



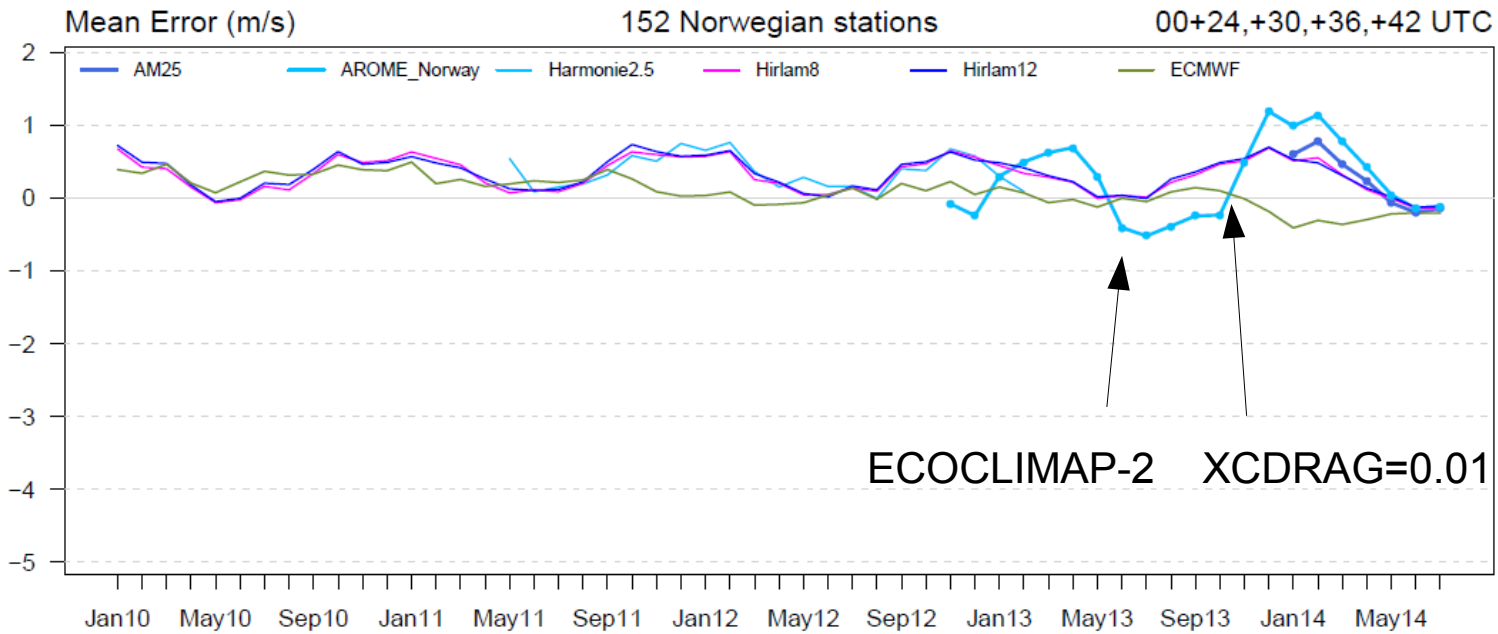
Norwegian
Meteorological
Institute

Temperature and surface related issues

MetCoOp meeting in Oslo 26 August 2014

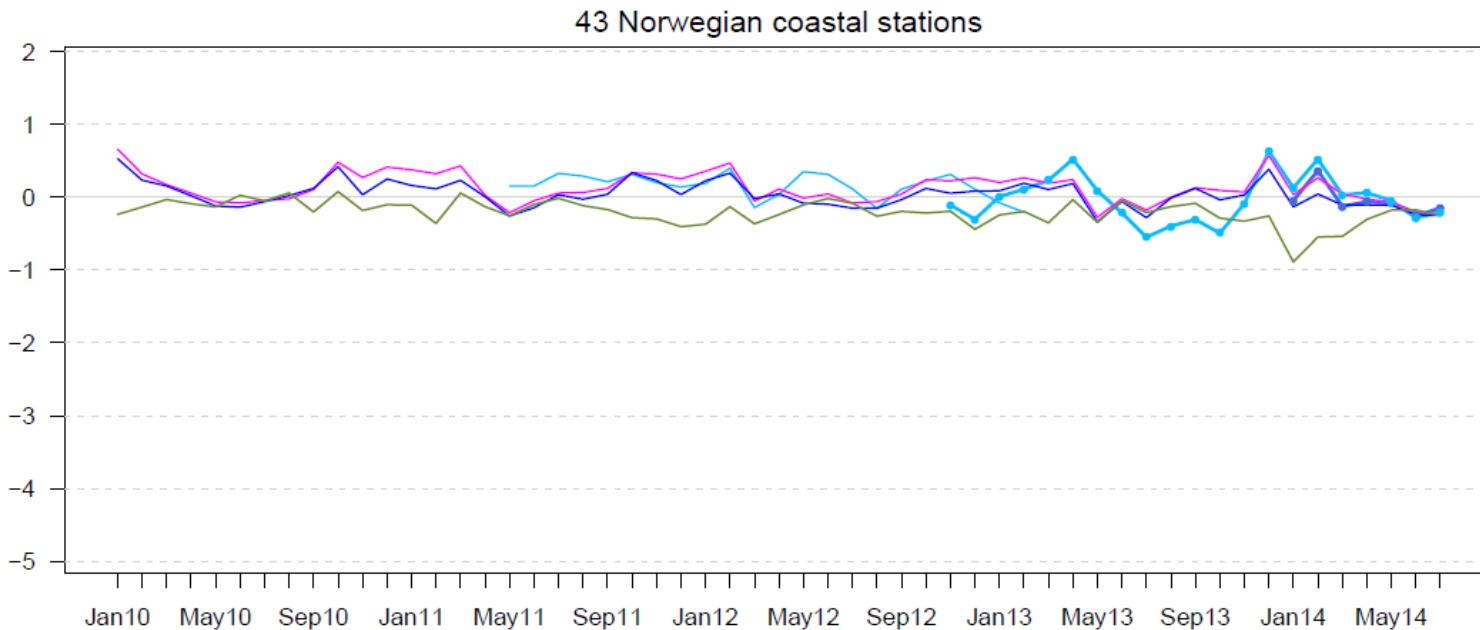
Mariken Homleid

Wind speed 10m



AROME-MetCoOP
- cy38 -

AROME-Norway
- cy37 -

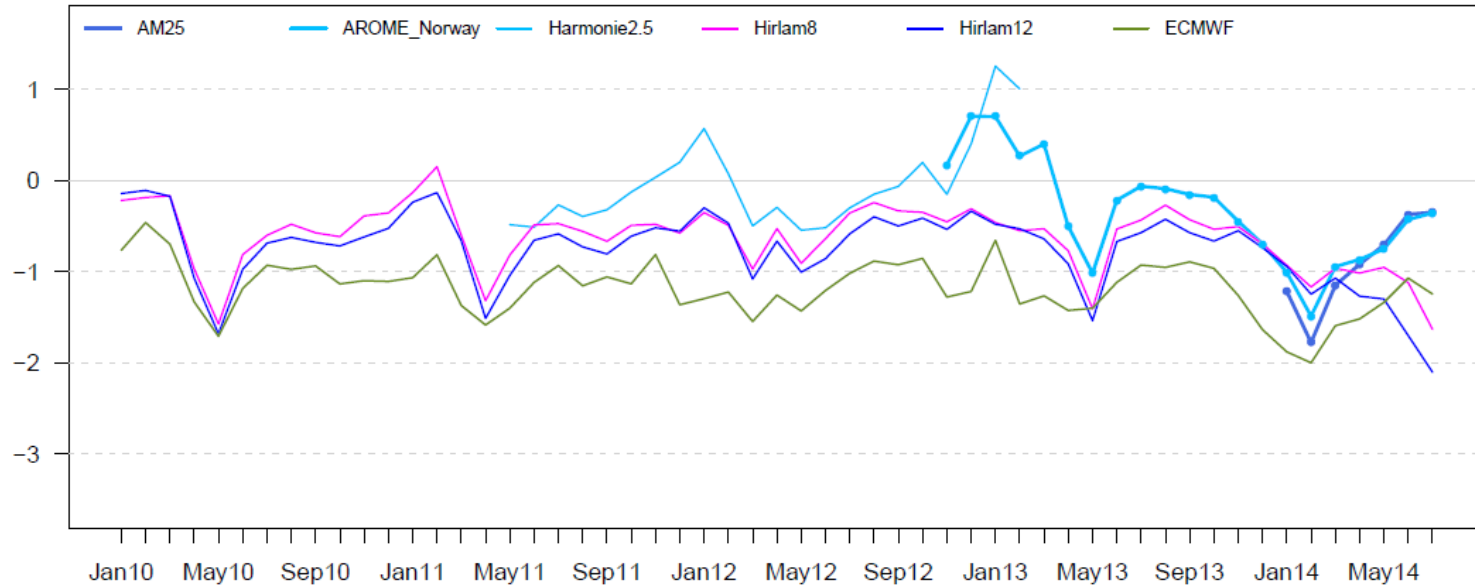


Temperature 2m

Mean Error (K)

156 Norwegian stations

00+24,+30,+36,+42 UTC



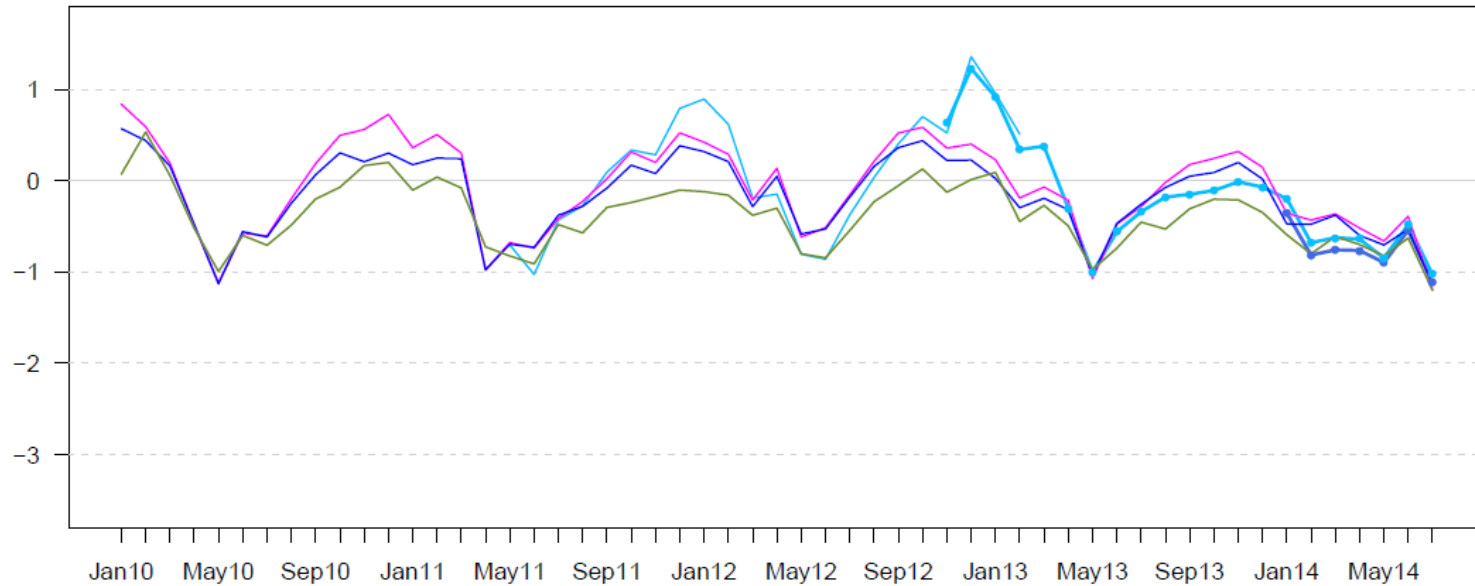
AROME-MetCoOP

- cy38 -

AROME-Norway

- cy37 -

43 Norwegian coastal stations

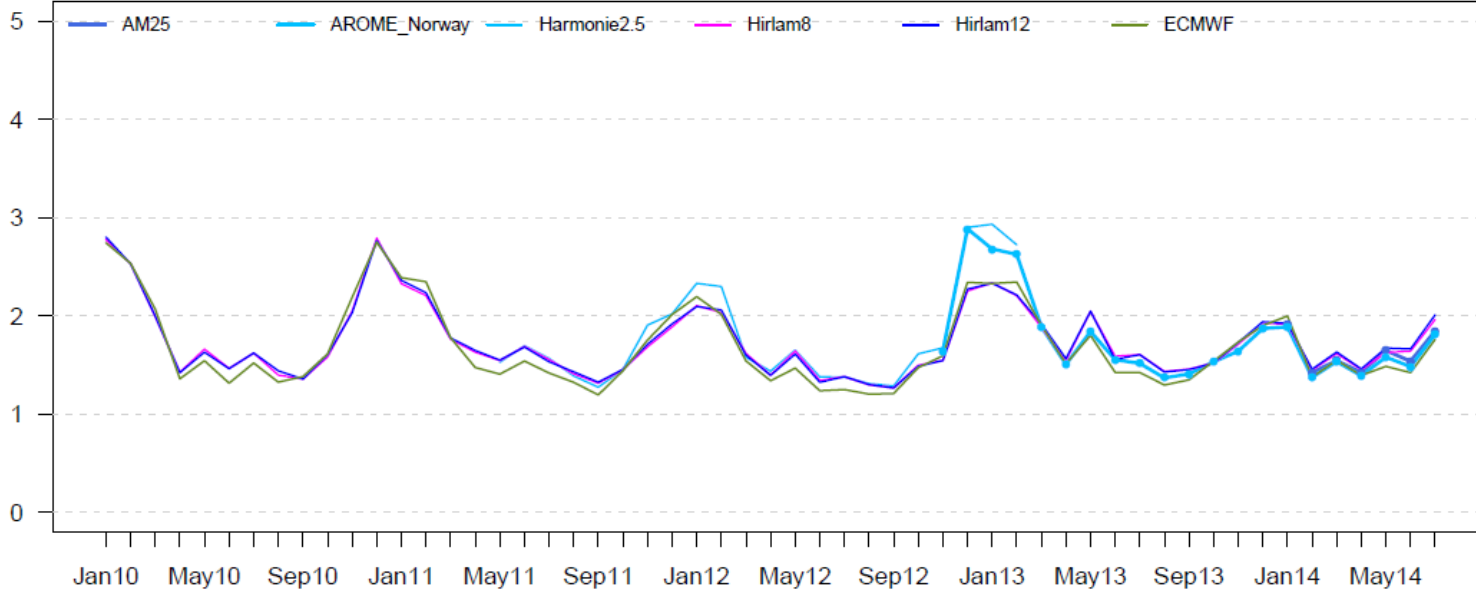


Temperature 2m

Standard Deviation of Error (K)

156 Norwegian stations

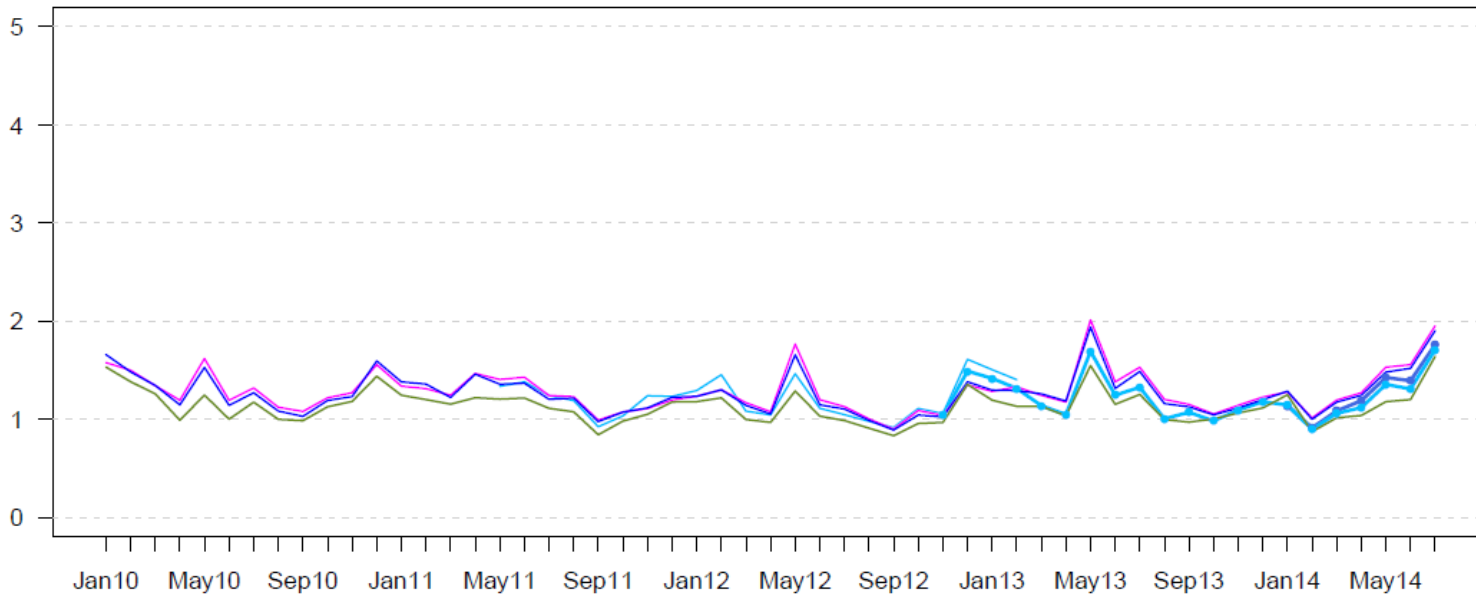
00+24,+30,+36,+42 UTC



AROME-MetCoOP
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43 Norwegian coastal stations



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A brief summary of quality

- Wind speed 10m
 - positive ME in winter, AROME-MetCoOp (cy38) slightly lower values than wind than AROME-Norway (cy37)
 - ME close to 0 in summer
- Temperature 2m
 - good in summer
 - less overestimation in «cold» summer nights in 2014??
 - relatively good in mild winters (e.g. 2013/2014)
 - much too cold in specific winter situations

MEtCoOp development project to improve near surface temperature forecasts

Task 1: Observation usage in surface analysis

- Monitoring by forecasters/ Morten/Mariken/Magnus?

Task 2: Surface analysis tuning

- Magnus' fix (increased weight in Tsoil updates) introduced again 19 June 2014 by Ole (tested by Xiaohua and Ole)

Task 3: ECOCLIMAP – how realistic are the roughness lengths for various patches used in Scandinavia, e.g polar and subpolar wetlands?

Task 4: Tuning of snow properties

- Snow emissivity, snow fractions

Task 5: Cloud issues

- ICE3 and LOSIGMA experiments