Hydrol. Earth Syst. Sci. Discuss., 5, S2544–S2545, 2009

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## **HESSD**

5, S2544-S2545, 2009

Interactive Comment

## Interactive comment on "Soil moisture retrieval through a merging of multi-temporal L-band SAR data and hydrologic modelling" by F. Mattia et al.

W. Wagner (Editor)

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Received and published: 3 February 2009

The paper fits extremely well into this special issue as it combines remote sensing and hydrological modelling in a very effective way in order to improve the estimation of soil moisture at small spatial scales. It is acceptable subject to minor revisions.

In addition to the reviewer's recommendations, I have a couple of additional comments:

- 1) The statement on lines 25-26 is also true for coarse-resolution active microwave data
- 2) In addition to Figs 3 and 4 please also show the plot of VV backscatter versus fresh biomass to corroborate your statement that VV backscatter is "clearly attenuated" by

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Interactive Discussion

**Discussion Paper** 



the crop canopy.

3) You state that the API simulation was not calibrated over the test site, while the TOPLATS and PROMET models probably were. If calibrated may the API results not be similar to the TOPLATS and PROMET results?

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 5, 3479, 2008.

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