MODELLING OF N FLUXES USING THE INTEGRATED NITROGEN CATCHMENT MODEL (INCA) AT A SMALL SUBTROPICAL FOREST CATCHMENT IN SERRA DO MAR, SÃO PAULO, BRAZIL.

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RESUMO

The comprehension of the hydrogeochemical fluxes within a catchment is fundamental for the management of hydrological resources. The nitrogen cycle especially the nitrate component is complex and its processes are not well known for tropical regions. Although in these regions N is not a limiting factor for vegetal nutrition it is important in the control of the water bodies trophic level. The INCA (Integrated Nitrogen Catchment) model was chosen because it is a model for N that takes into account the vertical flows, tracking N inputs from the atmosphere and fertilizer through catchments soils and the river and also integrates horizontally across the catchment (e.g. land uses, vegetation, hydrology) by addressing the spatial variation which influences nitrate the river.