

AHW023-P04

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Elevation effects for hydrogen and oxygen isotope values of rainwater within the Kofu Basin

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To elucidate the factor controlling elevation effects in hydrogen and oxygen isotope values, 150 rain water samples were collected from 6 points in different altitude from 250m to 1300m of 25 rainfall events. The water oxygen and hydrogen isotope values were analyzed with these samples. And the rainfall feature in each event was investigated by the observation of the X-band multi-parameter radar of University of Yamanashi.

The elevation effects were not well understood on windward side. Hence, these results were different from the previously reports of Friedman and Smith (1970). Elevation effects are well defined on the rainfall amount. Hence, to clarify the factor of elevation effects, it must identify the distribution of rainfall amount. In this presentation, we examine the relationship between rainfall amount and the rainfall distribution in rain clouds advected to the Kofu Basin.

Keywords: water hydrogen and oxygen isotope, elevation effects, rainfall, X-band multi-parameter radar