**SEDMENTS OF LAKE LISAN**

<table>
<thead>
<tr>
<th>Picture</th>
<th>Description</th>
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<tbody>
<tr>
<td>(a)</td>
<td>Halite deposits</td>
</tr>
<tr>
<td>(b)</td>
<td>Aragonite &amp; detrital deposits</td>
</tr>
<tr>
<td>(c)</td>
<td>Lindavia ocellata species complex, Achnanthidium sp., Hanitzschia sp., Navicula spp.</td>
</tr>
<tr>
<td>(d)</td>
<td>Achnanthidium sp., Amphora pediculus, Gomphonema sp., Nitzschia sp.</td>
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</tbody>
</table>

**DIATOM PRESERVATION**

- Exceptionally good preservation in all evaporitic deposits (contradictory to literature)
- Diatoms are (highly) abundant in all analysed samples

**DIATOM SPECIES COMPOSITION**

- DS 15: Delicata sp., Diatoma sp., Navicula gregaria cf., Nitzschia spp., Rhopalodia gibberula
- DS 19: Lindavia ocellata, Lindavia kuetzingiana cf., Navicula spp., Nitzschia lembiformis

**RESEARCH MOTIVATION**

- Little knowledge about (a) aquatic life in Dead Sea and former waterbodies (b) distribution of diatoms within Lake Lisan/Dead Sea
- Literature postulate very bad – no diatom preservation in southern basin & sediment deposits of Lake Lisan
- Diatoms of Lake Lisan never investigated from sediment cores – only outcrops
- Check diatom preservation in different evaporitic deposits

**DRILLING CAMPAIGN 2010/11**

- 3 drilling sites with total recovered core length of 721.2 m
- Deepest borehole with 455 m sediment recovery at site 5017-1 close to the deepest point of the basin
- Lisan Fm: core 5017_1_88-200 m blf (14-70 ka)

**OUTLOOK**

- Taxonomical investigation & identification of diatom flora
- Quantitative analysis (counting) → reconstruction of palaeo-environmental setting during Last Glacial period
- Comparison of sediment cores with outcrops → preservation & diatom abundance
- Is diatom-based lake-level reconstruction possible?

**References**


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