Field campaign 9 – early Kimmeridgian – late Tithonian unconformity (March 17th, 2023)

During the 9th field campaign, the Zlatni rt was once again visited, as additional samples from the bedrock and the cover of the 1st unconformity (early Kimmeridgian – late Tithonian unconformity) were required for the proper reconstruction of the paleoenvironmental conditions that preceded and succeeded the 1st unconformity. Two members of the GEO team participated on this field trip, together with one member of the PALEO team. The main outcrop of the 1st unconformity was visited (ZR-1 profile on Fig. 1.), where six additional samples were collected. The Zlatni rt was additionally explored as to find additional outcrops of the 1st unconformity on this locality. Two adequate outcrops were found (ZR-2 and ZR-3 profiles on Fig. 1.), where nine additional samples were collected altogether. The collected samples from this field campaign are going to be primarily used for the preparation of thin sections.

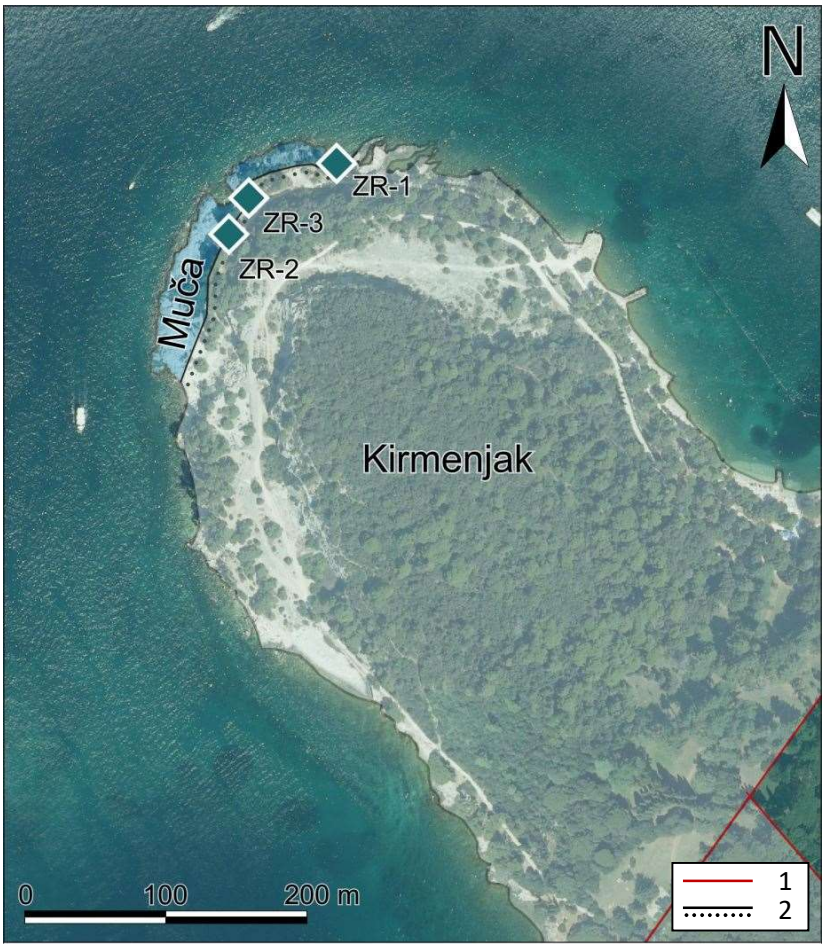


Figure 1. *lithostratigraphic map of the Zlatni rt, with indicated sampling localities (ZR-1, ZR-2 and ZR-3); 1 – normal faults, 2 – transgressive boundary*

The unconformity on two additional profiles is present as a 20 to 30 cm layer of weathered clay (Fig. 2.a), overlain with a breccia composed from the bedrock fragments and black pebbles (Fig. 2.b, 2.c and 2.d), bound with calcite cement and weathered clay (best seen on Fig. 2.d). Glauconite occurrences were observed on all studied ouctrops, despite being highly weathered (Fig. 2.c, example from ZR-3 profile). The unconformity is covered with bioclastic to pelloidal grainstones abundant in bioclasts of *Campbeliella*

striata and *Favreina* coprolites. The rest of the cover sequence is composed of mudstones and bioclastic to peloidal wackestones, with sporadic occurrences of black pebbles.



Figure 2. *photographs of studied outcrops and materials of the 1st unconformity;* ***a)*** *outcrop of the 1st unconformity, which is represented with the clay occurrence overlain with the layer of breccia, ZR-2 profile;* ***b)*** *breccia layer in the upper section of the 1st unconformity, Zr-3 profile;* ***c)*** *glauconite occurrence below the black pebbles from the breccia layer, ZR-3 profile;* ***d)*** *hand specimen of the breccia from the upper section of the 1st unconformity, Zr-3 profile.*