

# SPECTRAL EVOLUTION

## RS-8800 Mounted on a UAV for Field Measurements

Beijing Azup International, a Spectral Evolution distributor in China, mounted a Spectral Evolution RS-8800 field spectroradiometer on a drone for automated field scans.

The system included:

- A six rotor custom UAV
- RS-8800 field spectroradiometer with gimbal stabilized fiber holder featuring tilt-angle sensor, auto-range finder and camera to automatically photograph and record field of view of scanned image.
- Full automatic aerial survey
- Flight control triggering of data acquisition
- GPS coordinates simultaneously obtained
- Object image synchronization storage
- A variety of modes for route designation
- High resolution/low noise spectra

The RS-8800 field spectroradiometer is a full range (350-2500nm) high resolution/high sensitivity system including an Internet of Things (IoT) operating system that allows you to operate the system by iPhone, Android device, or tablet. In combination with our new *Sensa/Tilt™* gimbal stabilized fiber holder, researchers can access and store more important field data in addition to their scans, including:

- A picture of the exact sample Field of View that you want to scan
- The angle of the scan
- The sun height angle
- The GPS location



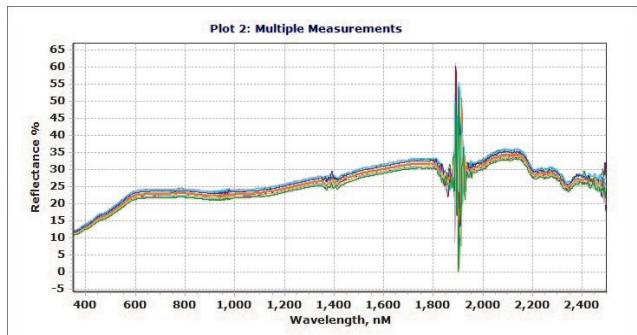
The RS-8800 uses its IoT operating system to control the pistol grip functionality so that any user can get consistent scans. The IoT uses a WiFi network accessed by an Android device, iPhone or tablet for controlling the system and

downloading real-time data stored on the instrument.

Scans were taken of areas of primarily soil with no vegetative cover.



RS-8800 mounted on a UAV.



Multiple scans taken from UAV.

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