

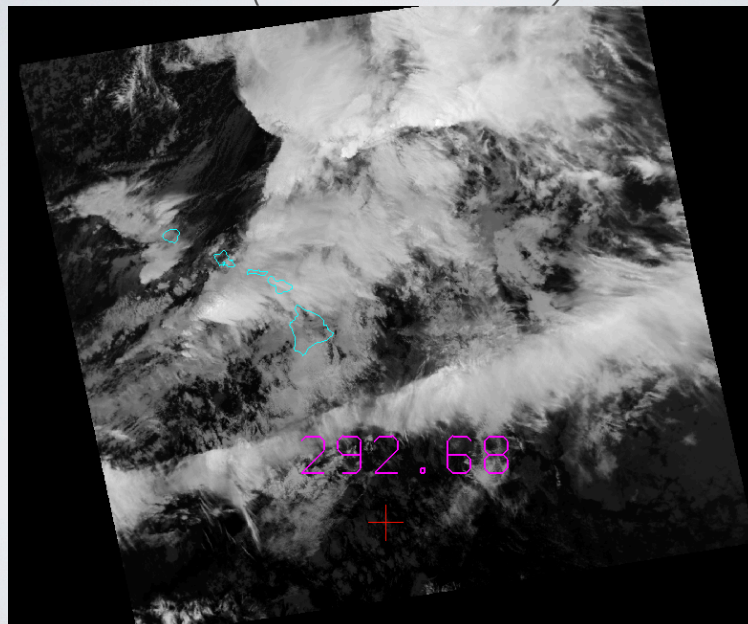
HAWAII SEVERE WEATHER!!

March 6, 2012
Bob Ballard & Vanessa Almanza

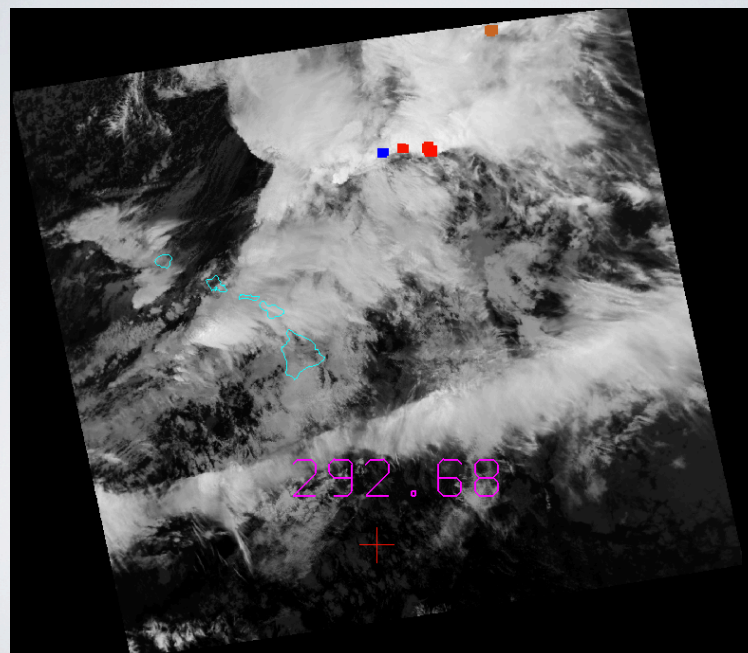
MOTIVATION

- Looked for areas that could be hazardous to aviation
 - Lightning
 - Overshooting tops
 - Layered clouds with icing potential
 - Areas of potential turbulence (mechanical or convectively induced gravity waves)
- Compared MODIS and VIIRS resolution at edge of swath

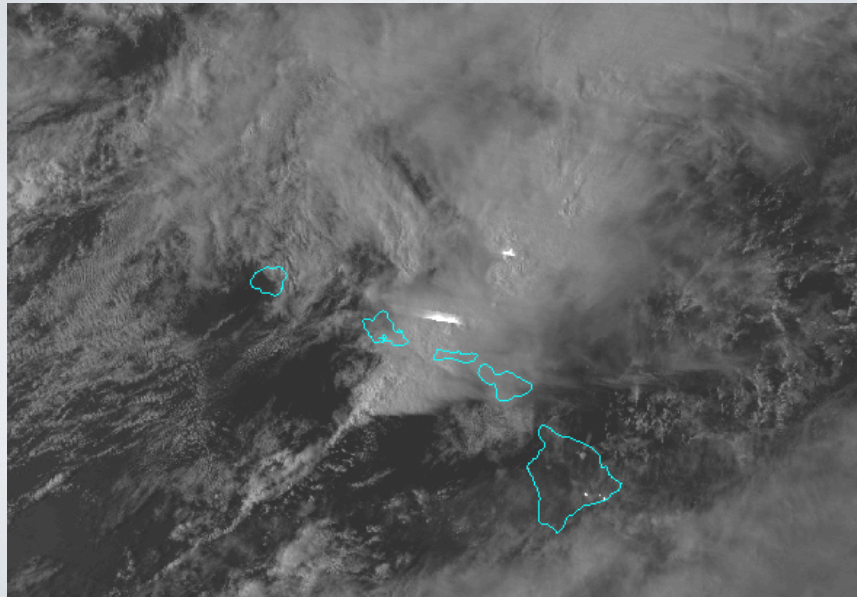
BAND 31 (11.03 MICRON) 2340Z

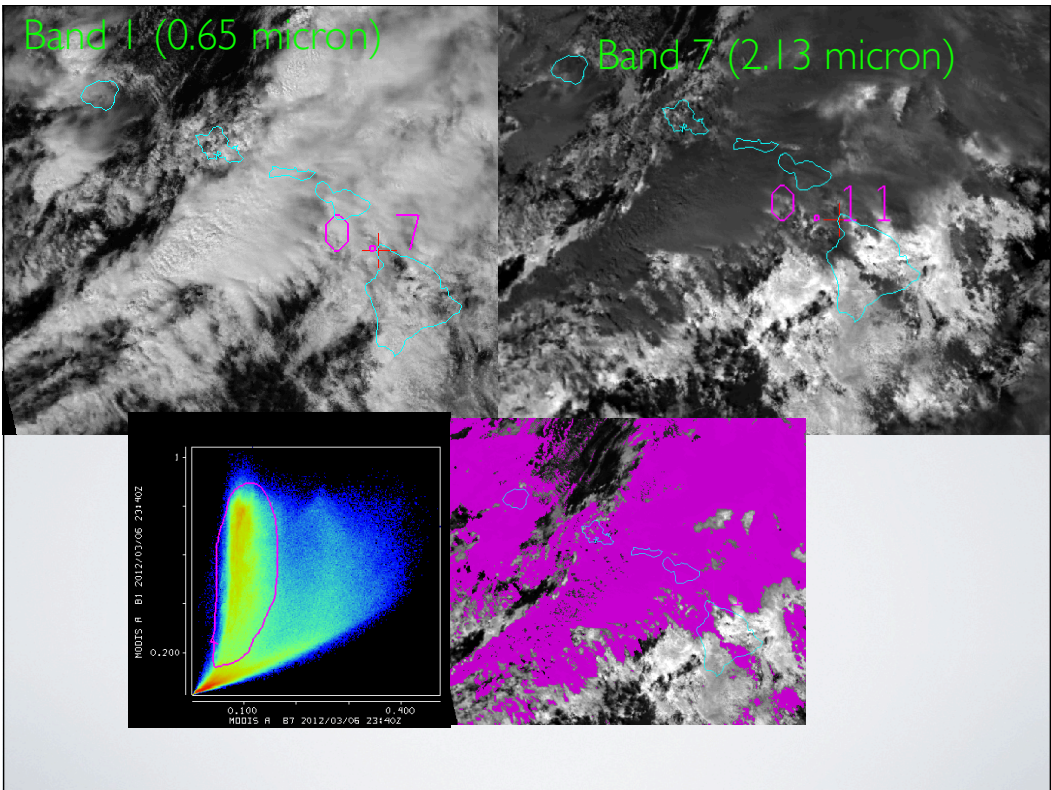


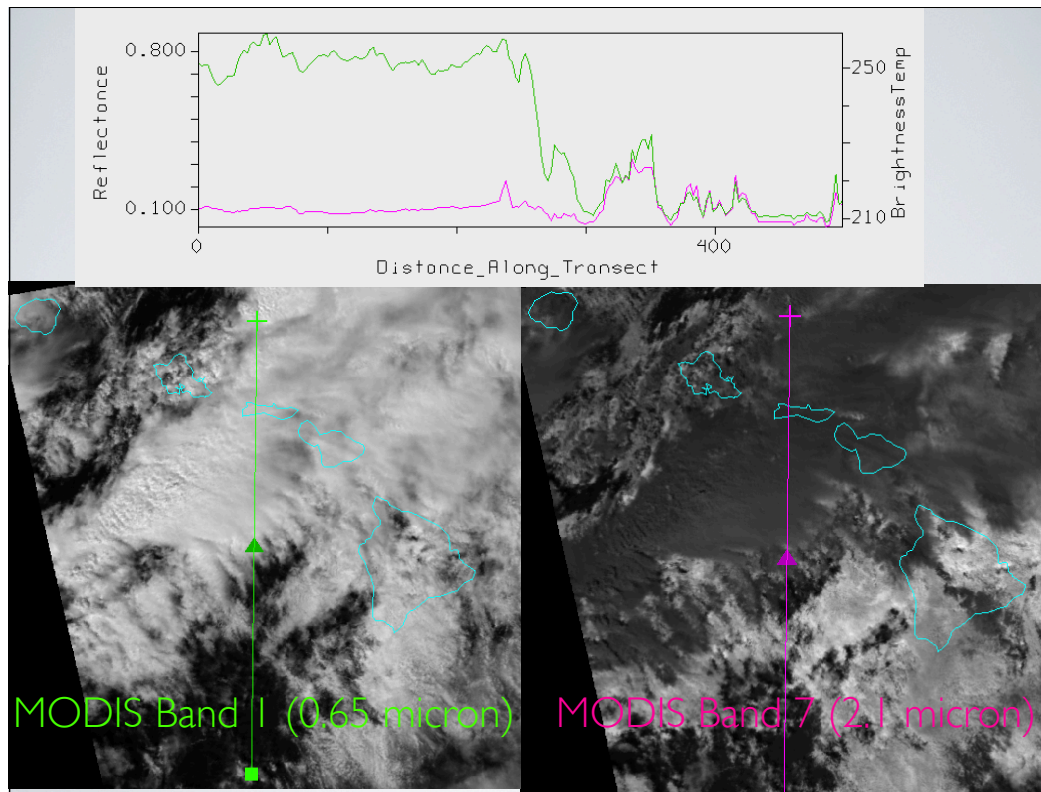
BAND 31 WITH OT PRODUCT OVERLAY



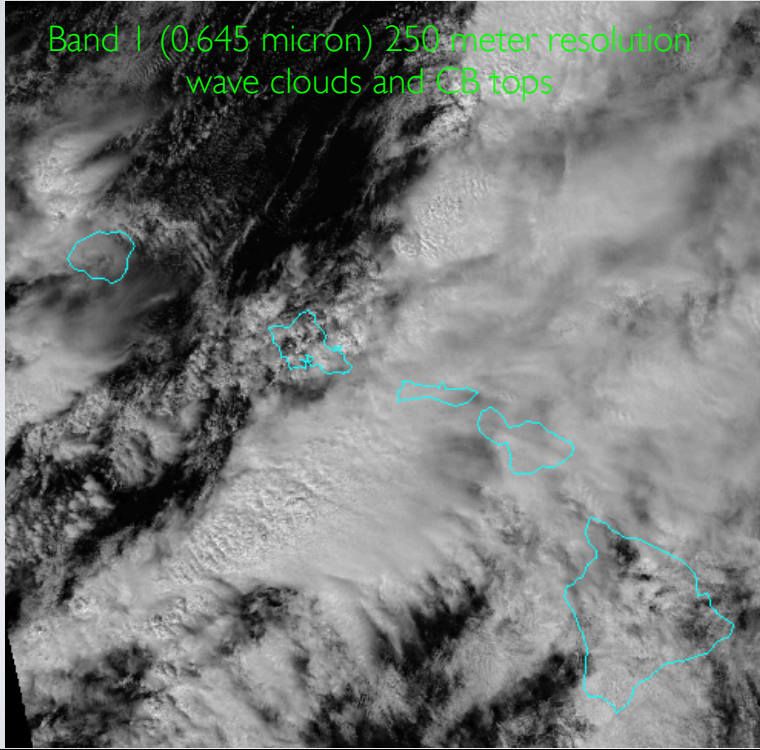
DNB LIGHTNING..IT'S VERY FRIGHTENING 1204Z



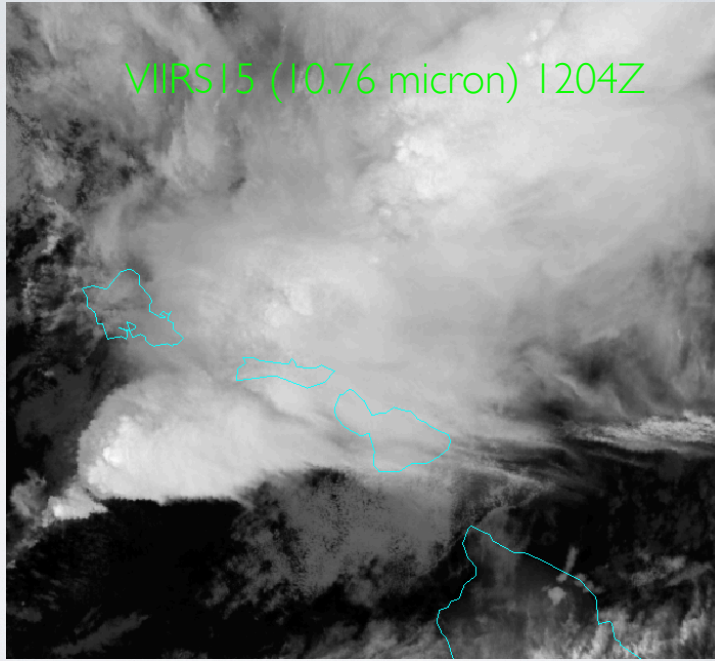




Band 1 (0.645 micron) 250 meter resolution
wave clouds and CB tops



VIIRS I5 (10.76 micron) 1204Z



SUMMARY & CONCLUSIONS

- The polar satellites provided high resolution visible and nighttime imagery to analyze areas that are high risk for turbulence, lightning and potential icing.
- VIIRS provided higher resolution nighttime thermal imagery than MODIS.
- MODIS band 1 and 7 can be used to determine clouds properties.