HYPERSPECTRAL IMAGER FOR THE COASTAL OCEAN (HICO): OVERVIEW, OPERATIONAL UPDATES, AND COASTAL OCEAN APPLICATIONS

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The Hyperspectral Imager for the Coastal Ocean (HICO) was built to measure in-water properties of complex coastal regions. HICO enables synoptic coverage; 100-meter spatial resolution for sampling the variability and spatial irregularity of coastal waters; and high spectral resolution to untangle the signals from chlorophyll, colored dissolved organic matter, suspended sediments and varying bottom types. HICO was built by the Naval Research Laboratory, installed on the International Space Station (ISS) in September 2009, and operated for ONR for the first three years. In 2013, NASA assumed sponsorship of operations in order to leverage HICO's ability to address their Earth monitoring mission. This has opened up access of HICO data to the broad research community. Over 8000 images are now available on NASA's Ocean Color Website (http://oceancolor.gsfc.nasa.gov/cgi/browse.pl?sen=hi). Oregon State University's HICO website (http://hico.coas.oregonstate.edu) remains the portal for researchers to request new collections and access their requested data. We will present updates on HICO's calibration and improvements in geolocation and show examples of the use of HICO data to address issues in the coastal ocean and Great Lakes.

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