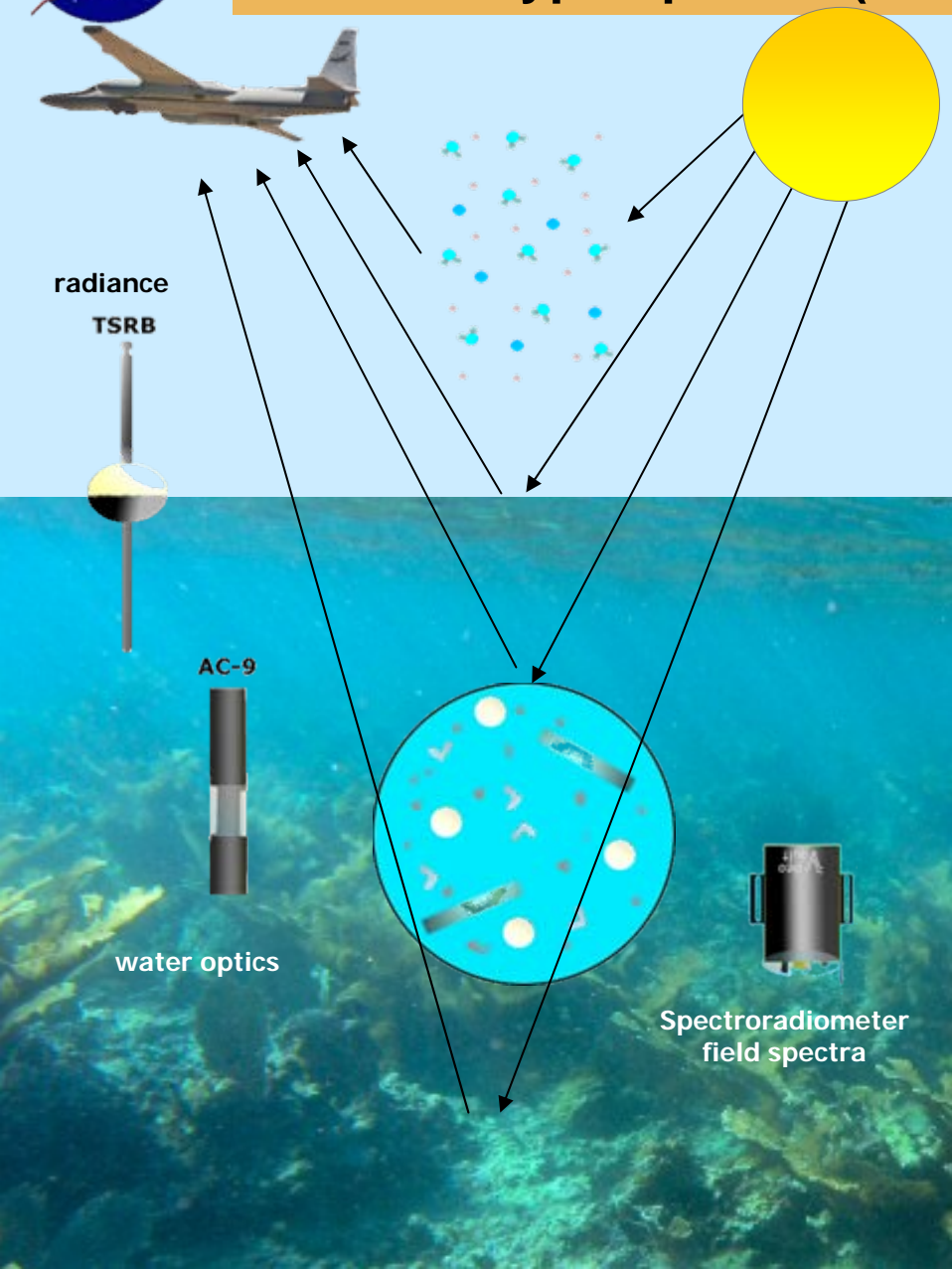




# NASA imaging used to study coral reef ecosystems

## Airborne hyperspectral (AVIRIS) and camera imaging (DCS)



NASA Coral Reef Health and Biodiversity Project:  
Dr. Liane Guild, NASA Ames

<http://geo.arc.nasa.gov/sge/coral-health/>

**AVIRIS** (Airborne Visible Infrared Imaging Spectrometer)

- 224 contiguous spectral channels, many channels in the visible spectrum

**High resolution DCS** (digital camera system)

**Field Sampling, Calibration and Validation**

- Atmospheric correction, sun glint removal, water column correction
- Field spectra of bottom types using handheld spectroradiometer
- Percent cover of bottom types
- Underwater photography
- Rugosity (index of coral morphology)

