



Daisy Newsletter no. 16



**Merry Christmas and Happy New Year
From the Daisy-group at PLEN, UCPH**

1 The Daisy code, v. 5.59

Version 5.59 is still the last version available on all platforms.

2 Daisy group in EGU 2019

The Daisy group is co-organizing a session in the EGU General Assembly 2019:

SSS7.7/AS4.27/HS8.3.14:

Data assimilation in the vadose zone and beyond: merging models and data in the groundwater-soil-vegetation-atmosphere continuum

The deadline for the receipt of Abstracts is 10 January 2019 - 13:00 CET.

Link to the abstract submission:

<https://meetingorganizer.copernicus.org/EGU2019/session/31536>.

3 Recent articles where Daisy has been used

Only one article was identified during the last months. *Manevski et al. (2019)* combined single or multiple weather station data with soil textural

data ranging from low to high detail, i.e., point data from a field station, the FAO Digital Soil Map of the World and a comprehensive data from national soil survey, as input to the Daisy model to simulate and upscale crop yields, drainage and nitrogen leaching for an agroecosystem in the North China Plain.

Increasing the detail of the weather data increased the spatial variation of all simulated variables and decreased their regional median. Regional crop yields were simulated well with high-detail input data, though at a weak response to data detail. Simulated regional drainage and nitrogen leaching, and their spatial variability, however, responded well and increased two-to threefold, but their regional medians were similar for medium- and high-detail soil data. This work demonstrates the importance of explicit consideration of weather and soil variability for agro-environmental simulation studies at regional scale.

4 Posters

Two of our PhD-students presented Daisy-related posters at International soil modelling conference (ISMC) at Wageningen University, Netherlands.

Maja Holbak: The effect of application timing on pesticides leaching to drains: how does application date affect pesticide leaching?

Jeanne Vuaille: Effect of application timing on pesticide leaching to drains: towards a prediction of the optimum application date.

5 Daisy-related presentations at the Plant Congress in Herning, Denmark, 15-16. Jan.

Session 43, 45 and 87 on 16th include talks about Daisy or the use of Daisy to interpret and extrapolate data.

6 References

Manevski, K., Børgesen, C.D., Li, X., Andersen, M.N., Zhang, X., Shen, Y., Hu, C. (2019). Modelling agro-environmental variables under data availability limitations and scenario managements in an alluvial region of the North China Plain. *Environmental Modelling and Software* 111: 94-107.