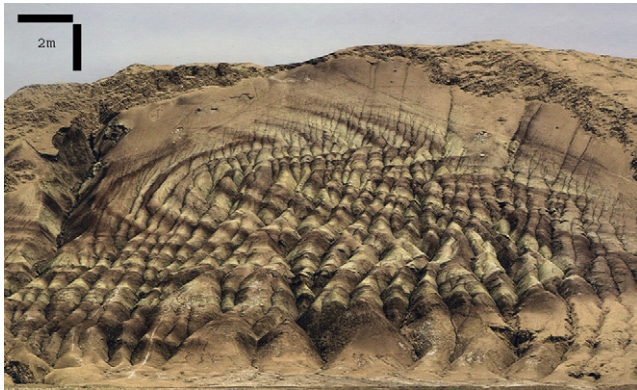




Photograph of the Month

Tank track folding in marls covering a salt glacier, Garmsar, Iran

Tank track folding (Talbot and Aftabi, 2004) in an outcrop of Miocene red and green marls, covering an Eocene–Oligocene salt glacier in the Garmsar area of Central Iran (Aftabi, in preparation).



In the Garmsar area many extruded and intruded salt diapirs occur, some of which have large glaciers of salt associated (Talbot and Jarvis, 1984; Jackson et al. 1990). The folds are not only exposed in the marl cover but also in small isolated salt exposures in sink holes, and in mining excavations or in natural outcrops (Aftabi, in preparation). The salt or salt-marls mixture deformations are largely driven by gravity.

Outcrop location 522030° E, 351600° N, sheet 1:25000 of Kuh-e-Kahlarz Geological map no 6460ISW in Central Iran. The outcrop is a distal front of salt glacier advanced like a lava flow (Talbot & Aftabi, 2004) or ice glacier (e.g. Ramberg, 1981;

Lawson et al., 1994; Gilbert & Merle, 1987). This frontal recumbent folding corresponds to the rolling of the free surface at the front of salt sheet spreading zone. The major recumbent fold sets suggest change in the rate of spreading.

Photograph Pedram Aftabi. Copyright © Pedram Aftabi.

References

- Aftabi, P., In preparation. Kuh-e-Kahlarz of Garmsar, geological map 1:25000 in scale. Geological Survey of Iran, Tehran, Iran.
- Gilbert, E., Merle, O., 1987. Extrusion and radial spreading beyond a closing channel. *Journal of Structural Geology* 9 (4), 481–490.
- Jackson, M.P.A., Cornelius, R.R., Craig, C.H., Gansser, A., Stocklin, J., Talbot, C.J., 1990. Salt diapirs of the Great Kavir, Central Iran. *Geological Society of America, Boulder*, 177.
- Lawson, W.J., Sharp, M.J., Hambrey, M.J., 1994. The structural geology of a surge-type glacier. *Journal of Structural Geology* 16 (10), 1447–1462.
- Ramberg, H., 1981. *Gravity, Deformation and the Earth's Crust in Theory, Experiment and Geological application*. Academic press, London.
- Talbot, C.J., Aftabi, P., 2004. Geology and models of salt extrusion at Qom Kuh, Central Iran. *Journal of the Geological Society* 161, 321–334.
- Talbot, C.J., Jarvis, R.J., 1984. Age, budget and dynamics of an active salt extrusion in Iran. *Journal of Structural Geology* 6 (5), 521–533.

Pedram Aftabi

*Geological Survey of Iran,
PO Box 13185–1494 Tehran, Iran*

Present address: Fereshteh street, Sahara no 8, Tehran, Iran.

E-mail address: Ped_Aftabi@yahoo.com

18 May 2010

Available online 18 December 2010