

Introduction

- rise, transpiration.
- during dry periods (Wang-Erlandsson et al., 2016).



Vegetation rootzone storage and rooting depth, derived Utrecht University from local calibration of a global hydrological model

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Fig. 5. PCR-GLOBWB calibrated parameterization

Outlook

- Sensitivity analysis.
- Analysis of role of capillary flows.
- Validation with discharge data.
- climate and depth of the groundwater table.

References

- continental level, Environ. Model. Softw., 75, 68-76, 2016.
- and water availability, Water Resour. Res., 47(7), 2011.

• Calibration on evaporation allows to change the values in each pixel. •Climate signal visible, but not everywhere as expected.

• Analysis of calibrated rooting depths per land-use type. • Future goal for global hydrological models: uncalibrated parameterization, but with better methods to regionalize "measurements", taking into account soil type, vegetation type,

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• Schenk, H. J. and Jackson, R. B.: Global Distribution of Root Profiles in Terrestrial Ecosystems, 2003. • van Beek, L. P. H., Wada, Y. and Bierkens, M. F. P.: Global monthly water stress: 1. Water balance

• Wang-Erlandsson, L., Bastiaanssen, W. G. M., Gao, H. and Jägermeyr, J.: Global root zone storage capacity from satellite-based evaporation, Hydrol. Earth Syst. Sci., 20, 1459–1481, 2016.