

# MODDO - Version 6.0

## Modtran® 6 for Remote Sensing Research

### Scientific Tool

used to...

**analyse** signatures at various sensor systems,

design hyperspectral instruments,

**calibrate and validate** operational sensors,

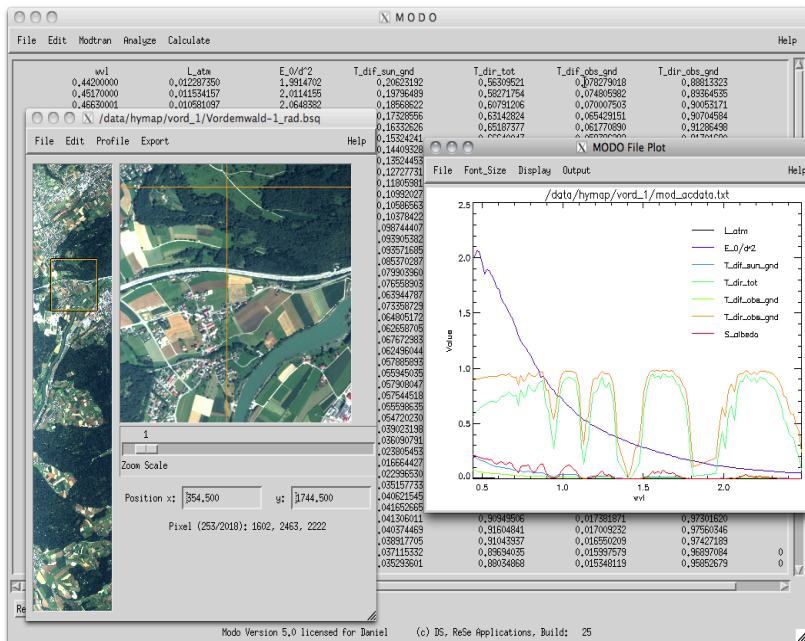
propagate surface reflectance signatures,

**learn** about radiative transfer, and

**investigate** atmospheric gases and aerosols.

### Features

- includes original Modtran® executables of Modtran®6.0 for x86-Linux/MacOSX and Windows (under license of the United States of America),
- full support of the actual MODTRAN release and its data structure,
- flexible data handling in multi user environment
- supports optional line by line (LBL) radiative transfer calculations,
  - straight-forward at-sensor radiance simulation for a broad collection of remote sensing systems,
  - import/export of Modtran® 'json' or 'tape5' control files,
  - creation of input files including support for multiple run inputs,
  - convolution of Modtran® outputs to hyperspectral and multispectral sensors,
  - import of ground reflectance spectra including support for adjacency effect,
  - export of calculation results to ENVI(TM) spectral libraries and ASCII,
  - automatic creation of series based on a spectral library, and sensitivity analysis through parameter series,
  - extraction of radiance/transmittance and flux components from standard Modtran® output (\*tp7 and \*flx),
  - plotting of standard Modtran® outputs (tape7/flux),
  - supporting applications for visibility determination and solar angles calculation,
  - direct online help for each GUI,
  - complete, linked documentation.



### Ease of Use

MODDO provides access to the MODTRAN®6 radiative transfer code through a graphical user interface. It has been designed for use by the remote sensing specialists. Moreover, it is well suited for generic use of MODTRAN®6 and for educational purposes.

### Technical Requirements

- IDL 8.7 virtual machine provided with software distribution,
- 2 GB storage for complete MODTRAN®5 installation,
- Windows XP or higher, Linux (x86, 64bit), or MacOSX.

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APPLICATIONS