

EML - Bug #3541

clarify documentation on polygons and grings, indicate relationship to FGDC

10/21/2008 10:34 AM - Margaret O'Brien

Status:	Resolved	Start date:	10/21/2008
Priority:	Normal	Due date:	
Assignee:	Matt Jones	% Done:	0%
Category:	eml - general bugs	Estimated time:	0.00 hour
Target version:	EML2.1.0	Spent time:	0.00 hour
Bugzilla-Id:	3541		

Description

The documentation in this section is sparse. The NEON project is currently evaluating EML, and has pointed out a discrepancy between FGDC and EML which should be either explained or the 2 specifications should agree.

FGDC: types that are equivalent to "datasetGPolygonOuterGRing" and "datasetGPolygonExclusionGRing" require a minimum of 4 points for polygons

EML: a) datasetGPolygonOuterGRing: requires 3 minimum, and b) datasetGPolygonExclusionGRing requires 1.

Reasoning: a) FGDC documentation states that a polygon needs to have 4 points, and the first and last should be identical.

However, XMLSchema does not have a way to enforce this. So EML requires only 3, and the 4th is implied.

b) allowing the exclusionRing to have only one point means that a single point can be excluded, presumably, a single station.

EML's documentation for datasetGPolygonOuterGRing should make this clear. It also could recommend that xsl stylesheets that transform EML to FGDC should repeat the first lat/lon pair as the last when creating a list of points.

the alternative to both datasetGPolygonOuterGRing and datasetGPolygonExclusionGRing is gRingType, which is a string of ordered pairs. Presumably, this was supposed to be a field that could be directly translated to FGDC. If so, the documentation should state this, and recommended that a minimum of 4 pairs be included. However, if this field remains an unrestricted string, this is not enforceable with xmlschema.

History

#1 - 11/22/2008 11:02 AM - Margaret O'Brien

checked in the documentation, with r1.89

#2 - 03/27/2013 02:23 PM - Redmine Admin

Original Bugzilla ID was 3541