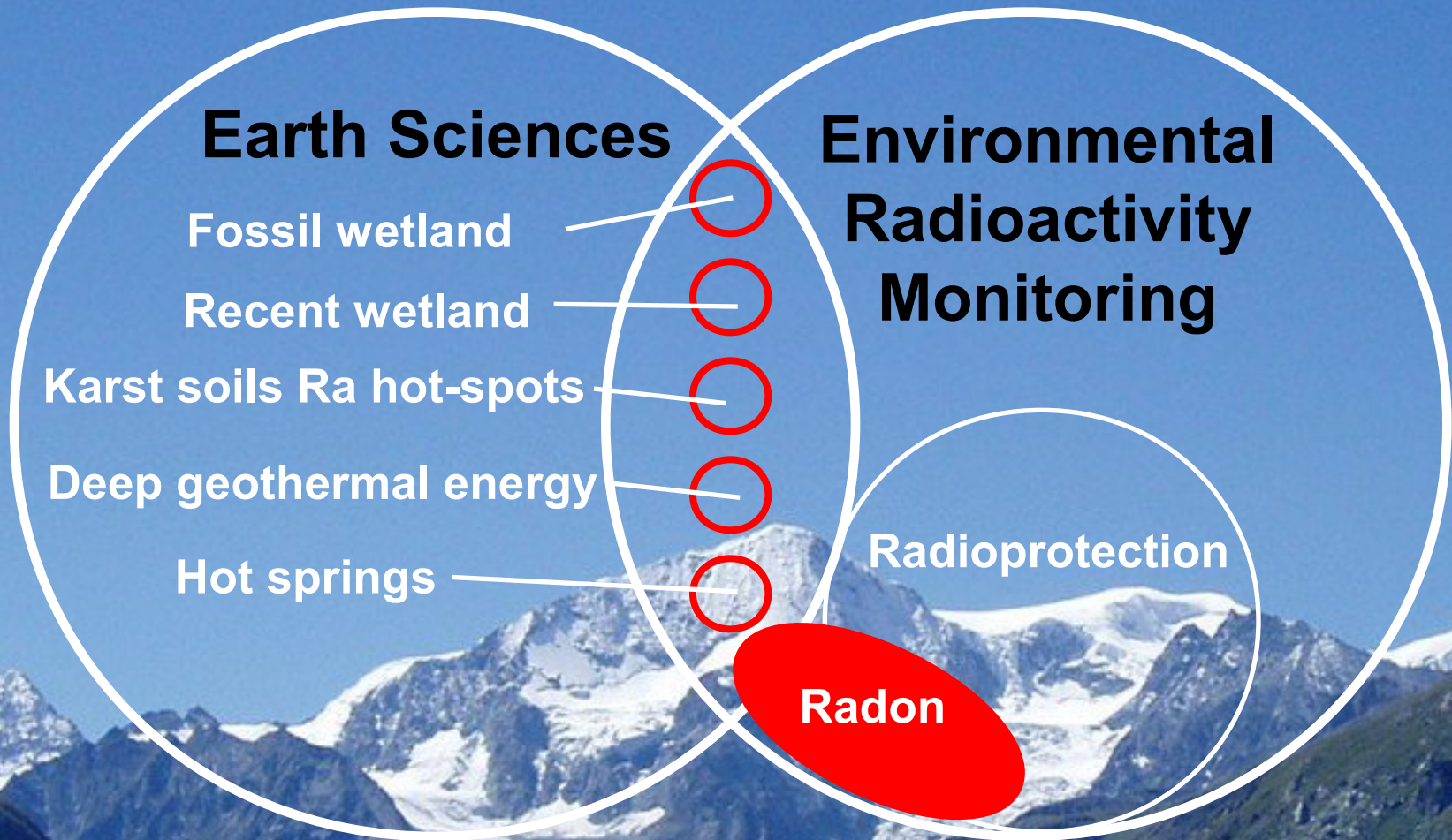
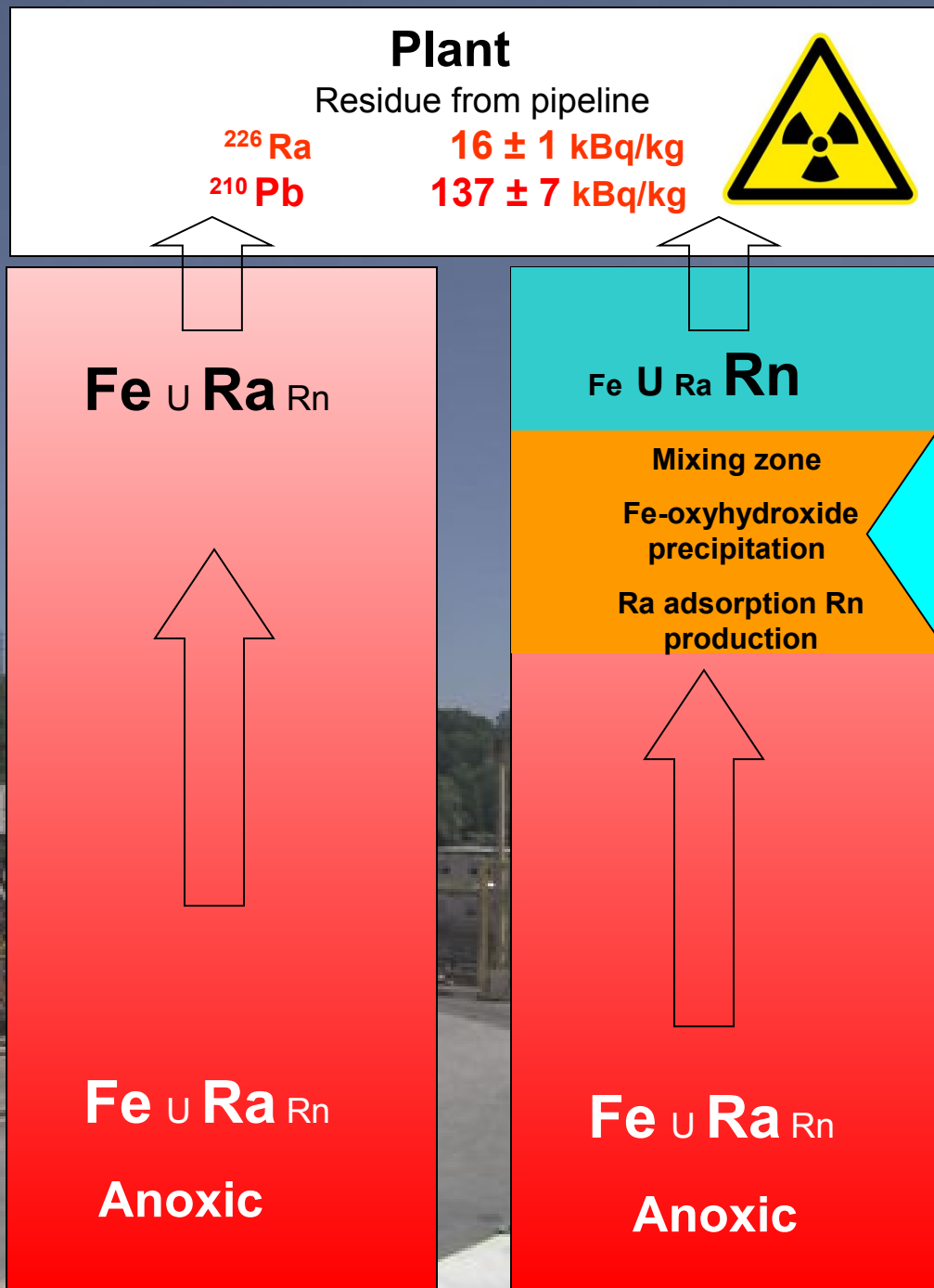


More than Radon

Heinz Surbeck



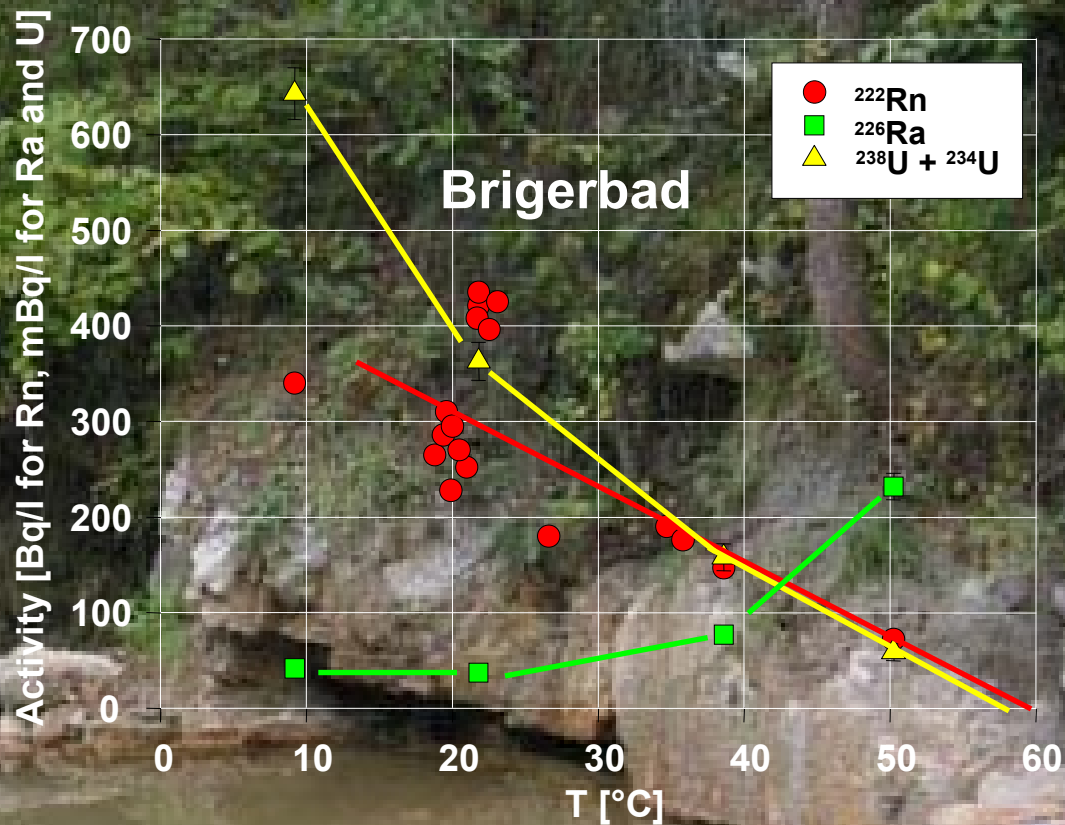
Deep
geothermal
energy



Cold
shallow
oxygen
rich water

Background :

www.geothermie-schweiz.ch

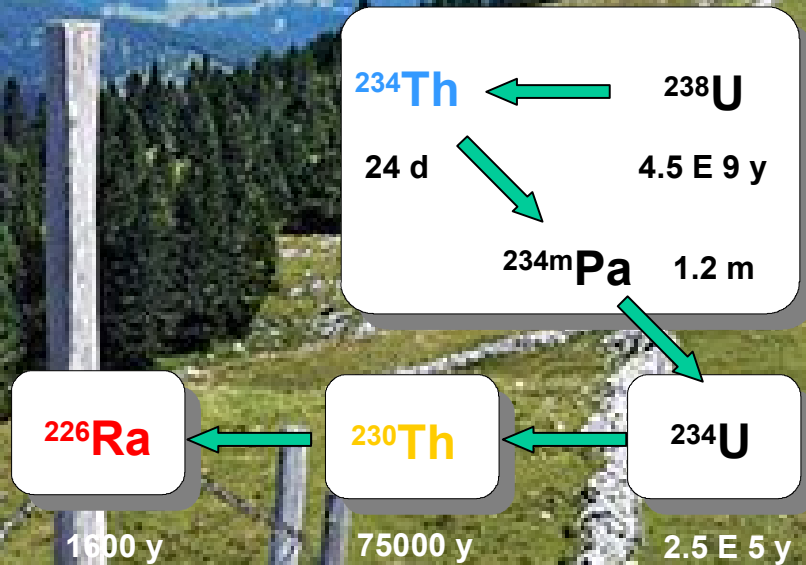
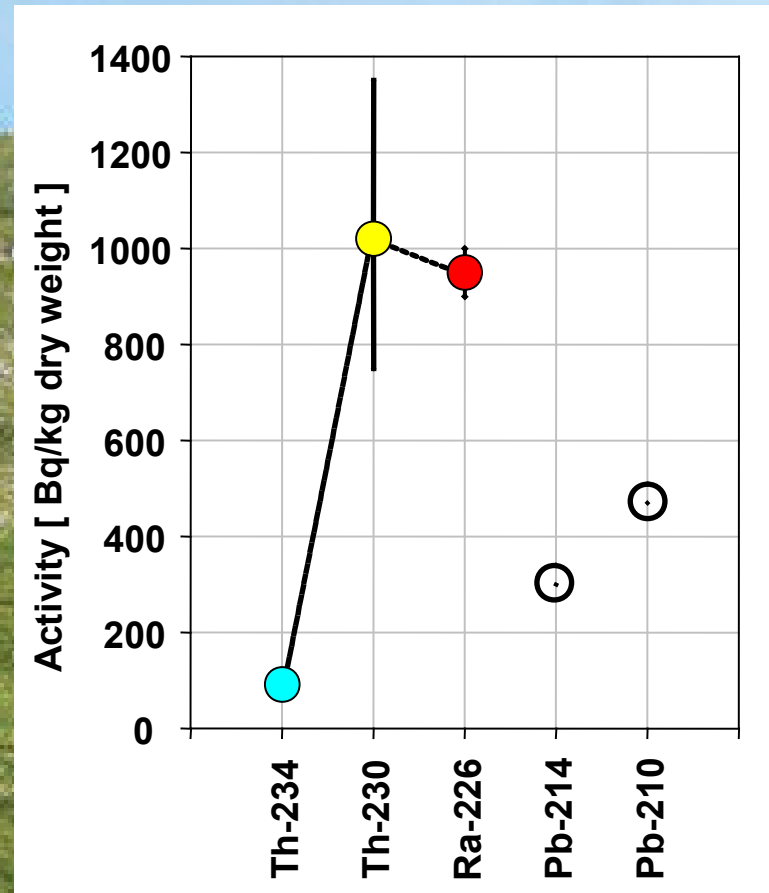


Hot springs Combioula
Val d'Herens, Valais



Jura Mountain Soils on Karst

- ^{234}Th , proxy for ^{238}U
- ^{230}Th
- ^{226}Ra





Lyssbach creek

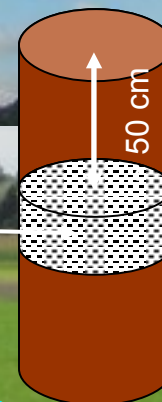
U : 300 $\mu\text{g/liter}$

~ 600 g U drainend / year

Drainage

Gamma radiation from ^{226}Ra decay products

~200 ppm U



nSv/h



Uranium accumulation in a recent (10 ky old) wetland



Thank you for your attention



François Gainon

Hansruedi von Gunten

Ricardo Perret

Anja Pregler

Olivier Kloos

Rico Ryser

Philipp Steinmann

Simon Werthmüller



U rich fossil on top of Mt.Vully, a
"fossil wetland" 20 My old

U: 1'800 ppm

Photo : mont-vully.ch