

## [The HICO Online Processing System: A Web-accessible Coastal Hyperspectral Imagery Processing System](#) [1]



Submitted by t\_harris on Fri, 2014-06-27 15:46 **Event:** [Summer Meeting 2014](#) [2]

### **Abstract:**

HySpeed Computing and Exelis VIS are developing the HICO Online Processing System (HOPS), a cloud computing system that will provide online, on-demand, scalable remote sensing image processing capabilities. The goal of HOPS is to supply image processing analytics (IPA) that is routinely generated within the geosciences into the hands of the larger global user community.

The HICO Online Processing Tool project is funded by Center for the Advancement of Science In Space (CASIS), and uses imagery from The Hyperspectral Imager for the Coastal Ocean (HICO), an imaging spectrometer that is on the International Space Station (ISS) that is optimized for acquisition of aquatic targets.

HySpeed has implemented a collection of coastal remote sensing algorithms for deriving information on water properties, water depth, and habitat characteristics. Example applications implemented in this project are directed at deriving critical information on water and habitat characteristics of our vulnerable coastal environment. The project leverages the ENVI Services Engine as the framework for all image processing tasks to accommodate the rapid integration of new algorithms and processing tools. Users will only need a browser and internet connection to perform the analysis.

**Collaboration Area:** [Cloud Computing](#) [3]

**Attachments for download:**  [ESIP\\_HySpeed\\_Exelis\\_Poster\\_2014.pdf](#) [4]

**Author(s):**

**Name:** [James Goodman](#) [5]

**Organization(s):** [Hyspeed Computing](#) [6]

**Email:** [JGoodman@hyspeedcomputing.com](mailto:JGoodman@hyspeedcomputing.com) [7]

**Keywords:** [Hyperspectral](#) [8]

[Cloud](#) [9]

[enterprise](#) [10]

[analytics data-scientist big-data techniques/methodologies](#) [11]

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