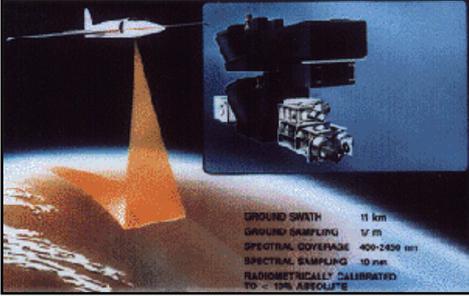
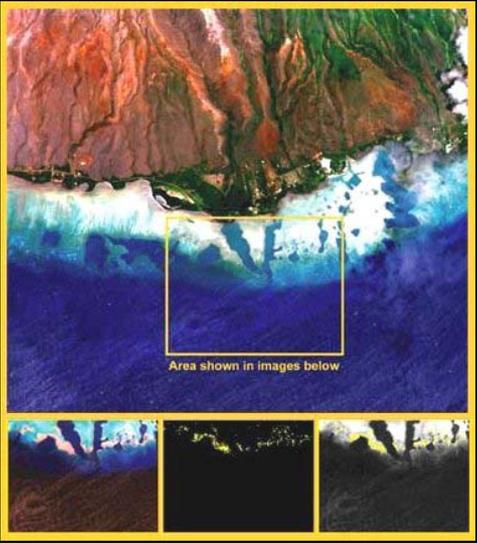
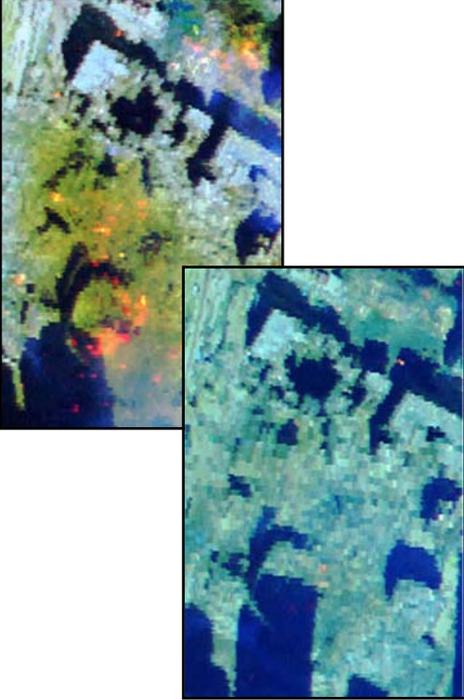




## Summary View of Airborne Hyperspectral Imaging Survey Technique



Application	Data Coverage	Resolution			Key Points
		Vertical	Horizontal	Image	
Imagery	Several km	N/A	m	m	<ul style="list-style-type: none"> <li>• Geo-referenced image</li> <li>• Collection of several hundred spectral bands of data at a high-spatial resolution</li> <li>• Classification of benthic habitats in coastal zones</li> <li>• Dependent on water turbidity; low availability, complex, not cost-effective</li> </ul>
Data Collection <sup>1</sup>			Raw Data <sup>2</sup>		Processed Data <sup>2</sup>
 <p>Image of aircraft and hyperspectral imaging sensor.</p>			 <p>Hyperspectral imaging of coral reefs in Hawaii. The true color (RGB) image at top shows the location of processed images below. Pseudo-color infrared image (lower left) shows detectable variations across the reef. The yellow pixels in the middle image show the locations of live coral colonies (mostly <i>Porites compressa</i>). The image at lower right shows these results overlain on a grayscale image.</p>		 <p>Hyperspectral imaging can be used for detection of thermal signatures as well as habitat types. Hot spots show as orange and yellow areas. Dozens of hot spots are seen in the top image, but most had cooled a few days later (bottom).</p>

N/A = Not applicable

<sup>1</sup>Data collection image from NASA. <sup>2</sup>Raw data and processed data images from USGS ([http://walrus.wr.usgs.gov/coralreefs/mapping\\_hyper.html](http://walrus.wr.usgs.gov/coralreefs/mapping_hyper.html) and <http://speclab.cr.usgs.gov/index.html>).