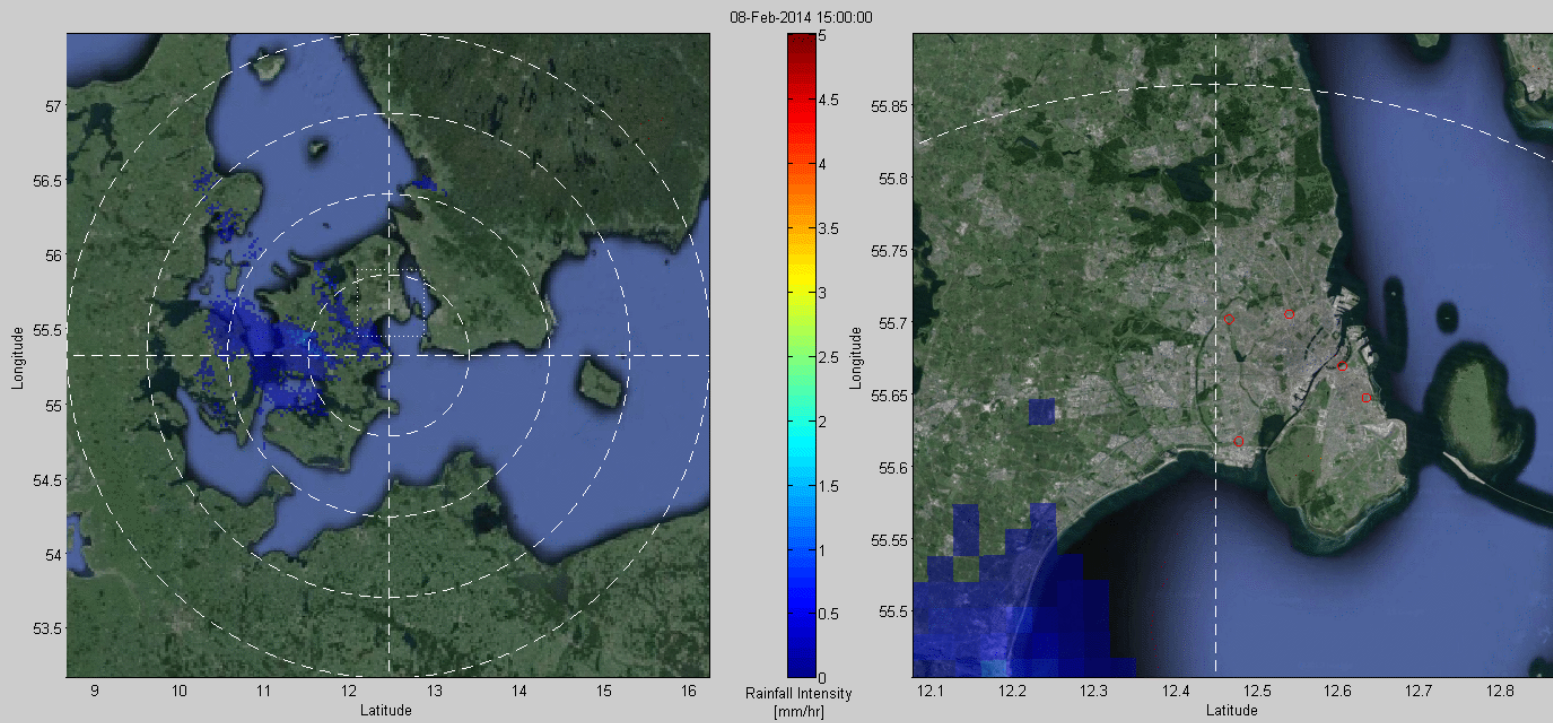


KAN RADAR DATA GIVE MERE NØJAGTIGE NEDBØRSMÅLINGER?

MICHAEL R RASMUSSEN
INSTITUT FOR BYGGERI OG ANLÆG
MR@CIVIL.AAU.DK

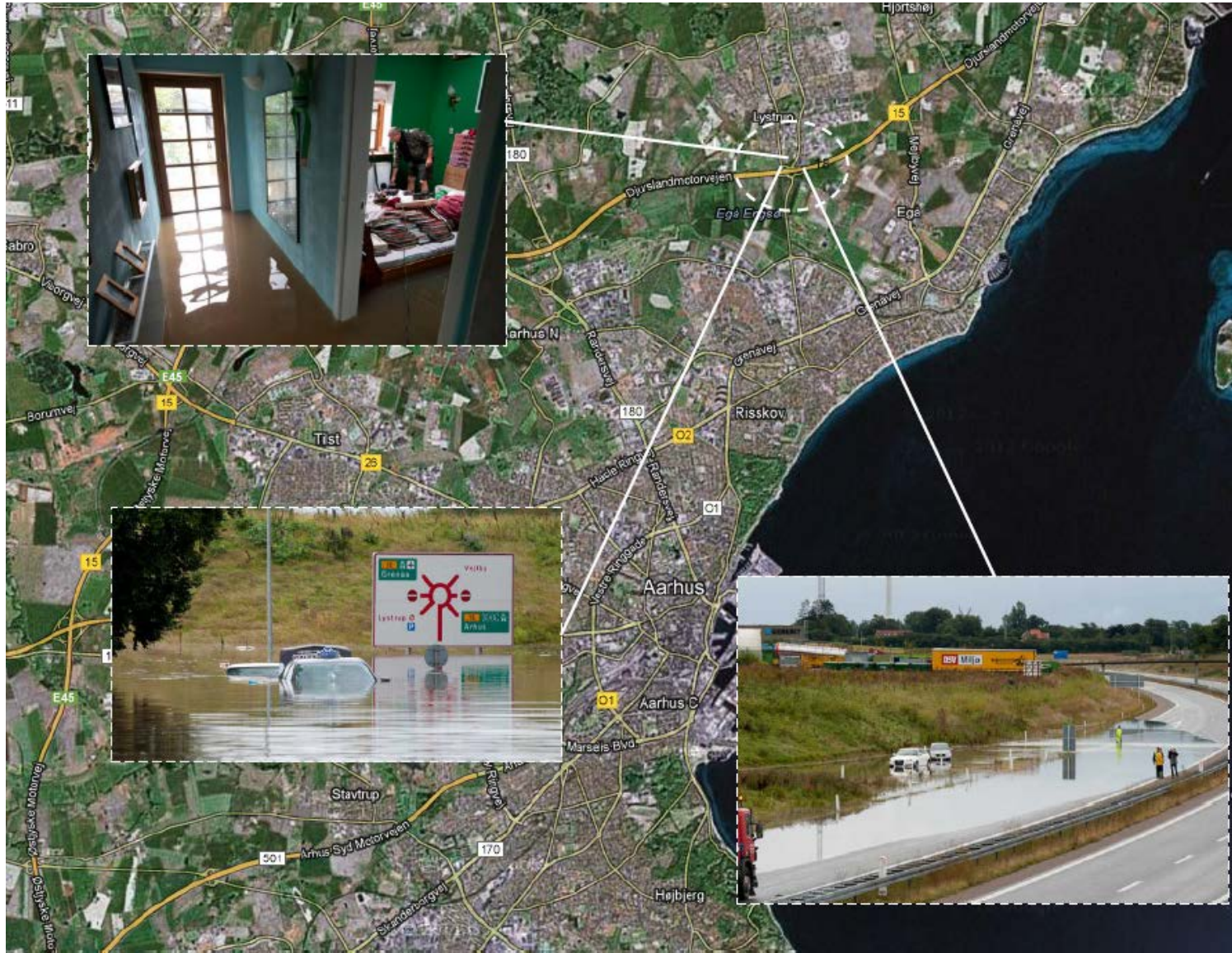


Vejrradar – tæt på og langt fra



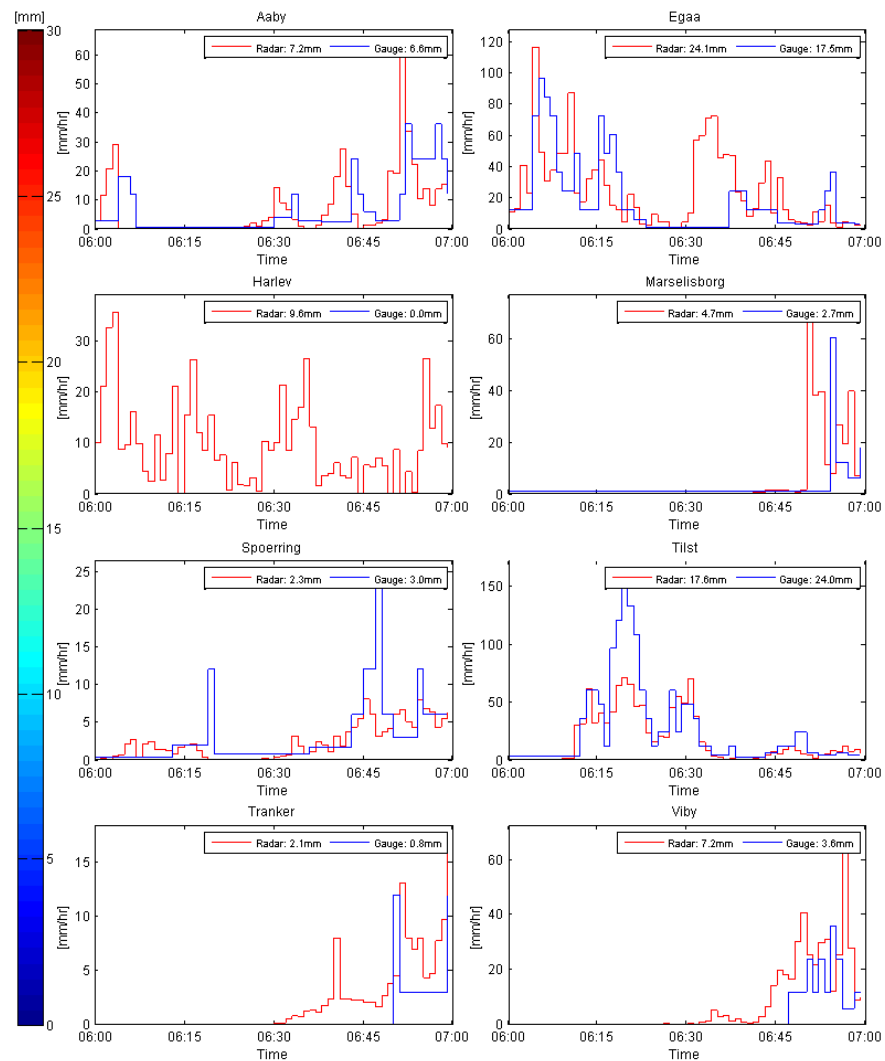
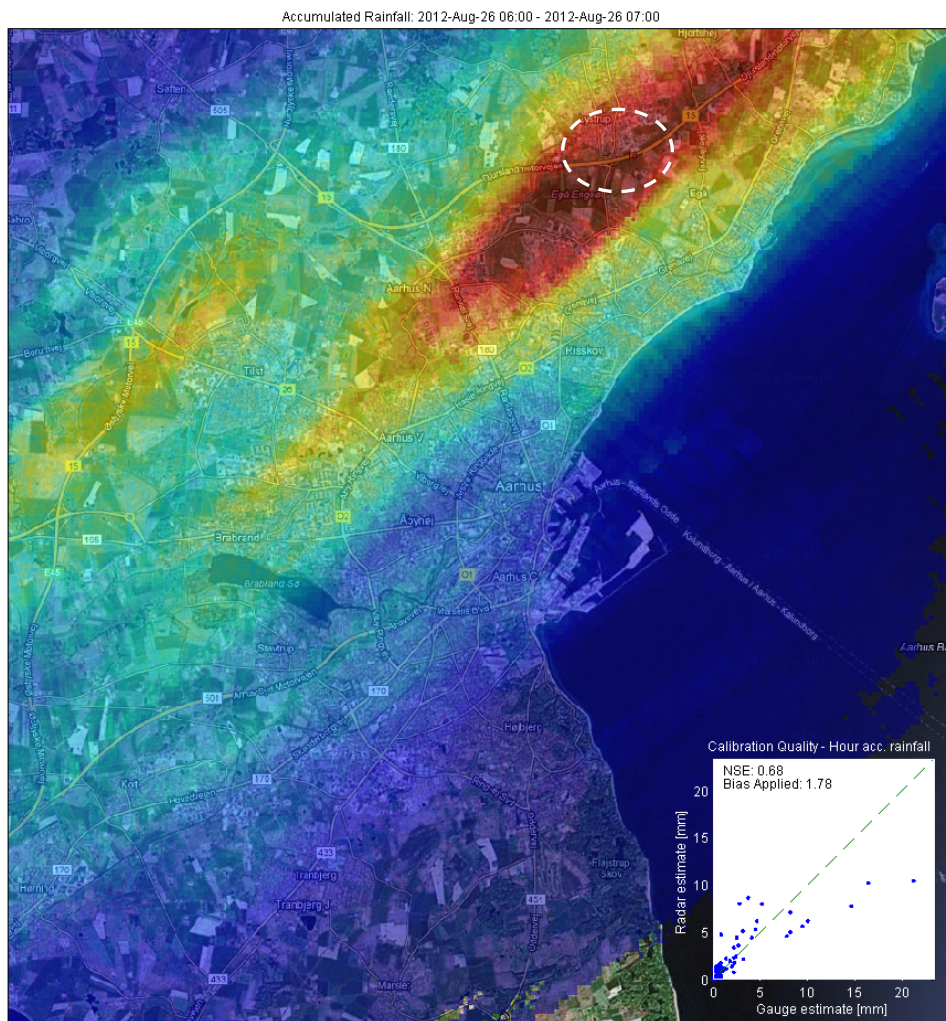
Case: 26/8 2012

- Oversvømmelse af Lystrup og Djursland motorvejen



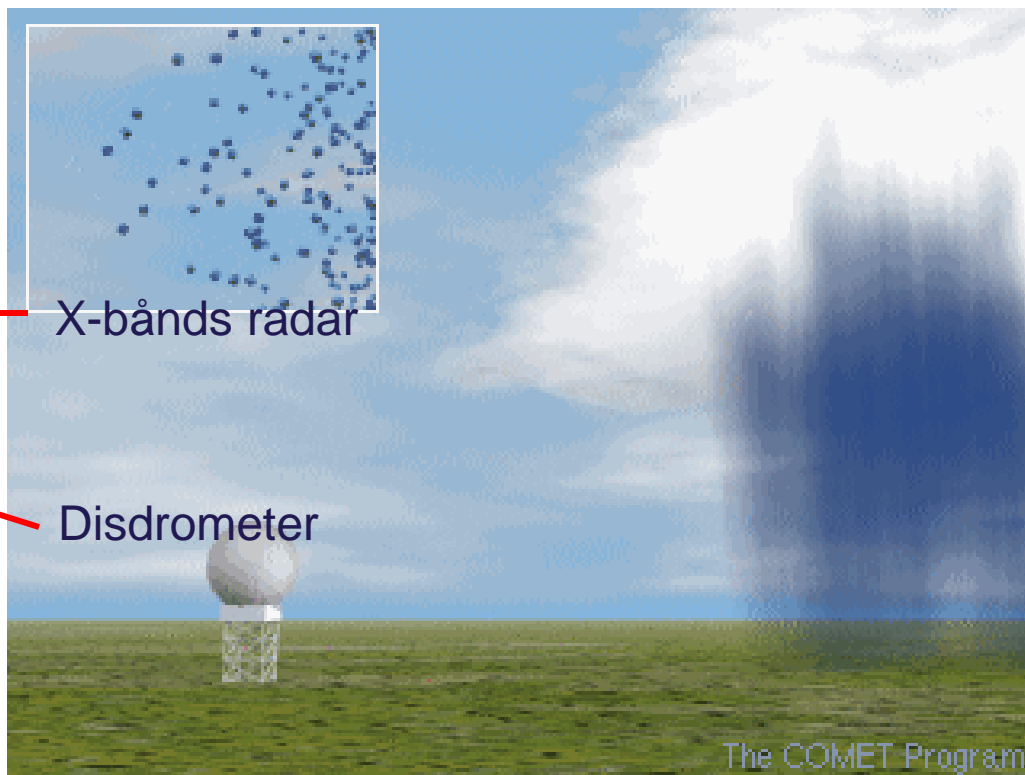
Case: 28/8 2012

- Akkumuleret nedbør 06:00 – 07:00





C-bånds radar



X-bånds radar

Disdrometer

The COMET Program



Furuno WR-2100



Eldes WR10X

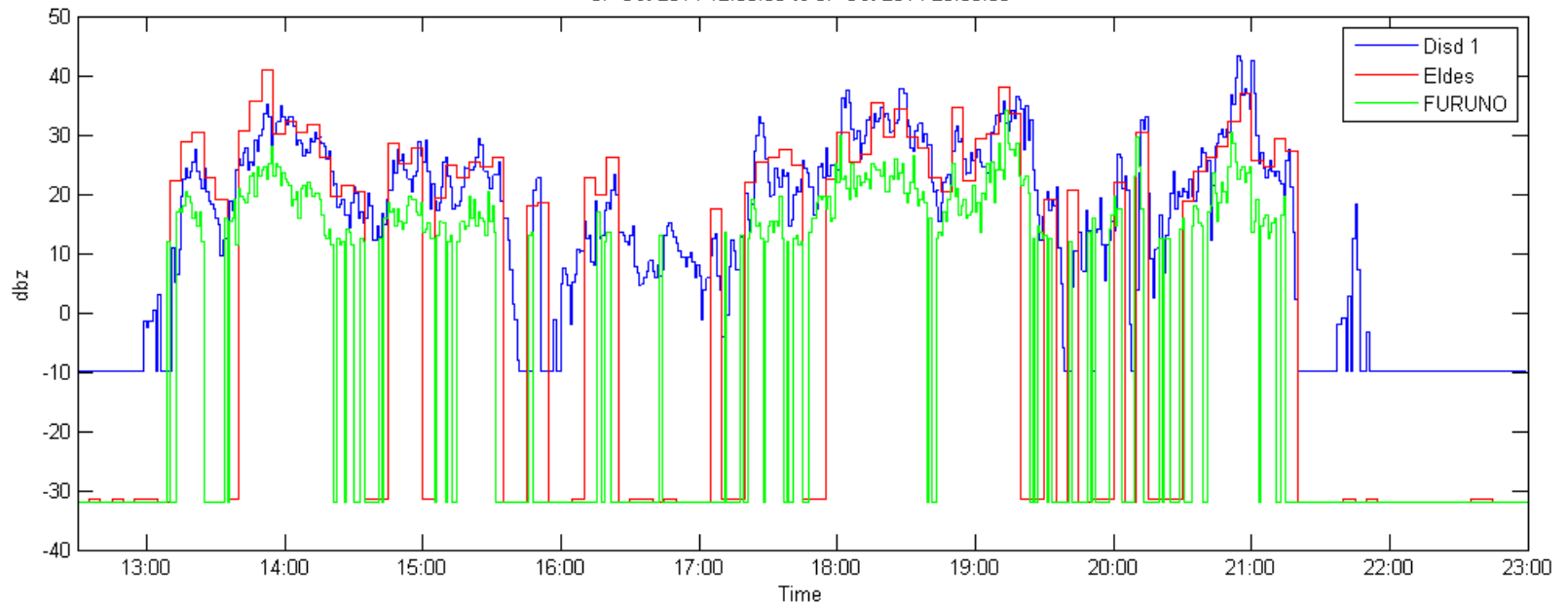


Nye X-bånds radarer

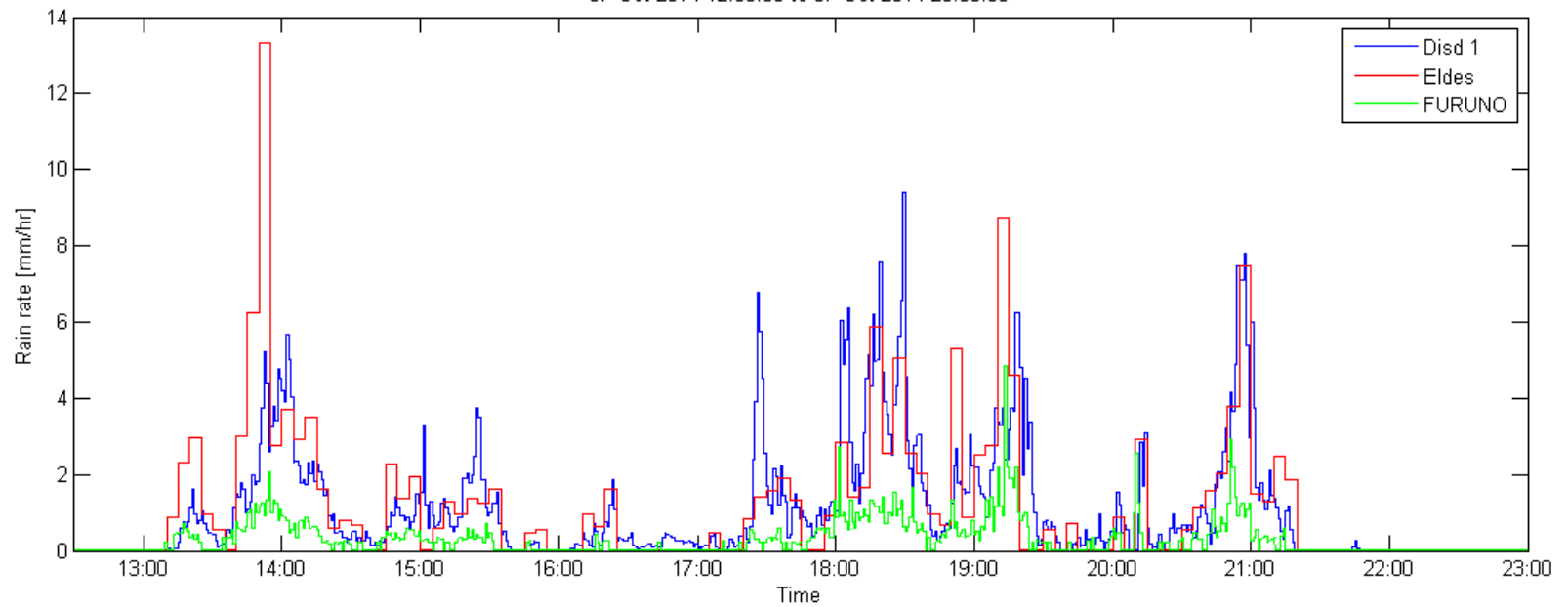


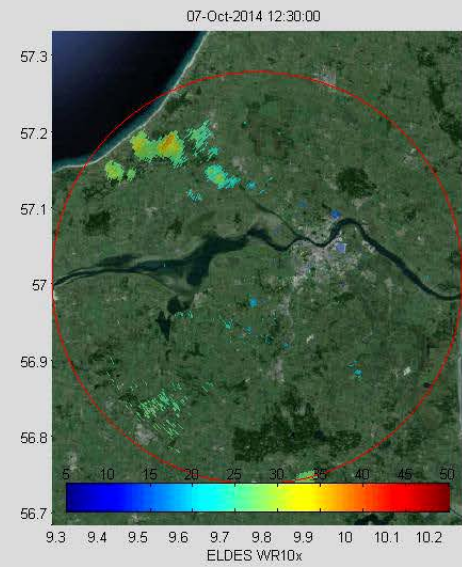
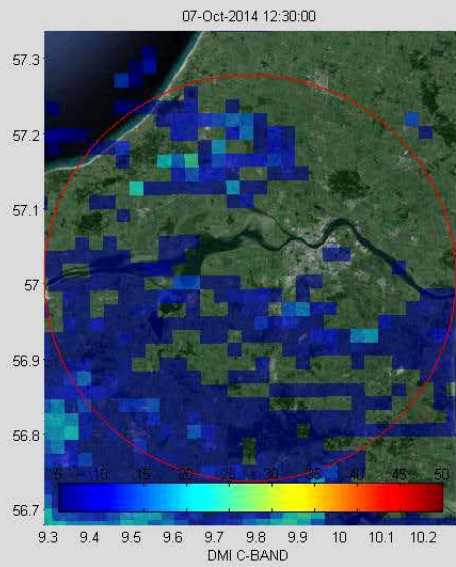
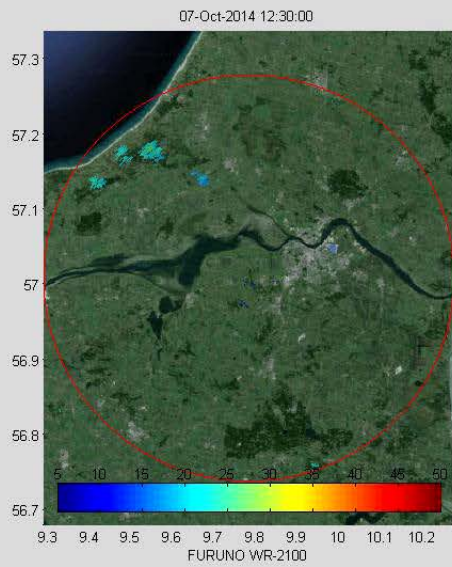
AALBORG UNIVERSITY
DENMARK

07-Oct-2014 12:30:00 to 07-Oct-2014 23:00:00



07-Oct-2014 12:30:00 to 07-Oct-2014 23:00:00



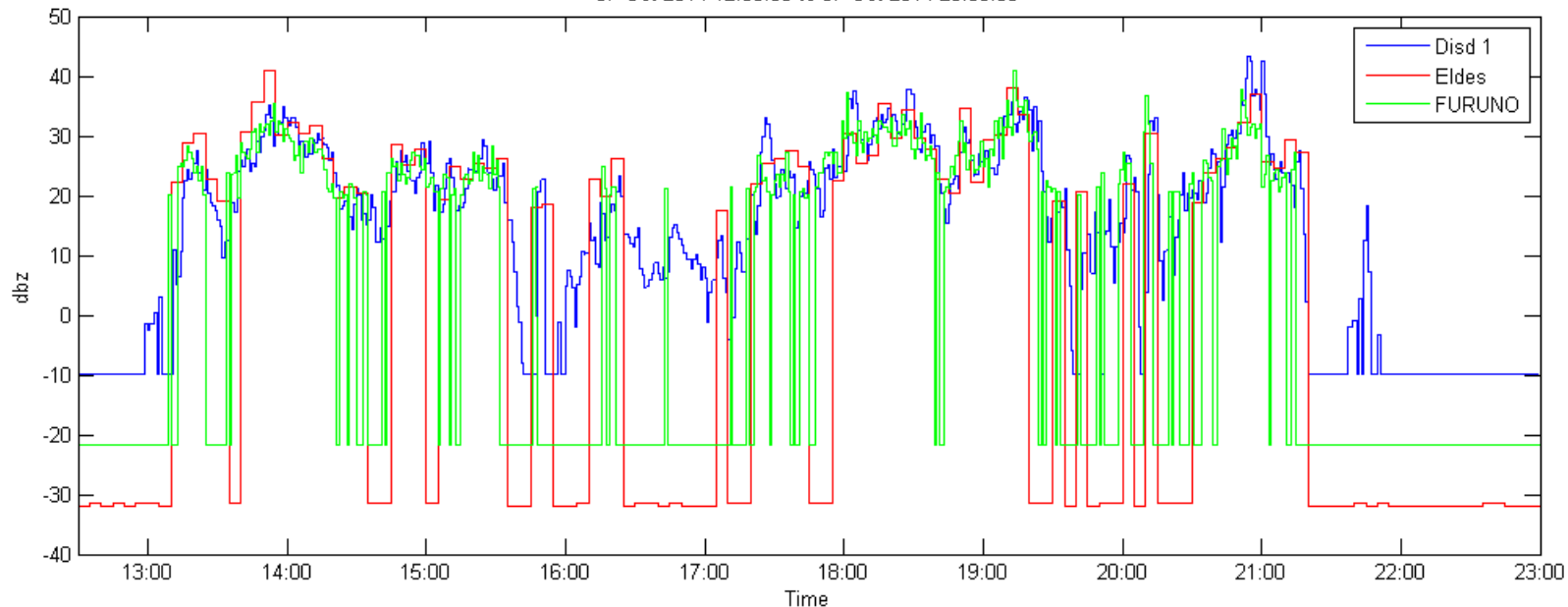


Aalborg University, Research Data - Not for public use.

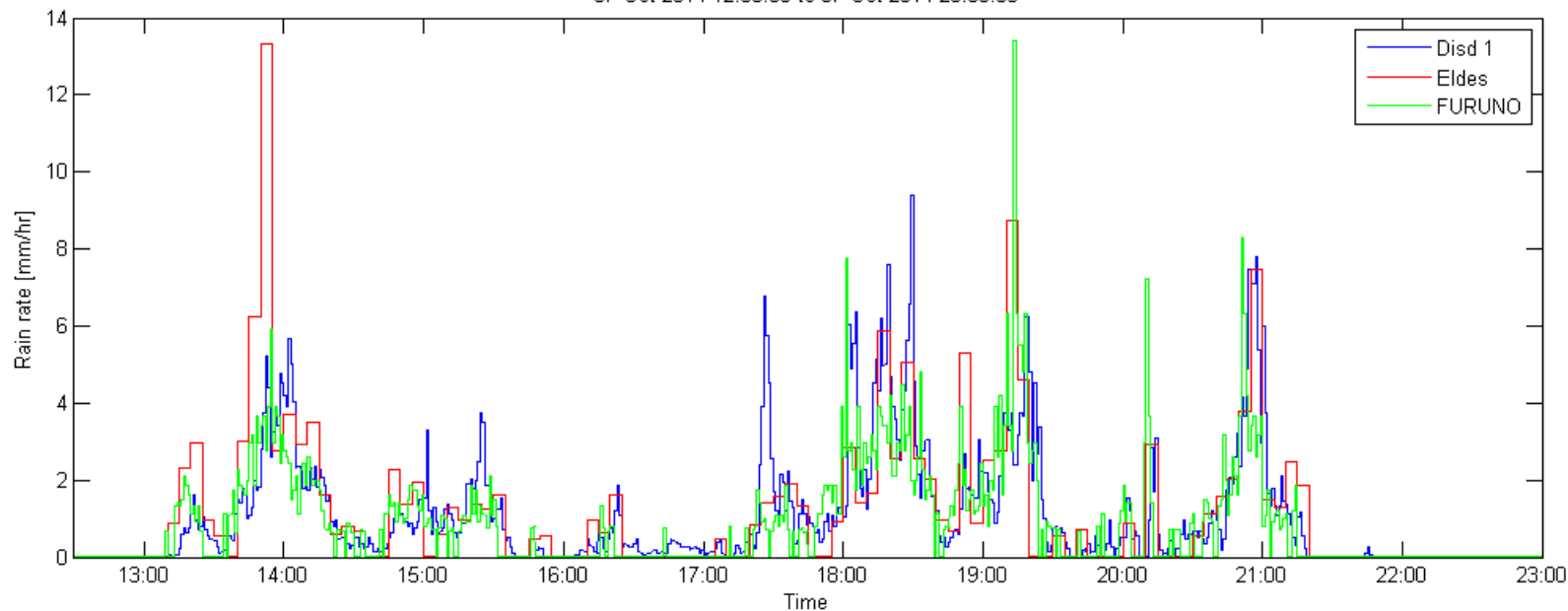


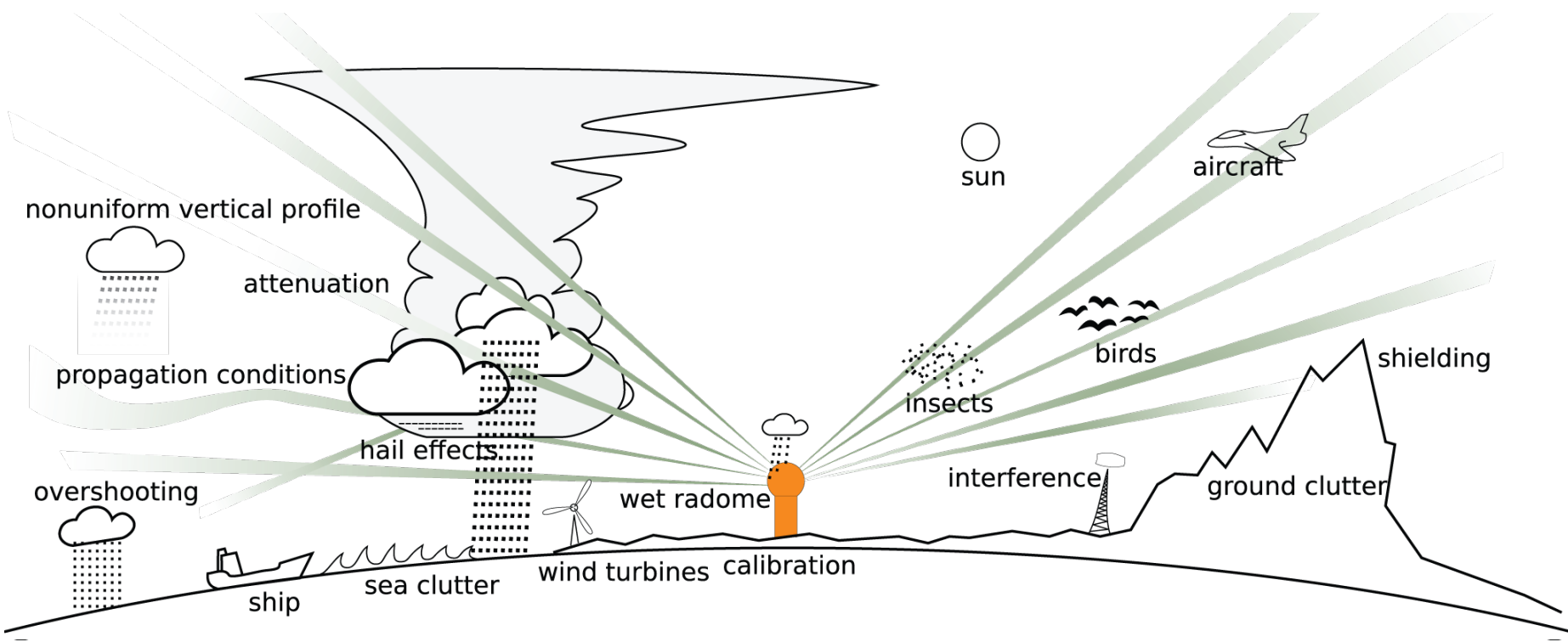
AALBORG UNIVERSITY
DENMARK

07-Oct-2014 12:30:00 to 07-Oct-2014 23:00:00



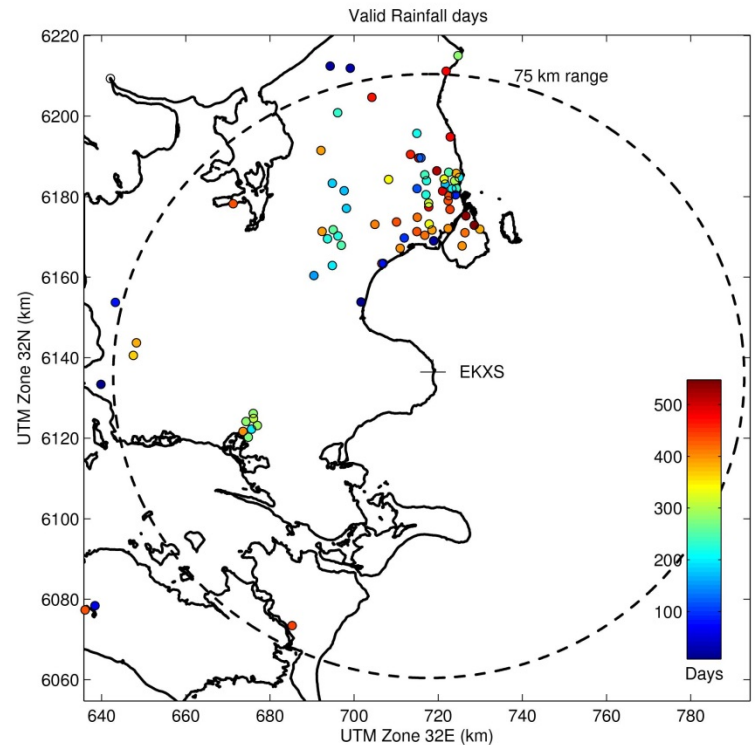
07-Oct-2014 12:30:00 to 07-Oct-2014 23:00:00





Mean Field Bias justering (på historiske data)

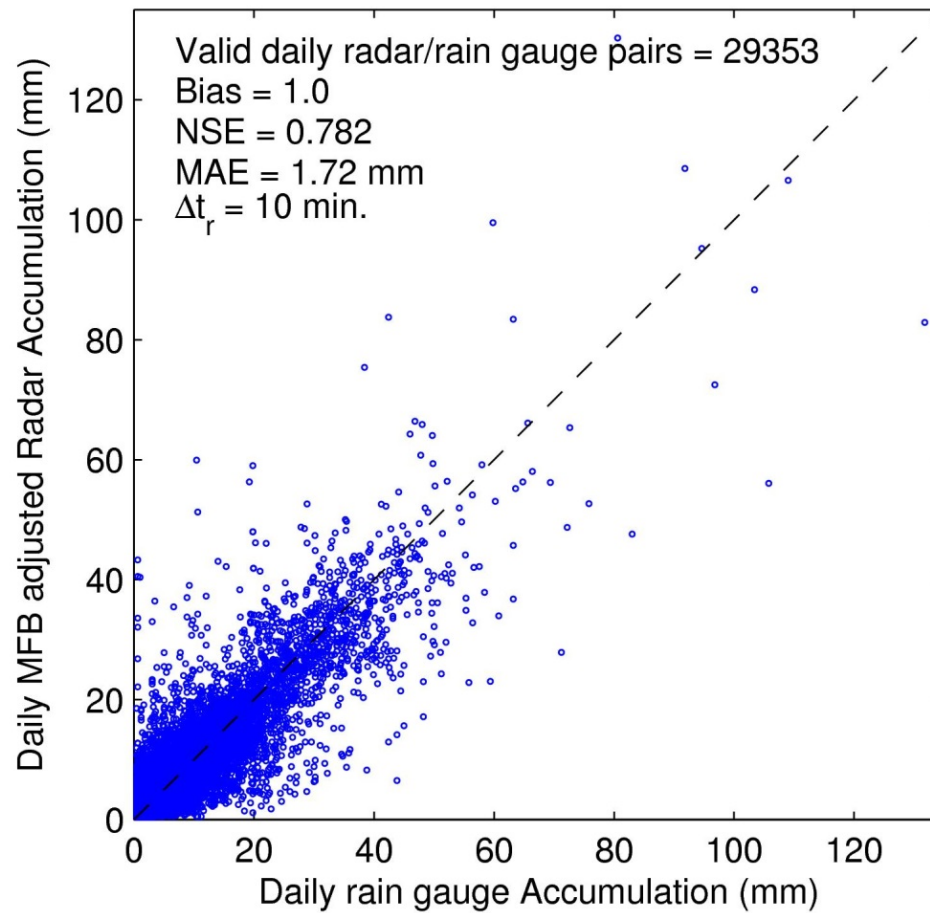
- 10 års radar observationer (2002-2012) from DMI C-band radar at Stevns (EKXS).
- DMI pseudo-CAPPI produkt
resolution: 500 x 500 m², 10 min.
- 49-79 regnmålere 75 km range
resolution: 0.2 mm, 1 min.
- Fast Z-R forhold (Standard Marshall Palmer)
- Mean field bias Justering



Thorndahl, S., Nielsen, J.E., Rasmussen M.R. (2014) *Bias adjustment and advection interpolation of long-term high resolution radar rainfall series*, Journal of Hydrology, Volume 508, 214-226.

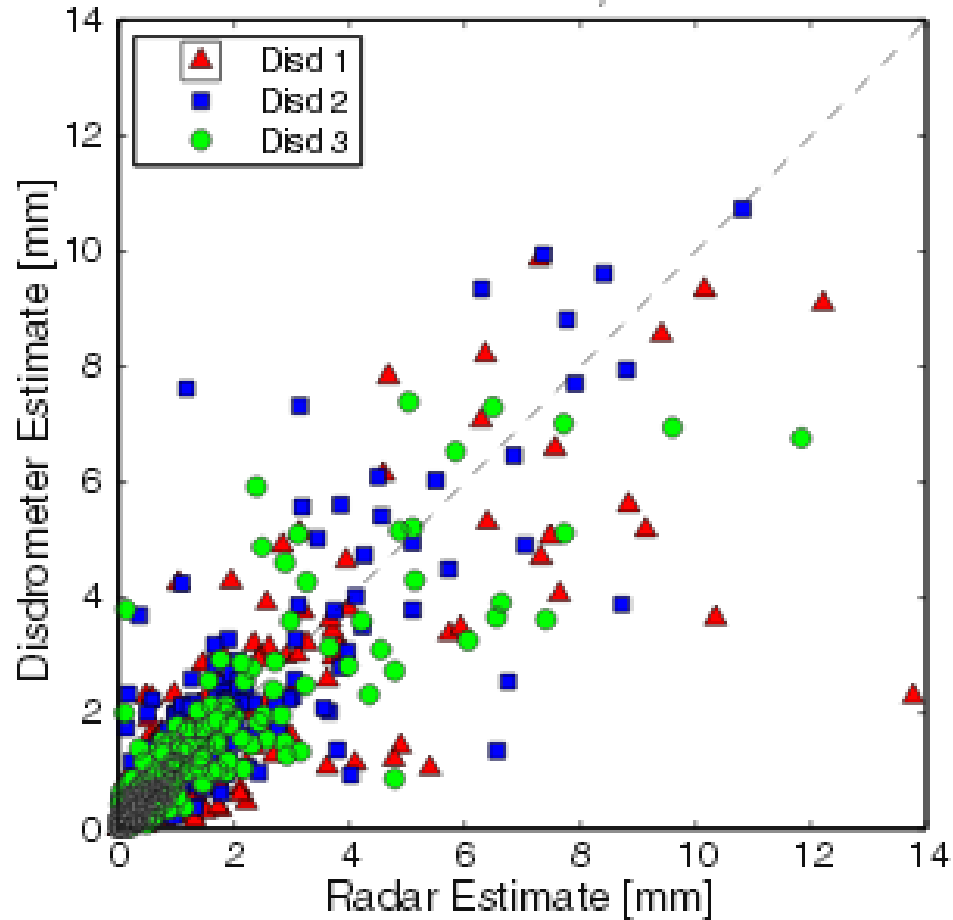


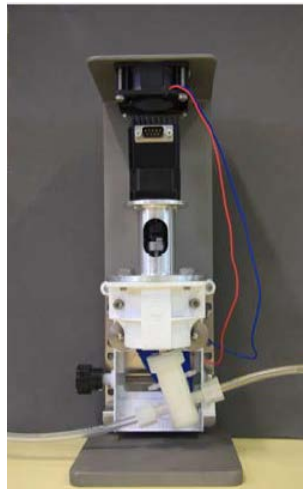
SAMMENHÆNG MELLEM REGNMÅLER OG VEJRRADAR



Vejrradar kvalitet

Original radar data,
1 Hour Accumulations, NSE : 0.601

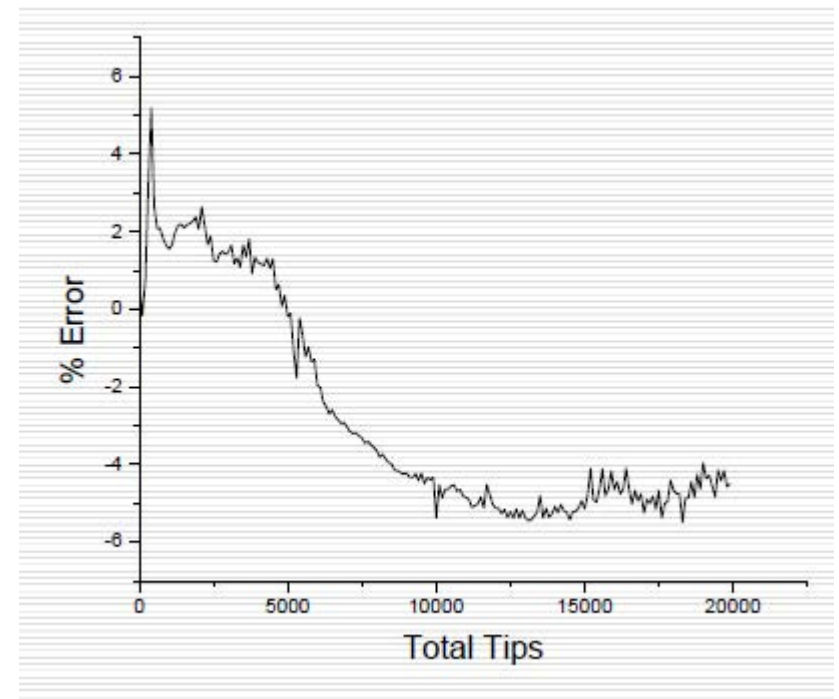
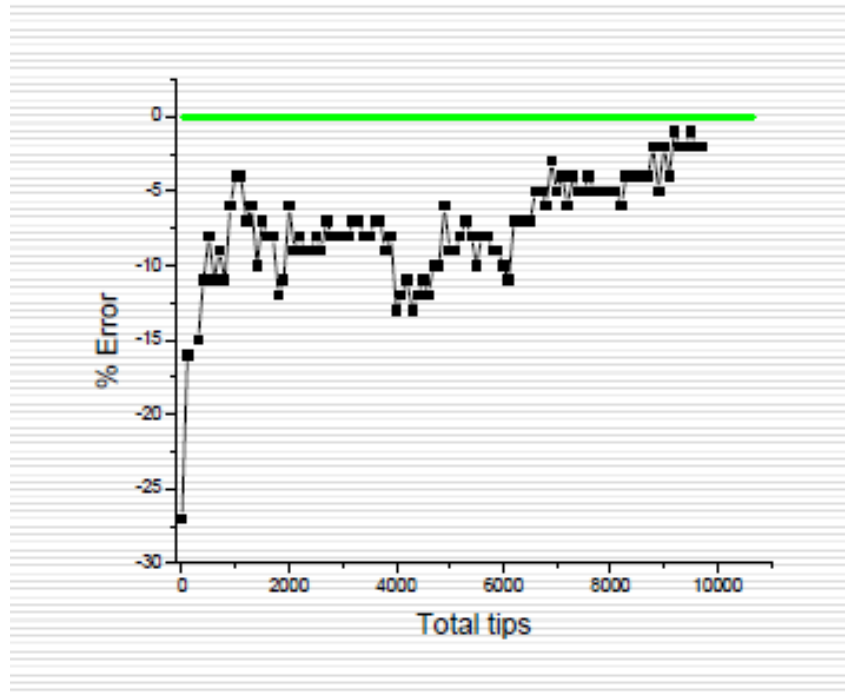




http://www.wmo.int/pages/prog/www/IMOP/TrainingMat/2011-Melbourne/Doc_3_3_Tipping-bucket-rain-gauge_JGorman.pdf



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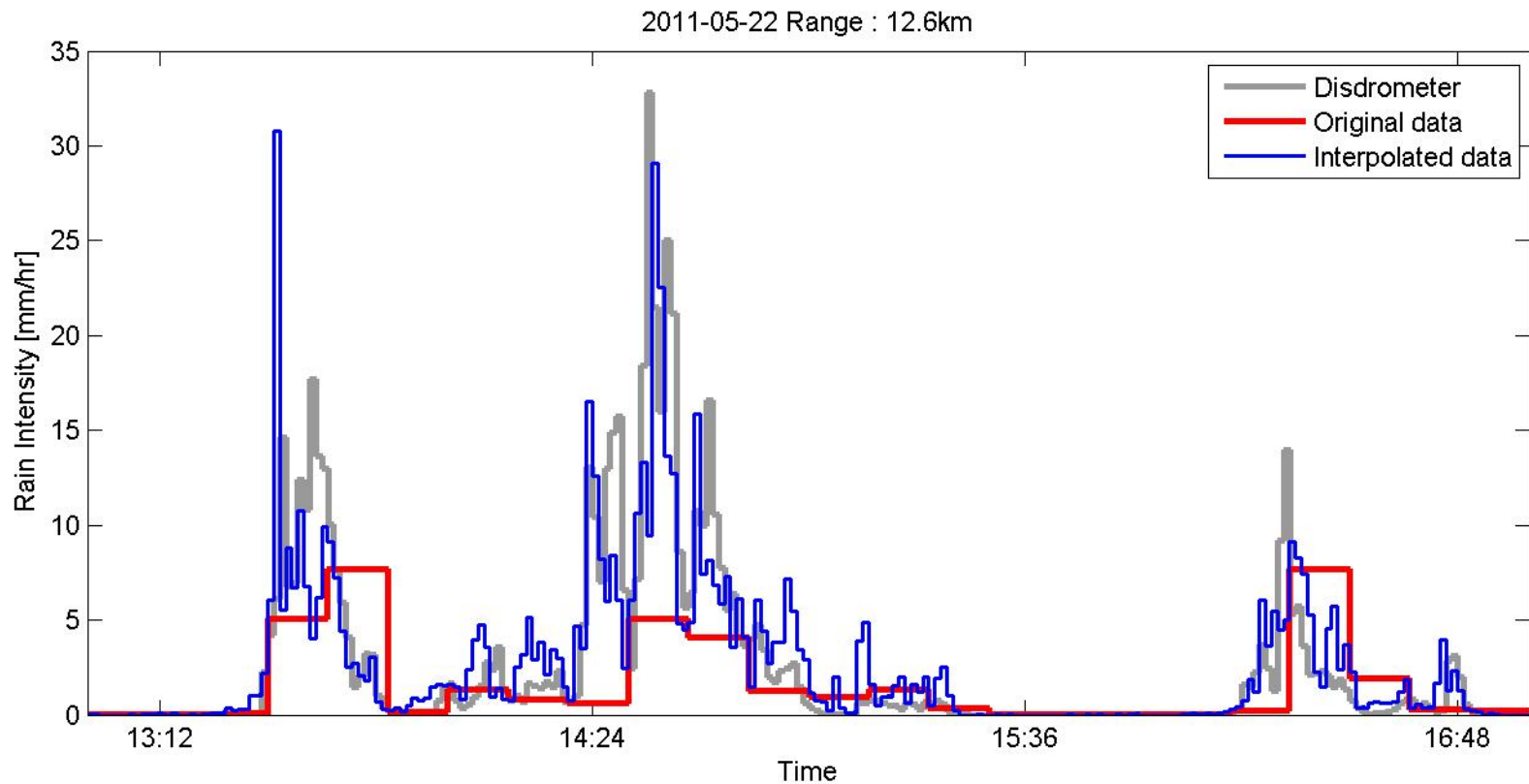
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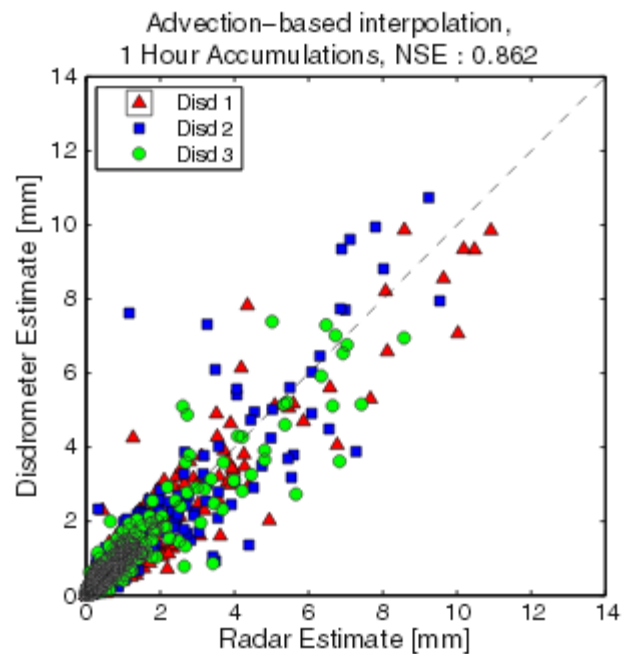
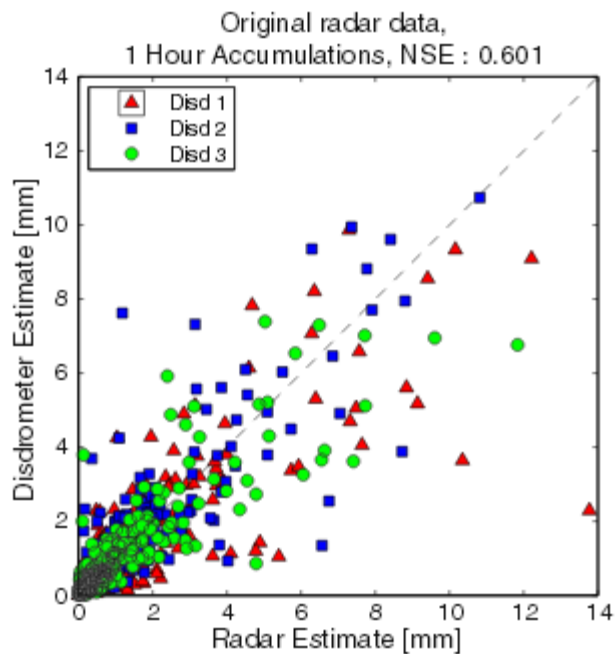


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Forbedring af radardata – fremtiden er her nu.



Vejrradar kvalitet



Håndtering af usikkerhed mellem radarmåling og jordobservationer

