

Supplement 1

S-1.1 Hardware

All image processing was completed on the SeaWulf cluster at the Institute for Advanced Computational Science (Stony Brook University, Stony Brook, NY), using GPU nodes equipped with Nvidia K80 GPUs @ 2.91 DP Teraflops. Other CUDA-enabled GPUs would also be sufficient.

S-1.2 Python Packages

The code requires a variety of packages for Python 3:

Package	version
Conda	4.5.8
Dominare	2.3.1
Pillow	5.1.0
Scikit-image	0.14.0
Scikit-learn	0.19.1
Scipy	1.10
Torch	0.4.0
Torchfile	0.1.0
Torchvision	0.2.1

S-1.3 Satellite Imagery

We acquired imagery from Digital Globe's WorldView-3 sensor via the Digital Globe Foundation.

See <https://discover.digitalglobe.com/> for details on individual scenes and a preview.

Scene ID	Location	Date
1040010003121A00	Peninsula Valdes, Argentina	14 Oct. 2014
1040010029924200	Maui, Hawaii, USA	13 Feb. 2013