Geophysical Research Abstracts, Vol. 7, 11158, 2005

SRef-ID: 1607-7962/gra/EGU05-A-11158 © European Geosciences Union 2005



Dissolved radon and gaseous mercury profiles in the Adriatic seawater

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Dissolved radon gas (²²²Rn) and dissolved gaseous mercury (DGM) profiles have been measured in seawater at nine sites in the Adriatic Sea. In addition to the bottom and surface level, at each site, water was sampled at 2-5 levels in-between, the number depending on the depth. Preliminary results show different distributions of both gases, as a result of their different origin and transport mechanisms, as well as their different characteristics, i.e., while mercury may undergo chemical transformations on its way to the surface, radon, being a noble gas, does not, but is subject to radioactive decay with a half-life of 3.8 days. These factors have been considered in the interpretation of relationship between both profiles.