# F-TRG newsletter November 2015

This month…

The F-TRG team has been working on field data collected from the Vercors region of the French Sub-Alps collected in July this year. The Vercors region will form our main field case study for deformation in mountain fronts. We have been focussing on large scale structural trends and the variation in structures along strike by constructing a series of regional cross sections. Photogrammetry has also been used to construct 3D outcrop models using Agisoft Photoscan software. Models will be used in future to analyse curvature variations and fault geometries in limestone cliff faces.
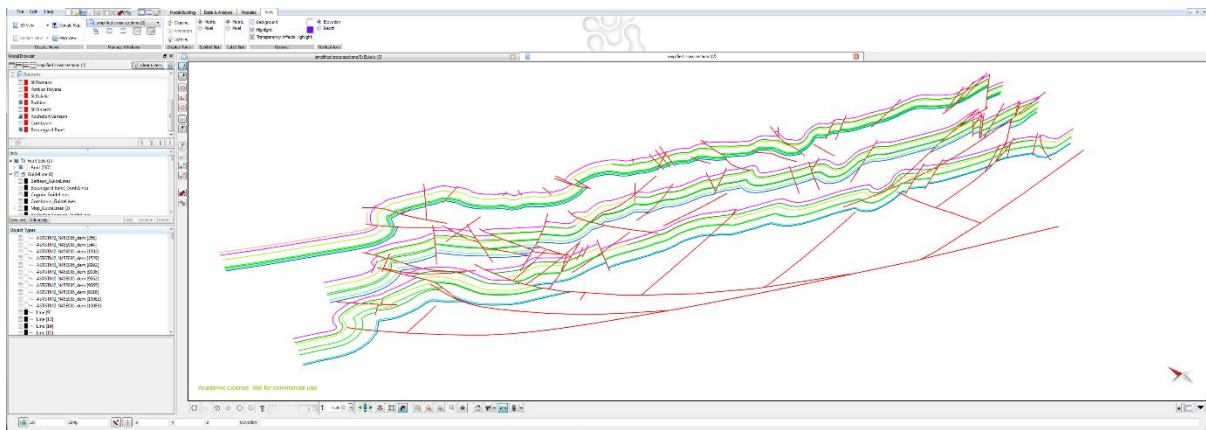
Top: regional scale cross sections through the southern Vercors region, constructed from field data using Move software. Bottom: 3D model of an Urgonian Limestone cliff face constructed using Agisoft Photoscan software.

Kick-off meeting

Logistics for the F-TRG kick-off meeting have now been finalised. The kick-off meeting will be held in the Oil Search offices in Sydney on Wednesday 2nd December 2015. Rob and Hannah will be in Sydney (2nd-4th December) to lead discussions on F-TRG activities over the next year, as well as to deliver seminars on the structural geology of mountain fronts. They will also stop off in Singapore to visit the InterOil offices prior to the kick-off meeting on Monday 30th November. We hope to see you there!

News and events

InterOil representative Mark Bentley met with the F-TRG team in Aberdeen on 14th October to discuss InterOil's involvement in the F-TRG project.

The F-TRG team organised a teleconference on Tuesday 27th October (UK time). Discussions were held between the F-TRG in Aberdeen, Oil Search in Sydney and Santos in Adelaide regarding the involvement of Oil Search and Santos in the F-TRG.

Rob has been working on a dataset from mountain front structures in Oman.

Clare attended the Shale gas environment Summit (26th-27th October 2015) in London where she presented an invited talk on 'Life-Cycle Assessment of Greenhouse Gas Emissions from Shale Gas Extraction in Scotland'.

Clare also attended the Geology of Geomechanics conference hosted at the Geological Society of London (28th-29th October 2015). She presented a poster entitled 'From Field Fractures to Reservoir Geomechanics: Utilizing Drones, Virtual Outcrop and Digital Data Analysis to Input into Fracture Models' (Bond C.E., Shackleton J.R., Wild, T. and Binti Zain, Z).

Hannah submitted a journal article to Marine and Petroleum Geology entitled 'Discrete Fracture Network (DFN) modelling of a folded tight sandstone reservoir analogue'. The research formed part of her PhD and investigates whether or not it is possible to predict fracture attribute variations using DFN modelling.

Hannah has completed Office365 SharePoint training at the University of Aberdeen. We are now in the process of setting up a fold-thrust SharePoint site to be used for knowledge exchange between F-TRG partners.

Recent/relevant publications

Bentley, M., 2015. Modelling for comfort? *Petroleum Geoscience*, doi: 10.1144/petgeo2014-089.

Cherpeau, N. & Caumon, G., 2015. Stochastic structural modelling in sparse data situations. *Petroleum Geoscience*, 21, 233-247.

Ruh, Jonas B., Gerya, Taras, Burg, Jean-Pierre, Towards 4D
modelling of orogenic belts: Example from the transpressive Zagros Fold Belt, *Tectonophysics*
(2015), doi: 10.1016/j.tecto.2015.09.035.

Tamara, J., Mora, A., Robles, W., Kammer, A., Ortiz, A., Sanchez-Villar, N., Piraquive, A., Rueda, L. H., Casallas, W., Castellanos, J., Montaña, J., Parra, L. G. Corredor, J., Ramirez, A. & Zambrano, E., 2015. Fractured reservoirs in the Eastern Foothills, Colombia, and their relationship with fold kinematics. *AAPG Bulletin*, 99, 8, 1599-1633.

Next month…

The next issue of the F-TRG newsletter will be circulated at the beginning of December, and will also be available on our website (www.abdn.ac.uk/research/foldthrust).