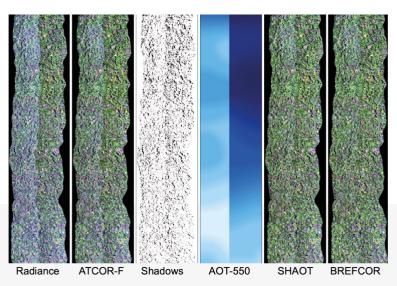


# Atmospheric & Topographic Correction

The ATCOR® software family derives surface reflectance, emissivity, and temperature from calibrated images by atmospheric and topographic correction. The model is applicable to all optical remote sensing systems with special focus on imaging spectroscopy data.



ATCOR-4, aerosol scatterin removal and BRDF correction.

## **Fully Featured**

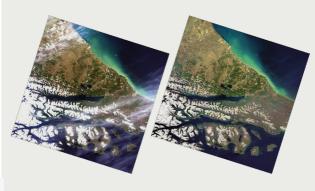
- Complete graphical interface for the atmospheric & topographic correction based on IDL (NV5 Inc),
- Based on ENVI<sup>™</sup> file formats,
- Batch processing and logging capabilities for operational processing,
- Using high-accuracy MODTRAN® radiative transfer calculations,
- ATCOR-3 support for Landsat, SPOT, IRS sensors, MERIS, ASTER, ALI, DMC, Ikonos, Quickbird, Orbview, Worldview, RapidEye, THE-OS, Sentinel, VENuS, and more,
- ATCOR-3 hyperspectral option for ENMAP, EMIT, PRISMA, and others,
- ATCOR-4 support for airborne multispectral, hyperspectral and thermal line scanner instruments.

- Automatic aerosol type and aerosol optical thickness retrieval,
- Flexible water vapor retrieval and correction.
- Removal of haze, cloud shadow, and cirrus clouds,
- Capability for in-flight vicarious radiometric and spectral calibration and validation,
- Sensor simulation tool for at-sensor radiance cube from reflectance imagery,
- · Correction for spectral smile,
- Cast shadow correction with adaptive diffuse irradiance calculation, and
- Physical model based BRDF correction (BREFCOR method).



### ATMOSPHERIC COMPENSATION

- ATCOR-3 for small and medium FOV satellite imagery, for rugged terrain, and
- ATCOR-4 for airborne imaging spectroscopy, multispectral scanner imagery, all terrain



ATCOR--3 correction and haze removal for Sentinel-2.

### **COMPLETE SOLUTION**

ATCOR® is the major, state of the art software suite available on the market which includes the capability for radiometric correction in rugged terrain considering cast shadow and illumination calculations. It is based on the reliable MODTRAN® radiative transfer code and more than 30 years of research in physical atmospheric correction.

#### **REQUIREMENTS**

- IDL virtual machine provided wit software distribution,
- Linux, Mac OS X, or Windows,
- RAM: min. 16 GB allocated to IDL,
- ENVI™ license recommended, but not a condition.

The MODTRAN® trademark is being used with the express permission of the owner, the United States of America, as represented by the United States Air Force and by Spectral Sciences, Inc. (for use outside of the USA). MODTRAN® software used in this product is licensed from the United States of America, as represented by the United States Air Force, under U.S. Patent Nos. 5,884,226, 7,433,806 and 7,593,835 B2.



ATCOR® method
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