

A New Step Towards A Road Stretch Forecasting System

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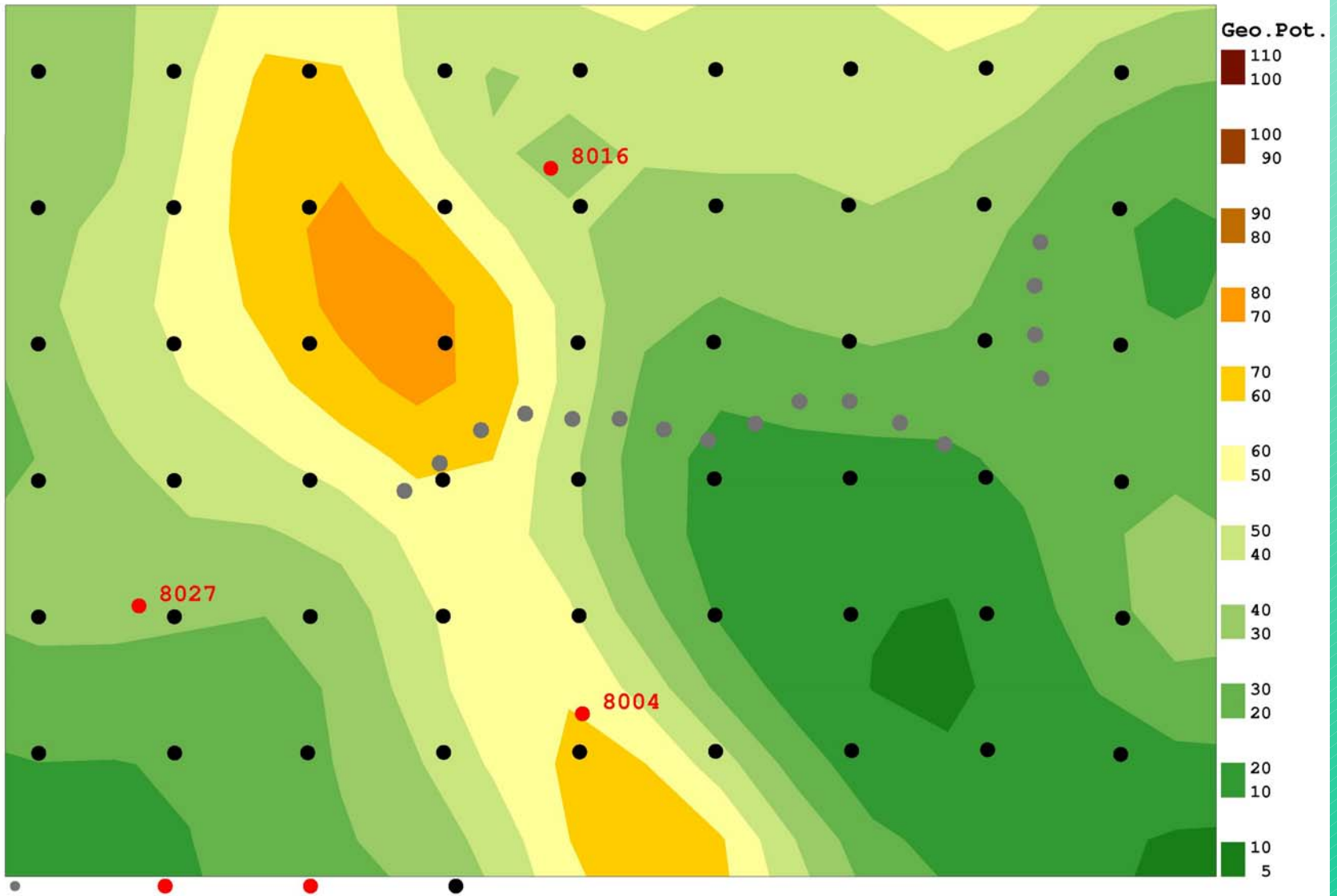
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VISION

- ACCURATE AND DETAILED ROAD FORECASTS
- CONTROLLED SALTING BASED ON
 - GPS
 - LOCATION
 - HISTORY
 - ROAD WEATHER FORECAST

HOW TO MAKE ROAD STRETCH FORECASTS

- HIGH RESOLUTION NWP MODEL
- DENSE NETWORK OF ROAD STATIONS
- USE OF LOCAL INFORMATION
 - ASPHALT TYPE, ROAD CHARACTERISTIC ETC.
 - HIGH RESOLUTION PHYSIOGRAPHIC DATA
 - SHADOWS
 - 'THERMAL MAPPING DATA'

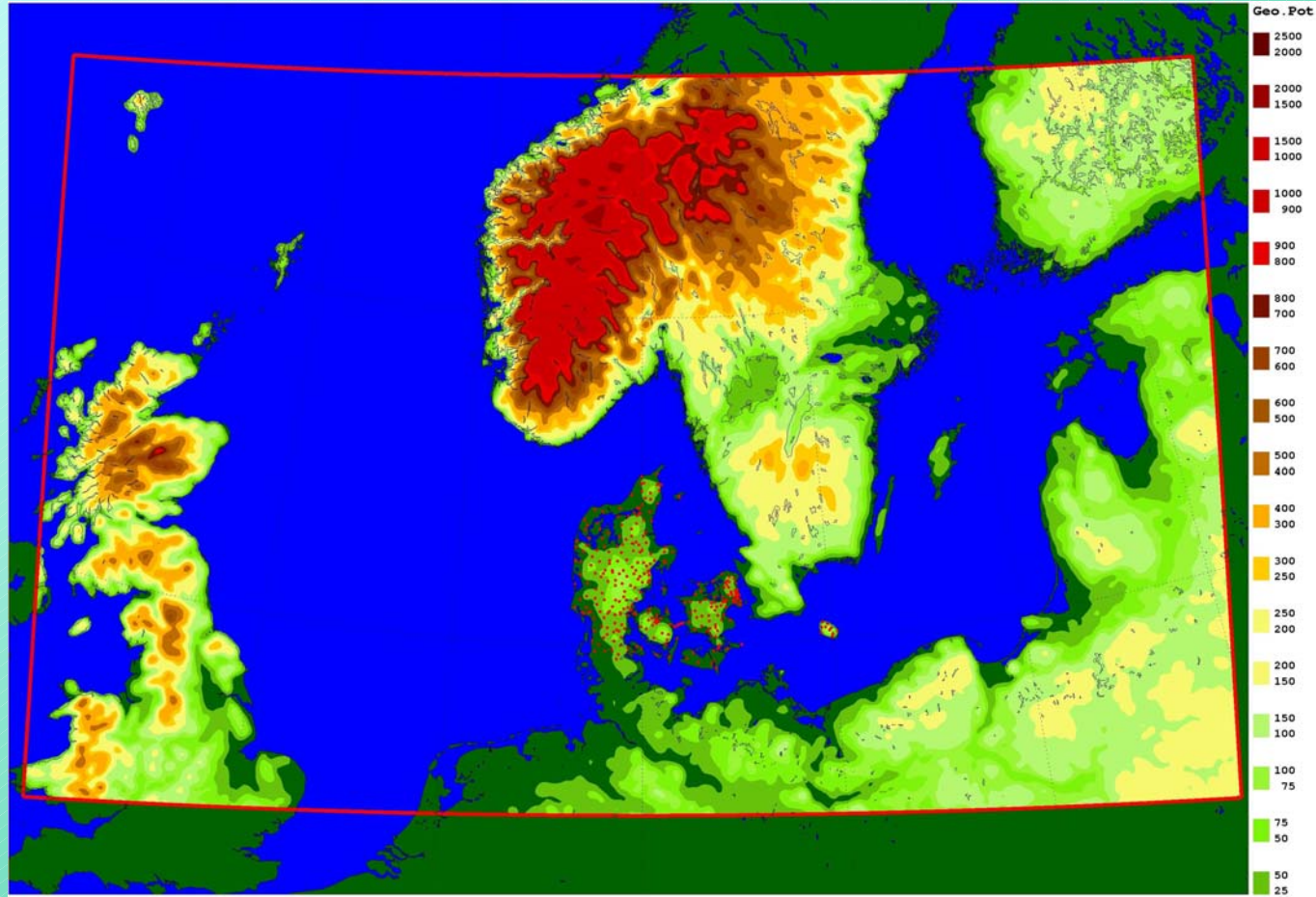


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NWP

FACT BOX

- HIRLAM 7.1
- 0.05x0.05
- 40 LEVELS
- EVERY HOUR
- 24 HOURS FORECAST SL
- CLOUD INITIALIZATION
- INLINE ROAD MODEL
- ROAD OBSERVATIONS
- CRAY SUPERCOMPUTER



OBSERVATION NETWORK

SYNOP STATIONS:

CLOUD

T2M

T2D

WEATHER

PRECIPITATION

OTHER

ROAD STATIONS:

T2M

T2D

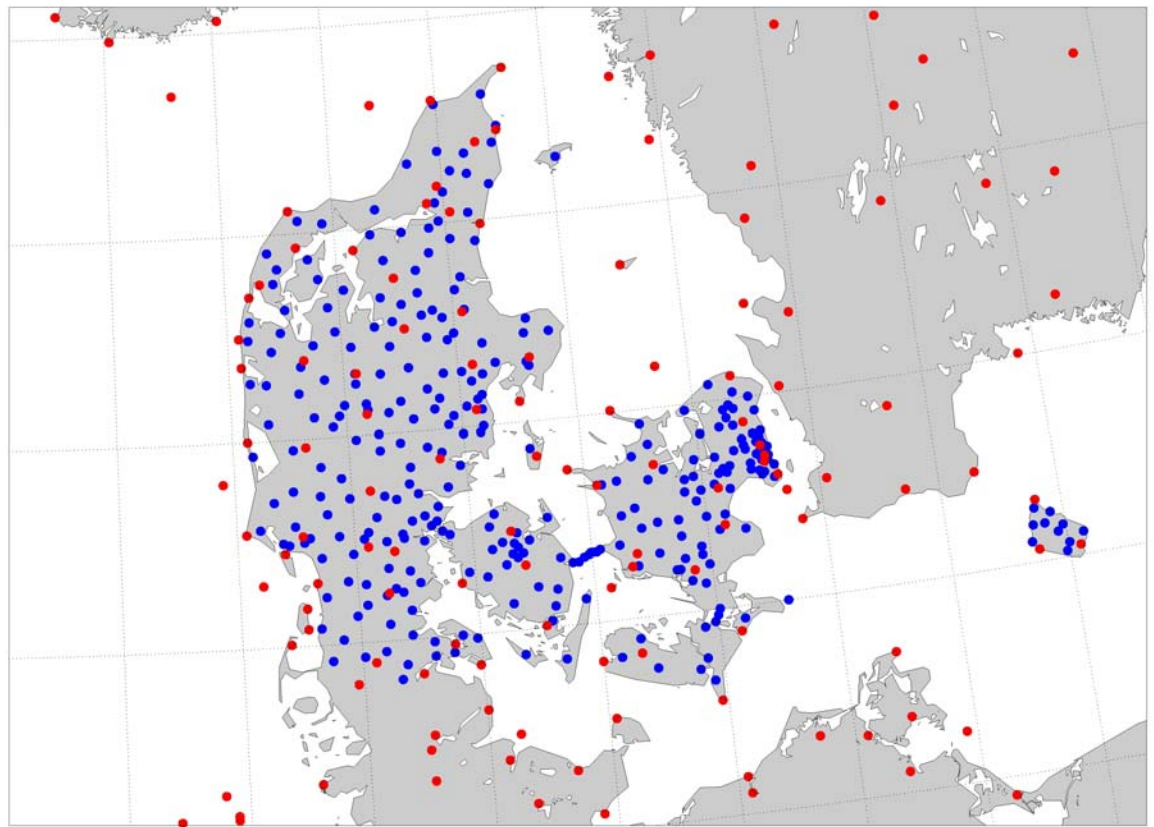
(WEATHER)

(PRECIPITATION)

TS

TSD

OTHER



THERMAL MAPPING AND ROAD STRETCH FORECAST

Vims Isbil 98 Rapportering

Bestyrenr	Vejnr	Vejdel	Sidevej	Forløb				
0	20			KJIGE-HALSSKOV(VESTMOTORVEJEN)				
0	40			KNUDSHOVED-KOLDING				

Fra km	Til km	Løbenr	Måledato start	Måledato stop	Bemærkning	Bil	Irit
210/0000	130/0425	14	09-02-99 21:46:24	09-02-99 22:33:50	IKKE HELT KLART OVER FYN	I1	TBC
130/0425	210/0000	13	09-02-99 19:58:20	09-02-99 20:50:47	WIND SVAG FRA SYD VEST- EN DEL TIGE IS'R VED ODENSE	I1	TBC

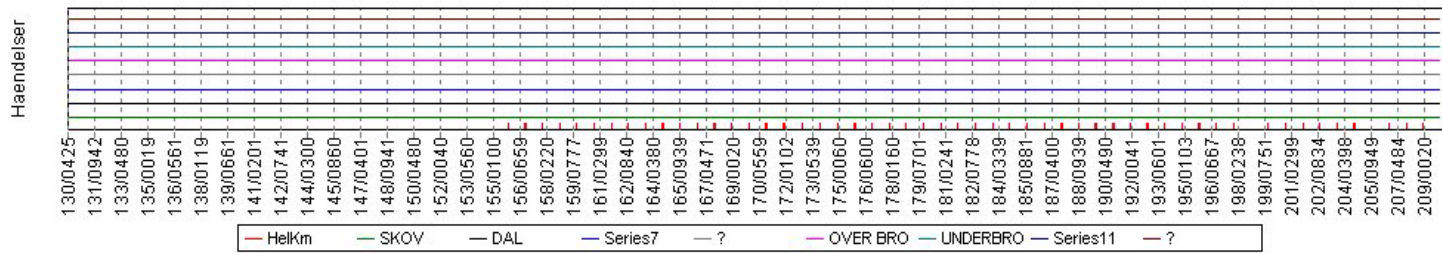
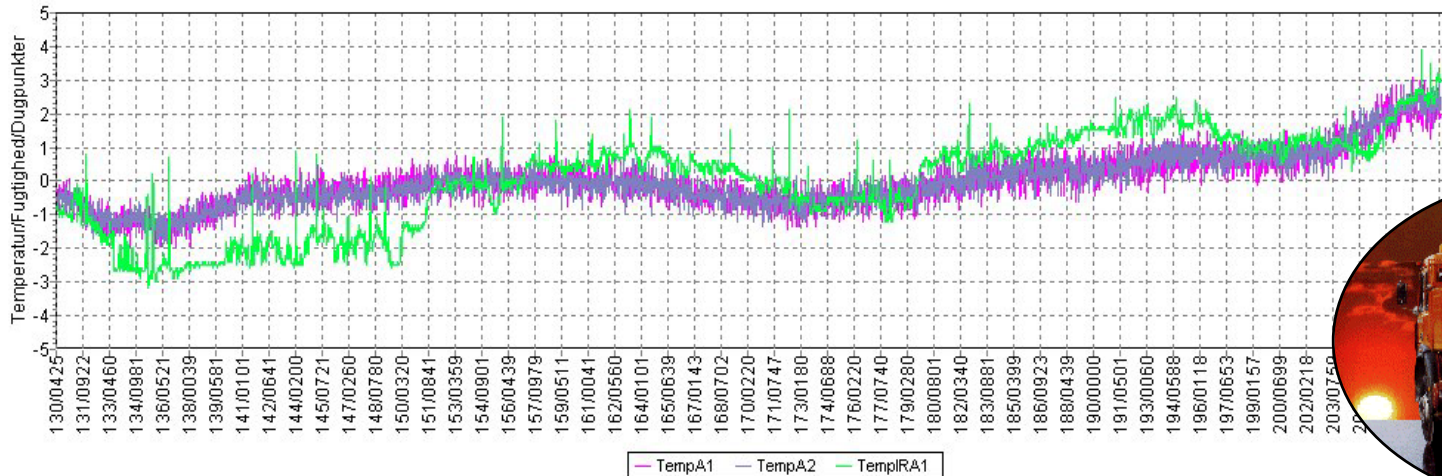
Temp IR1 Dug(Temp IR1) Temp IR1
 Temp IR2 Dug(Temp IR2) Temp IR2
 Temp IR3 Dug(Temp IR3) Temp IR3

Temp 1 Dug(Temp 1) Temp 1
 Temp 2 Dug(Temp 2) Temp 2
 Temp 3 Dug(Temp 3) Temp 3

Fugt 1 Fugt 2 Fugt 3

Database: vi98
 Antal målinger pr. side: 4000
 1/1
 Line tykkelse: 1
 Udfør

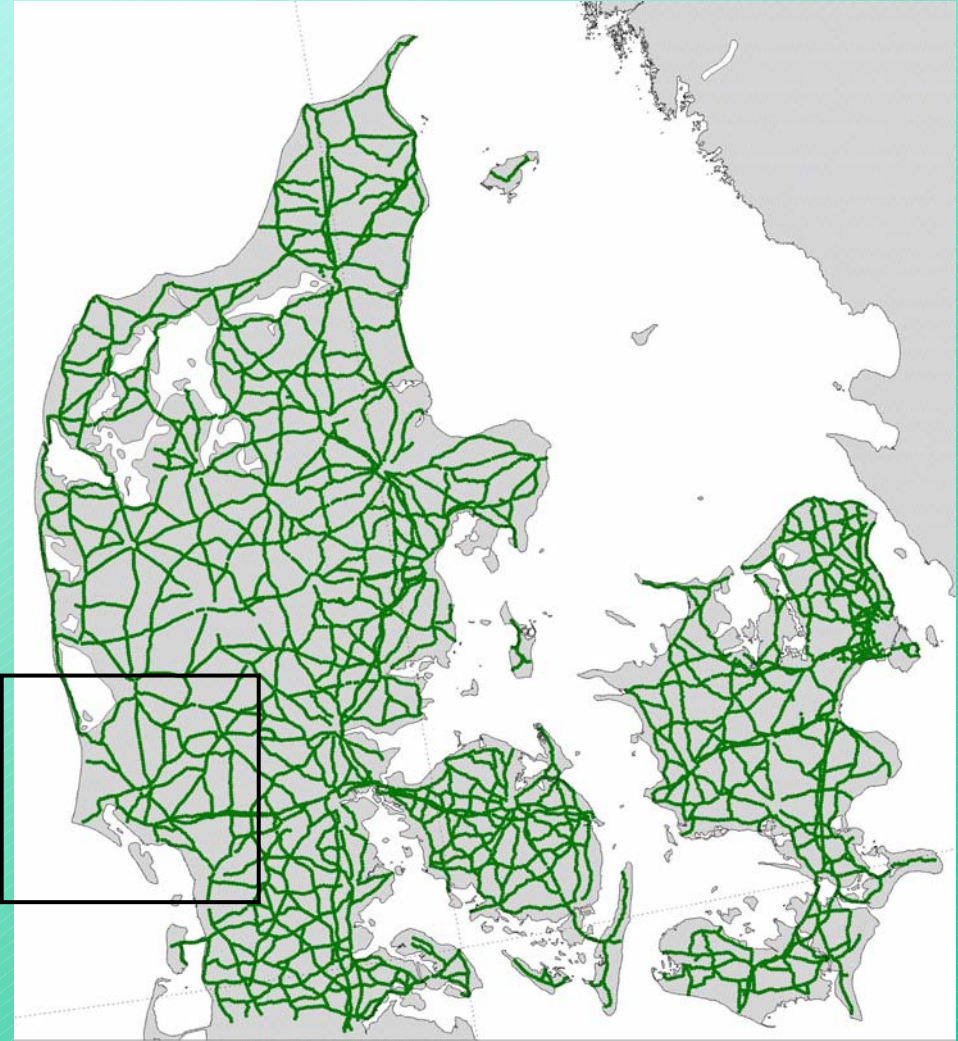
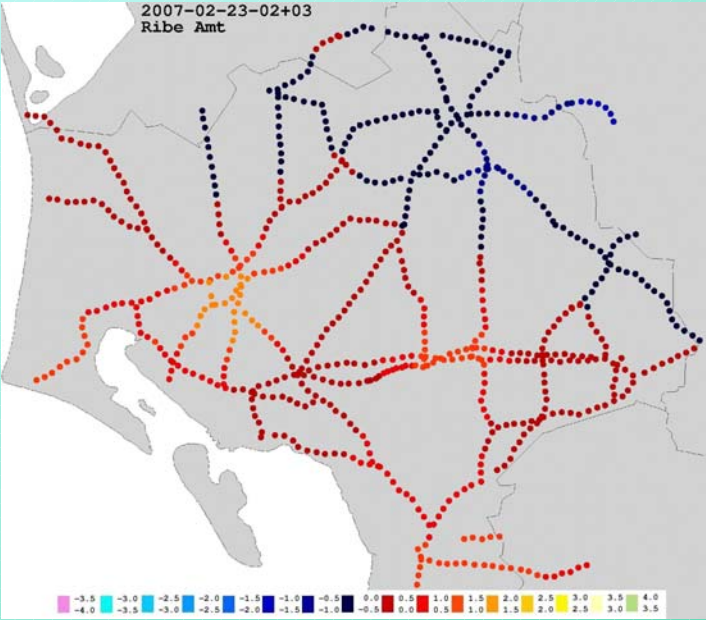
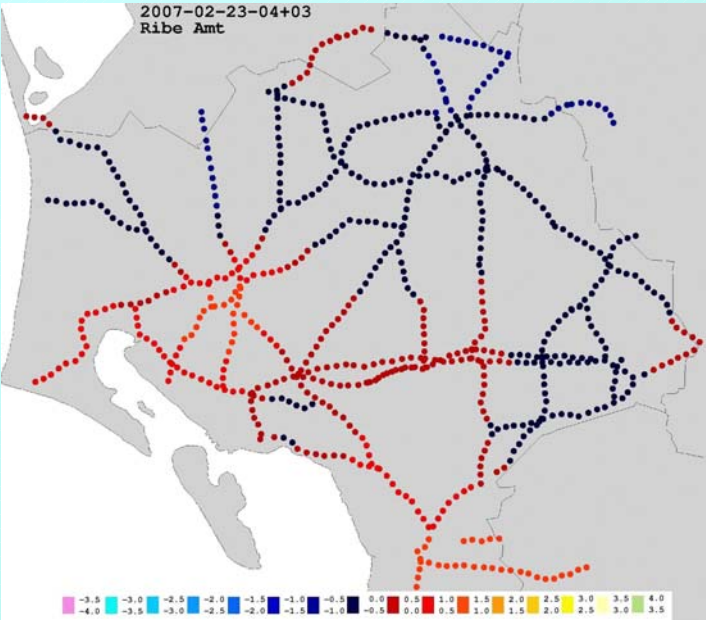
Hent data



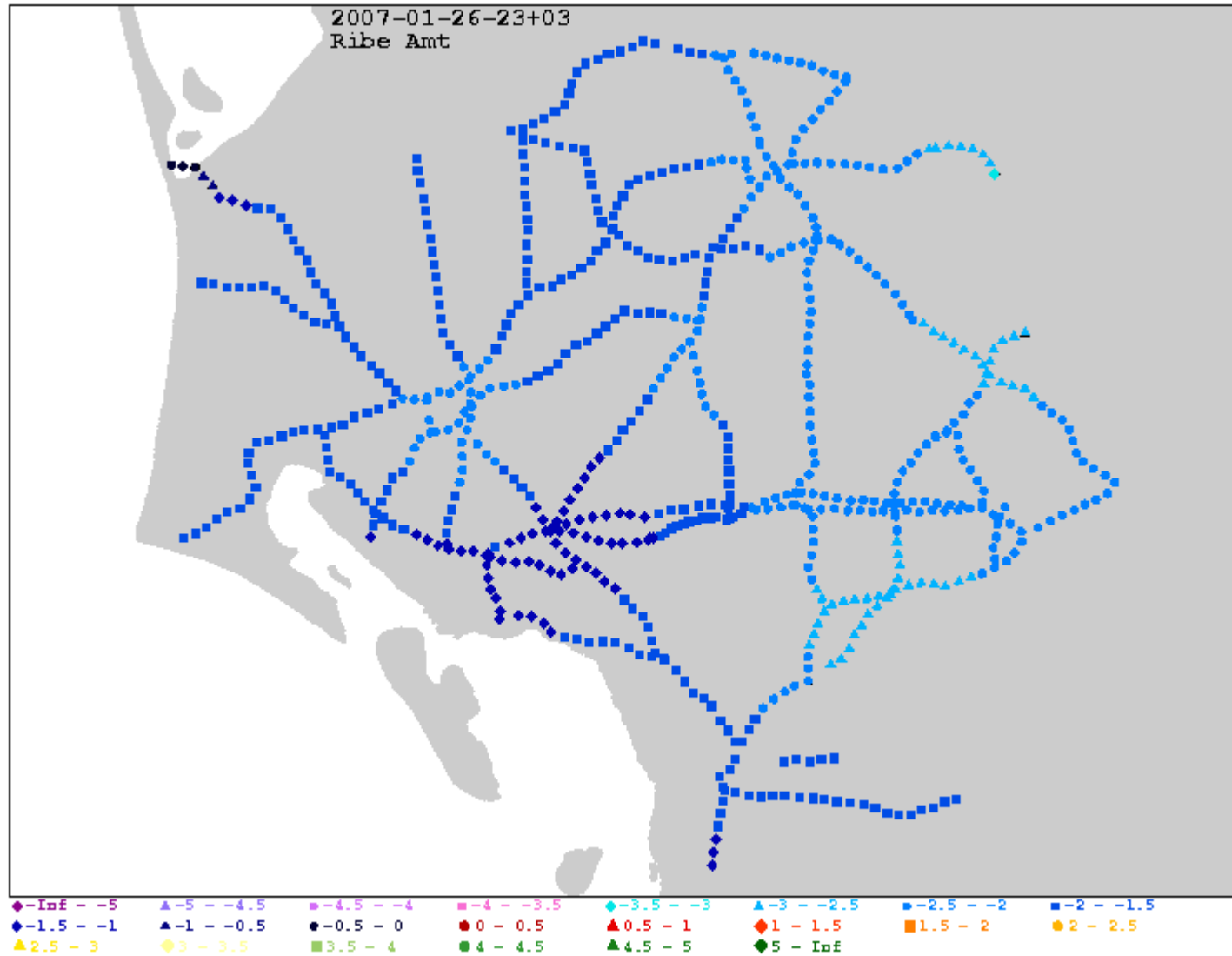
**DANISH ROAD
AUTHORITIES**
www.vd.dk

ROAD STRETCH FORECASTS SHOWING FORECAST OF ROAD SURFACE TEMPERATURE

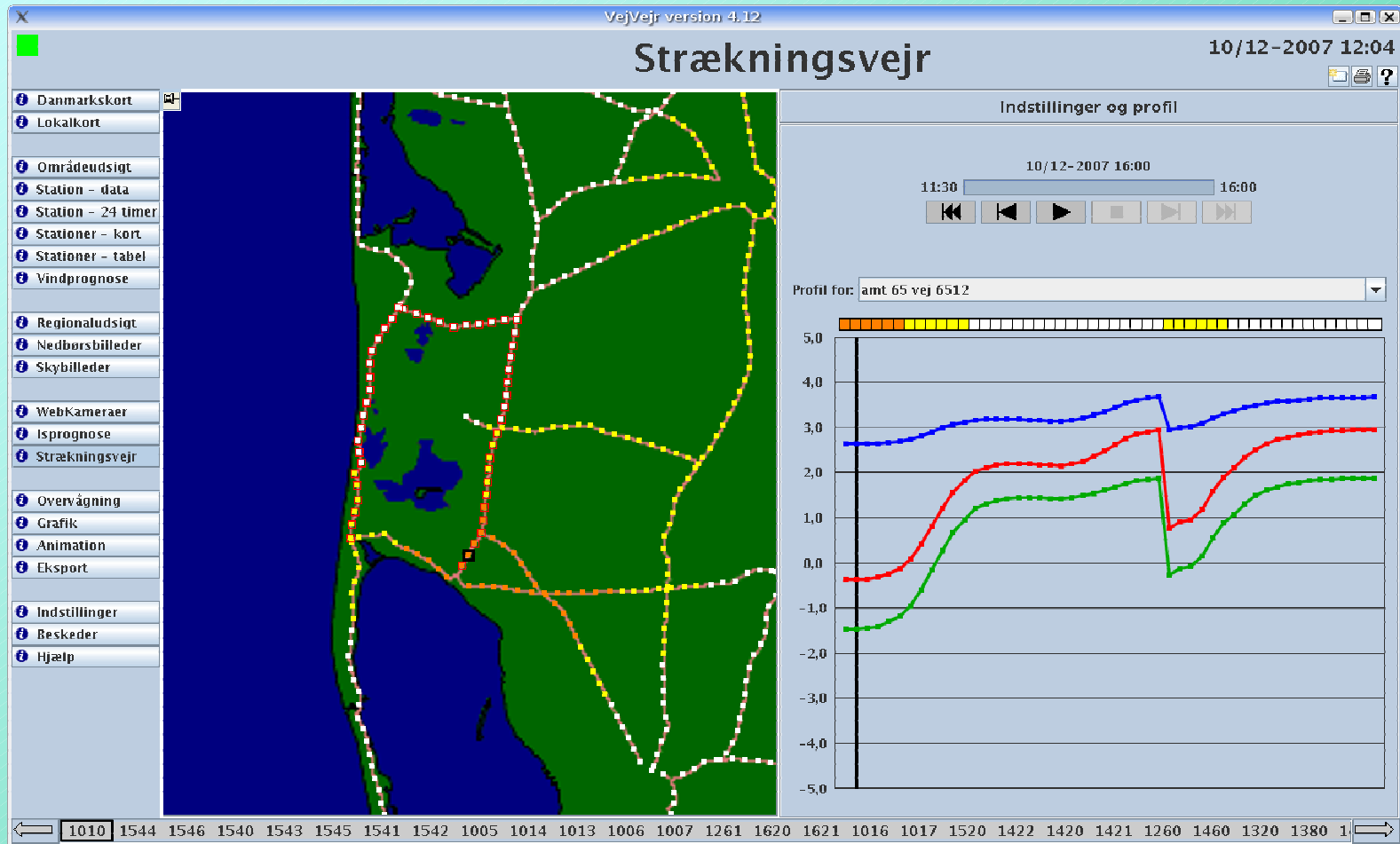
PRESENT ROAD NETWORK



3H FORECAST OF ROAD SURFACE TEMPERATURE

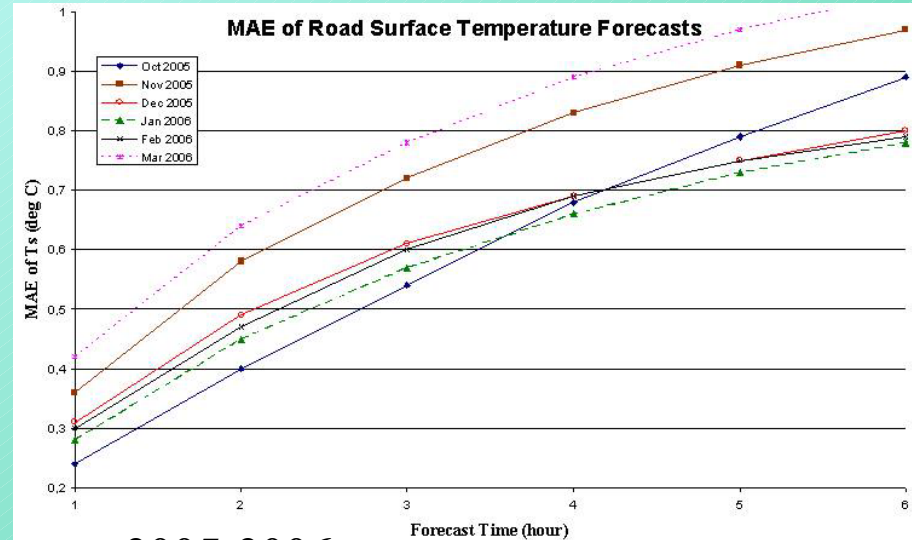
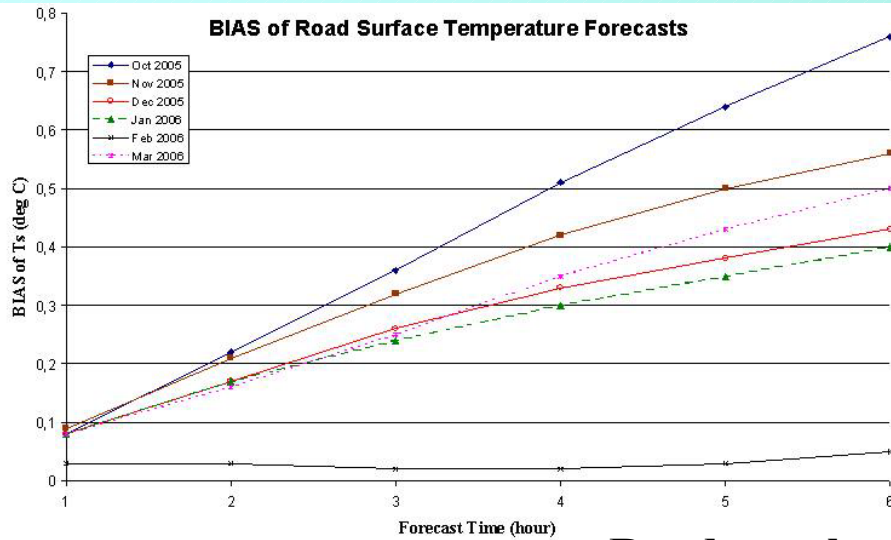


HOW WOULD THIS LOOK LIKE FOR THE CUSTOMERS?

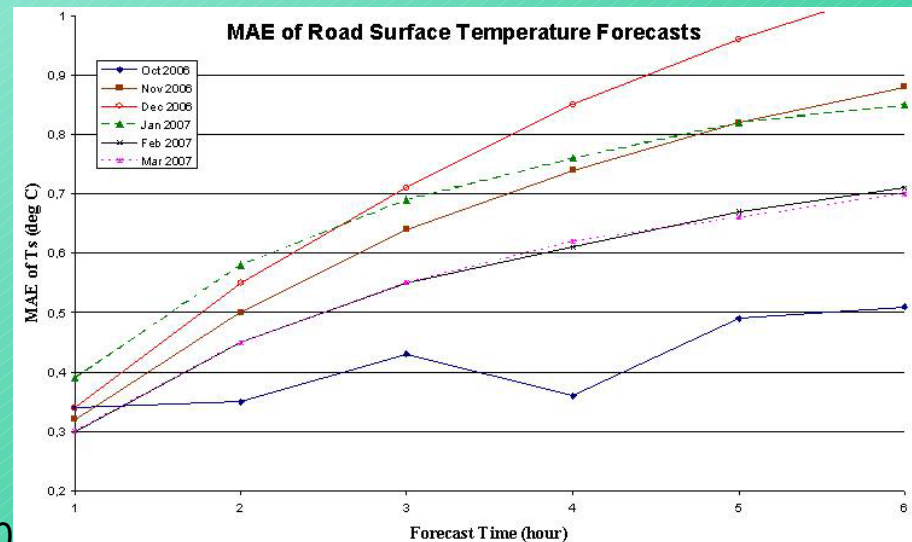
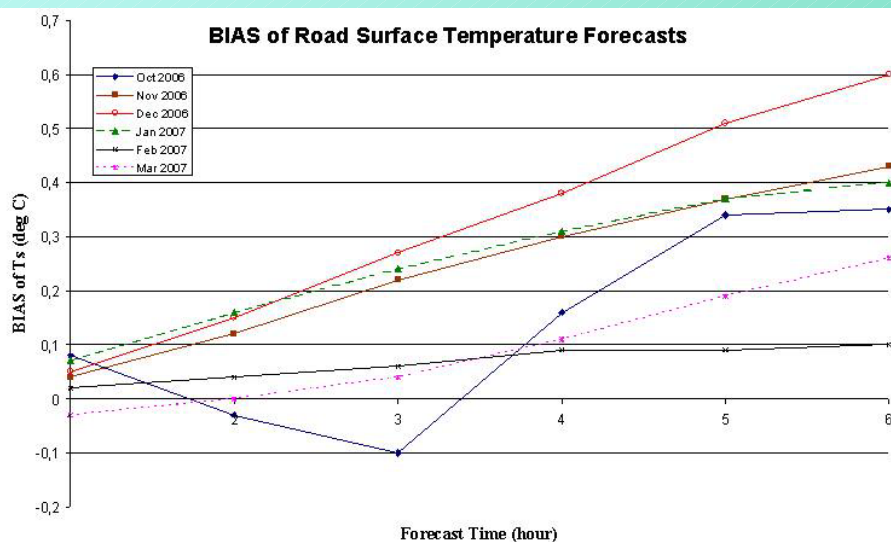


QUALITY OF PRESENT ROAD STRETCH FORECASTS

Road surface temperature (Ts)



Road weather season 2005-2006



Road weather season 2006-2007

END

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