Geophysical Research Abstracts, Vol. 7, 03710, 2005
SRef-ID: 1607-7962/gra/EGU05-A-03710

Web-based Outcrop Digital Analog Database (WODAD): A Public Relational Database Archiving Carbonate Platform Margins in the Geological Record

J. Kenter and P.M. Harris

(1) Faculty of Earth and Life Science, Vrije Universiteit Amsterdam (jeroen.kenter@falw.vu.nl), (2) ChevronTexaco E & P Technology Company, San Ramon, CA

Information on geological outcrops is generally poorly accessible in the literature and no systematic (semi) quantitative catalog exists in the public domain. However, such information is essential to the Earth Science community for comparative and background research and similarly outcrop analogs are an important part of any hydrocarbon or water exploration or development project. Analogs provide information to supplement what is available from the academic or industry project's data set and thereby often add significantly to one's understanding and interpretation. Specifically, analogs help to conceptualize stratigraphic, facies and diagenetic relationships that develop reservoirs and traps. The range of scenarios that analogs can help to illustrate is particularly important when uncertainties are of a concern and need to be quantified. The Web-based Outcrop Digital Analog Database (WODAD) is an attempt to make outcrop information more readily available to the earth scientists. This relational database will 1) cover the Phanerozoic, 2) include carbonates, clastics as well as mixed systems and, 3) maximize the searchable parameters. This way (ideally), the database will searchable from any angle and not necessarily by age or system type alone. The database consists of a series of chapters, each focusing on a specific outcrop. Each chapter contains a summary page with search items, a few (2-3) pages of descriptive information, and a short reference list. From the standpoint of the user, the summary page should let one know if the particular outcrop is of interest, the descriptive pages should provide enough information to answer most obvious questions, and the reference list should provide the in depth details where needed. A section of each summary page contains the items that will eventually guide the search. The primary search items will be age, system type (for carbonate, platform type), rock properties (lithology, tex-

ture), overprint (recrystallization, fracture, karst), and geographical location. Searchable categories will be mostly qualitative variables measured on a nominal scale (the nominal level of measurement classifies data in mutually exclusive categories with no order or ranking); those that are quantitative variables are measured on an ordinal, interval, or ratio scale, however, most of those variables will be ordinal (categories that can be ranked but exact differences between the ranks do not exist) with the exception of the dimensional properties of outcrops that will be measured on a ratio scale (ratio scales add a true zero and true ratios exist between different units of measurement). The database will offer unique and unsurpassed opportunities for comparative research, many of which will be only discovered once the database is available. WODAD is currently under construction at the Vrije Univeristeit in Amsterdam and partly funded, untied support, by the energy industry. The web-based database will be operational by the end of June and invite contributions from academia and industry. The first of three databases will concentrate on carbonate outcrops and publication as a digital manuscript is planned mid 2007.