represents a constant water-irrigated fields. The fluctuation of F1+F2 and F3 values in Profile 1 suggests that the OM content of the marginal territory (both in its natural and present state) is determined by the alternation of dry and wet periods, sometimes with a high algae production in slack waters. Based on the quality parameters of OM, dry and wet accumulation periods can be separated, and signs of human influence can also be identified.

Middle and Late Triassic radiolaria from Kotel'nyi Island (New Siberian Islands, Russia, Arctic) and their paleobiogeographical significance

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Kotel'nyi Island is located in the Arctic Ocean near to the prolongation of Southern Anyi ophiolite suture zone which is supposed to be remnant of southern Anyi Paleo-ocean located between Eurasian and North American plates. Therefore the information on Early Mesozoic faunas of this area and their paleobiogeographic affinities represent high interest for paleogeography and paleotectonics. Triassic of Kotel'nui Island is represented by all three series that are well characterized by ammonites, nautiloids, coleoids, bivalves and radiolarians. Section is characterized by predominance of soft clays. Radiolaria are present in the Middle and Upper Triassic, from Upper Anisian to Middle Norian.

The Middle Triassic is represented by Anisian black clays with interlayers of bituminous shales, clayey limestones and phosphatic concretions with total thickness 30 - 140 meters. Ladinian is composed of similar clays with thickness 6 - 15 meters. Radiolaria were found in the Upper Anisian together with ammonites *Indigirophyllites popowi* Konstantinov. They are represented by *Glomeropyle clavatum* Bragin, sp. nov., *G. boreale* Bragin and others (11 species). Next radiolarian assemblage was found in the Upper Ladinian (with bivalvs *Daonella* sp. ex gr. *D. frami* Kittl.): *Muelleritortis firma* (Gorican), *M. kotelnyensis* Bragin, sp. nov., and others (10 species). Upper Triassic is represented by Carnian clays with siderite and phosphatic concretions (100 m) and Norian clays with siderite and phosphatic concretions (up to 500 m). Radiolaria are present in the Lower Carnian (with ammonoids *Discophyllites taimyrensis* Popov): *Pentactinocarpus colum* Bragin, sp. nov., *Glomeropyle cuneum* Bragin, sp. nov., and others (12 species); Upper Carnian (with ammonoids *Yakutosirenites yakutensis* (Kiparisova): *Pseudostylosphaera glabella* Bragin, sp. nov., *P. gracilis* Kozur et Mock, and others (34 species); and in the Lower Norian (with ammonoids *Striatosirenites kinasovi* Bytschkov): *Pseudostylosphaera glabella* Bragin, sp. nov., *P. gelida* Bragin, sp. nov., and others (10 species). Each radiolarian assemblage includes several forms know from low-latitude regions as Mediterranean and Japan. These taxa constitute from 25 to 40 % of all species present in assemblage/

These results allow making several conclusions:

1) The sections include several radiolarian assemblages ranging from late Anisian to the early Norian. Taxonomic diversity of the assemblages increases at the stratigraphic levels rich in phosphorites and bituminous shales, which probably correspond to transgression episodes and well correlate with intervals of abundance of cephalopods.

2) Triassic radiolarian assemblages from Kotel'nyi Island significantly differ from the coeval radiolarians of Pacific and Mediterranean. They are characterized by domination of genus *Glomeropyle Aita* et Bragin which is present only in Northern Siberia and in the New Zealand and displays bipolar distribution pattern. Triassic radiolarian assemblages of these regions display clear affinity. Radiolarians can serve as paleoclimatic indicators for the Triassic.

3) The Middle Triassic radiolarian assemblages from Northern Siberia and regions of Mediterranean and Pacific include a number of common species (25-40 %). Using them, we can correlate Triassic deposits. This approach is helpful for solving the basic problem of correlation between Triassic deposits accumulated in the high- and low-latitude zones.

4) The presence of low-latitude species in radiolarian assemblages is well correlative with constant presence of low-latitude taxa among cephalopods. Their assemblages include

several species known from Mediterranean and North America. These facts can be explained as results of marginal position of Kotel'nyi Island in the Boreal Realm and well connections between basins. We can interpret the appearance of warm-water taxa by the influence of warm current coming from Pacific via suspected North Anyi Paleo-ocean.

Radiolarian biostratigraphy of supraophiolitic Cretaceous metalliferous sediments of Cyprus (Perapedhi Formation)

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Sedimentary strata related with ophiolites commonly represent high interest for tectonostratigraphic reconstructions. Upper Cretaceous Perapedhi Formation represents lowermost part of sedimentary cover of Troodos Ophiolite Complex, and consists of umbers (sediments enriched by iron and manganese) and cherts with total thickness ranging from few meters up to nearly 50 m. These sediments are characterized only by radiolarians that still need detailed study.

Best section of Perapedhi Formation is known in the former Mangaleni quarry, Limassol District. Three lithological units can be distinguished in this section: 1 – dark-brown massive umbers (2-20 m), 2 – intercalation of brown umbers and brown radiolarian cherts (6-10 m), 3 – pink ribbon cherts (up to 6 m). All units are characterized by abundant well-preserved radiolarian assemblages. According to stratigraphic distribution of radiolarian taxa the following radiolarian zones and subzones can be distinguished in this section:

1. *Alievium superbum* Zone, Turonian, *Theocoronium subtriquetrus* Subzone. First occurrences (FO) of *Pseudodictyomitra* sp. A and *Theocampe cypraea* Bragina (middle part of unit 1).

2-3. *Alievium praegallowayi* Zone, Coniacian, subdivided into: 2. *Multastrum regale* Subzone, FO of *Archaeospongoprunum bipartitum* Pessagno, *Annikaella omanensis* De Wever (middle part of unit 1 – lower part of unit 2); 3. *Microsciadiocapsa quasisutterensis* Subzone, FO of: *Lipmanium* (?) *ovalum* Bragina (lower part of unit 2).

4-7. *Alievium gallowayi* Zone, Santonian – Lowermost Campanian, subdivided to: 4. Quinquecapsularia sp. A Subzone, FO of *Theocampe urna* (Foreman) (lower – middle part of unit 2); 5. *Dorypyle* sp. *A* Subzone, FO of *Acanthocircus* sp. *A*, *Dictyodedalus* sp. *A* (middle – upper part of unit 2); 6. *Multastrum mangaleniense* Subzone, FO of *Amphipyndax* sp. ex gr. *A. pseudoconulus* (Pessagno) (lower part of unit 3); 7. *Bisphaerocephalina* (?) *amazon* Subzone, FO of *Dorypyle* sp. *B*, *Neosciadiocapsa urquharti* Bragina, *Theocampe salillum* Foreman (middle part of unit 3).

8. *Crucella espartoensis* Zone. FO of *Dictyomitra koslovae* Foreman subsp. *B*, *Heliocryptocapsa* sp. *B* (upper part of unit 3). Therefore the total stratigraphic range of this section is Turonian – Lowermost Campanian

Another section of Perapedhi Formation was studied near Perapedhi Village, Central Cyprus. It is represented by umbers with recrystallized chert bodies and rare layers of pink padiolarian cherts with total thickness 10 m. These strata yield radiolarian assemblage of Subzone 6 only (Multastrum mangaleniense).

Therefore, the deposition of metalliferous sediments of Perapedhi Formation was diachronous. In the Mangaleni Section it starts in the Turonian, but in the Perapedhi Section it was considerably later (Santonian). This phenomenon can be interpreted as result of deposition of Perapedhi Formation in isolated small depressions of Troodos Ophiolite Complex that was completely formed in Turonian.