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Ammonites and stratigraphy of the Kirnmeridgian at Wimanfjellet, Sassenfjorden, Spitsbergen

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Five Kimmeridgian ammonite faunas occurring at well separated horizons have been recognized in the Janusfjellet Fm., at Wimanfjellet in Sassenfjorden. Together with other ammonite faunas described so far from the Kimmeridgian in Spitsbergen they are arranged into the faunistic sequence, and their correlations with the best known Arctic successiam viz. in the East Greenland (Milne Land) and the northern Siberia (Kheta Basin) are discussed. The ammonites of Spitsbergen belong mostly to the family Cardioceratidae which indicates the affiliation of the area to the restricted Boreal Province. However, the faunas corresponding to the *Rasenia cymodoce* Zone (except its lowermost part) and the *Aulacostephanoides mutabilis* Zone show in Spitsbergen a marked increase in number of the Subboreal representatives of the Aulacostephanidae. The appearance of aulacostephanids of the Subboreal affinities reflects the faunal invasion from the south.

Key words: biostratigraphy, biogeography, ammonites, Upper Jurassic, Kimmeridgian, Boreal Realm.

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