

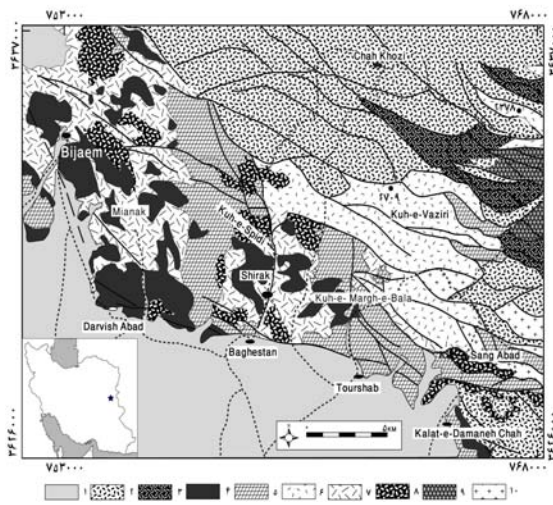


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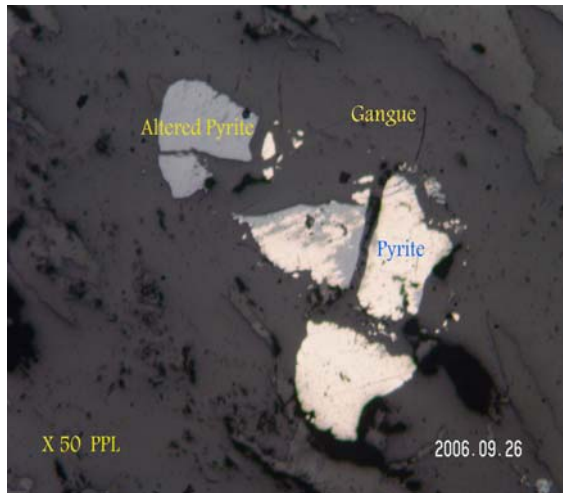
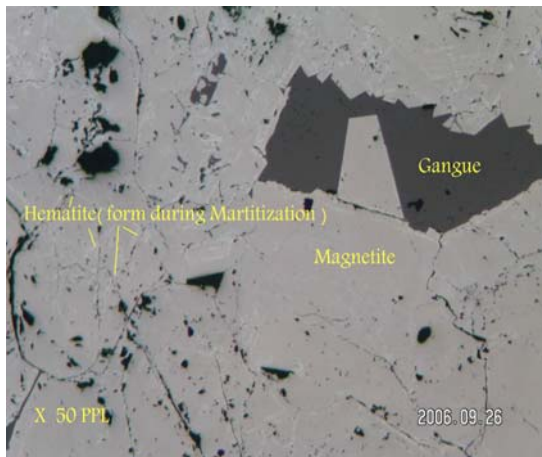
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PC3 (/ -/ )

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Reflectance

PC2 (/ -/ )

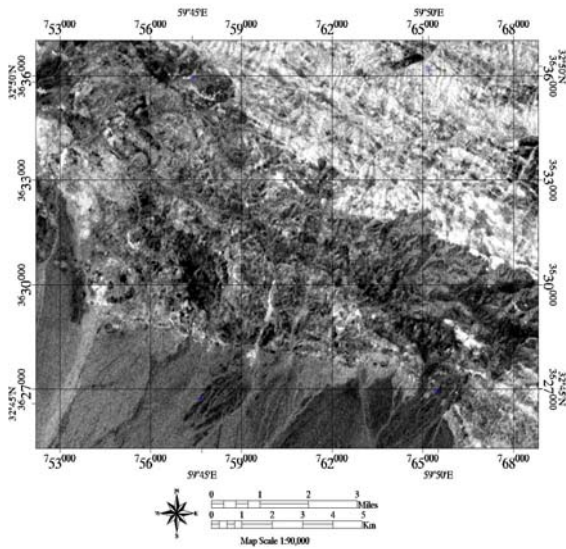
(Pseudoreflectance)

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log Residual

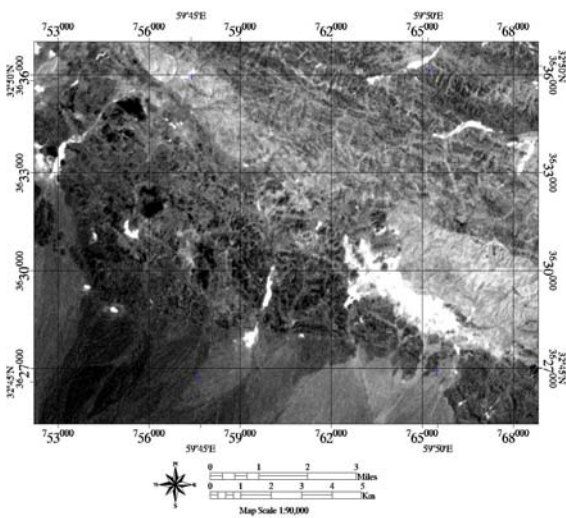
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شکل ۵: هیدروکسید ها (پیکسل های روشن).

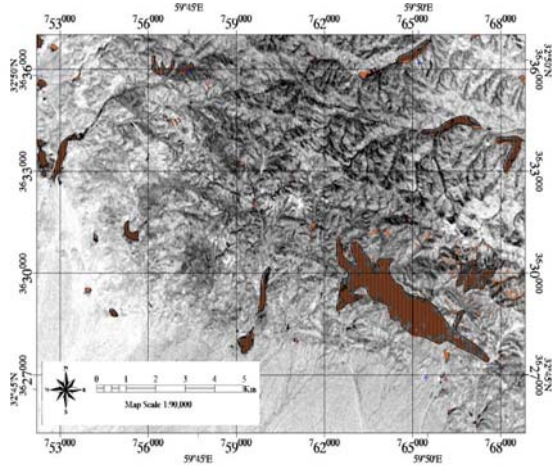
PCA :

PCA	Band 1	Band 2	Band 3	Band 4
1	0.010053	0.044571	-0.74892	0.661079
2	0.621661	0.775411	-0.03753	-0.10425
3	0.782485	-0.62115	0.010725	0.042129
4	-0.03396	-0.10452	-0.66151	-0.74184

PCA :

PCA	Band 1	Band 3	Band 4	Band 8
1	0.029449	-0.68737	0.602835	0.404045
2	-0.36726	-0.25254	0.296179	-0.84476
3	-0.91894	0.179512	0.014397	0.350884
4	0.140743	0.656906	0.740717	0.002129

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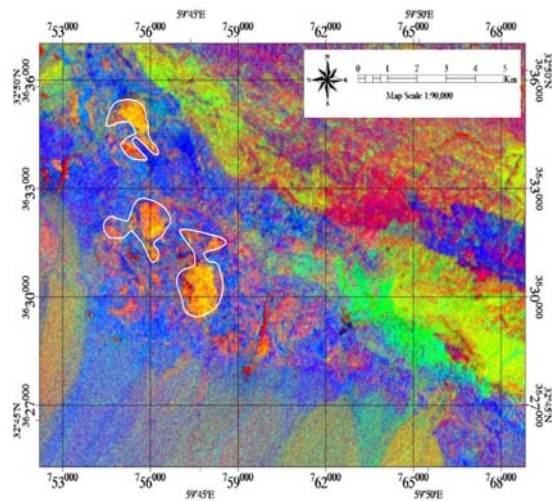
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LS-FIT

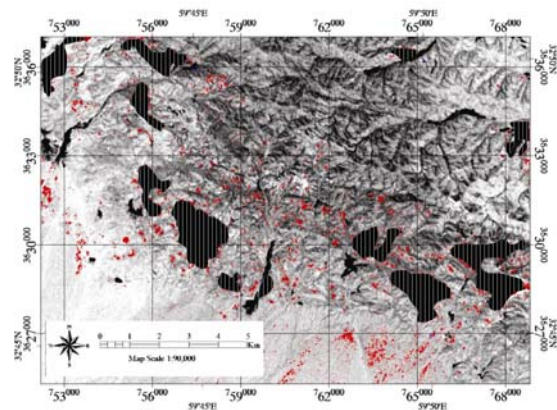
LS-FIT,PCA

$$\frac{(b3 - b2)}{(b3 + b2)}$$

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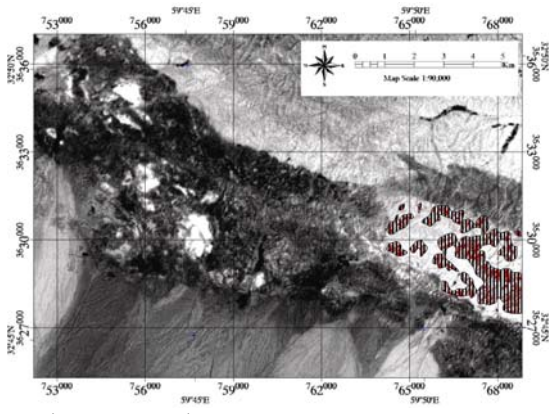
شکل ۶: بیکیسل های حاوی اکسید آهن با توجه به مقایسه سه روش LS-FIT,PCA و نسبت باندی.

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LS-FIT

Z-Profile

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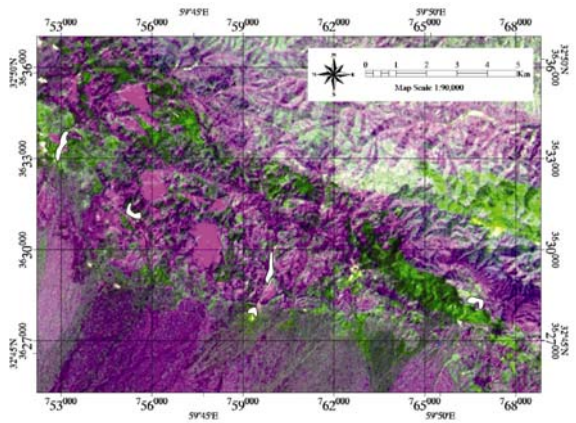


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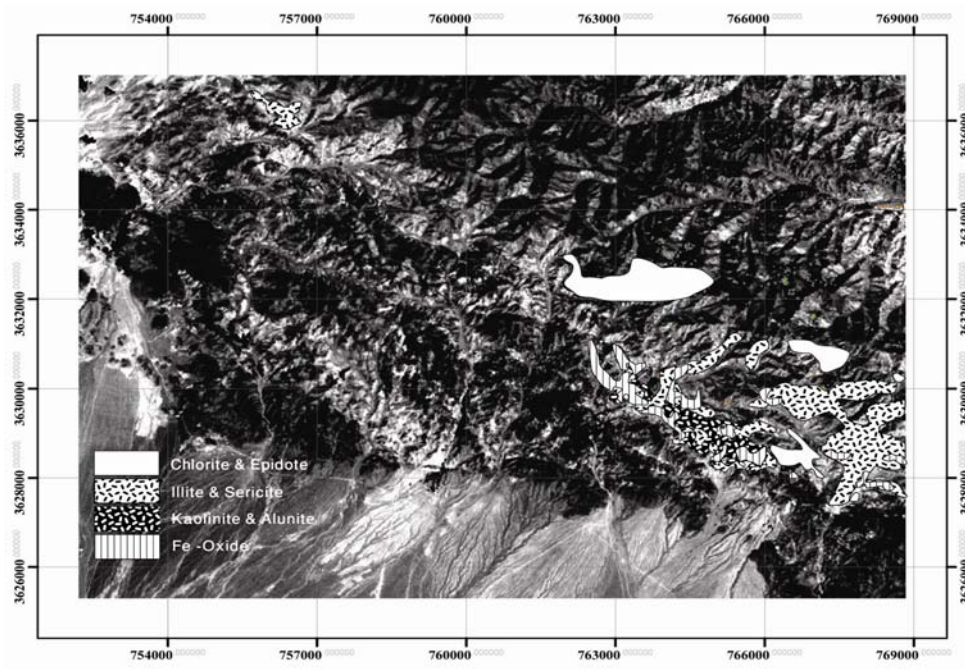
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## تقدیر و تشکر

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- 1 - Yongming Xu, Qizhong, Lin, Yun Shao, and Lu Wang. (2004). "Extraction mechanism of alteration zones using ASTER imagery." *Geosci. & Remote Sensing Symp.*, IGARSS 04. Proceedings. Vol. 6, PP. 4174 – 4175.
- 2 - Asadi, H. H. and HALE, M. (1999). "Integrated analysis of aeromagnetic, Landsat TM and mineral occurrence data for epithermal gold exploration in northwest Iran." *Proceedings of the thirteenth international Conference on Applied geologic Remote Sensing*, Vancouver, British Columbia, Canada, 1-3 March, PP. 8.
- 3 - Legg, C. A. (1989). "Updating thematic maps of mining districts." *Proceedings Remote Sensing Society Conference*, Bristol, PP. 243-248.
- 4 - Irons, J. R. and Kennard, R. L. (1996). "The utility of Thematic Mapper Sensor Characteristics for Surface Mine Monitoring." *Photogrametric Engineering and Remote Sensing*, Vol. 4, PP. 389-396.
- 5 - Kruse, F. A., Lefkoff, A. B., Boardam, J. B., Heidebrecht, K. B., Shapiro, A. T., Barloon, P. J. and Goetz, A. F. (1993). *The Spectral Image Processing System(SIPS)-Interactive Visualization and Analysis of Imaging Spectrometer Data: Remote Sensing of Environment*. Vol. 44, PP. 145-163.
- 6 - Nazari, H. (1999). *Geological Map of Iran 1:100000 Series Sheet 7955-Sarbishe* Geological Survey of Iran.
- 7 - Crosta, C. R. (2003). "Targeting Key Alteration Minerals in Epithermal Deposits in Patagonia-Argentina Using ASTER Imagery and Principal Component Analysis." *Geosciences Institute*, University of Campinas.
- 8 - Legge, C. A. (1997). *Remote Sensing and Geographic Information System*, Publishd in Association with PRAXIS PUBLISHING.
- 9 - Vincent. R. K. (1997). *Fundamentals of Geological and Environmental remote Sensing*, Bowling Green State University.
- 10 - ENVI 4.2, Manual, 2005.

## واژه های انگلیسی به ترتیب استفاده در متن

- |                       |                    |
|-----------------------|--------------------|
| 1 - ASTER             | 2 - Crosta         |
| 3 - Matched Filtering | 4 - Remote sensing |
| 5 - Martitization     | 6 -Thematic Mapper |
| 7 - Reflectance       | 8 - Eigenvalue     |
| 9 - Eigenvector       |                    |