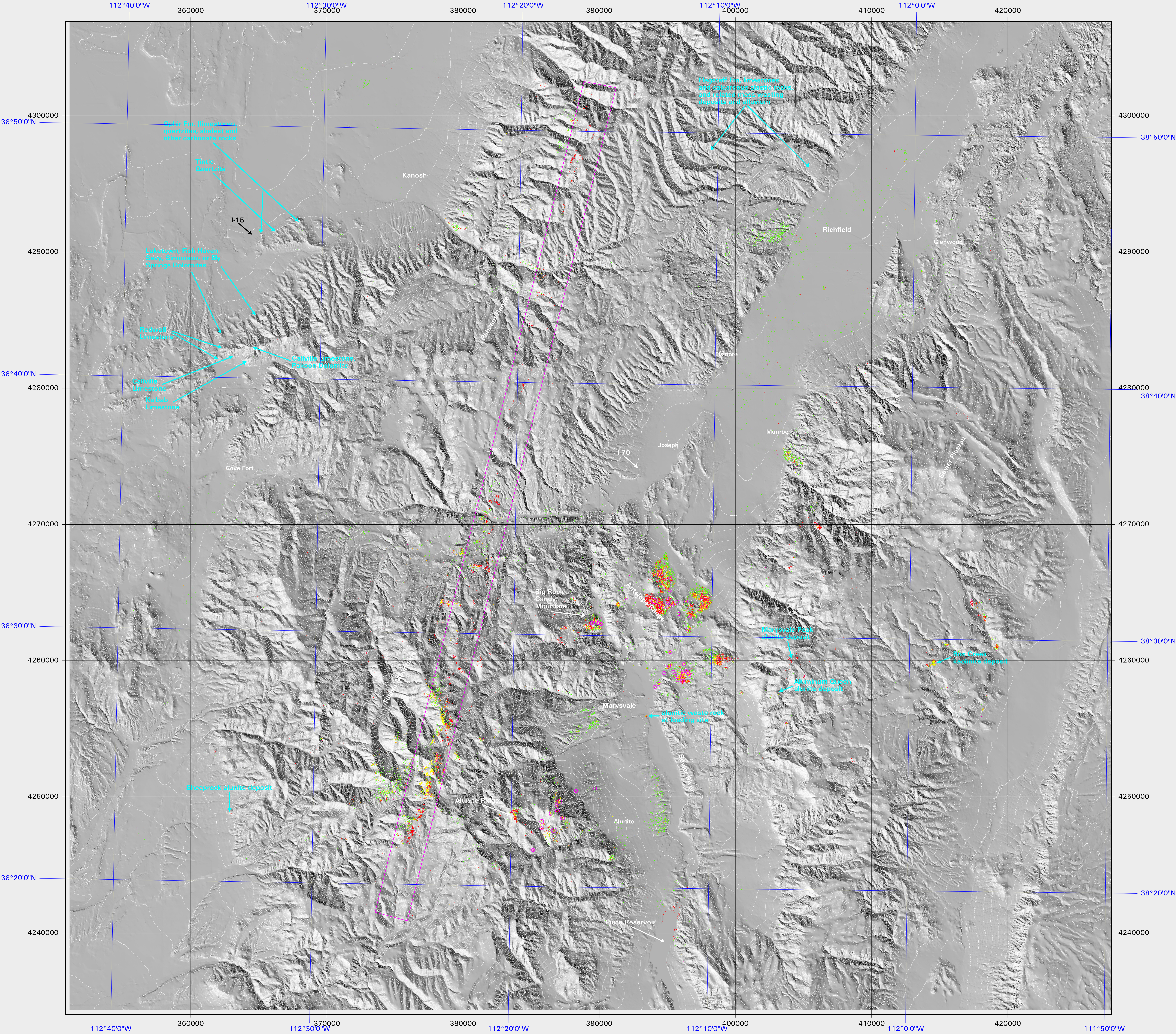
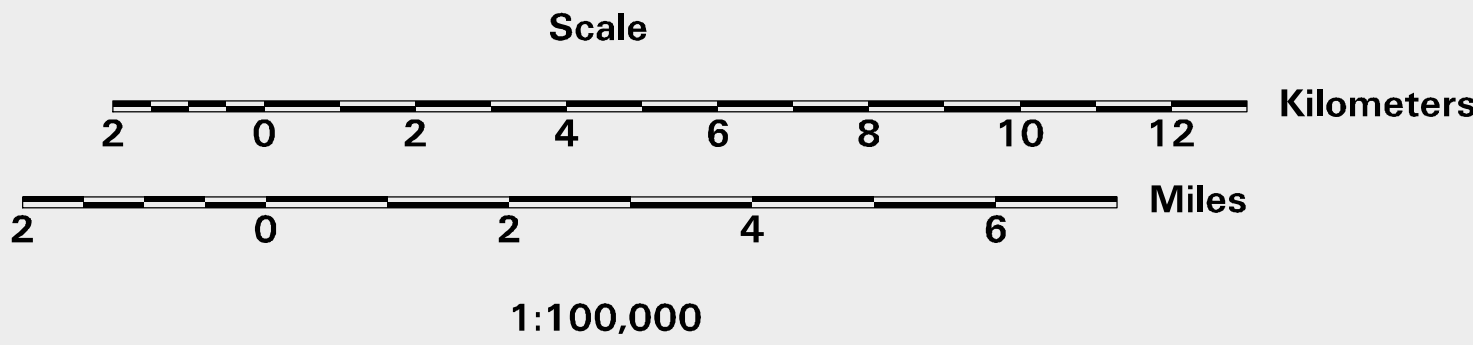


Map of Argillic and Advanced Argillic Alteration with Experimental Discrimination of Dickite and Well-Crystallized Kaolinite from Poorly Crystallized or Impure Kaolinite Using Al-OH Band Fit and Depth in ASTER Data
Tushar Mountains/Pahvant Range/Sevier Plateau, Utah



- ASTER Scene ID: SC:AST_L1B.003:2007212624
- Acquired June 12, 2002
- ASTER data orthorectified using a Projective Transform to mosaicked TerraServer digital orthophoto quadrangles and a 1/3 arc second digital elevation model (~10 m resolution) from the USGS National Elevation Dataset (NED, provided by USGS Seamless Data Distribution System).
- Topographic contours and shaded relief image derived from 1/3 arc second NED digital elevation model. Contour interval 50 m.
- Spectral analysis by Barnaby W. Rockwell, March 2004



Universal Transverse Mercator Projection
Zone 12
Clarke 1866 Spheroid
NAD 27 Horizontal Datum

- Region of image in which material identifications are unreliable due to defect in SWIR detector array ("Filter Scratch") (Iwasaki and Oyama, 2005).

- Explanation for ASTER spectral mapping:
- alunite
 - alunite + kaolinite
 - alunite + minor kaolinite, or natroalunite
 - well-crystallized kaolinite or dickite (high fit x depth kaolinite identifications)
 - poorly crystallized or impure kaolinite (low fit x depth kaolinite identifications)

Areas where spectrally pure dickite was identified through AVIRIS data analysis and/or field surveys (Rockwell and others, 2005; 2006).