Site selection
Accuracy, uncertainties and traceability
Sampling

- Evaluated effects caused by sampling
  - Spatial imagery
  - Site measurement resampling
- Conclusion
  - Four random samples are sufficient to retrieve the reflectance to better than 3% of full 512 sample
  - Difficult to do random sampling
  - Safer to do the oversampling
Sampling and Measurement protocols

Test site will define the way we collect the data

- Protocols must use methods usable by all groups
- Sensitivity studies and defensible and traceable error budgets provide the basis for improvements
- Surface properties and uniformity should dominate not instrumental effects
- Reduce impact from instrument and other error sources
Size of source – adjacency impacts

Work with ETM+ at two separate sites shows that there are not site-related differences.

Not the case for ASTER SWIR bands.
Minimize uncertainties in the band-averaging process and with the radiative transfer

- Flat spectral reflectance would be ideal
- Still have a spectral variability caused by the atmosphere and solar irradiance
- Select reflectance to minimize atmospheric uncertainties
Test site uncertainties and traceability

Test site selection by itself does not affect traceability

- Test site does not cause absolute uncertainties
- How the site is characterized and handled as part of the processing is where the uncertainties arise
- Test site selection can make our problems easier
- Test site selection by itself will not make the result more traceable or more accurate

![Images of test sites]