

Base is Landsat Thematic Mapper, band 7 grayscale image (<http://landsat.usgs.gov/>) Universal Transverse Mercator projection

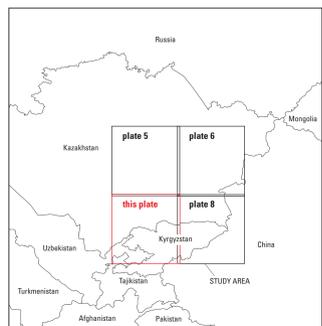
Ratio Scale 1:666,000

50 25 0 25 50 MILES

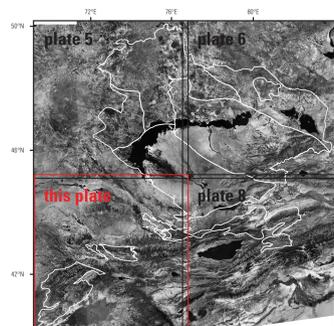
50 25 0 25 50 KILOMETERS

NATIONAL GEODETIC VERTICAL DATUM OF 1984

Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) hydrothermal alteration data were used to map potential porphyry copper sites. Data files are available online only at <http://pubs.usgs.gov/sir/2010/5090/n/> for physical characteristics and locations of potential porphyry copper sites, listed by site number.



Index map showing location of study area, this map area (red outline), and bordering map areas (black outlines).



Index map showing location of this ASTER hydrothermal alteration map area (red outline), bordering map areas (black outlines), and permissive tract boundaries (white outlines).

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/n/>)]

Alteration units, mapped using ASTER data

- Phyllic-altered rocks
- Silicic-altered rocks
- Argillic-altered rocks
- Permissive tract boundary
- Potential porphyry copper site

ASTER Hydrothermal Alteration Map and Potential Porphyry Copper Sites of Southwestern Part of Study Area, Southern Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan, and Western China, Western Central Asia

By
John C. Mars
2014

Any use of trade, product, or firm names in this publication is for descriptive purposes only and does not imply endorsement by the U.S. Government.

This map was printed as an electronic plate directly from digital files. Dimensional calibration may vary between electronic plates and between hard and soft copies of the same plate, and paper may change size due to atmospheric conditions. Therefore, scale and proportions may not be true at all times.

For more information, contact the U.S. Geological Survey, Box 25286, Federal Center, Denver, CO 80225-1488, USA. (303) 546-5355

Digital files available at <http://pubs.usgs.gov/sir/2010/5090/n/>

Supporting information: Mars, J.C., 2014, ASTER hydrothermal alteration maps and potential porphyry copper sites of southwestern part of study area, southern Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan, and western China, western Central Asia, plate 7 of 8, Mars, J.C., Mars, J.C., Mars, J.C., 2014, ASTER hydrothermal alteration maps and potential porphyry copper sites of southwestern part of study area, southern Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan, and western China, western Central Asia, plate 7 of 8, Mars, J.C., Mars, J.C., Mars, J.C., 2014, ASTER hydrothermal alteration maps and potential porphyry copper sites of southwestern part of study area, southern Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan, and western China, western Central Asia, U.S. Geological Survey Scientific Investigations Report 2010-5090-N, Plate 7 of 8, scales, and spatial data, <http://pubs.usgs.gov/sir/2010/5090/n/>