

# EML Packages from the GCE Data Toolbox

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Georgia Coastal Ecosystems LTER

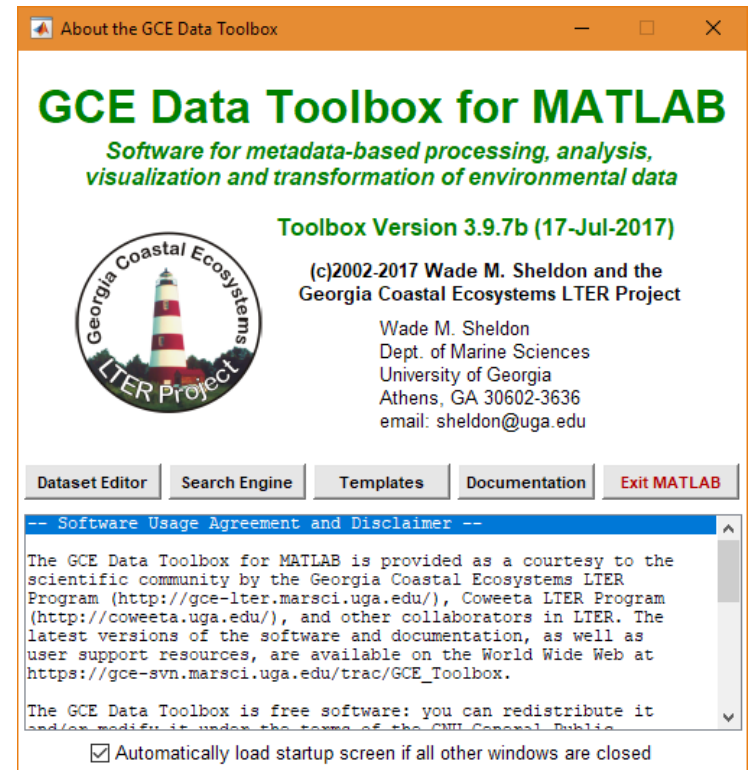
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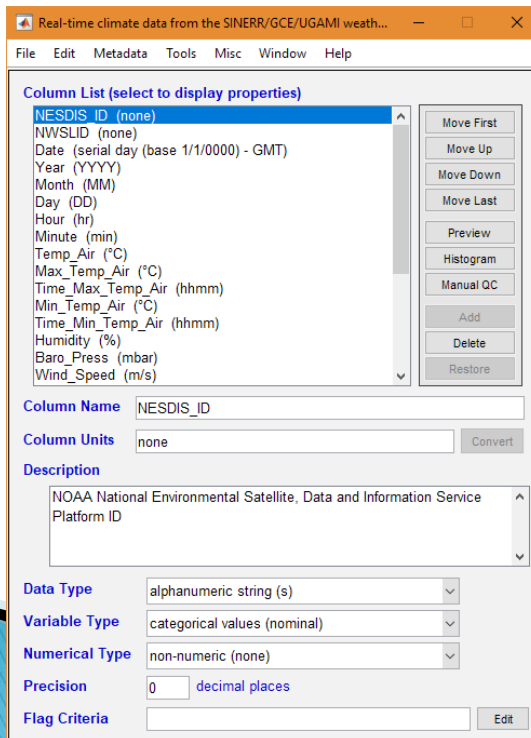
# Background

- ▶ Generalized MATLAB package for metadata-based data management
- ▶ Documentation, attribute, Q/C rule metadata managed in templates
- ▶ Metadata applied on import to document and Q/C data
- ▶ Ideal for sensor data, but useful for any tabular/SQL data source



# EML Export – Metabase

- ▶ Toolbox can now register new data sets in a Metabase instance
- ▶ Top-level metadata uploaded via JDBC to create ID/Accession
- ▶ Entity files generated and metadata uploaded via JDBC
- ▶ Metabase catalog application/services generate PASTA EML



Real-time climate data from the SINERR/GCE/UGAMI weath...  
File Edit Metadata Tools Misc Window Help

**Column List (select to display properties)**

- NESDIS\_ID (none)
- NWSLID (none)
- Date (serial day (base 1/1/0000) - GMT)
- Year (YYYY)
- Month (MM)
- Day (DD)
- Hour (hr)
- Minute (min)
- Temp\_Air (°C)
- Max\_Temp\_Air (°C)
- Time\_Max\_Temp\_Air (hhmm)
- Min\_Temp\_Air (°C)
- Time\_Min\_Temp\_Air (hhmm)
- Humidity (%)
- Baro\_Press (mbar)
- Wind\_Speed (m/s)

Column Name: NESDIS\_ID

Column Units: none

Description: NOAA National Environmental Satellite, Data and Information Service Platform ID

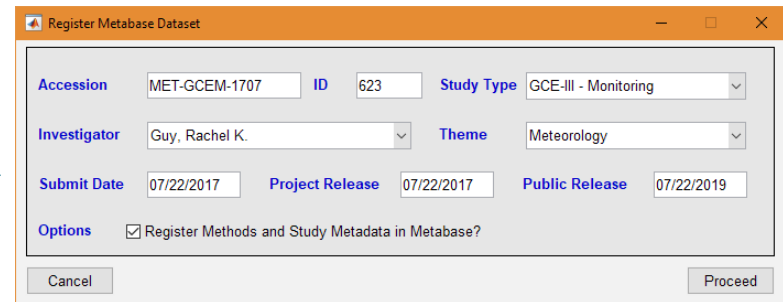
Data Type: alphanumeric string (s)

Variable Type: categorical values (nominal)

Numerical Type: non-numeric (none)

Precision: 0 decimal places

Flag Criteria: [ ] Edit



Register Metabase Dataset

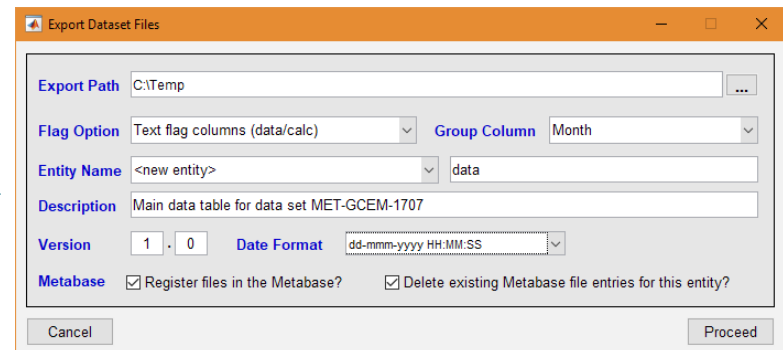
Accession: MET-GCEM-1707 ID: 623 Study Type: GCE-III - Monitoring

Investigator: Guy, Rachel K. Theme: Meteorology

Submit Date: 07/22/2017 Project Release: 07/22/2017 Public Release: 07/22/2019

Options:  Register Methods and Study Metadata in Metabase?

Cancel Proceed



Export Dataset Files

Export Path: C:\Temp

Flag Option: Text flag columns (data/calc) Group Column: Month

Entity Name: <new entity> data

Description: Main data table for data set MET-GCEM-1707

Version: 1.0 Date Format: dd-mmm-yyyy HH.MM.SS

Metabase:  Register files in the Metabase?  Delete existing Metabase file entries for this entity?

Cancel Proceed

# EML Export – Standalone

- ▶ Toolbox can also create EML packages for PASTA natively
- ▶ Generates complete EML docs with physical and attribute meta
- ▶ Can also generate dataTable EML fragments for adding to EML docs
- ▶ Q/C flags automatically documented as coded text columns
- ▶ Unit dictionary unit mapping or auto custom units with STMML

Real-time climate data from the SINERR/GCE/UGAMI weath...

File Edit Metadata Tools Misc Window Help

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- Humidity (%)
- Baro\_Press (mbar)
- Wind\_Speed (m/s)

Column Name: NESDIS\_ID

Column Units: none

Description: NOAA National Environmental Satellite, Data and Information Service Platform ID

Data Type: alphanumeric string (s)

Variable Type: categorical values (nominal)

Numerical Type: non-numeric (none)

Precision: 0 decimal places

Flag Criteria: [ ] Edit



Export EML Dataset

Export Path: C:\Users\Wade\Desktop

File Name: marshlanding\_met\_20170719.csv Entity Name: data

Data URL: http://gce-iter.marsci.uga.edu/public/file\_pickup/toolbox\_demo/marshlanding\_met\_20170719.csv

File Format: CSV (spreadsheet) Flag Option: Text flag columns (data/calc + others)

Header: 5-line header (title, column names, units, variable types)  dataTable Only

Package ID: knb-iter-gce.999.1 AuthSystem: knb  Public Access

Date Format: yyyy-mm-dd HH:MM:SS Missing Char: NaN  Map Units

Cancel  Close dialog after performing export? Proceed

# More Info

- ▶ **GCE Data Toolbox website:**  
[https://gce-svn.marsci.uga.edu/trac/GCE\\_Toolbox](https://gce-svn.marsci.uga.edu/trac/GCE_Toolbox)
- ▶ **Support resources:**  
[https://gce-svn.marsci.uga.edu/trac/GCE\\_Toolbox/wiki/Support](https://gce-svn.marsci.uga.edu/trac/GCE_Toolbox/wiki/Support)
- ▶ **Toolbox is FOSS (but requires MATLAB)**