

## THE DABIE-SULU UHP METAMORPHIC BELT: REVIEW AND PROSPECT

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The new results in the studies of the Dabie-Sulu UHP rocks belt during the past 5 years were summarized and discussed. The discussion included the following key points: (1) UHP eclogite has two kinds of country rocks, with one being UHP eclogite facies rocks and the other non-UHP granitic gneiss. (2) The FeTiO<sub>3</sub> in olivine indicated exsolution at depth of 300-400km. However, the key point is to prove the peridotite in which the FeTiO<sub>3</sub> in olivine was found once had been subducted down that depth. (3) UHP hydrous phase evidenced that fluids had taken part in the UHP metamorphism, while the meter-scale inhomogeneous distribution of O-, C-isotope indicated no fluid activity in the deep subduction environment. (4) No agreement has been arrived on many problems related to the tectonic background of the UHP rocks, such as whether or not ophiolitic rocks there exist now?, when did UHP metamorphism proceed?, what is the subduction polarity?, etc. (5) How did the UHP rocks exhume from mantle depth? The future studies will focus on the following three subjects: (1) thermal dynamics of the UHP metamorphism, (2) relationship between UHP metamorphism and collision orogeny, as well as their geodynamics, and (3) interactions between crust and mantle, and between continental lithosphere and asthenosphere during the collision orogenic process, as well as their constraints to the evolution of continental lithosphere.