## **Poster 172-D2**

# Sea ice motion from space

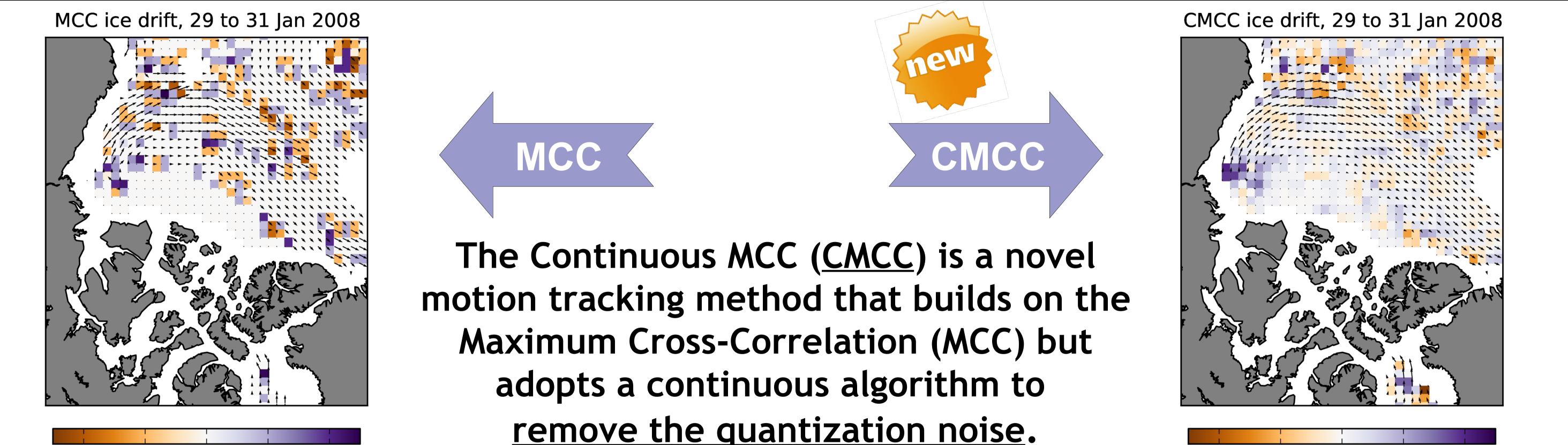
An alternative method and its validation in the Arctic

Thomas Lavergne, Steinar Eastwood, Johannes Röhrs, Harald Schyberg and Lars-Anders Breivik Norwegian Meteorological Institute (met.no) thomas.lavergne@met.no



Norwegian Meteorological Institute

iAOOS



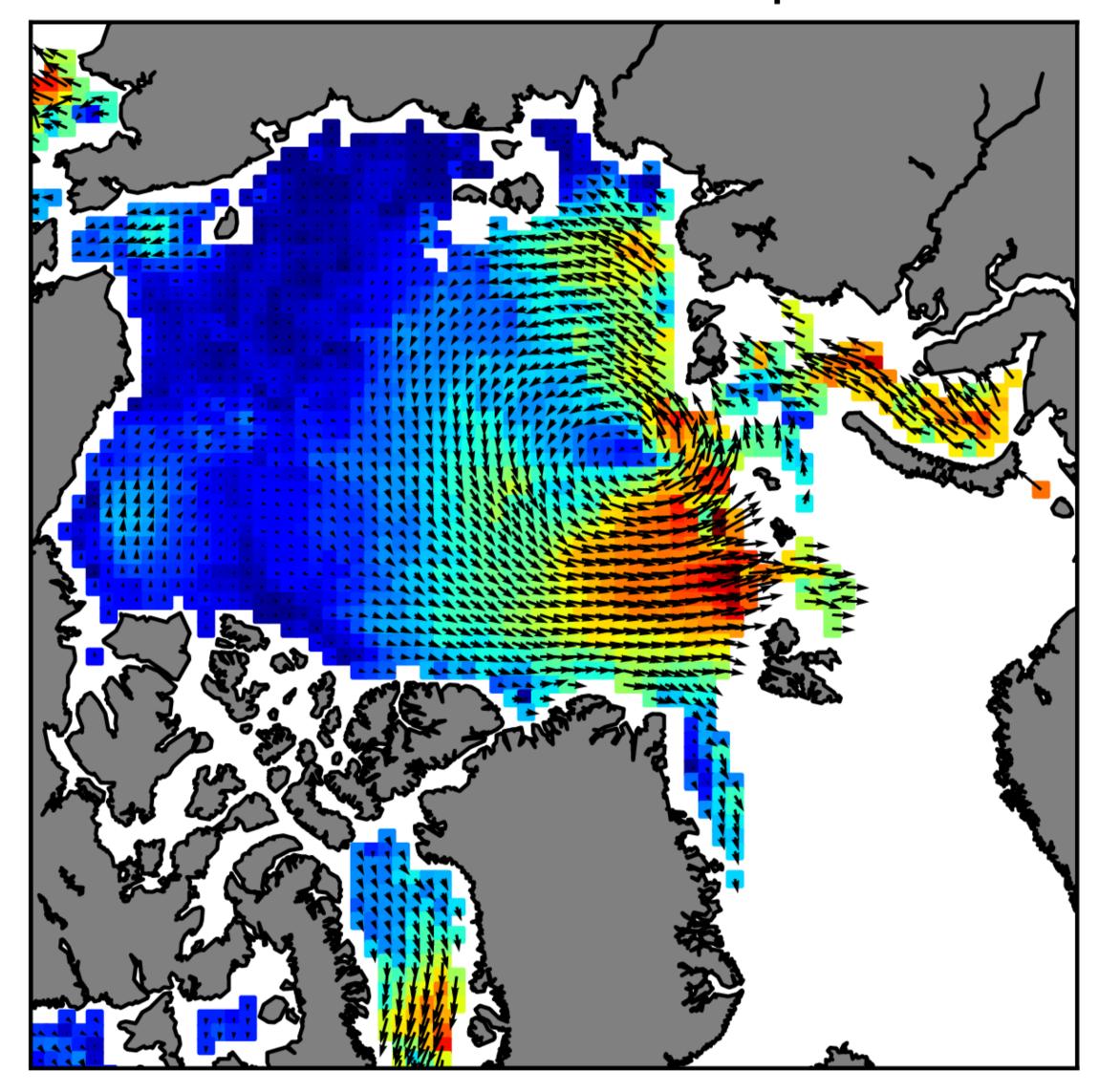
-0.2 +0.1+0.2+0.0Divergence

remove the quantization noise.

Lavergne *et al*. (2010)

+0.1+0.2Divergence

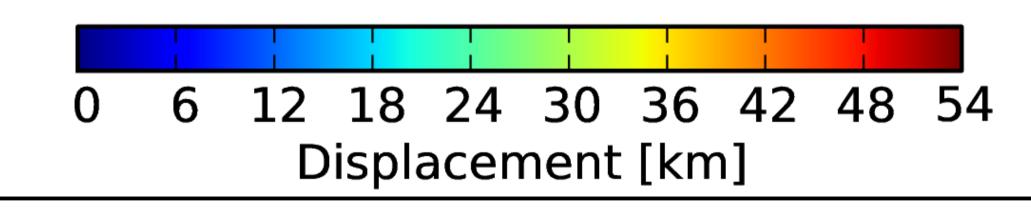
### sea ice drift, 12 to 14 Apr 2010



An operational processing chain that delivers near-real-time ice drift products is installed at EUMETSAT OSI SAF<sup>1</sup>

## Product specifications:

2-day ice motion maps



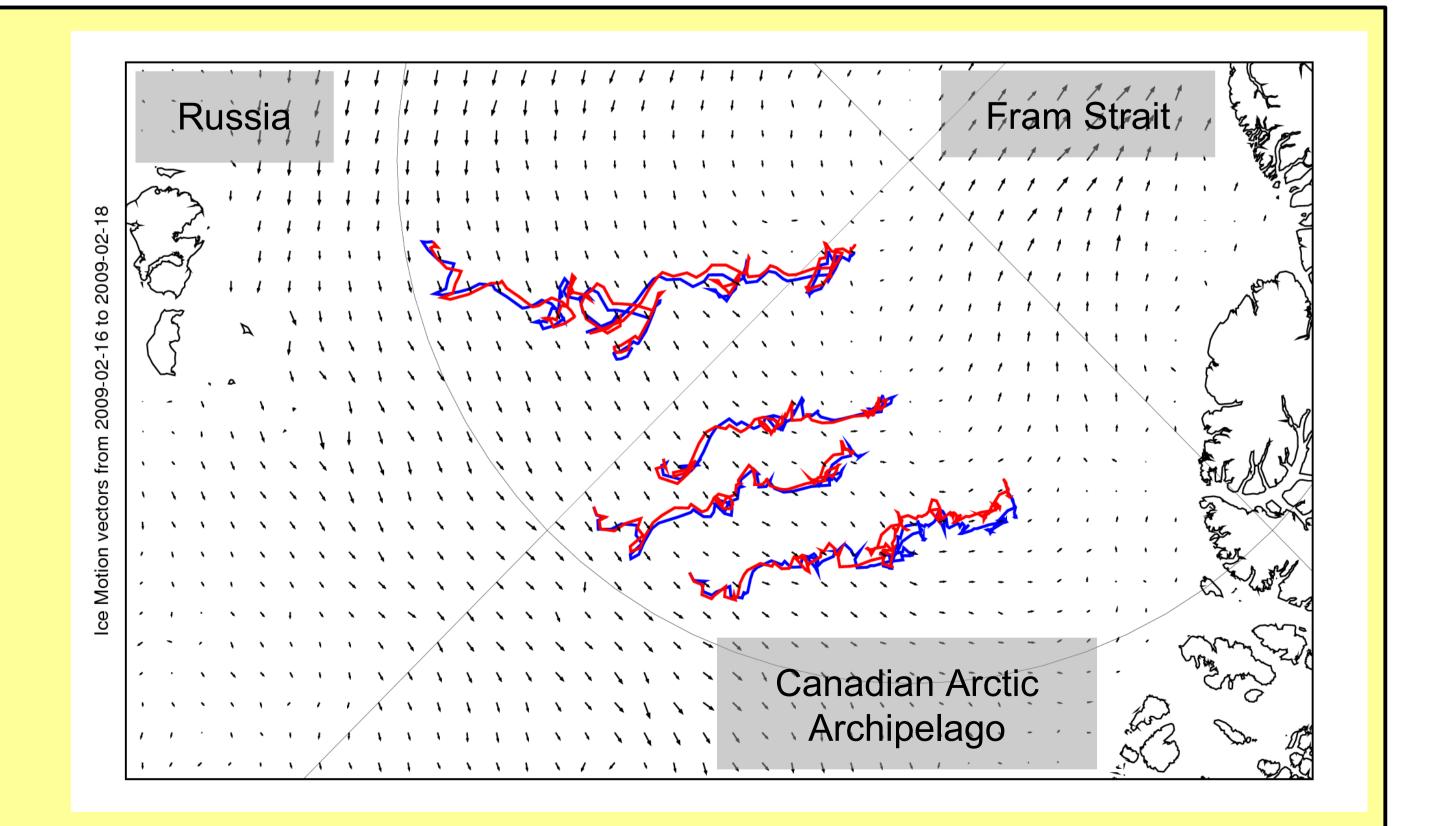
Available daily (October throughout April) Polar Stereographic, 62.5 km spacing □ AMSR-E, SSM/I, ASCAT products + Merged (multi-sensor) daily analysis Northern Hemisphere Validated against GPS trajectories



1: EUMETSAT Ocean and Sea Ice Satellite Application Facility

Validation against GPS drifters:

Trajectories of 6 ITP<sup>2</sup> (red) and associated Lagrangian displacements from the 2-day OSI SAF sea ice drift products (blue). 2008 Trajectories are from October throughout March 2009 (6 months).



2: Ice Tethered Profilers (Acknowledgment: Woods Hole Ocean. Inst. for distributing ITP data.

#### Reference

Lavergne, T., S. Eastwood, Z. Teffah, H. Schyberg, and L.-A. Breivik (2010), Sea ice motion from low resolution satellite sensors: an alternative method and its validation in the Arctic, J. Geophys. Res., doi:10.1029/2009JC005958, in press.

URL: http://www.agu.org/journals/pip/jc/2009JC005958-pip.pdf

#### Contact

**Thomas Lavergne** Norwegian Meteorological Institute, OSLO, NORWAY E-mail: thomas.lavergne@met.no WEB: http://osisaf.met.no