

GEOLOGICAL FIELD TRIP: KARA-DAG – SUDAK – NOVY SVET

Within a frame of one-day bus & pedestrian field trip with professional guidance you will be acquainted with unique geological structures of the Eastern Crimea (Fig. 1). Its complex ensemble and various structures are expressed in picturesque outcrops that have no analogues in Ukraine. At the sites will show you can trace tectonic structure and evolution of the Peninsula and understand the reasons of its contradictory interpretations generated for the last 100 years. This field trip is designed for geologists, geophysicists and all those who are interested in unique beauty of the landscapes mirrored in complex geological structure of the Crimea.

Field trip description

Stop 1. The route starts at the western outskirts of Kurortnoye township with picturesque view of the Kara-Dag Massif (Fig. 2). You will be shown the balanced model for its structure and evolution with demonstration of geological maps, different geophysical models of the area and palinspastic restorations.

Stop 2. In the western part of Sudak town, 100 m from the road, you will see the Sugar Loaf Rock that represents a typical downslided reefal body in the Sudak area (Fig. 3). From that site it is well seen thrust structures accompanied by large overturned fold and landslided olistolithic massifs are located to the west and east from that place. For those who decide not to take pedestrian route from Novy Svet may visit the Genovese fortress in Sudak. Other group will be driven by bus to Novy Svet township with several short stops.

Stop 3. The pedestrian tourist Holitsyn route starts from bus stop in Novy Svet and goes along the most beautiful coast cliffs (Fig. 4). The distance is about 3 km and relief is not hard to walk. An unique collection of the Upper Jurassic limestones, namely mounts Sokol, Koba-Kaya, Kapchik and Karaul-Oba, crops out along the shore. Reefal massifs underwent complex development. In Neogene-Quaternary time these one belonged to the Massandra olistostrome have been slid down upon the slope towards the sea during formation of nappes. At the base of olistolithes there are gently dipping slickensides with low-temperature calcite and brecciated zones. Underlying claystones and siltstones and anomalously deformed. Southern slopes of the massifs are disturbed to some extent by exogenous process that allow looking inside the internal structure of the paleo-reefs.

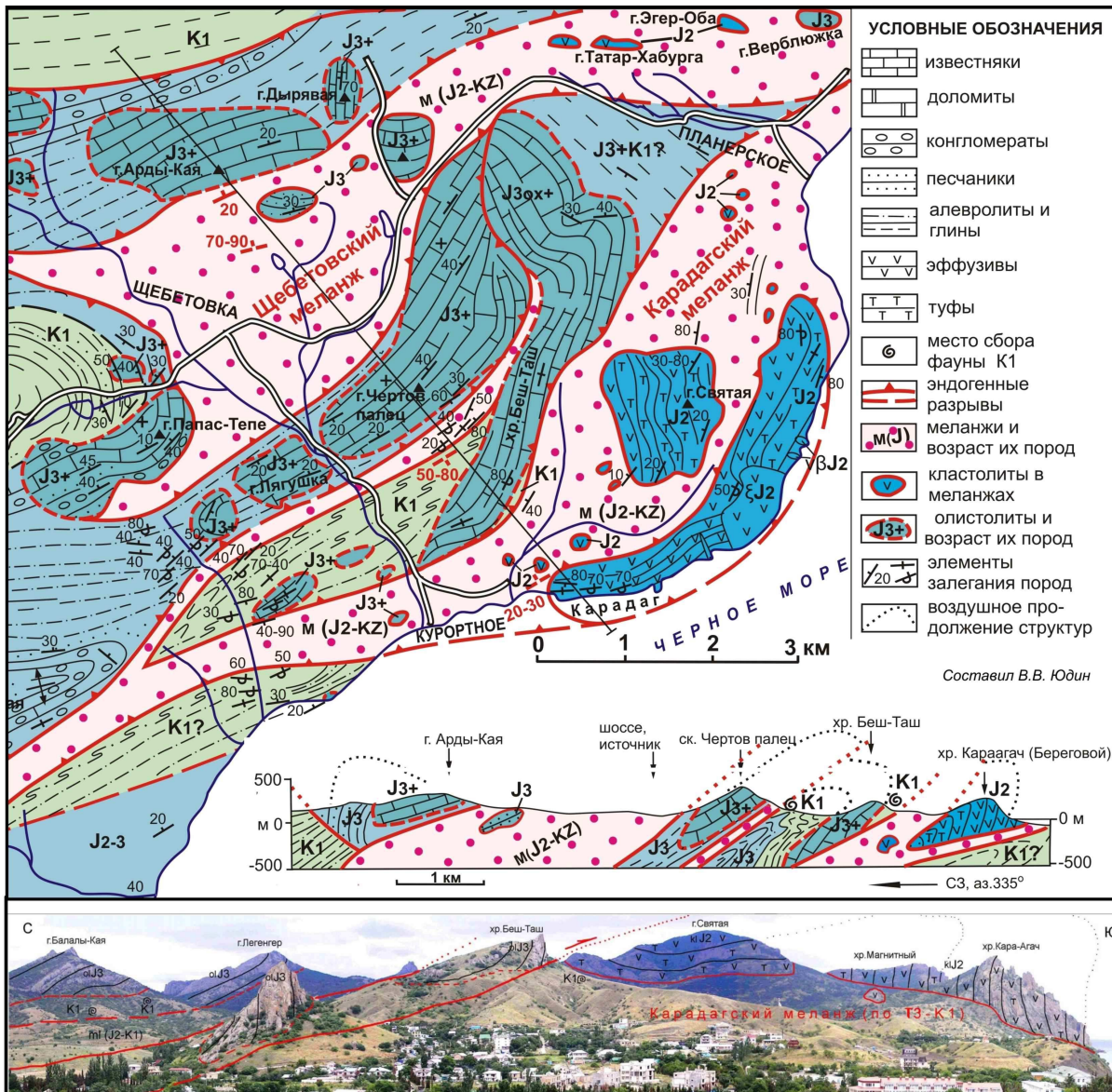
Fieldtrip Leader:



Yudin Viktor Vladimirovich

Doctor Sciences in Geology and Mineralogy on speciality «Geotectonics», an Academician of Mining Sciences Academy of Ukraine and Crimean Academy of Sciences. Graduated from Leningrad University. Has defended his PhD and DrSc theses at Lomonosov Moscow University. He authored in 390 publications (320 papers and abstracts, including more than 30 monographs and special issues). More than 150 of his publications are devoted to the geology of Crimea and adjacent regions. Regional research interests: balanced structural geology, actualistic geodynamics, structural/tectonic and geodynamic criteria for petroleum and mineral prospecting, as well as regional geology of foldbelts.

E-mail: yudin_v_v@mail.ru



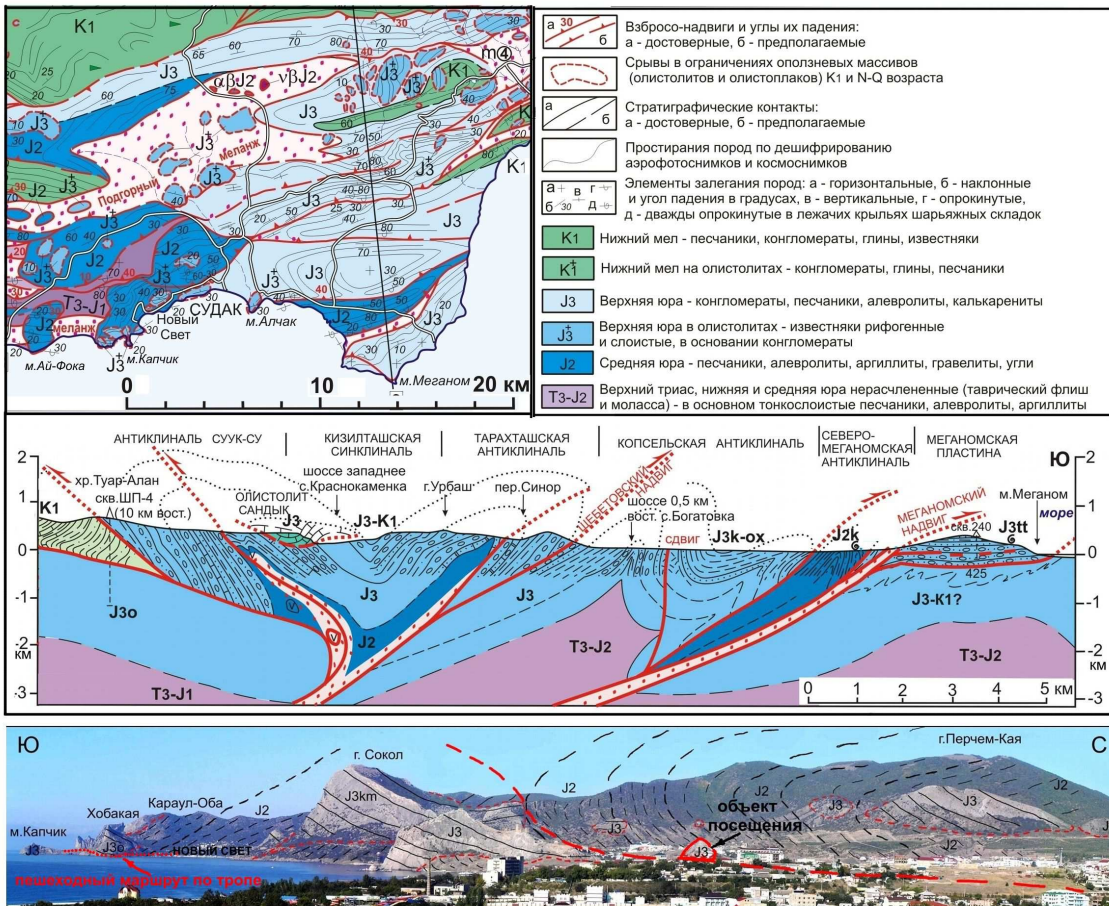


Figure 3. Geological map and panorama of the Novy Svet area

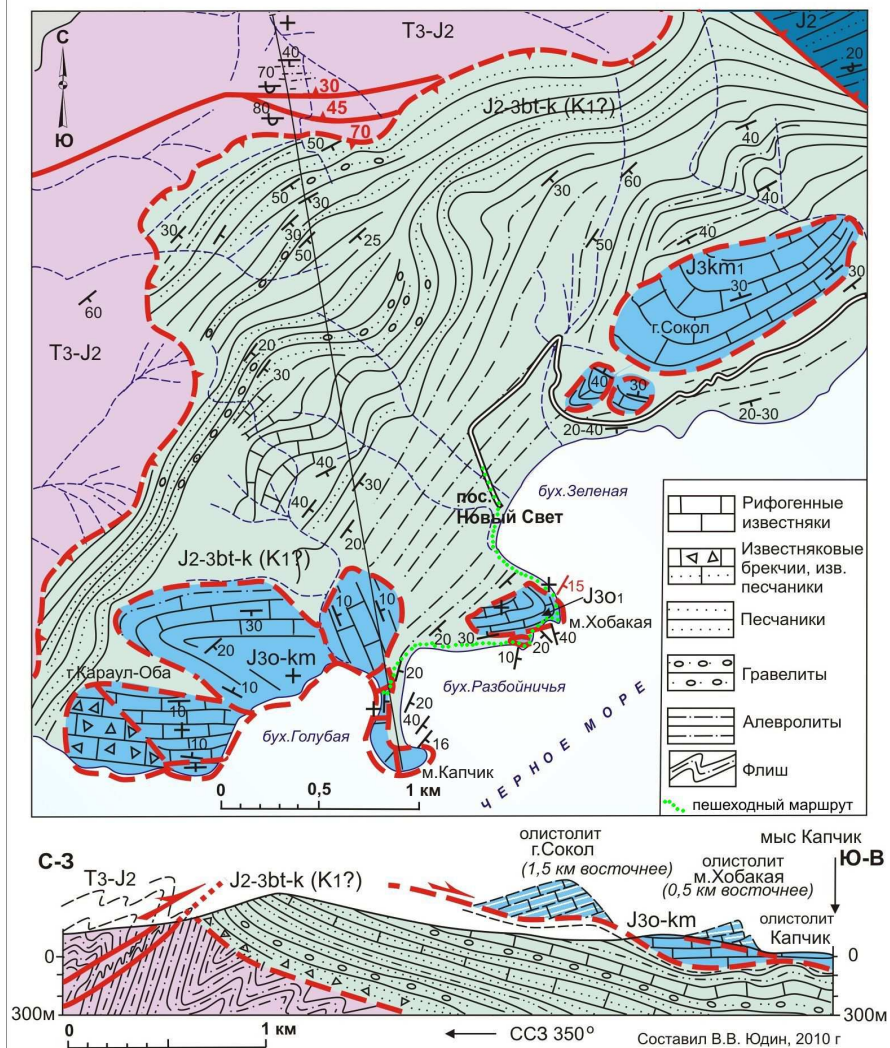


Figure 4. Geological structures near Novy Svet