

THERMAL CLASSIFICATION PERFORMED IN IMAGE GENERATED BY THE HYPER SPECTRAL SENSOR DAIS 7915 IN THE COAL MINE WITZNITZ - SAXON - GERMANY

1CÔRTEZ, I.M.A, 2GLAESSER,C.,3TROEGER, U., 1Instituto Bras. Meio Ambiente,
2Marthin-Luther Universitaet Halle, 3Technische Universitaet Berlin-Germany

The work here described is part of a doctoral thesis that is being conducted at the Technische Universitaet Berlin. The showed temperatures at the maps was measured in loco with the radiometer KT 15 Heimann, concomitant with an overfly of the german hyperspectral sensor DAIS 7915 on May, 1996 and the same measured temperatures were used to do the subsequent thermal calibration of the image of Witznitz, as well as the superficial object's emissivite correction. The termal classification was generated from two different methods: direct measuremt and the measurement done by the sensor DAIS 7915. In the first case, the results were simply located in maps and the temperatures was divided in classes, trying to show the maximum of variation among them. For the second case, the Planck's Law was used to determine the final temperature read by the sensor. Concluding, we can say that the image produced by the sensor allowed an excellent and meticulous thermal classification and classes with smaller intervals were not defined in function of the oversized produced file.