



Environment and  
Climate Change Canada

Environnement et  
Changement climatique Canada

# Python Tools and Workflow for WIGOS Metadata Generation and OSCAR Publishing

Tom Kralidis  
Geospatial and Open Data Systems  
Meteorological Service of Canada

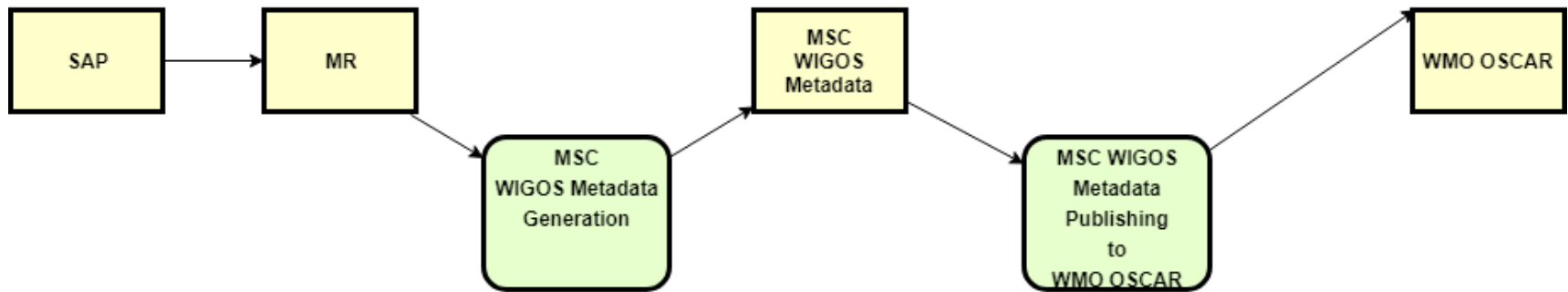
<https://woudc.org>

ET-WDC Meeting 2020-06-11



Canada 

# Python Tools and Workflow for WIGOS Metadata Generation and OSCAR Publishing



- Push workflow (from MSC/WOUDC to OSCAR)
- Generate WIGOS XML from internal databases (pygeometa)
- Publish WIGOS XML to WMO OSCAR (pyoscar)

# WIGOS XML Generation: pygeometa

- <https://github.com/geopython/pygeometa>
- Small, lightweight and flexible, free and open source tool to generate metadata
- Numerous formats supported
  - ISO 19139
  - WIS Core Metadata Profile
  - WIGOS
- Simple YAML configuration
  - <https://github.com/geopython/pygeometa/blob/master/sample-wmo-wigos.yml>
- Command line or direct API capability (composable)
- Used by MSC (as NMHS) and WOUDC



# OSCAR Publishing: pyoscar

- <https://github.com/wmo-cop/pyoscar>
- Small, lightweight and flexible, free and open source tool to interact with OSCAR
- Simple query and upload capability
- Uploads to either OSCAR DEPL (testing) or production
- Command line or direct API capability (composable)
- Used by MSC (as NMHS) and WOUDC



Thank you!

<https://github.com/geopython/pygeometa>

<https://github.com/wmo-cop/pyoscar>

[tom.kralidis@canada.ca](mailto:tom.kralidis@canada.ca)

