The following was presented at DMT'11
(May 22-25, 2011).

The contents are provisional and will be
superseded by a paper in the
DMT'11 Proceedings.

See also earlier Proceedings (1997-2010)
http://ngmdb.usgs.gov/info/dmt/

Science Language for an Integrated GSC Data Model for Surficial Maps

By Geological Survey of Canada Surficial Legend Review Committee
Geological Survey of Canada, Technical note

Introduction

The Geological Survey of Canada (GSC) Geological Map Flow (GMF) Project is developing a process to enable the effective and efficient compilation, interpretation, management and dissemination of geologic map information. This data model is designed for surficial geology mapping projects and is implemented in a geodatabase. This geodatabase is the core of the GMF workflow as it bridges between the data collection, data management and data dissemination components.

This data model pertains to map units and observation features (landforms and geomorphologic interpretations as well as field observations and measurements).

This surficial geology data model is designed to reflect the steps involved in creating a standard surficial geology map to be used in all new surficial geology mapping projects. This involves the compilation of existing and new maps.

The science language and symbols presented in this document were developed to portray surficial geology mapping information at a scale of 1:100 000. However, the same symbols and units can be used for surficial geology maps at a range of scales.

Map units

Observation features

Field Data Collection Process

STATION → EARTHMAT → SAMPLE / PALEOFOLW / MEASUREMENT

SOILPRO / PHOTO / ENVIRON / TRAVERSE