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Subsidies to creation of a wildfire hazard regional model: Taquari River Springs Park, MS - A case study

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Using map algebra, in the GIS (Geographic Information Systems) environment, this study integrates The BRAMS - Brazilian Regional Atmospheric Models software (CPTEC, 2005), model climate data with remote sensing data intending to obtain a wildfire hazard map. As a case study, the Taquari River Springs Park (TRSP) was chosen, due to the presence of springs, which are considered important contributors to the Upper Paraguai Basin as well as essential remnants of the Cerrado Biome. The BRAMS model provided relative humidity, components of the horizontal wind and temperature. The TRSP land cover was identified by object based classification in a LANDSAT image, supported by field observations, from the land cover phytophysionomic types characterization, was elaborated a forest wildfire map. The integration of the different maps was made using a GIS and a new map with the associated GIS database was generated showing the zone most vulnerable to wildfire hazard.