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Lake-level change history of Nojiriko and its impct to human society

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Lake level of Nojiri-ko changed drastically at eight times during the last 45 kilo years. Maxima of lake level can be correlated with abrupt cooling events, namely, Heinrich events, Bond events, etc. Although lake-level change ratio is very low, which is ca. 5 to 10 mm per year, possibility of emergence of water shortage is high. Global warming can lead more frequent water shortages. Intensity variation of winter monsoon is assumed to be the cause of lake-level change. Arctic Oscillation is thought to be the most probable working hypothesis of winter-monsoon oscillation at present.

Keywords: lake-level, history, sediment, Lake Nojiri