Dataset Title: Landsat derived historical lake extents

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Classification: Hydrology

Data Overview:

Lake extent maps for the Alaska North Slope and Barrow peninsula were generated from selected Landsat satellite images between 1977 and 2008available at the United States Geological Survey (USGS) database. The acquisition dates for the images are included in the individual filenames. The lake maps cover 400,000 km^2 from 69.6dd N to 71.3dd N and -162.6dd W to 174.1dd W.

The spatial resolution of the lake maps depends on the resolution of the Landsat image on which it was based. Landsat Multispectral Scanner (MSS) based maps have a resolution of 60 x 60 meters. Landsat Thematic Mapper (TM) and Enhanced Thematic Mapper Plus (ETM+) maps have 30 x 30 meter resolution.

Data Format:

Lake extent maps are released in ArcView shapefile format. All files are projected in the UTM Zone 4 North with units of meters (m). All have the following attributes:

Shape: Polygon (geometry)
OBJECTID: Unique feature identifier (integer)
IMGSOURCE: Filename of the Landsat Image source (text)
ACQDATE: Acquisition date of Landsat image (YYYYMMDD)

Lake extent shape files:
P078R010_LM5D19840703.shp
P078R010_LT5D20050713.shp
P078R010_LT5D20080705.shp
P079R010_LE7D20000714.shp
P079R010_LE7D20010701.shp
P079R010_LE7D20020720.shp
P079R010_LT4D19920708.shp
P079R010_LT5D20060824.shp
P080R010_LE7D20000619.shp
P080R010_LM4D19920715.shp
P080R010_LT4D19920715.shp
P081R010_LM4D19920706.shp

P086R010_LM2D19760717.shp
P086R010_LM2D19770712.shp
P087R010_LM2D19760718.shp
P087R010_LM2D19770713.shp
P088R010_LM1D19770702.shp
P088R010_LM3D19820715.shp