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Decrease of continental weathering in the Early Triassic in the Tethyan Himalaya, central Nepal

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The geochemistry of mudstones to estimation for continental weathering in the central area of Nepal, Tethyan Himalaya, present the key of the Early Triassic climate change, around early Olenekian (Smithian). High value of chemical weathering indexes in the Griesbachian - Dienerian are sharply decreased from the late Dienerian to middle Smithian, which suggests the climatic episode characterized by abrupt decrease of continental weathering suggesting predominance of arid or cool climate. Because the contemporaneous radiation of ammonite fauna was reported previously, presented arid or cool climate episode indicates that the large climatic change could be one of the important controls in Early Triassic environment. The climatic change is considered to contribute to emerge from "super hot house" subsequent from the duration of Permian - Triassic boundary aftermath.

Keywords: Triassic, continental weathering, climatic change