

HYDROLOGICAL MODELING OF LARGE SCALE: INITIAL PARAMETERIZATIONS IN AMAZON (SH 38.19)

ESALQ

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INTRODUCTION

Anthropogenic alterations in natural's ecosystems and it's conversion to agricultural areas, specially in the Amazon, can affect the proprieties of land surface and soil (storage of nutrient's and it's recycling rate). Such processes alter both surface and sub-surface hydrological cycle in the region.

In order to quantify such alterations, the following work is calibrating and evaluating the performance of the hydrological model VIC – Variable Infiltration Capacity (WOOD et al., 1992), for tropical conditions in the Brazilian Amazon.

MATERIAL & METHODS



RESULTS 770 578 385 192 J F J A

Precipitation interpolated for Ji-Paraná basin – RO (1995)



Soil moisture (layer 1) calculated by VIC model for Ji-Paraná basin – RO (1995)



Evapotranspiration calculated by VIC model for Ji-Paraná basin – RO (1995)

CONCLUSIONS

Even though the model is more suitable for large scale and the small numbers of simulations done, we observe that the same presents good relationship with data found on literature.

The next steps are the implementation of a more detailed vegetation and soils library, especially for Amazon region and better model calibration.