

## Rate process of weathering inferred from silica concentration and specific flow rate of stream water in eastern Chugoku district

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The aim of this study is understanding of weathering process by the use of SiO<sub>2</sub> concentration dissolved in stream water. We carried out collecting stream waters for basins with different discharge characteristics in the region of Chugoku district between Seto Island Sea and Japan Sea. Stream waters from 32 points and rain waters from 17 points were analyzed.

The results showed a tendency that SiO<sub>2</sub> concentration become low as annual precipitation is increased. The tangency is clearer with annual infiltration estimated by CI ratio of stream waters to precipitation than the above. In order to clear understand this phenomenon, we considered weathering process by the use of tank model. The tank model showed that residence time of water becomes short as infiltration is increased and as consequence SiO<sub>2</sub> concentration is decreased. It follows from what has been said that weathering process is related to infiltration per unit area.