AZGS NCGMP09 Discrepancies

The AZGS developed tools to assist geologists in the creation of geologic maps in NCGMP09 databases early in the process of the development of that standard. Due to subsequent changes and some minor misinterpretation on the AZGS's part have led to some discrepancies between the databases being developed and populated at the AZGS and the definition of the NCGMP09 database scheme in USGS OFR2010-1335.

Feature Datasets

OFR2010-1335 has a single feature dataset for all Geologic data related to the map; AZGS scheme puts station-related data in a separate feature dataset. This should have no significant impact?

Mandatory Tables and feature classes

MapUnitPolys

- RuleID not included in AZGS implementation ("If Cartographic Representations are used, this field is required; otherwise it is not included in the table" OFR2010-1335, p. 109). Instead...

ContactsAndFaults

- Symbol implemented as Long Integer and functions as RuleID in ESRI geodatabase; ContactAndFaults table in OFR2010-1335 does not specify a data type for the Symbol field, so it defaults to type=string (OFR2010-1335, p. 103);
- RuleID field not included in AZGS implementation;
- Is Concealed is, according to OFR2010-1335, a text field with domain {'N', 'Y'}. It is implemented in the AZGS tools as a short integer with an ESRI domain that maps 0="No", 1="Yes". This allows ArcGIS to recognize the field as a "subtype", and therefore, the field can be used to constrain Topology rules.

DataSourcePoly

- No differences.

DescriptionOfMapUnits

- GeneralLithology is named GeneralLithologyTerm;
- Symbol field is absent.

DataSources

- No differences.
Glossary

- No differences.

AS NEEDED Tables and feature classes

CartographicLines

- No RuleID, see above.

Point feature class properties

- Samples
  - Missing MapUnit;
  - Missing LocationSourceID, contains DataSourceID;
  - No sample fields included (FieldSampleID, AlternateSampleID, MaterialAnalyzed)

- OrientationPoints
  - Missing MapUnit;
  - Missing LocationSourceID, contains DataSourceID;
  - Symbol is implemented as Long integer and used as the RuleID for ESRI Geodatabase;

- Stations
  - Missing MapUnit;
  - ObservedMapUnit is not in table but is nilable;
  - Missing LocationSourceID, contains DataSourceID;
  - Primary key field called StationPoint_ID instead of Stations_ID.

- GeologicLines
  - Table called OtherLines in AZGS tools;
  - Missing IsConcealed;
  - RuleID is renamed Symbol.

- OtherPolys
  - Table called OverlayPolys in AZGS tools;
  - Primary key change from OverlayPoly_ID to OtherPolys_ID;
  - Missing Type field - instead contains MapUnit, a foreign key to DescriptionOfMapUnits.