Dacitic dome in the Southern Sanandaj-Sirjan Zone- An example of chloritization in biotite minerals

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Abstract: The dacitic domes lie in the Sanandaj-Sirjan Zone. They were subjected to deformation resulting from tectonic movements. They are as oriented rocks which show deformation textures such as plagioclase with mechanical twin, biotite fish, and deformed clinopyroxene set in foliated groundmass. Under condition of hydrothermal alteration, biotites altered into chlorite with smectite interlayers and probably leucoxene and titanite intergrowths. The deformation has created micro-fractures and micro-cavities which has provided suitable spaces for fluids movements and hydrothermal alteration. The plagioclases show albition and sericitia alteration (An 5-10) in these rocks.

Keywords: Chlorite; biotite; alteration; Sanandaj-Sirjan Zone.

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