



A Global Systems Framework for All Geoheritage

Benjamin van Wyk de Vries

Magmas et Volcans CNRS/IRD - Université Clermont Auvergne, AUBIERE, France (b.vanwyk@opgc.fr)

Geoheritage can have a framework in which all sites can be understood in the context of the Earth's geological system. This has the advantage that it gives a global meaning and significance to sites, allows them to be seen in context and allows them to be compared. It also allows sites to be integrated with biosphere heritage. Without such a framework there is no way of assessing the true diversity of geological phenomena (say at World Heritage level), and Geoparks or other sites float unconnected in their local contexts. The Earth is a system, that can be simplified down to the exchange of heat, gravitational and electromagnetic energy through the solid liquid and gaseous parts. This, abstracted system, is interesting as it allows the physical processes and then the physical objects to be placed in a system framework. And all geological elements, and thus geoheritage can be located in this framework. This framework was initiated in a limited way for the Chaîne des Puys – Limagne fault World Heritage nomination submitted to UNESCO in 2013. In the subsequent years, we have refined and broadened the work, and I present the result of 8 years of discussion with geoscientists about this system. The framework I suggest is not unique, it can be drafted or arranged in more than one way, but the constituent parts are those which encompass all Earth processes, and all the Earth system's features can be included. This thus provides a fully adaptable framework in which we can all cast out geoheritage sites, for the fullest and most meaningful exchange and comparison.