Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) hydrothermal alteration data was used to map alteration interpreted as potential porphyry copper sites. See appendix B table (available online only at http://pubs.usgs.gov/sir/2010/5090/o/) for physical characteristics and locations of potential porphyry copper sites, listed by site number. Base is Landsat Thematic Mapper, band 7 grayscale image (http://landsat.usgs.gov) RATIO SCALE 1: 660,000 Universal Transverse Mercator projection 50 25 0 50 25 0

NATIONAL GEODETIC VERTICAL DATUM OF 1984 50 KILOMETERS **EXPLANATION** [NOTE FOR PLOT USERS: Small, isolated data areas may be difficult to see on plots; see files for detail (http://pubs.usgs.gov/sir/2010/5090/o/)] Alteration units, mapped using ASTER data Phyllic-altered rocks Argillic-altered rocks



Index map showing location of this ASTER hydrothermal alteration map area (red outline), bordering map

areas (black outlines), and volcanic belt boundaries (white outlines).

Volcanic belt boundary

Potential porphyry copper site