

Discussion of M-Type Plagiogranite at the South of Subduction Zone (Bursa-Uludag)

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It is possible to say South of Uludag region is one of the most important area for the geological studies. Uludag is a mountain which is dominantly occurred with main orogenic plate movements progressed between two crust. There is a long subduction line at the south of Uludag. Because of these we observe many different type of rocks in the range of ultrabasics to nearly acidics. According to the literature review one of the most investigated region of Turkey is Southern part of Uludag. On the region it has been defined there is three main lithological unions. These unions can be classified as metamorphics, ophiolites and magmatic intrusions which are generally I-type granodiorites. There are several important discoveries on the field. These discoveries should be developed with the questions and new research queries. of these is sheeted dykes which has formed as butterfly structure. It is possible to observe pillow lavas. Additionally pillow lavas not clearly intelligible because of the forest and plant cover. Between the sheeted dykes and pillow lavas it is distinct to say gabbroic layer exists. Gabbroic layer does not exist with the specific structures like gabbro but it exists with border of basic chemical compositions. Existence of plagiogranite is also another important discovery for us. Firstly we misunderstood this granite and we thought it is aplite or pegmatite dykes. While we are searching border of granite we made an observation. There was not any tectonic border with this granite and ultrabasic rocks. Analysis showed us it is chemical composition similar with tonalite. According to microscopic investigations it is dominantly plagioclase and neighbour zones occurred with alkali feldspars. Cross sections for the field shows that this sampling point falls on the middle of the ophiolitic serie. On the north side of the plagiogranite it is clearly observable sheeted dykes and at the south pillow lavas complete the series. Between sheeted dykes and pillow lavas gabbroic layer exist along the 8-12 km. Plagiogranite mainly distinguishable on the far tectonic border of ultrabasic rocks.