



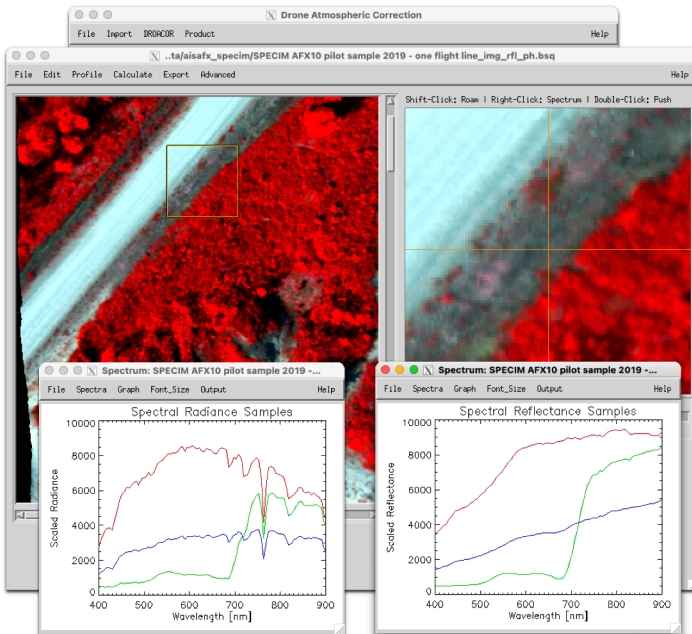
# DROACOR<sup>®</sup>

## Drone Atmospheric Correction

### A New Generation

for **reflectance retrieval from UAV** based imagery designed for hyperspectral and multispectral instruments.

Automatic **directory based processing**, fully **physical self-adjusting** calculation.



*DROACOR spectral reflectance retrieval from AISA FX imagery (data courtesy of Specim Inc, Finland)*

### Ease of Use

DROACOR can be used out of the box for supported sensor systems. The mostly automatic data import and pre-configured atmospheric correction makes it usable without expert knowledge about atmospheric compensation.

### Supported Sensor Systems

Automated data import and processing is supported for:

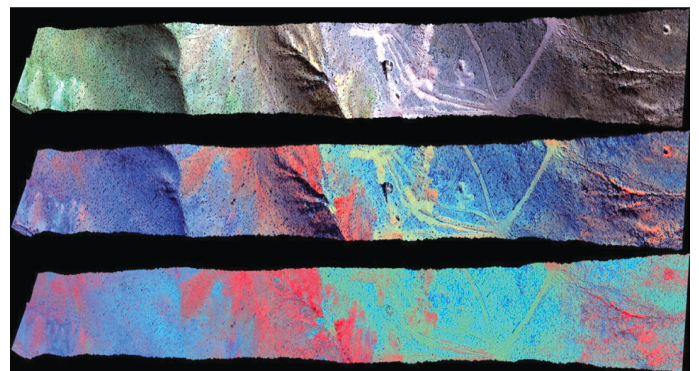
- Hyperspectral: NEO Mjolnir, Specim AISA, Headwall Hyperspec, Resonance Pika, Corning Shark
- Multipsectral: Micasense RedEdge, DB2 Laquinta, Standard RGB TIFFs
- .. more systems and thermal sensors upon request.

### Key Features

- Automatic physical reflectance retrieval method,
- LibRadtran radiative transfer model based atmospheric parameters,
- Panel based inflight radiometric calibration,
- Specific low flight altitude adjacency irradiance correction,
- Self-calibrating reflectance retrieval using image statistics,
- Spectral calibration for VNIR and SWIR using oxygen band positions,
- Water vapor retrieval by spectral fitting technique
- Aerosol optical thickness estimate by enhanced dark object method, and
- Adaptive atmospheric feature treatment and spectral polishing.

### Advanced Tools

- Below-cloud reflectance retrieval,
- Ground based/horizontally acquired data correction,
- Mosaic cloud deshading and standard BRDF correction,
- Multi-file multi-index vegetation index calculation,
- Spectral angle mineral mapping,
- Thermal Infrared data processing,
- Topographic illumination correction based on digital surface model input, and
- Built-in GLIMPS image analysis tool.



*DROACOR mineralogy results for Cuprite Nevada. NEO Hyperspec Mjolnir VS-620 scene - data courtesy of Echo Labs Inc, Canada.*