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# Evaluation of a new high-resolution forest fire index in Finland

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A Forest Fire Index (FFI) for fire risk assessment in Finnish boreal forests is produced operationally by the Finnish Meteorological Institute. First results of a recently developed high-resolution (1 km) FFI version are introduced, and comparisons with the operational 10 km version presented. The period under investigation is the forest fire season (April-September) of 2007. A total of 2625 fires were observed representing a typical fire season in Finland.

The FFI is based on meteorological input data: air temperature and relative humidity, wind speed, solar radiation and precipitation. Traditionally, all other fields except precipitation are based on direct observations using the Kriging interpolation method. An advantage of Kriging is that it takes into account several factors like the location of observations, the elevation and the lake coverage which is extremely relevant in a country like Finland. The precipitation fields of the operational 10 km FFI version are based on radar data. For this study, the required high-resolution 1*1 km precipitation fields were produced by combining rain gauge observations and radar data. The merging is realized also using Kriging.