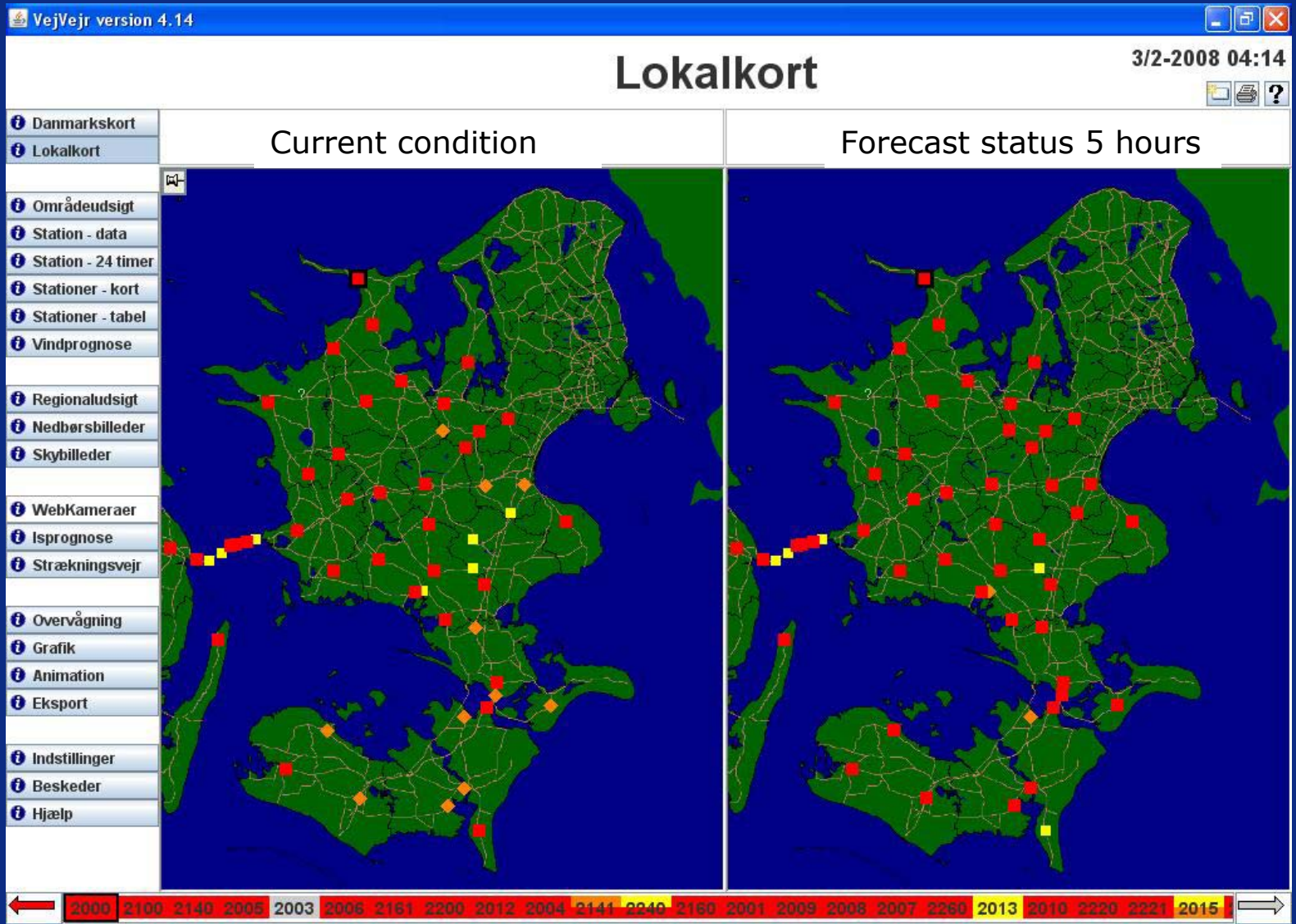Snowfall or freezing precip ?
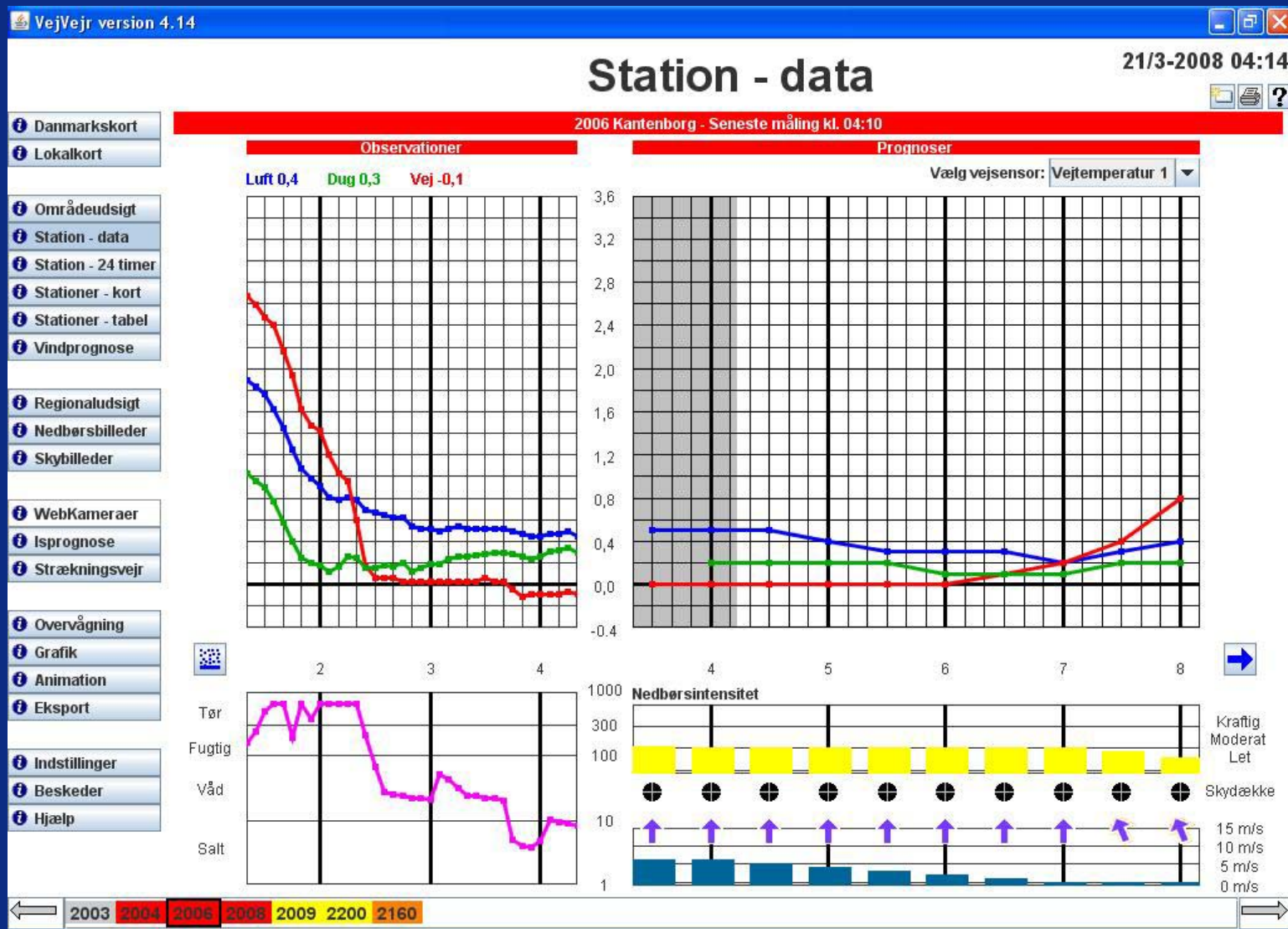
Wet road ?

Dewpoint Higher ?

Describe this using colours

Basic principles of colourcoding

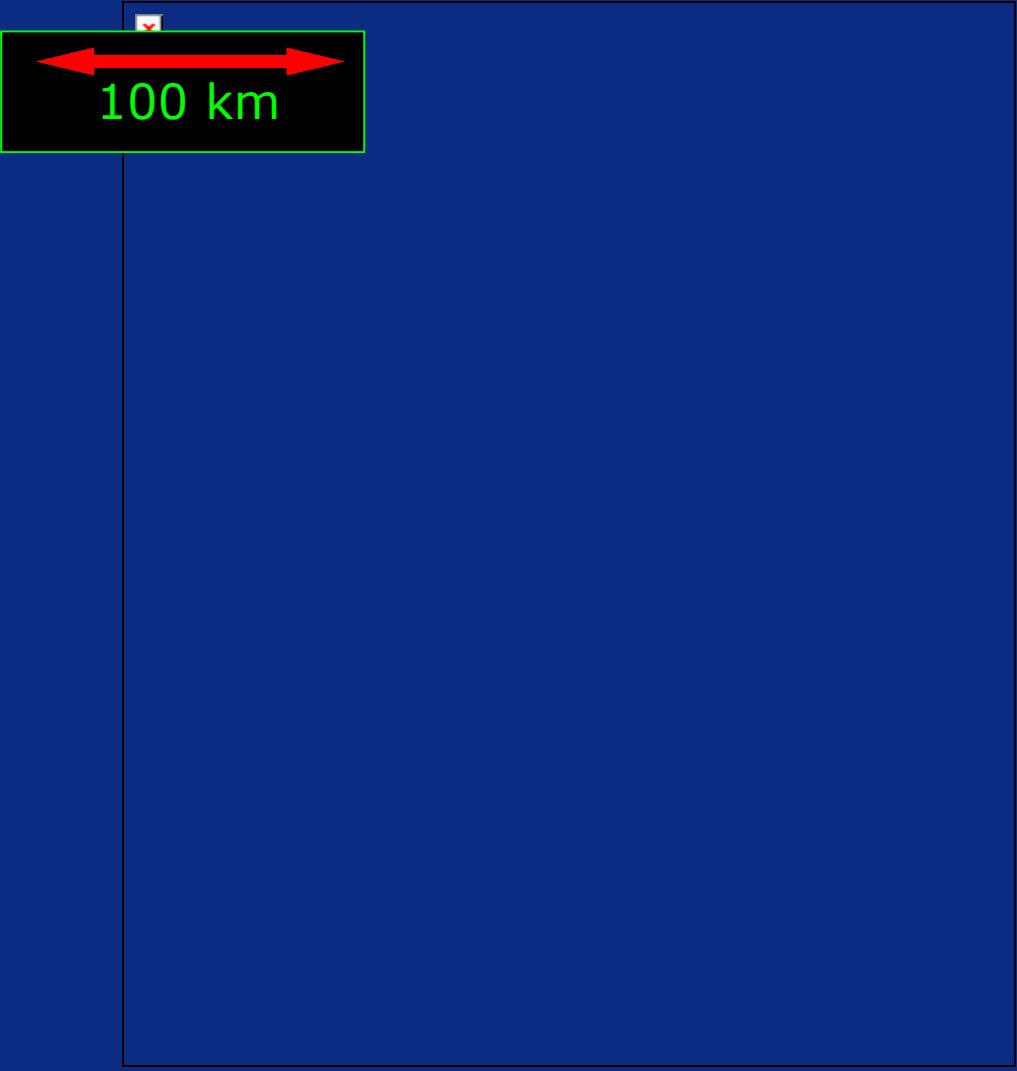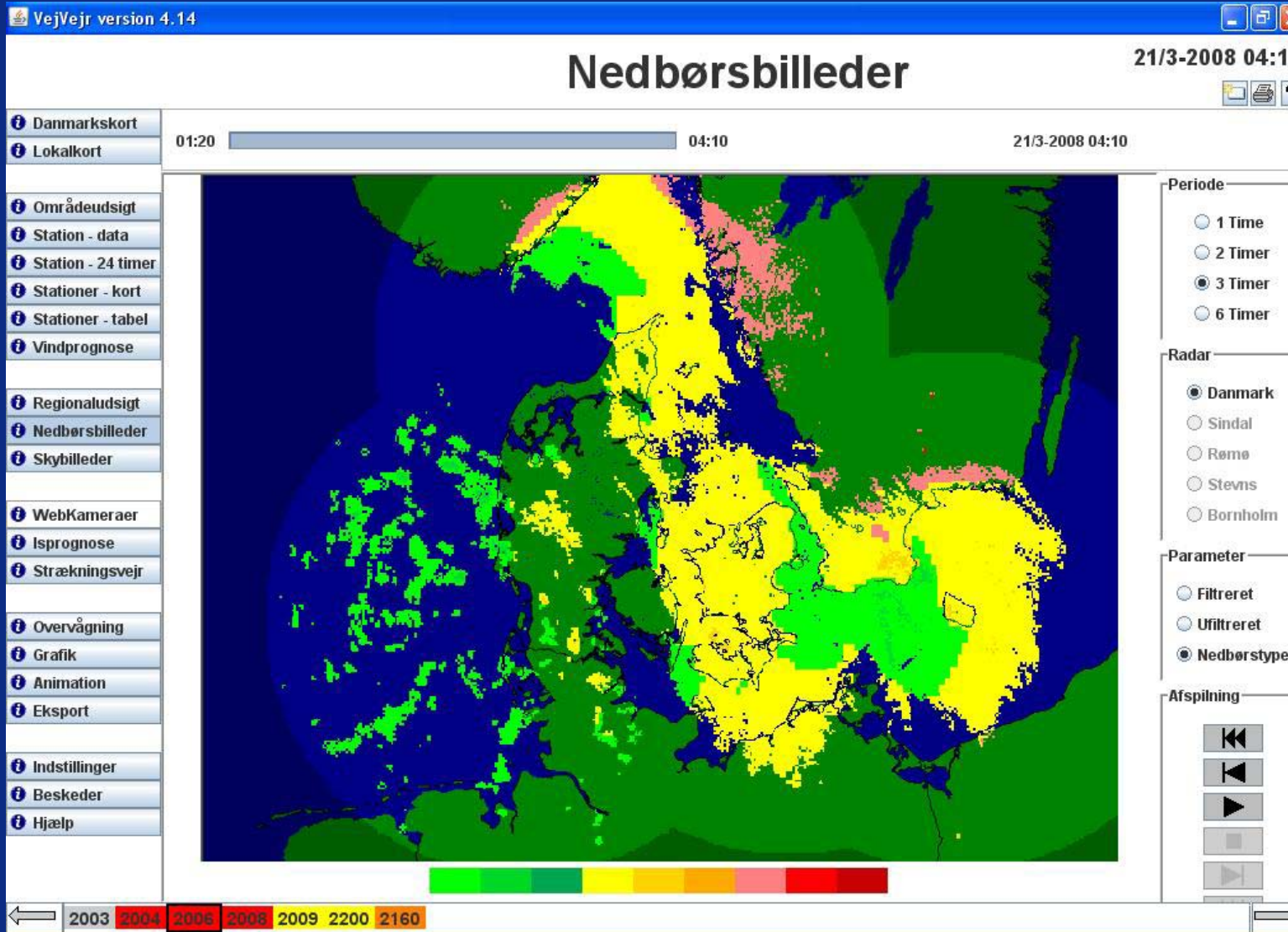| Alarm status	Description
White	$T_{Road} > + 2\ °C$
Yellow	$0\ °C < T_{Road} \leq + 2\ °C$
Orange	$T_{Road} \leq 0\ °C$ and $T_{Dew} < T_{Road}$
Red	$T_{Road} \leq 0\ °C$ and $T_{dew} \geq T_{Road}$ or $T_{Road} \leq 0\ °C$ and $T_{Dew} = T_{Air}$

Local-map

Station - data

Long forecast

~330 stations !
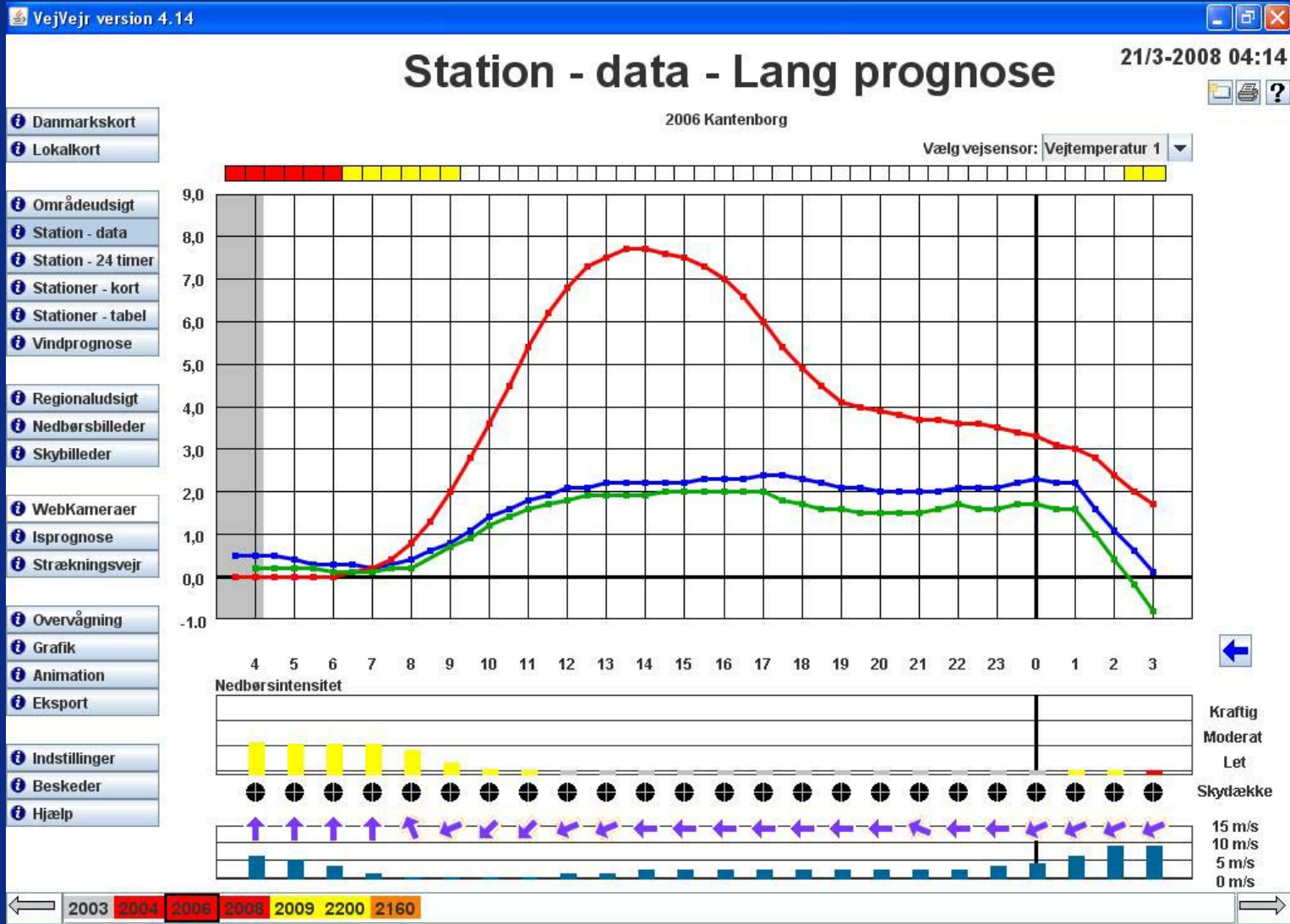
Denmark in "weather-areas"
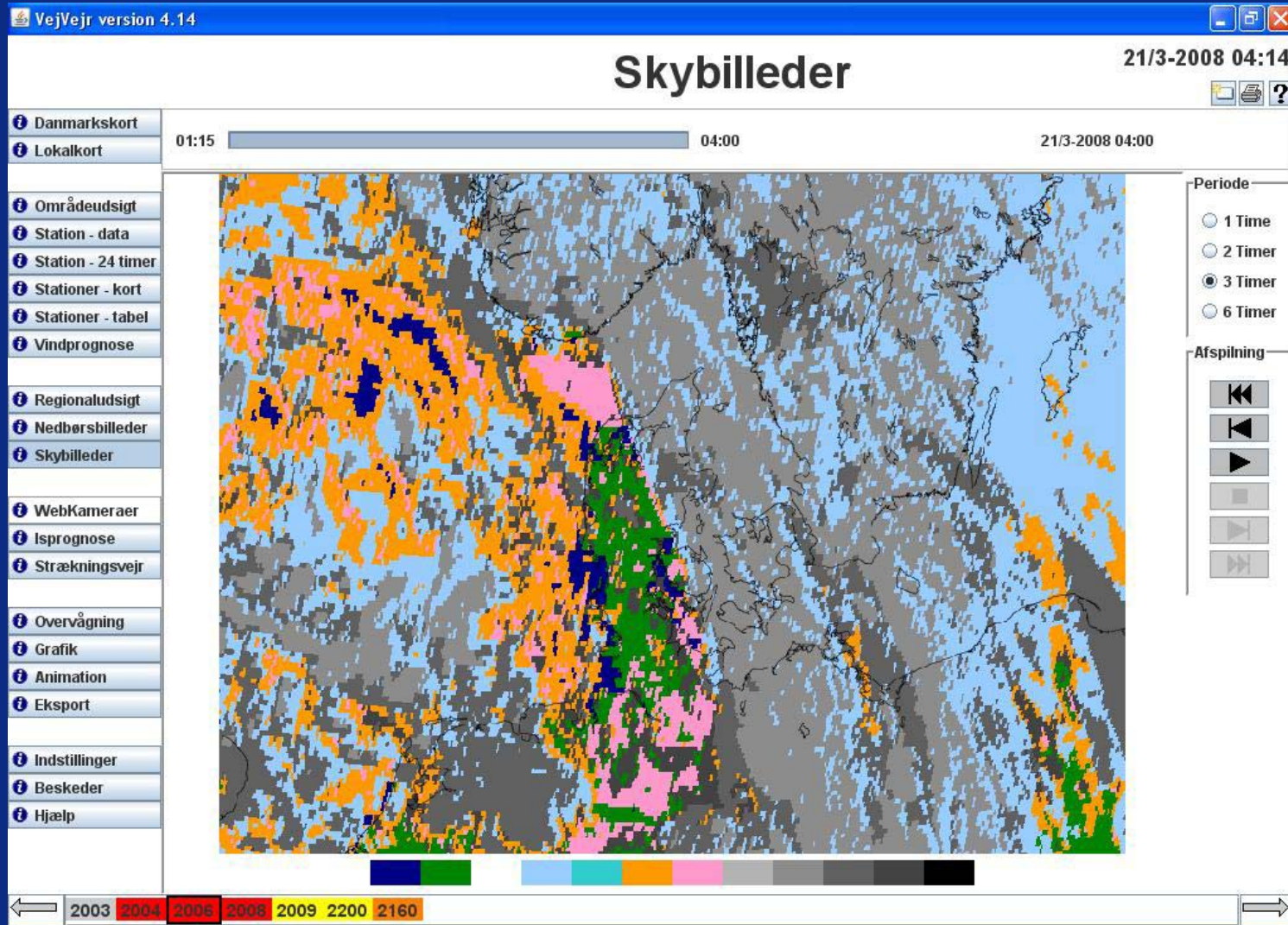
100 km

Area forecast
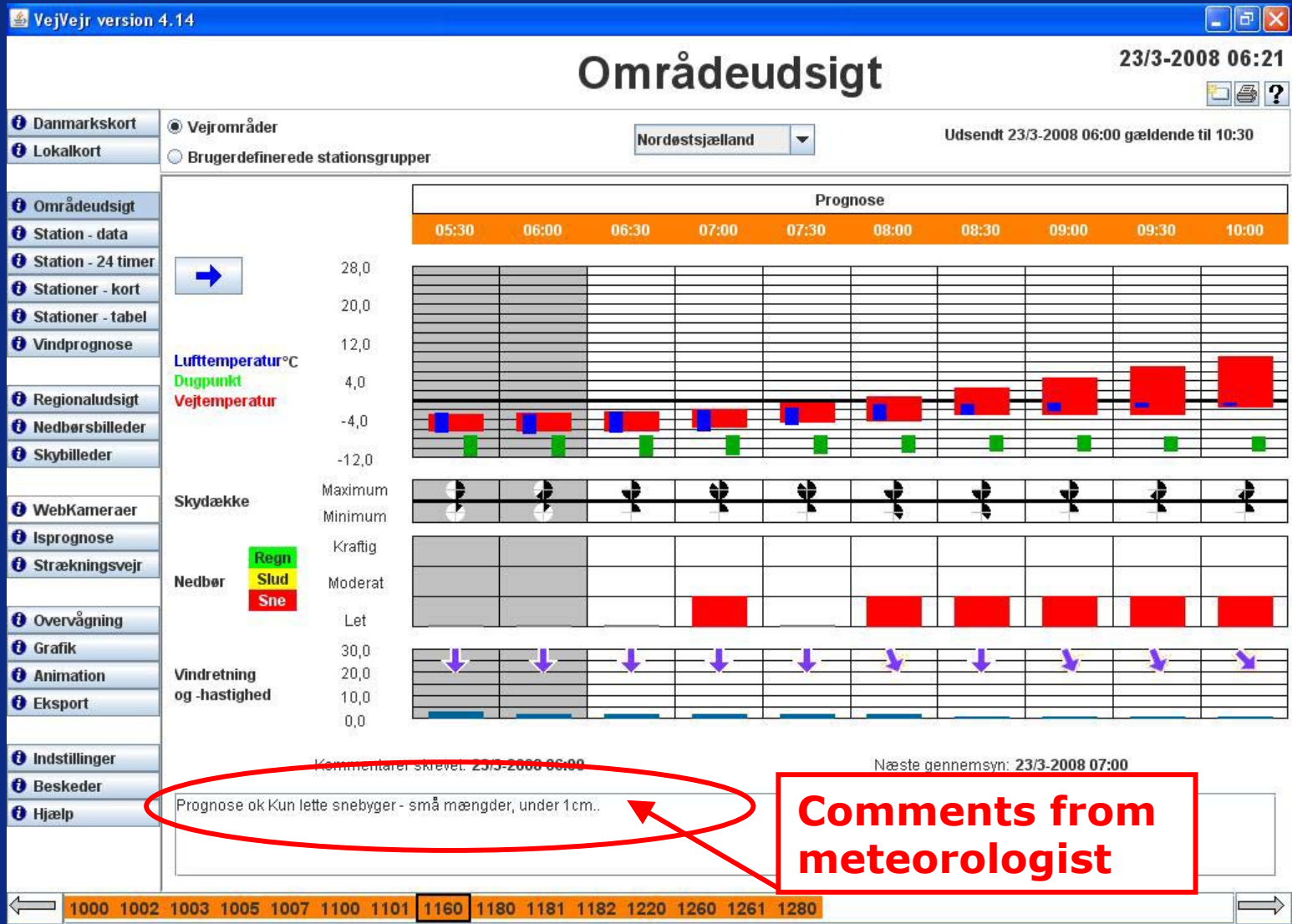
Radar images (Precipitation)

Rain
Mix
Snow
FRZ precip

Satellite imagery (Cloudcover)

Shades of grey:

Clouds are thick.

Colours:

Clouds are scattered or high/thin

Web-cams

How to improve the system ?

- Feed-back from users
- Performance continuously verified
- Day seminar every year

How to improve the users ?

- Intro demo
- 1-day course, beginners
- 1-day course, advanced

Questions ?

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