## U-Pb zircon ages from Devonian tuffaceous clastic rocks in the Kuzuryu Lake-Upper Ise River area of the Hida Gaien belt, central Japan

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Devonian deep-water tuffaceous clastics and shallow-marine carbonates are developed in the Kuzuryu Lake-Upper Ise River area of the Hida Gaien belt in central Japan. These strata are subdivided into the Shibasudani and Kamianama formations (Kurihara, 2003). The Shibasudani Formation consists mainly of alternating tuffaceous sandstone and mudstone, with exotic limestone blocks. The mudstones of this formation are rich in radiolarians (e.g., Kurihara and Sashida, 1998). The Kamianama Formation consists of limestone, felsic tuff, and tuffaceous sandstone.

U-Pb dating of zircons was performed for tuffaceous sandstones of the Shibasudani and Kamianama formations with the aim of providing information about their sedimentary age and the transition of Devonian radiolarian assemblages, constrained by isotopic age data. U–Pb ages for zircons from two horizons of tuffaceous sandstone in the Shibasudani Formation were measured. These tuffaceous sandstones were collected from the *Pactarentinia intermedia-Pactarentinia igoi* Assemblage Zone (Kurihara, 2004), cropping out the Shibasudani and Tokonobora valleys (Kurihara and Sashida, 1998, 2000; Kurihara, 2000). For the Kamianama Formation, U–Pb age for zircons was measured from one horizon of tuffaceous sandstone in the Tokonobora Valley (Kurihara, 2000). As a result, the zircons of the Shibasudani Formation range in age from 450 Ma to 390 Ma, and make a clear peak around 410 Ma to 415 Ma that corresponds to the Early Devonian. The zircon age of the Kamianama Formation show a large youngest peak of ca. 407 Ma with small peaks of 480 Ma and 440 Ma. The biostratigraphic ages of these formations (e.g., Kurihara, 2003, 2004) are consistent with the numerical ages of the tuffaceous sandstones.