# Opportunities for DHS Use of NASA Capabilities including Direct Broadcast

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# Disaster Response Requires Information That Generally Have the Following Characteristics:

- At a scale that addresses incident response needs at that time in the incident
- Delivered at the time it is needed. 80% of a answer on time is better than 100% of the answer late
- Shared throughout the incident command structure
- Imagery as a backdrop to other products is valuable but often a derived product that answers the question is better





### Not All Hazards are Created Equal from a Response Standpoint

- Notice incidents such as hurricanes have identified phenomena that are well understood and measured by remote sensing and in situ devices.
- Fires and flash flood hazards have phenomena that are generally understood but often have nonotice incident impact.
- No-notice incidents such as earthquakes have phenomena that we (DHS) currently do not understand or measure as well.



**NOAA** image



**Image by Pictometry** 



#### Direct Broadcast Benefits to Disaster Response

- NASA may be able to help improve disaster response if satellite sensor systems that measure critical hazard phenomena are included in the DB system. MODIS is a good example.
- ➤ DB measurements are especially important for no-notice incidents where no preparations have been made and time is more critical.
- Rapid development of "standard products" from DB data that address response needs would be very valuable.





# Homeland Security

