

Precipitation Isotope Monitoring by RAISE G3

1. Objectives

- 1) To measure water isotope input to the upper Kherlen River basin
- 2) To clarify the characteristics of isotopic composition in precipitation over Mongolia
- 3) To estimate origin of Mongolian precipitation.

2. Main researcher

T. Yamanaka, M. Tsujimura (Univ. of Tsukuba, Japan)

- Isotopic and water chemical analysis, data analysis

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- Precipitation collection, data analysis

3. Monitoring sites and period

1) Site: Mongonmorit, Kherlenbayan-Ulaan, Underhaan, Ulaanbaatar, Mandalgobi, Sukhbaatar (see Fig.1)

2) Period: Oct. 1, 2002 – Sep. 30, 2004

4. Monitoring components

1) Daily basis (13.5 ml grass bottle) * only from April to September

- Stable isotope (δD , $\delta^{18}O$)

2) Monthly basis (100 ml polyethylene bottle) * throughout a year

- Stable isotope (δD , $\delta^{18}O$)
- Anion (Cl^- , SO_4^{2-} , NO_3^- , Br^-)
- Cation (Na^+ , K^+ , Mg^{2+} , Ca^{2+})

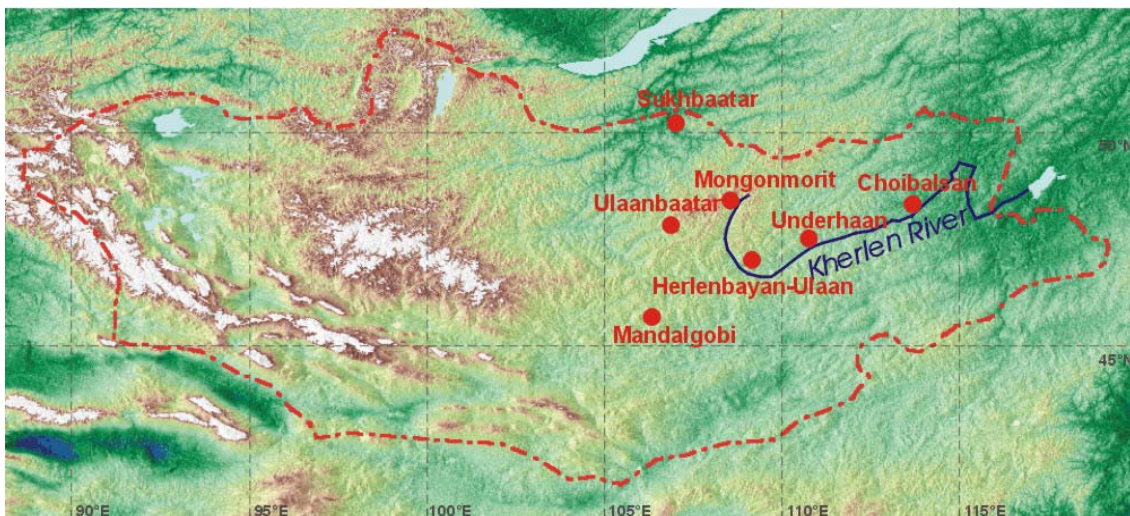


Fig. 1 Sites proposed for the isotope monitoring network