

Trends in large wild land fires in NE Spain

December 17th, 2013



Over the past 30 years, wild land fires have become more extreme, with fire behaviour more and more often exceeding fire fighting capabilities, and fire agencies experience difficulties in suppressing extreme-behaviour fires while providing safety for both fire-fighters and citizens.

It has been stated that days with air temperature higher than 20°C at an altitude in the atmosphere where pressure is 850 hPa (around 1500m up in the atmosphere), the so-called high temperature days, provide extreme conditions for fire propagation and difficulties to suppress those fires.

From an analysis of the effects of high temperature days on large wild land fires (those over 100 ha) during 1978–2010 in Aragón (NE Spain), it was concluded that if days with these temperatures become more frequent and these conditions are able to decrease air humidity and fuel moisture and increase the fire behaviour potential, the area may be facing larger wild land fires in the future, and very likely extreme-behaviour fires beyond suppression capacity.

Source: Cardil et al., 2013. Natural Hazards and Earth System Sciences 13: 1393–1399.

Photo: European Commission DG ECHO (www.flickr.com)