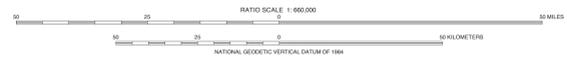
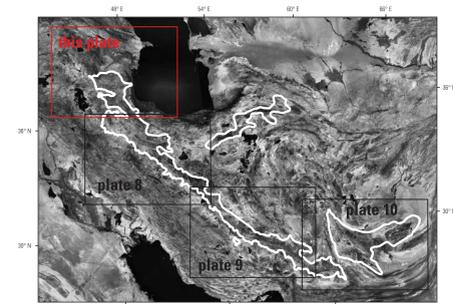


Base is Landsat Thematic Mapper, band 7
grayscale image (<http://landsat.usgs.gov/>)
Universal Transverse Mercator projection

30° N
35° N
40° E
45° E
50° E
55° E
60° E



Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) hydrothermal alteration data were used to map alteration (represented as potential porphyry copper sites, see Appendix B). Other alteration units are shown in yellow and red. Potential porphyry copper sites are shown as blue circles. For physical characteristics and locations of potential porphyry copper sites, listed by site number.



Index map showing location of this ASTER hydrothermal alteration map area (red outline), bordering map areas (black outlines), and volcanic belt 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/2010/5090a/>)]

Alteration units, mapped using ASTER data

- Phyllic-altered rocks
- Argillic-altered rocks
- Volcanic belt boundary
- Potential porphyry copper site

Map of Potential Porphyry Copper Sites and ASTER Hydrothermal Alteration in the Northwestern Urumieh-Dokhtar Volcanic Belt, Northwestern Iran

By
John C. Mars
2014

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This map was prepared as an electronic, digital file. Dimensional information may vary between electronic, printed, and paper versions of the same dataset, and paper may change size due to atmospheric conditions, therefore, scale and projection may not be true for all versions of this map.
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Digital file available at <http://pubs.usgs.gov/sir/2010/5090a/>
Published online March 2014. Map of potential porphyry copper sites and ASTER hydrothermal alteration in the northwestern Urumieh-Dokhtar Volcanic Belt, Northwestern Iran. John C. Mars, U.S. Geological Survey. Report number: Scientific Investigations Report 2010-5090-0. Plate 7 of 10. For more information, see the report at <http://pubs.usgs.gov/sir/2010/5090a/>. Also for potential porphyry copper sites, listed by site number, see the report at <http://pubs.usgs.gov/sir/2010/5090a/>.
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