



## **A novel Eemian palynological record: chronologically constraining Last Interglacial biostratigraphies with paleolake deposits from the Swiss North Alpine Foreland Basin**

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The Last Interglacial (Eemian, c. 130 ka) has been a major focus of recent research efforts because its warmer-than-today conditions offer unique possibilities to assess vegetational responses to a warmer climate in the future. Nevertheless, the biostratigraphic position and the plant succession during the Eemian have not been fully deciphered and characterized yet. In fact, the numerous palynological records from the Swiss North Alpine Foreland Basin (Welten 1982, 1988; Wegmüller 1992) are all lacking well-constrained independent internal chronologies. It is the major scope of this project to improve the characterization and the temporal calibration of Eemian biostratigraphic records. To address this scope, we plan to perform a high-resolution investigation of a novel palynological record from Spiezberg, Switzerland, coupled with independent dating techniques (U/Th and luminescence dating). The planned analyses would represent a major scientific advance in Quaternary biostratigraphy, as they would, for the first time, generate independent internal chronologies of Eemian pollen records from the North Alpine Foreland Basin. In addition, refining and chronologically constraining the Eemian biostratigraphies with state-of-the-art approaches will allow better foundations for biostratigraphic comparisons of European pollen archives.

### References

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