



## PRESS RELEASE

**Fast Access to Vegetation Spectra and Data.**

**SPECTRAL EVOLUTION field spectrometers and spectroradiometers deliver direct access to the USGS Spectral Library and 19 vegetation indices.**

*Lawrence, MA – April 10, 2013* – UV-VIS-NIR spectroscopy is an increasingly popular tool for environmental and vegetation studies, including:

- Agricultural analysis
- Ecosystem changes
- Forestry research
- Glacial change
- Plant species identification
- Snow and ice studies
- Canopy studies
- Photosynthesis efficiency
- Soil mapping and monitoring

All SPECTRAL EVOLUTION field portable spectrometers and spectroradiometers for remote sensing, vegetation, and environmental applications include DARWin SP Data Acquisition software. This powerful software interface allows for the rapid collection of target spectra with a single click, offers a range of plotting options, and can overlay multiple scans for quick identification and comparison. DARWin SP includes pull-down menus for instant access to the USGS Spectral Library and 19 popular vegetation indices.

The USGS Spectral Library is a digital reflectance spectral library that covers the wavelength range from the ultraviolet to the far infrared, along with sample documentation. By selecting the USGS SpecLib from the main DARWin menu, the user can choose a sample of interest. The right half of the DARWin window displays the reflectance spectrum for the sample with a descriptive web page including sample photographs where available. Types of vegetation include:

- Aspen
- Bacterial mat
- Cactus
- Cattail
- Douglas fir
- Long grass
- Flowers
- Leafy spurge
- Fescue grass
- Lawn
- Lichen
- Willow
- Range land

By comparing your sample against a known library, you can quickly and accurately identify your sample.

In addition to comparison with the USGS library, you also have access to the following vegetation indices from the DARWin SP menu:

- NDVI – Normalized Difference Vegetation Index
- SR - Simple Ration Vegetation Index
- SAVI - Soil Adjusted Vegetation Index
- CCI - Chlorophyll Content Index
- ARVI - Atmospherically Resistant Vegetation Index
- EVI - Enhanced Vegetation Index
- IPVI - Infrared Percentage Vegetation Index
- PRI - Photochemical Reflectance Index
- WBI - Water Band Index
- PAR - Photosynthetically Active Radiation
- GRVI - Green Ratio Vegetation Index
- DVI - Difference Vegetation Index
- Red/Green - Red Green Ratio
- Green NDSVI - Green Normalized Difference Vegetation Index
- MSAVI2 - Modified Soil Adjusted Vegetation Index Type II
- Sum Green - 0 Summed Green Vegetation Index
- NDVI705 - Red Edge Normalized Vegetation Index
- NDWI - Normalized Difference Water Index
- NDNI - Normalized Difference Nitrogen Index

For more information on SPECTRAL EVOLUTION spectrometers, spectroradiometers, software and libraries, please visit:

[http://www.spectralevolution.com/portable\\_spectroradiometer\\_remote\\_sensing.html](http://www.spectralevolution.com/portable_spectroradiometer_remote_sensing.html)

**About SPECTRAL EVOLUTION**

Established in 2004, SPECTRAL EVOLUTION is a leading manufacturer of laboratory and handheld portable spectrometers, spectroradiometers and spectrophotometers. SPECTRAL EVOLUTION spectrometers are used worldwide for many mission-critical lab and field applications in mining, remote sensing, vegetative studies, ground truthing, environmental and climate studies, developing satellite calibrations, and more, due to their reliable, robust, rugged design and user-friendly one-touch features.

SPECTRAL EVOLUTION maintains a facility in Lawrence, Massachusetts which houses design, prototyping, manufacturing and service facilities for the instruments that it markets and sells worldwide, either through direct sales, OEM sales or through distributor agents.

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