

Eclogites and its tectonics in the Tien-Shan, Republic Kyrghyz

Michio Tagiri [1]

[1] Dept. Environm. Sci., Ibaraki Univ

Three metamorphic districts are distributed, and UHP or HP metamorphism took place three times in the Tien-Shan. The areas are Aktuz (750Ma), Makbal (480Ma), Atbashy (270Ma) in the order of geologic age, and also in the order of topographic location from north to south. Accordingly, the Tien-Shan has grown from north to south. Coesite from Makbal, and coesite-pseudomorph from Atbashy has been found, respectively. Granitic rocks of post metamorphic ages intruded into Aktuz and Makbal eclogites. These granitic rocks are old as going to north. Atbashy eclogites forms a paired-metamorphic belt together with the northern neighbor metamorphics.

A model of Makbal will be introduced in this paper.

Geology and tectonics of eclogite-bearing metamorphic districts in the Tien-Shan will be reviewed. Three such metamorphic districts are distributed in the mountains, and UHP or HP metamorphism took place three times in the Tien-Shan. The areas are Aktuz (750Ma), Makbal (480Ma), Atbashy (270Ma) in the order of geologic age, and also in the order of topographic location from north to south. The Tien-Shan and the metamorphic belt trends east and west. Accordingly, the Tien-Shan has grown from north to south. Coesite from Makbal, and coesite-pseudomorph from Atbashy has been found, respectively.

Granitic rocks of post metamorphic ages intruded into Aktuz and Makbal eclogites, and gave thermal effects to them. These granitic rocks are old as going to north. Atbashy eclogites forms a paired-metamorphic belt together with the northern neighbor metamorphics.

It is most important to study the geologic age of metamorphic and granitic rocks and the tectonic relationship between these metamorphic belts and non~weakly metamorphosed formations in the Tien-Shan. A model of Makbal will be introduced in this paper.