



## **Monitoring forest fire in Portugal with the Combined Forest Fire Risk Index (ICRIF)**

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Forest fires are the most important natural risks affecting Portugal, especially over the summer time with enormous direct economical impact, introducing fast changes on the land cover and affecting the forest exploitation. The Forest Fire Risk Index, the ICRIF, produced by the Portuguese Meteorological Institute (IM), combining meteorological conditions, vegetation status and structural information, will be presented. The ICRIF value, ranging from 0 to about 100, is calculated weighting the FWI (Canadian Forest Fire Weather Index) used in Portugal, with a factor connected with a fuel burn index and the vegetation index NDVI. Benefiting from the reprocessing of the FWI, it was possible to assess the ICRIF over the period 1999 to 2007. The results are presented, evaluating the pixel risk level and establishing some statistical indicators over the period, comparing the number of high-risk pixels in each Portuguese District area and the amount of fire events (area and number of fires), whenever possible. Preliminary results shows a correlation above 60%, between the number of pixels with higher ICRIF (above certain thresholds) for each district area, and forest fire occurrence numbers/burnt areas during the forest fire season.