**The Cryosphere
Discussions**

Interactive comment on "An algorithm to detect sea ice leads using AMSR-E passive microwave imagery" *by* J. Röhrs and L. Kaleschke

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The criticism about the high pass filter was correct. We learned from further investigations that leads can be detected based on high pass filtered 89 GHz brightness temperatures. The calculation of the brightness temperature ratio is a processing step that can be omitted.

The validation of the lead detection was based on optical satellite images that allow an unambiguous identification of leads in cloud free scenes. We could easily add more results from case studies but this would not provide any new information. No other standard lead data set is available that we could use for validation. A comparison to the RGPS data set could be very interesting. We could analyse the occurence of leads as a response to divergence and shear. However, to our knowledge there exists no

lead parameter in the RGPS product.

Interactive comment on The Cryosphere Discuss., 4, 183, 2010.