

Field campaign 2 – Cretaceous/Palaeogene boundary on the Ubac Peninsula (25th of February 2026)

On the second field campaign, the K/Pg boundary on the Ubac peninsula was revisited and reevaluated for additional terrestrial material, the suitable bedrock outcrops and additional cover outcrops. The main purpose of this field trip was additional reconnaissance of the K/Pg outcrops on the Ubac peninsula, and the search for new outcrops of the K/Pg boundary. The terrain proved to be rough, with very jagged and steep coastline, as well as very dense forests, and with limited car access, so the progress was limited. Nonetheless, we managed to widen our research area, and we found one additional outcrop, where the boundary is marked with thick flowstones, marked with palaeocaves, filled with polymict collapse breccias, with the matrix filled composed from marly material, rich in clayey ooids and pisoids and palaeosol fragments. The revisit of this outcrop is planned in the future, as the boundary looks very promising in this part of the Ubac peninsula. From this site, samples from the flowstone and breccia matrix were collected.

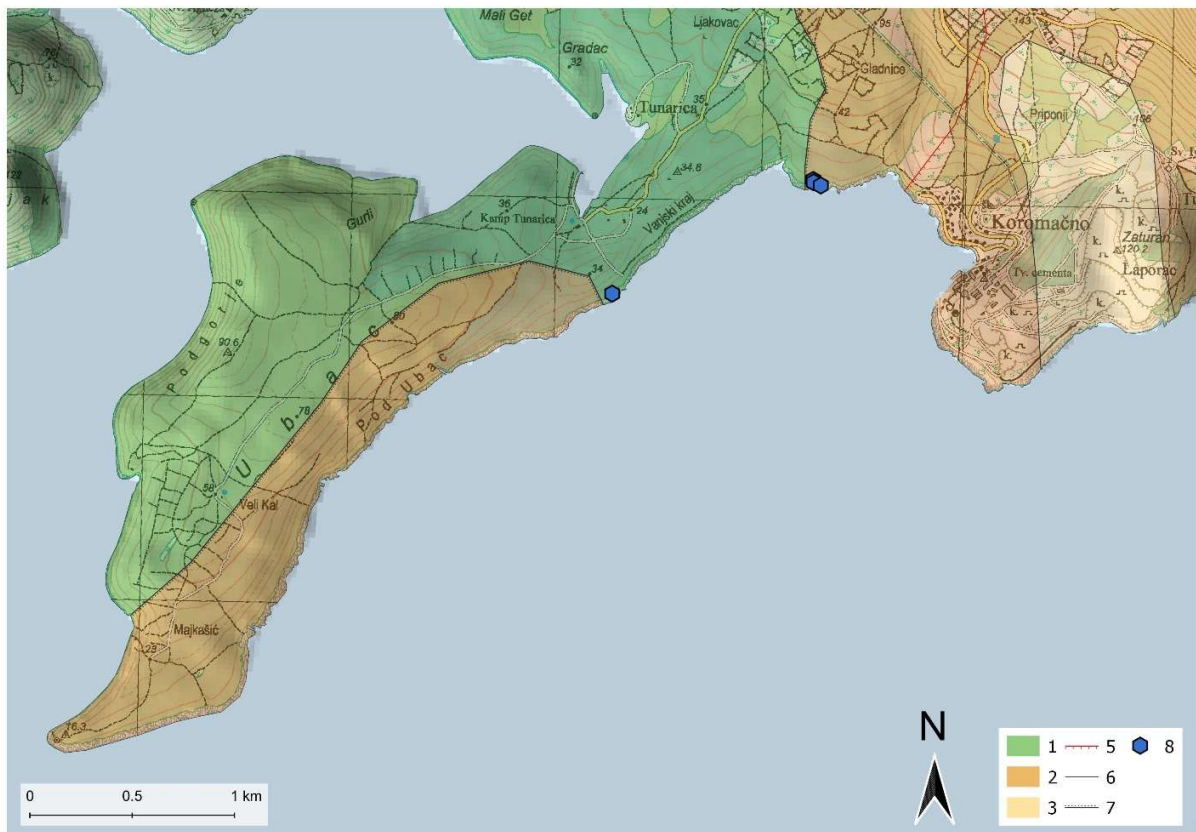


Figure 1. Geological and topographical map of the Ubac peninsula and the area of Koromačno, with marked sampling sites. 1 – Upper Cretaceous limestones, 2 – Liburnian deposits and Foraminiferal limestones, 3 – Flysch, 5 – reverse faults, 6 – normal geological boundary, 7 – transgressive boundary, 8 – sampling site

The K/Pg boundary close to Koromačno was also revisited, where we noticed that the boundary appears to have a cyclic character, as alternating thin layers of palaeosol and Paleogene limestones

appear in the cover of the K/Pg boundary. Close to this location, additional palaeosol samples were found, some appear to be a calcified and more reworked palaeosols, while others appear to be less

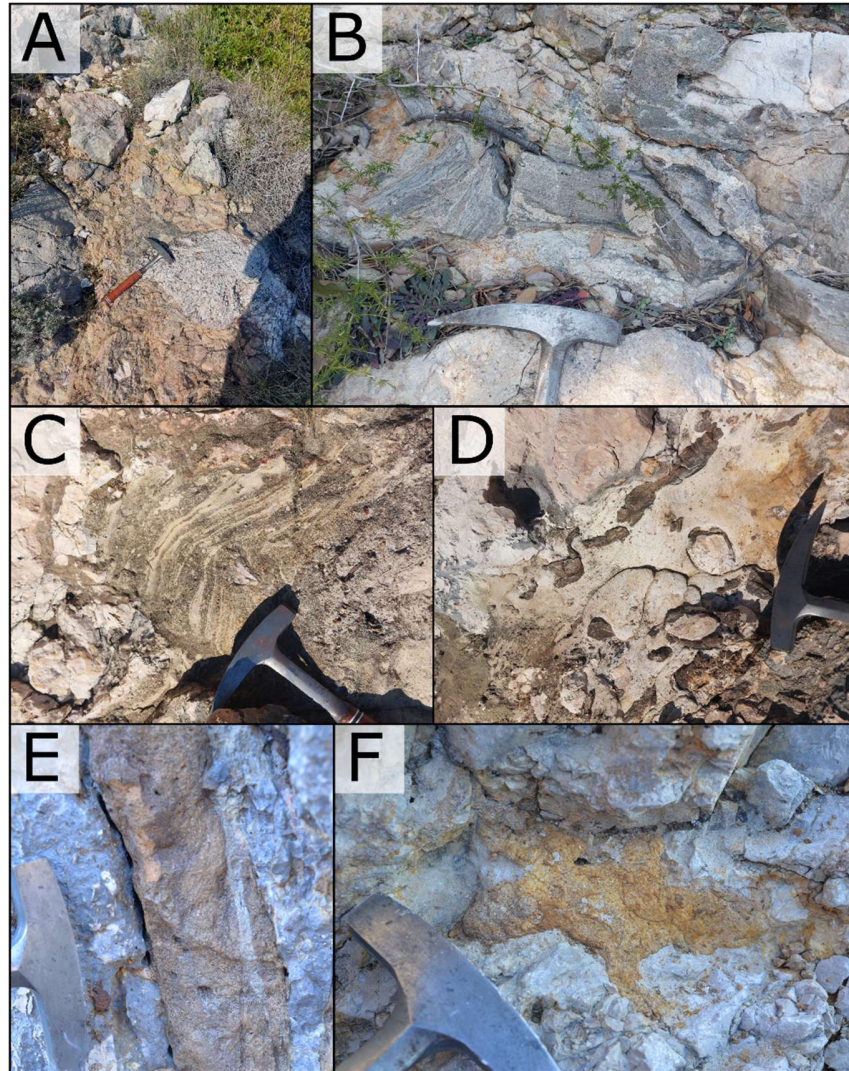


Figure 2. Photographs of various phenomena and materials marking the K/Pg boundary. A – Reworked speleothemes and bedrock fragments embedded within the collapse breccia, B – flowstones and breccias, C – stratified breccia matrix composed from fine-grained and coarser pisolitic layers, D – reworked, almost in situ speleothemes embedded within a fine-grained matrix, E – large channel filled with reworked and calcified palaeosol, F – compact palaeosol found in a karstified channel

reworked which are also much more compact, display conchoidal fracture and are dotted with vermiform iron oxides. Here, samples of these palaeosols collected. This field trip was also important as the master student Ivana Topić who is currently working on her master's thesis encompassing the K/Pg boundary on Ubac peninsula, also joined us on this field trip, to get accustomed to her outcrops in the field, and to look for additional samples for her thesis.

Team members present: Maja Martinuš, Blanka Cvetko Tešović, Igor Vlahović, Stanko Ružičić, Ana Maričić, Ivana Topić, Ivor Perković

Table 1. *List of collected samples on this field campaign*

KOR12	palaeosol
KOR13	palaeosol
KOR14	palaeosol
KOR15	palaeosol
KOR16	palaeosol
KOR17	flowstone
PKOR1a+b	bedrock