IGCP 653 field excursion to the Lower Ordovician Fezouata Lagerstätte, Zagora (Anti-Atlas, Morocco)

14-16 February 2018

The aim of this field excursion is to bring participants to the Ternata plain (Draa Valley, N. of Zagora), in the Central Anti-Atlas of Morocco, where several sites yielding the exceptionally preserved organisms of the Fezouata Biota were discovered in the early 2000s. The abundant and diverse assemblages of the Fezouata Biota document a key evolutionary transition, between the Cambrian Explosion and the onset of the Great Ordovician Biodiversification Event. The Fezouata assemblages are characterized by a mixture of typical post-Cambrian taxa (e.g. asterozoans, cheloniellids, cirripeds, crinoids, eurypterids, graptolites, ostracods, xiphosurans), along with the iconic taxa of Cambrian series 2-3 Lagerstätten (e.g. anomalocaridids, demosponges, lobopodians, marrellomorphs, naraoiids).

During this field excursion, a full day will be spent visiting two major fossiliferous sites. In the first one (Bou Izargane, late Tremadocian), exceptional preservation is restricted to thin, lens-shaped horizons. Each level has yielded abundant remains of distinct, low-diversity assemblages, generally dominated by one or two taxa (e.g. anomalocaridids, marrellomorphs, palaeoscolecids, stylophoran echinoderms, trilobites). The second fossiliferous site (at the bottom of Jbel Bou Zeroual, middle Floian) has been extensively quarried out by fossil collectors. This locality has yielded extremely abundant and diverse assemblages, dominated by articulate brachiopods, molluscs and trilobites. Exceptionally preserved fossils are relatively rare and include demosponges, possible annelids, as well as arthropods (e.g. aglaspidids, cheloniellids).

Preliminary programme:

Wed. 14 February: departure from Marrakech (morning), lunch in the High-Atlas (noon), panoramic view of the Early Palaeozoic strata in the Agdz area (afternoon), and arrival in Zagora (late afternoon-evening). Night in Zagora.

Thu. 15 February: visit to the Bou Izargane locality (morning and lunch), visit to the Jbel Bou Zeroual locality (afternoon). Night in Zagora.

Fri. 16 February: departure from Zagora (morning), stop at Amane n'Tourhart (Ediacaran stromatolites), lunch in Ouarzazate (noon), and arrival in Marrakech (late afternoon).

Registration fees: 200 euros, including transport (minibus), meals and accommodation. Given the limited numbers of seats, please register as soon as possible and before Dec. 16 2017, if you are willing to participate in this field excursion.