is a pedogenic carbonate bed, which was formed on the tidal flat under subaerial conditions. Tidal flat pools may have been the source of the ostracode-bearing cavity fill mud.

Above a sharp boundary the calcrete bed is followed by a thick limestone bed, abundant in megalodonts (Bed 7). It has a peloidal bioclastic packstone-grainstone texture, containing cm-sized fragments of chaetetid calcisponges, and Tubiphytes-type nodules and encrustations. It was formed under subtidal conditions (C facies).

Summing up, the section studied is made up by perididal and subtidal facies, characteristic elements of the Lofer cycles. In spite of excellent exposure conditions recognition of the basic cycles is not plausible. The macroscopic observations are not satisfactory, microfacies studies are needed to establish the real facies succession. For example, evaluation of traces of meteoric diagenesis in Bed 2 is rather problematic. Taking into consideration, that solution cavities in this bed are much more common than those in the overlying bed, the possibility of a short subaerial interval between deposition of Bed 2 and 3 cannot be excluded.

The cycle termination above Bed 3 is constrained by a well developed disconformity surface and evidences for karstification. The overlying beds (4, 5, 6) are probably tidal flat deposits, although Bed 5 formed in a permanently inundated environment, that was followed by a pedogenic period, represented by Bed 6. However, these facies changes are likely results of autocyclic processes, rather than sea-level changes. Abrupt appearance of subtidal facies in Bed 7 clearly indicates sea-level controlled transgression.

Conclusions

1) In the investigated Dachstein Limestone succession the Lofer cycles are usually bound by pronounced disconformities showing characteristic features of subaerial erosion, weathering and karstic solution on and below the paleosurfaces.
2) In some cases there are only subtle traces of the subaerial exposure, that has manifested itself in the more pronounced solution features, and meteoric diagenetic alterations below the bedding planes. In these cases the distinction of the cycles is poorly constrained, ambiguous. Accordingly proper identification of the facies stacking and distinction of the cycles need excellent exposure conditions and detailed microfacies investigations.
3) There are unambiguous traces of pedogenesis and meteoric diagenesis which affected the subtidal-peritidal carbonate deposits during the emersion periods. Calcretes forming on the top of the truncated bed-sets are typical. Rip-up chips of calcretes, pebbles of blackened carbonates are also common. They occur in the basal lag deposits of the overlying cycles together with clasts of the previously consolidated underlying carbonates, some of them had been encrusted by Fe-oxide.
4) Establishment of more or less permanent fresh-water pools over large parts of the tidal-flat may be considered as a herald of the rising sea-level. The first, typically ostracode-bearing pool deposits appeared in the karstic depressions and cavities.
5) Evidences for subaerial exposures between the subtidal-peritidal deposits strongly support the allocyclic control of the Lofer cyclicity in the study area. However the role of autocyclic processes which may have influenced the facies changes cannot be excluded.

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Bericht 2008 über paläobotanische Untersuchungen der Flora der Gosau-Gruppe von Jainzen NW von Bad Ischl auf Blatt 96 Bad Ischl

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The very small locality with a flora of the Gosau Group at the so called „Häuslkogel“ was detected by Winfried Leischner (Mitt. Ges. Geol. Bergbaustud., **10**, 63–94, Wien 1959). The locality of bedded bituminous marly limestones (BMN RW: 470 630; HW: 287 630) is situated in the western creek of the two steep creeks in an altitude of about 600 m NW of Jainzen village. The flora is rich in angiosperms. Preliminary field inspection in summer 2008 revealed one type of conifer, six types of angiosperm leaves and two types of reproductive structures. The leaf fragments are preserved as impressions, however, cuticle preparation was not possible. The conifer twig is classified as *Brachyphyllum* sp. It shows quite unusual massive xenomorphic leaves helically arranged on the main axis. Angiosperm leaves are assigned to form genera. Entire margined fragments of leaves cf. *Myrtophyllum* sp. show intramarginal vein. *Juglandiphyllites* sp. is also entire-margined. This small type of probably juglandoid foliage shows loops of secondary veins and a robust midvein. Attenuate entire-margined leaves of *Dicotylophyllum* proteoides (Unger) Herman & J. Kvaček are the most common leaves in the locality. *Dicotylophyllum* sp. 1 shows spiny teeth on its central and apical parts of the margin. *Dicotylophyllum* sp. 2 represents a fragment of very small entire-margined leaf about 1 cm long. *Dicotylophyllum* sp. 3 shows entire-margined lamina with blunt apex. The reproductive structures are difficult to identify. They represent probably seeds or fruits and reproductive axes-bearing fruits.

The conifer twig and small leaves of angiosperms argue for mesophytic/xerophytic flora. Most of the angiosperm leaves are entire-margined only the leaf *Dicotylophyllum* sp. 1 has teeth, which seem to be spiny. As far as we can estimate from the preliminary data (small entire-margined or spiny leaves) the palaeoenvironment of the original site of the flora was probably quite dry and warm.

We can conclude that this flora shows quite moderate diversity. More intensive collecting in the field would probably enlarge considerably the number of species.

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