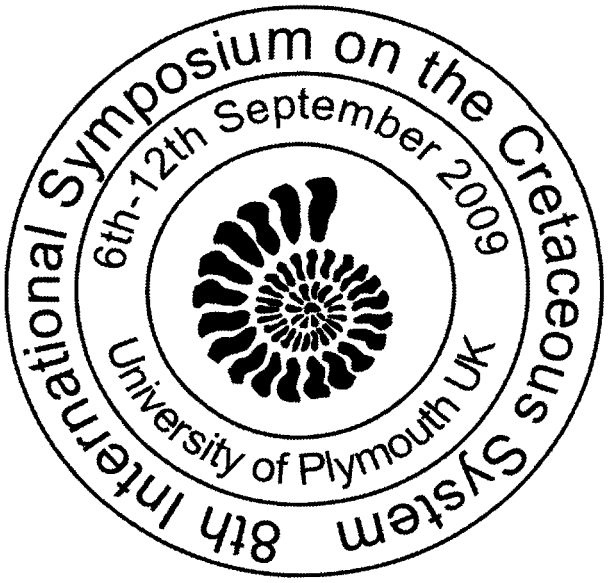

8th International Symposium on the Cretaceous System

University of Plymouth
6th – 12th September 2009

Abstract Volume

Editor: Malcolm B. Hart

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The Lower Cretaceous of Azerbaijan part of the Great Caucasus is little-known in terms of cephalopod biostratigraphy. There were no zones recognized within the Berriasian-Hauterivian interval. Here we present preliminary data on the Valanginian-Hauterivian boundary beds exposed along the slope of Kelevudagh Mt. (Guba region), which were studied during the field works in 2004 (Zakharov *et al.*, 2006).

The Upper Valanginian (60 m) consists of fine alteration of marls and carbonate clays. The Lower Hauterivian (100 m) is composed of clays with rare marl and conglomerate beds. Ammonites are represented mainly by Mediterranean deep-water heteromorph assemblage rich in *Criosarasinella* and *Crioceratites* (*C.* gr. *heterocostatum*, *C.* cf. *coniferus*, "*Davouxiceras*" gr. *nolani*), while neocomitids are uncommon. Phylloceratids as well as *Bochianites* and *Neolissoceras* are also scattered through the Valanginian–Hauterivian succession. Olcostephanids (*Olcostephanus* cf. *densicostatus*) are extremely rare.

The assemblage could be referred to the Upper Valanginian Trinodosum Zone, marked by the occurrence of *Varlheideites* gr. *peregrinus* (bed 48), and Callidiscus Zone recognized by the co-occurrence of *Criosarasinella* and *Teschenites* cf. *flucticulus* (beds 132-176). The Valanginian–Hauterivian boundary was drawn at the base of the bed 177 by the disappearance of *Criosarasinella* which is replaced by numerous "*Davouxiceras*" gr. *nolani*. The Valanginian–Hauterivian aptychi succession (*Lamellaptychus* (*Didayilamellaptychus*) *beyrichodidayi* - *L.* (*D.*) *subseranonis* - *L.* (*D.*) *seranonis*, *L.* (*D.*) *didayi* - *L.* (*D.*) *seranonis* subsp. 1, *L.* (*D.*) *atlantica*) is very close to those of Carpathians and other Mediterranean regions (Kasumzadeh *et al.*, 2008). Surprisingly, we have found *Punctaptychus* in the Lower Hauterivian bed 186, which is uppermost known record of this genus.

The Tethyan ammonite assemblage is accompanied by Boreal bivalve *Buchia keyserlingi* assemblage in the Valanginian–Hauterivian boundary interval (bed 177). This unusual co-occurrence could appear due to the short–time migration of Buchiids from the Russian Platform Basin through Caspian Strait (Baraboshkin *et al.*, 2007). Boreal bivalves could exist only in deeper–water conditions because of the temperature control. There is no doubt that it was dependent population even a few records of same Buchiids are known from Azerbaijanian part of the Lesser Caucasus (Zakharov & Kasumzadeh, 2005), Kopet-Dagh (Tovbina, 1988) and in Georgia (Kotetishvili, 2005).

This study has been supported by RFBR grant nos.09-05-0456, 07-05-00882 and "Scientific Schools" program, grant NSH-841.2008.5.

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Advances in bio- and magnetostratigraphy of the Jurassic/Cretaceous boundary beds of Svalbard [915]

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During the last decade the Jurassic–Cretaceous boundary beds of Spitsbergen became one of the most intensively studied level in Mesozoic of this area, mainly due to occurrence of unique marine vertebrate remains and studying of Mjolnir impact event. Nevertheless ammonite biostratigraphy of this level mainly was based here upon analysis of scattered records of fossils done during the geological survey, while precisely arranged ammonite succession of this age was published only once (Erschova, 1969). These beds also were not studied magnetostratigraphically yet, albeit such information could be very important from the both biostratigraphical and geodynamical point of view. Here we present new data from recent field work at two famous sites, Festningen and Myclegard, located on the west and east coasts of Spitsbergen, respectively.

Ammonite biostratigraphy: Erschova (1983) has recognized *Virgatosphinctes* spp. beds, Okensis and Nodiger zones within the Upper Volgian, while the "Berriasian" was characterized by Ryazanensis and Spasskensis zones. Recently the Exoticus Zone and corresponding "*Virgatosphinctes*" (= *Praechetaites*) beds were re-assigned to the Middle Volgian (Zakharov & Rogov, 2008). The Okensis Zone is identified by the appearance of *Craspedites* ex gr. *okensis*, and was recognized through both of the studied sections. Slightly above, the first *Taimyroceras*–like ammonites were found, suggesting the presence of the Taimyrense Zone. The Uppermost Volgian, Chetae Zone, still cannot be recognized here. The Ryazanian in Svalbard is mainly poor in ammonites. The Ryazanensis Zone here was based upon a non–figured, lost ammonite and should be abandoned. The presence of *Pseudocraspedites* ex gr. *anglicum* as well as *Borealites* and *Surites*. can be used to recognize the succession of the Siberian Ryazanian.

Magnetostratigraphy: We sampled 18-m succession of the terminal Volgian beds with sample step 0,1-1 m downwards from the base of Myklegard bed at Myklegard for magnetostratigraphy. Studied rocks are characterized by magnetic susceptibility (K) from 10-16.10-5 SI, except siderite bands in which K increased up to 78-188.10-5 SI. Natural remanent magnetisation (NRM) varies from 0.2 to 0.6.10-3A/m, sometimes attaining 1.47-1.73.10-3A/m at siderite concretions. Samples were demagnetized by alternating field (from 5 to 50-80 mTl with 5 mTl step) using AF demagnetizer LDA-3A, while K and NRM were measured, respectively, by kappabridge MFK1-FB and spinner magnetometer JR-6. Bulk of samples is characterized by two-component NRM, while other very stable samples have one-component NRM. At the first case low coercitivy component destroyed at 20-30 mTl, while high-coercitivy component (ChRM) preserved up to 50-80 mTl. Sampled interval includes ChRM directions, corresponding to both normal (N) and reverse (R) polarity, are close to antiparallel, which suggested primary nature of ChRM. Studied section mainly prevailed by normal polarity, except uppermost part of the section, marked by thin reverse magnetozone, which perhaps corresponds to basal portion of M18r or to Brodno Subzone (M19n.1r), earlier revealed at different Mediterranean sites (Houša *et al.*, 2004) and Taimyrensis Zone of Nordvik, N.Siberia (Houša *et al.*, 2007).

This study has been supported by RFBR grants 08-05-00385, 09-05-0456, grant of the President of Russian Federation MK-856.2008.5 and grant by Presidium of RAS no.16.

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