Reply to the comments of the anonymous referee #1

The authors wish to thank the referee for the many helpful comments. Please find below an item-by-item response.

- P 3386 L 12: the novel precipitation product is assimilated ... This is a wrong wording that MUST be changed. The precipitation product is NOT assimilated into the model, it is used by the model as forcing. Data assimilation is updating model results with external data sets (Kostov and Jackson, 1993). This is not what is happening in thiscase, the the term data assimilation MUST be replaced.

- Same thing P 33386 L 16.

Agreed. The wording "is assimilated into the model" has been replaced at all occurrences with "is used to force the model".

- P 3386 L 22: please spell EMIRAD in full the first time it is used.

In the list of acronyms in the PhD thesis by Sten Schmidl Søbjærg (http://phd.dtv.dk/2002/oersted/ss_soebjaerg.pdf), EMIRAD is explained as "EMI polarimetric radiometer system", while EMI is explained as "Ørsted-DTU, Electromagnetic Systems". However, EMIRAD data have been used in many scientific studies and, to our knowledge, the derivation of the name of the radiometer is not explained in any of those publications. Therefore, we prefer to use the radiometer name without further explanations.
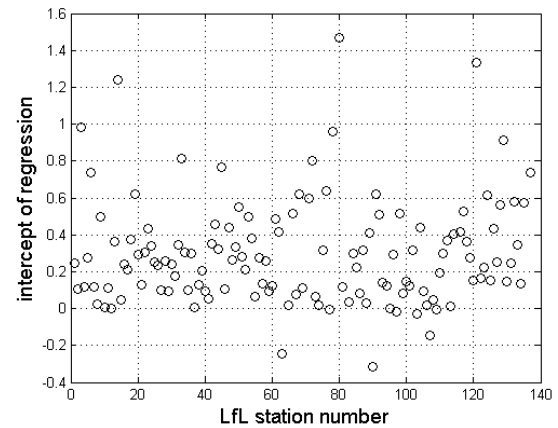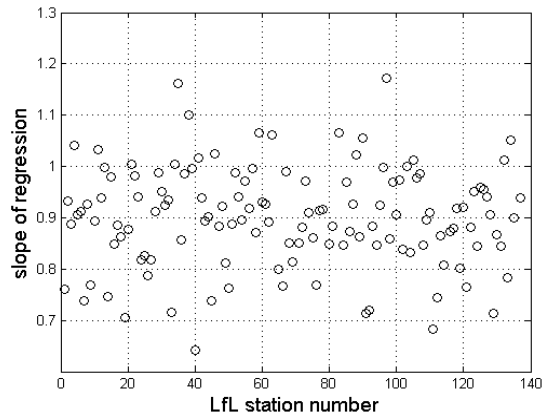
- P 3389 L 14: what does "AG" mean ?

"AG" is the abbreviation for "Aktiengesellschaft" which is a German term specifying the type of the company in legal terms (similar to GmbH, LLC, sarl, S.R.L., etc., depending on the country). As this is part of the company name, an explanation in the paper is considered unnecessary. For clarification, the relevant phrase has been changed to "the company Meteomedia AG (henceforth called Meteomedia)".

- P 3392 L 25: short and longwave radiation, not radiation fluxes (remove "fluxes").

Has been changed as suggested.

- Section 3.1: I would like to see the slope and the intercepts of the regressions as well. A very high correlation coefficient does not mean that the regression is close to the 1:1 line.

Slopes and intercepts are as follows:

A summary of this information has been added to the text.

- I am missing an explanation on how the model was calibrated. Was it calibrated using soil moisture data, discharge data, or using another data set or a combination of data sets, or was it not calibrated at all? Please provide an explanation. Also, how is the way the model was calibrated going to have an impact on the conclusions from the paper?

The concept of the PROMET model is that it is based on 1st order physical and physiological principles. It completely closes the water and energy balance. The model is thus not calibrated with measured discharge (but of course the discharge is used to validate model performance). This information has been added to Section 2.5.

- Second sentence in the conclusions: again, the term "assimilated" MUST be replaced by another term. What the authors have done is clearly NOT data assimilation.

Agreed, the term has been replaced by "used to force".

- Check the references. Many capitals are missing (danube, agrisar, ...).

We agree with the referee. In the revised manuscript, the list of references does not seem to have this problem.