

Interactive comment on “Tracing and quantifying groundwater inflow into lakes using radon-222” by T. Kluge et al.

Anonymous Referee #2

Received and published: 20 July 2007

The method described as a ‘simple method’ is rather laborious and sample sizes (12 litres) not always convenient if transporting long distances. A recent paper by F. Leaney and A. Herczeg "A rapid field extraction method for determining radon-222 in natural waters" *Limnol. Oceanogr.- Methods*, 4, 2006, 254-259 describe a method using just 1.25 L samples that can be extracted in the field in <10 minutes. The detection limit of 3 Bq/m³ is only slightly higher than that reported here.

The authors take into account the supported 222Rn in the model but it is not shown in the data or figures. The uncertainties inherent in the sometimes small differences between total and supported radon should be more explicitly presented and propagated through the calculations. Another method using 4He may be even better and is not affected by problems of short half life and assumptions about complete horizontal

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

mixing.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 4, 1519, 2007.

HESSD

4, S567–S568, 2007

Interactive
Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper