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3. Ophiolites are found together with radiolarian cherts on a world-wide scale (see Table 1). Chert occurrences not associated with ophiolites are rather the exception to a general rule. In many cases it can be shown that ophiolites and cherts are syntemporaneous. A direct relationship between ophiolite thickness and chert thickness can often be observed and seems to confirm the long held view that silica was supplied in connection with the intrusion and extrusion of ultra-basic and basic magma. Other ophiolite-chert relationships are less obvious. KÜNDIG's view that ophiolites usually occur along hinge zones can be corroborated.

4. Radiolarian chert-ophiolite associations are known throughout the geological column from Cambrian up to Eocene-Lower Oligocene. Chert deposition is especially characteristic of the Upper Jurassic and Upper Cretaceous, and to a minor extent of the Ordovician, Silurian and Devonian. The predominantly red colour of Upper Jurassic and Upper Cretaceous cherts can be ascribed to hematite, which originated in red upland soils under a moist tropical and subtropical climate, and was subsequently washed into the geosynclinal basin. As the main periods of chert genesis, i.e. Ordovician, Silurian and Devonian, Upper Jurassic and Upper Cretaceous, were characterised by a tropical to subtropical, moist climate, the theory is advanced that there is probably a close relationship between tropical palaeoclimate, abundant growth of radiolarians in surface water and red colour of cherts.

5. Radiolarian cherts occur mainly in the eugeosynclinal parts of the Tethys geosyncline, which extends from south-western Europe to the Malayan archipelago. In the Mediterranean part of the Tethys, the radiolarian cherts are Upper Jurassic; in the Middle-East-Far-East part they are predominantly Upper Cretaceous. Mesozoic radiolarian cherts are also found in the Circumpacific Belt (California, Latin America, Japan, Philippines and New Zealand).

Palaeozoic radiolarian cherts occur in the Caledonian trough, the Ural geosyncline, the Tasman geosyncline, and sporadically in a few other Palaeozoic basins.

6. Radiolarian chert-ophiolite belts have a structural style of their own, which is due to differences in their behaviour as a result of basinal and orogenic deformation as compared to overlying and underlying layers of different lithologic composition. Vertical tectonics and gravity-sliding play a major role not only during the eugeosynclinal stage of a basin but also characterise the orogenic history.

7. Radiolarian cherts and associated rocks belong to a sedimentary-magmatic unit which is characteristic for the slope-eugeosynclinal phase of a major geosynclinal basin.

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(Mention is also made of a few articles not discussed in the text)

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