climada module drought fire

3 June 2016

https://github.com/davidnbresch/climada_module_drought_fire beuschl@student.ethz.ch, horatc@student.ethz.ch & david.bresch@gmail.com

This module implements a method to generate a local bushfire model any place on the globe, using a cellular automat for the small scale fires and based on satellite information for the large(r) scale events.

This module is planned to also provide a global drought model (not implemented yet).

This module is in TEST (very mich beta) state. There are two relevant (higher level) codes, **bf TEST** and **bf generator large('TEST')**.

Your Custom Polygon

Fire Information for Resource Management System

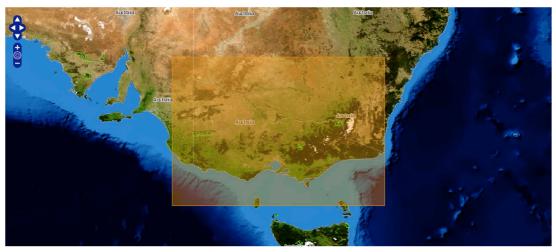


Figure: the region for which TEST data is available. Obtained from https://firms.modaps.eosdis.nasa.gov/download

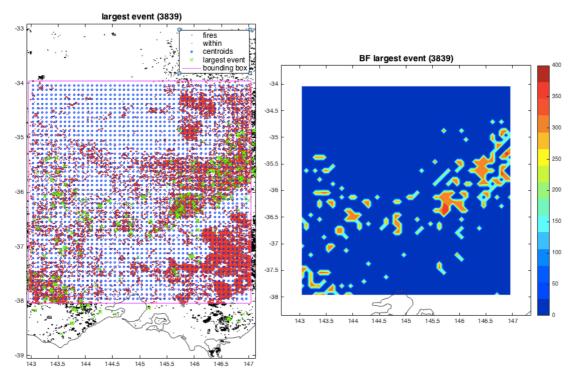


Figure: The result screen for TEST mode. Bushfire database on the left and rendering of largest single event on the right panel. Melbourne at the bottom center of the plots. Generated by hazard=bf generator large('TEST')

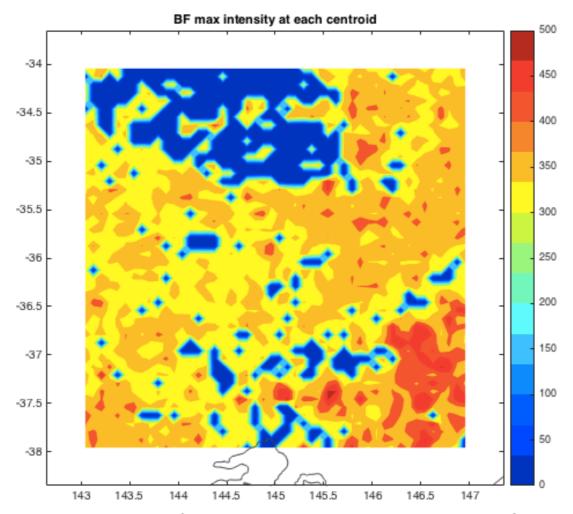


Figure: Maximum bushfire intensity at each centroid, based on the TEST data for Victoria (2006-2015). Melbourne at the bottom center of the plot.



Figure: The boundary rectangle for thw whole of Australia, resulting in a database of about 400MB of bushfire locations. Obtained from https://firms.modaps.eosdis.nasa.gov/download