Development of new features within the Advanced Fire Information System

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ABSTRACT:

The Council for Scientific and Industrial Research (CSIR) lead by die Meraka Institute and supported by partners such as the South African National Space Agency (SANSA) and University of Dundee (Scotland) has developed the Advanced Fire Information System (AFIS) with the aim to provide near real time fire information to disaster managers, fire fighters, farmers and forest managers across Africa, Europe and South America. The system combines satellite data with ground based observations and numerical weather forecast models to provide fire prediction, detection monitoring and assessment information through various dissemination platforms. With the launch of the system in 2004, Eskom (South Africa' and Africa's largest power utility) quickly became the biggest user of the system and today more than 300 line managers and support staff all around the country receive cell phone and email fire alert messages whenever a wildfire is within 2km of any of the 28 000km of Eskom transmission lines. Innovative ways to display and package the fire information such as the fire dashboard and AFIS mobile application has enabled the system to be incorporated in to actual firefighting incident command systems globally. The development of an AFIS mobile app for IOS and Android devices as well as a sophisticated fire reporting tool has expanded the AFIS product offering enabling the dissemination and alerting of forecasted fire danger, alert push notifications of new fire events and the upload of geo tagged photos to the AFIS database. New features such as 3D fire spread visualization will further revolutionise the AFIS product offering and increase to global use of the system in 2015.