The GOES-R ABI will provide data at 1-minute intervals over mesoscale domains, but current NWP models are unable to use information at such high temporal refresh.

This project involves developing methods to quantitatively incorporate high time resolution GOES-R data into models for short-term forecasts in both the midlatitudes and the tropics.

Data assimilation and data fusion techniques will be used.

This will result in improvements to short-term forecasts of events such as convection outflows, which can have significant effects on hazards such as wildfires (see figure on the right).

CIRA will coordinate with the Warn on Forecast team at NSSL.

**GOES-15 Visible image from 30 June 2013 at 2215 UTC as thunderstorm outflow approached the active Yarnell Hill wildfire (red ‘X’) in Arizona**

GOES-R high temporal data will be incorporated into NWP models to improve short-term forecasts.

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