PeakLocator 1.0, a web tool to compare extreme value areas among geo-located maps

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We developed a simple code, PeakLocator 1.0 (hereafter referred to as PL1.0), which aim is the analysis of gridded geo-located maps to identify sub-regions of them where values lie outside the standard deviation from average values. In the present version of the code, the maps can contain up to 10 different variables with different units, not necessarily measured at the same locations, as well as the same variable recurrently measured in the time. The degree of spatial correspondence between "anomalous" regions is reflected in the "fitting index" associated to the overlapping area. We suggest some possible applications of PL1.0, using published datasets, but its applicability spans to a large variety of cases where the common demand is the comparison of two or more variables mapped over a common area or over areas partially overlapping.
PL1.0 is written in Python and it can be run as a web tool at the website http://peaklocator.pi.ingv.it and the source code can be downloaded from https://github.com/demichie/Peak-Locator.