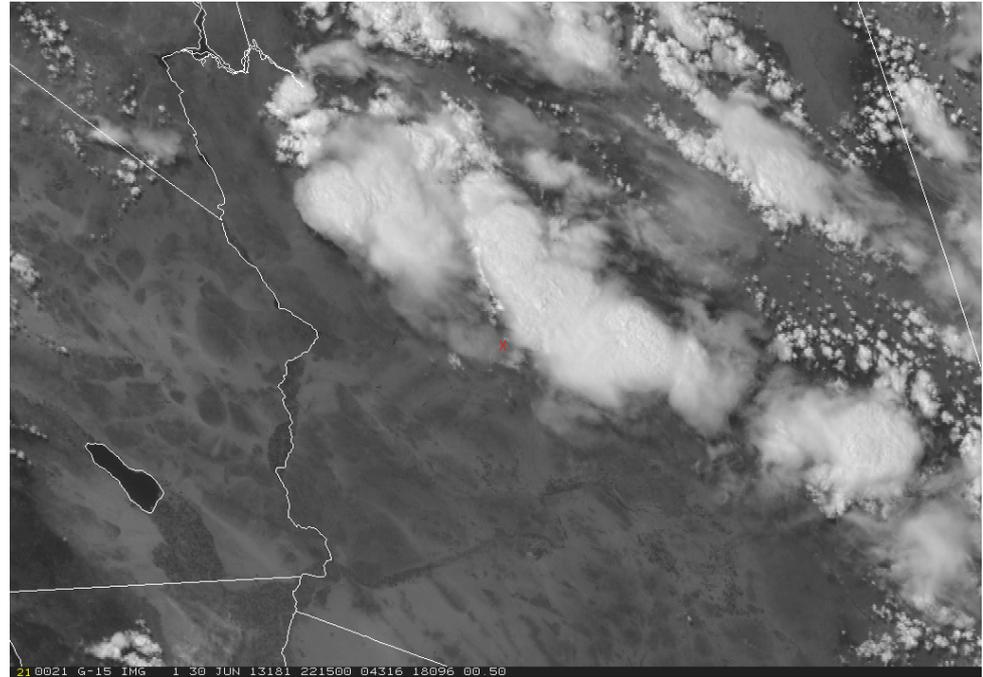




Connecting GOES-R with Rapid-Update Numerical Forecast Models for Advanced Short-Term Prediction and Data Fusion Capabilities



- 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

Christian Kummerow (CIRA)