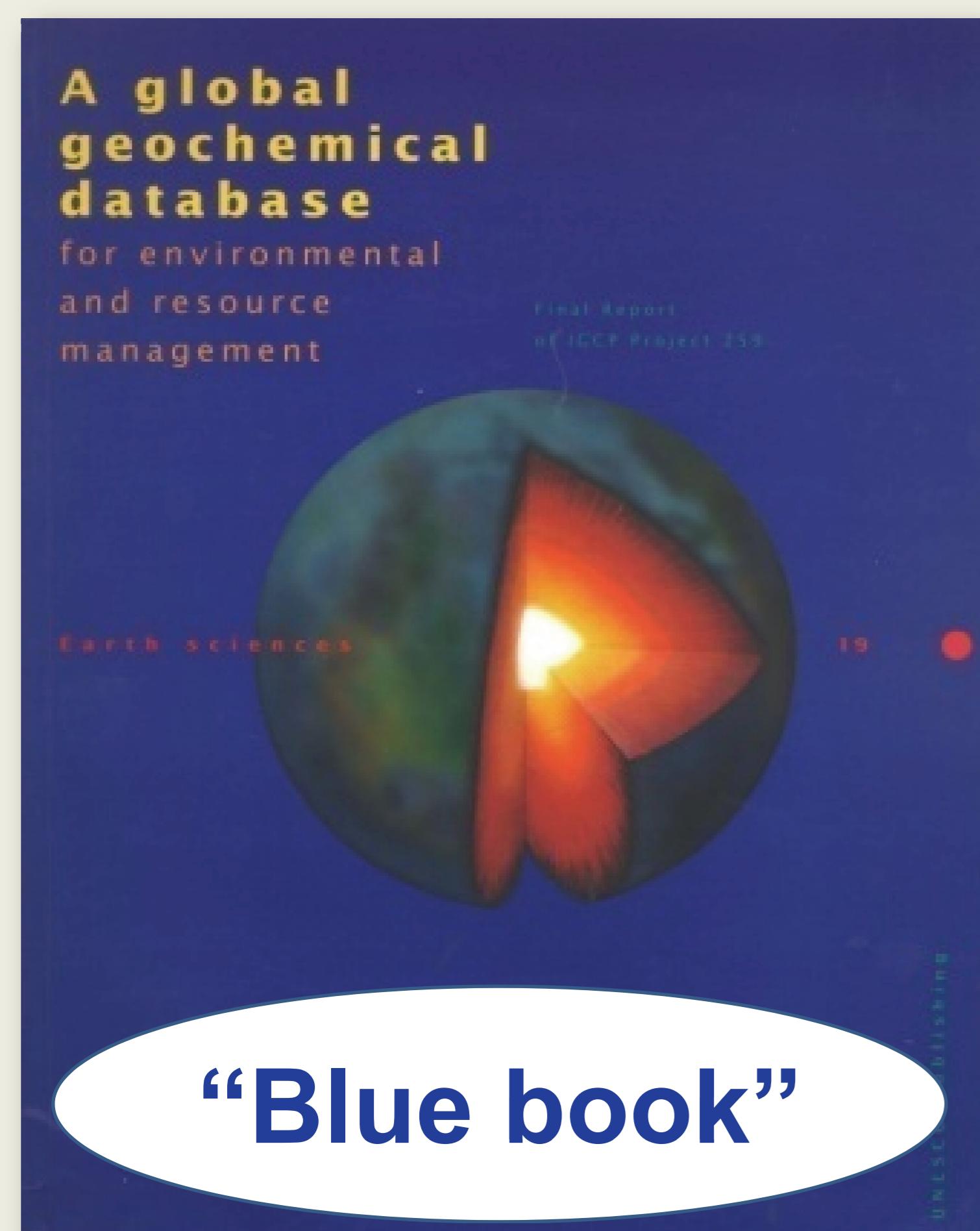


IUGS/IAGC Task Group on GLOBAL GEOCHEMICAL BASELINES



http://www.globalgeochemicalbaselines.eu/wp-content/uploads/2012/07/Blue_Book_GGD_IIGCP259.pdf

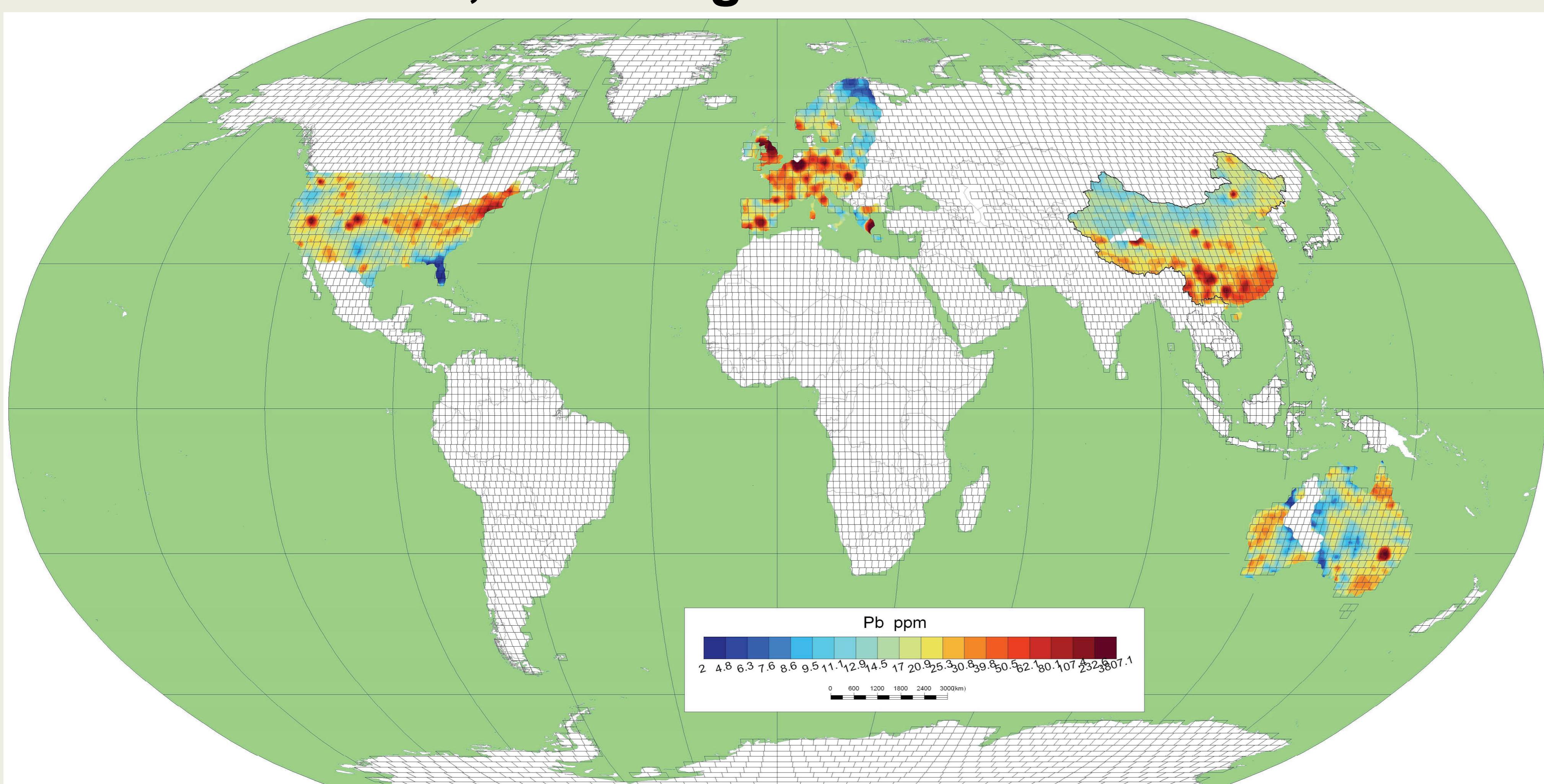
According to Darnley et al. (1995):

- **Everything in and on earth - mineral, animal and vegetable - is made from one, or generally some combination of the 98 naturally occurring chemical elements.**
- **Everything that is grown, or made, depends upon the availability of the appropriate elements.**
- **The existence, quality and survival of life depends upon the availability of elements in the correct proportions and combinations.**

It is, therefore, important to determine systematically the chemical composition of terrestrial surficial materials for environmental and resource management:-

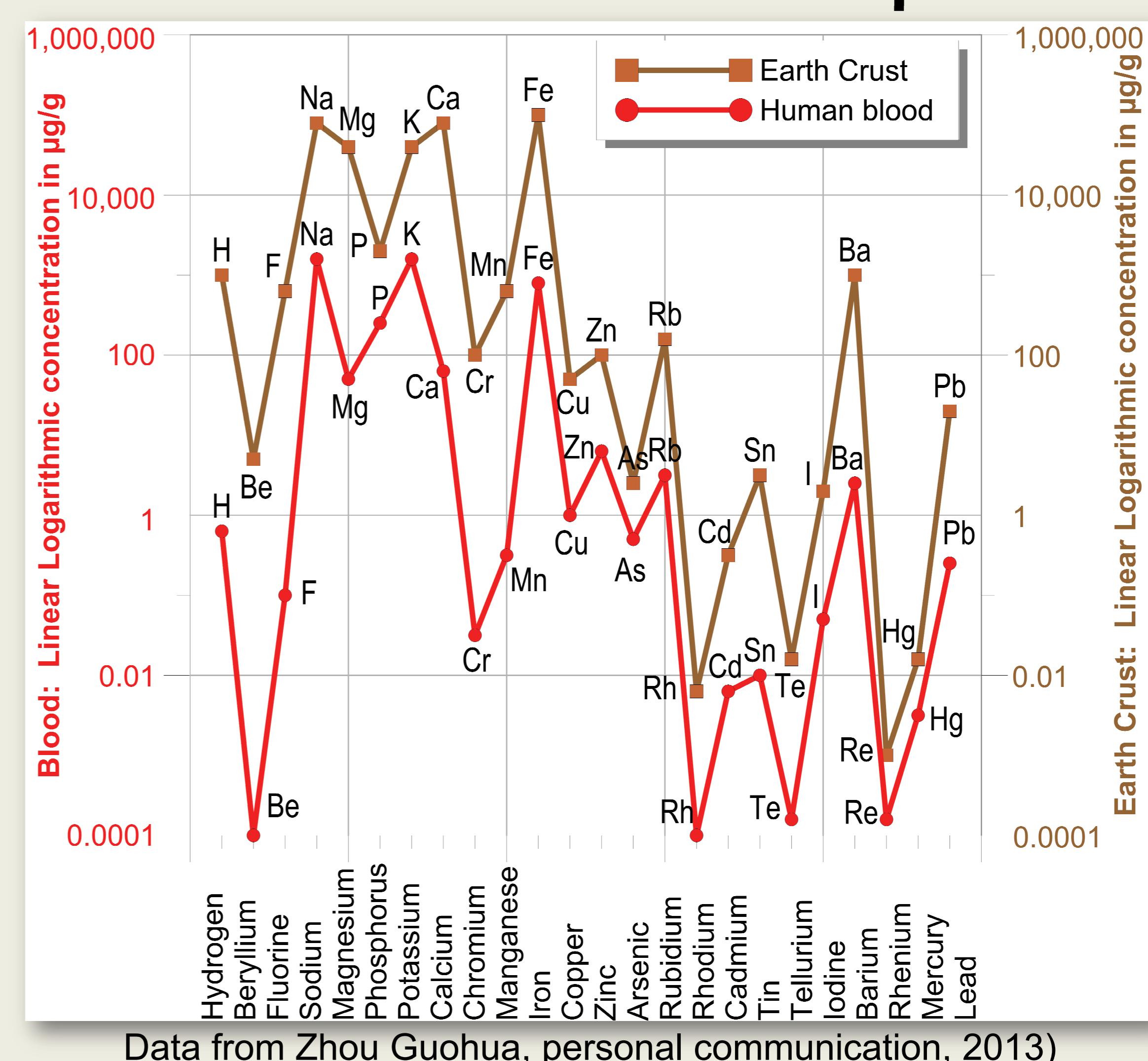


Map showing the distribution of Pb in USA, Europe, China & Australia, and the grid cells of 160 x 160 km



<http://www.globalgeochemicalbaselines.eu/>

The close relationship between the chemical composition of human blood and the Earth Crust can be seen in this plot:



The geochemical mapping hierarchy is based on a primary grid of 160 x 160 km (25,600 km²) covering the terrestrial surface of the Earth with approximately 5000 grid cells. A collection of standard reference materials is required to be collected from these cells as the first step in the technical implementation of the International Geochemical Mapping project. This geochemical Global Reference Network (GRN) shall be based on carefully controlled sampling, sample preparation and laboratory analysis to provide an inter-regional (and intercontinental) framework to which more detailed or more specialised local surveys can be related.

Sampling Scheme

