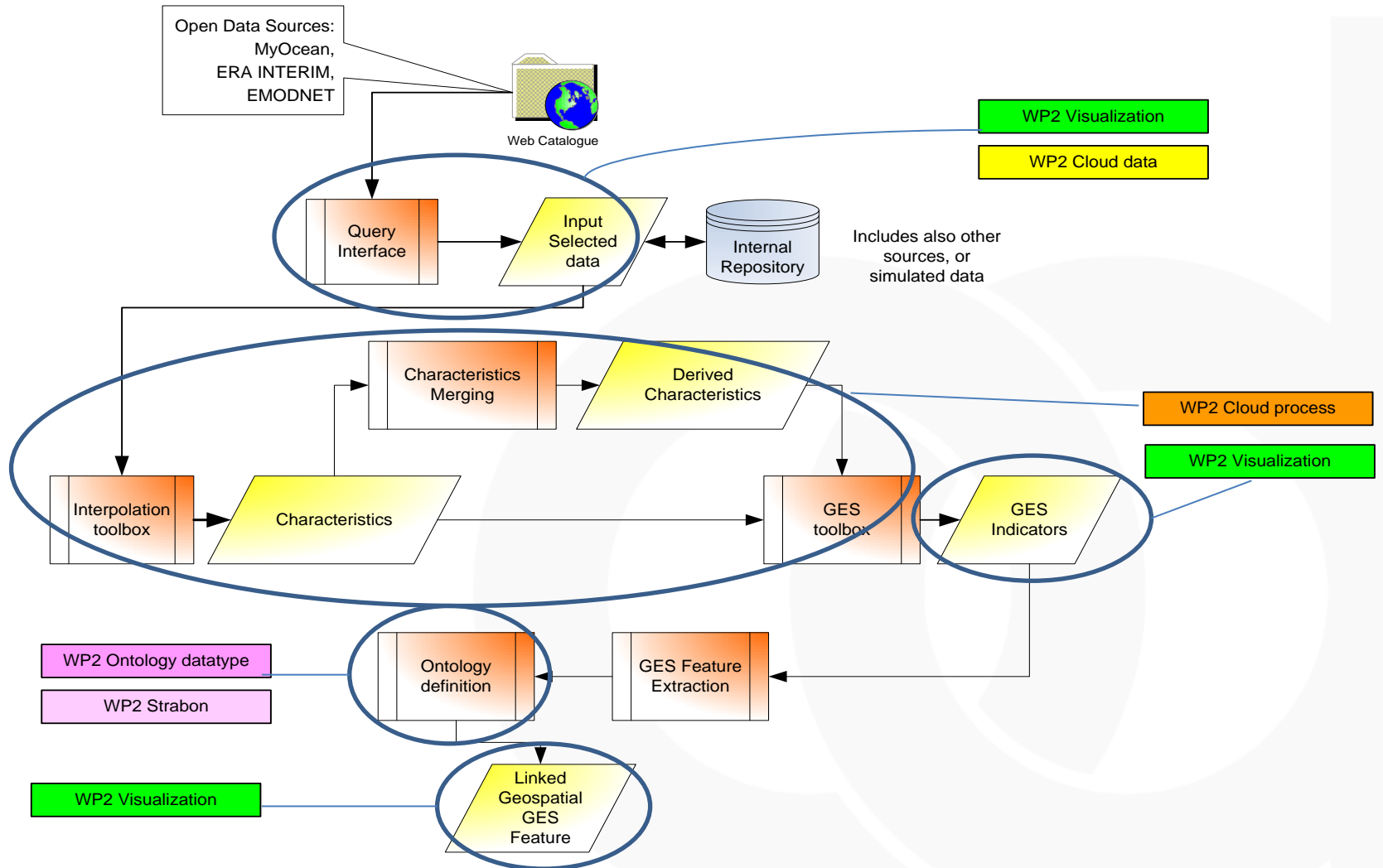




# WP6: preliminary processing chain and ontology

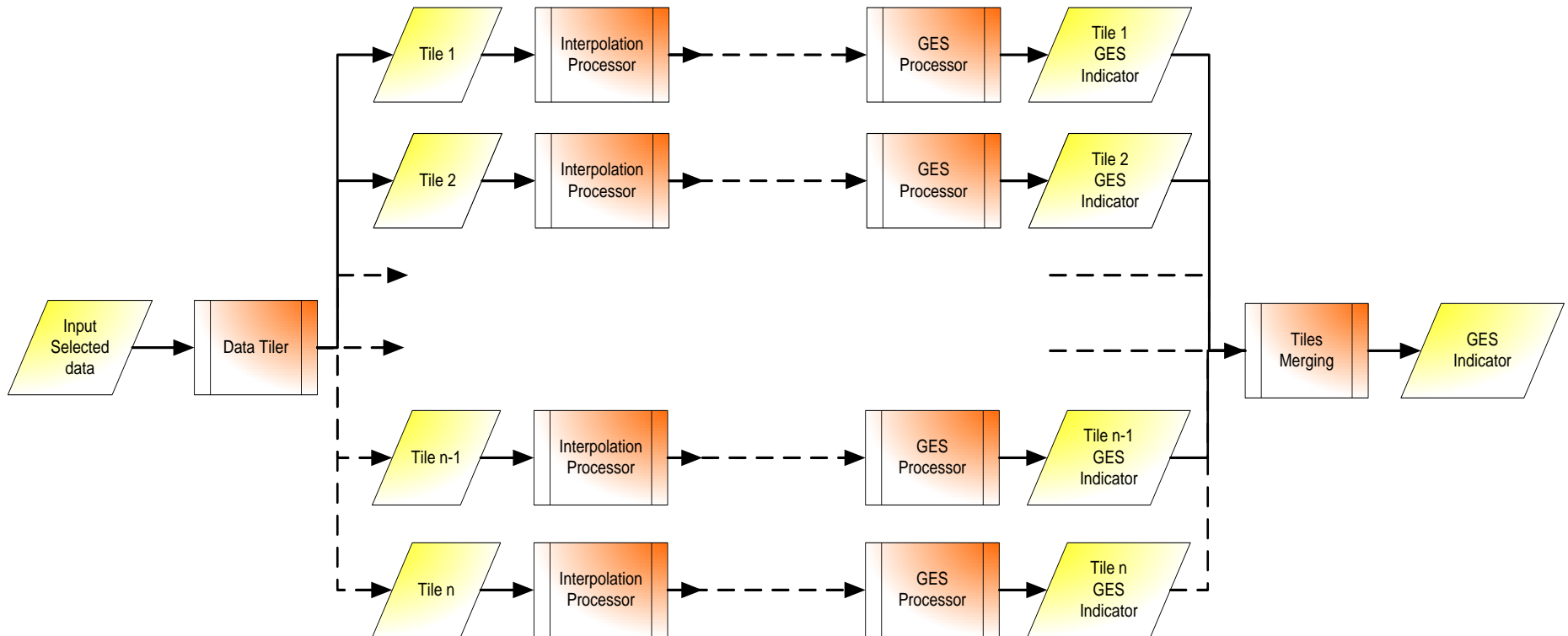
**Paolo Castracane ACS**  
**Massimiliano Drudi INGV**  
**Maria Karpathiotaki UoA**  
**Kallirroï Dogani UoA**

# WP6 work flow

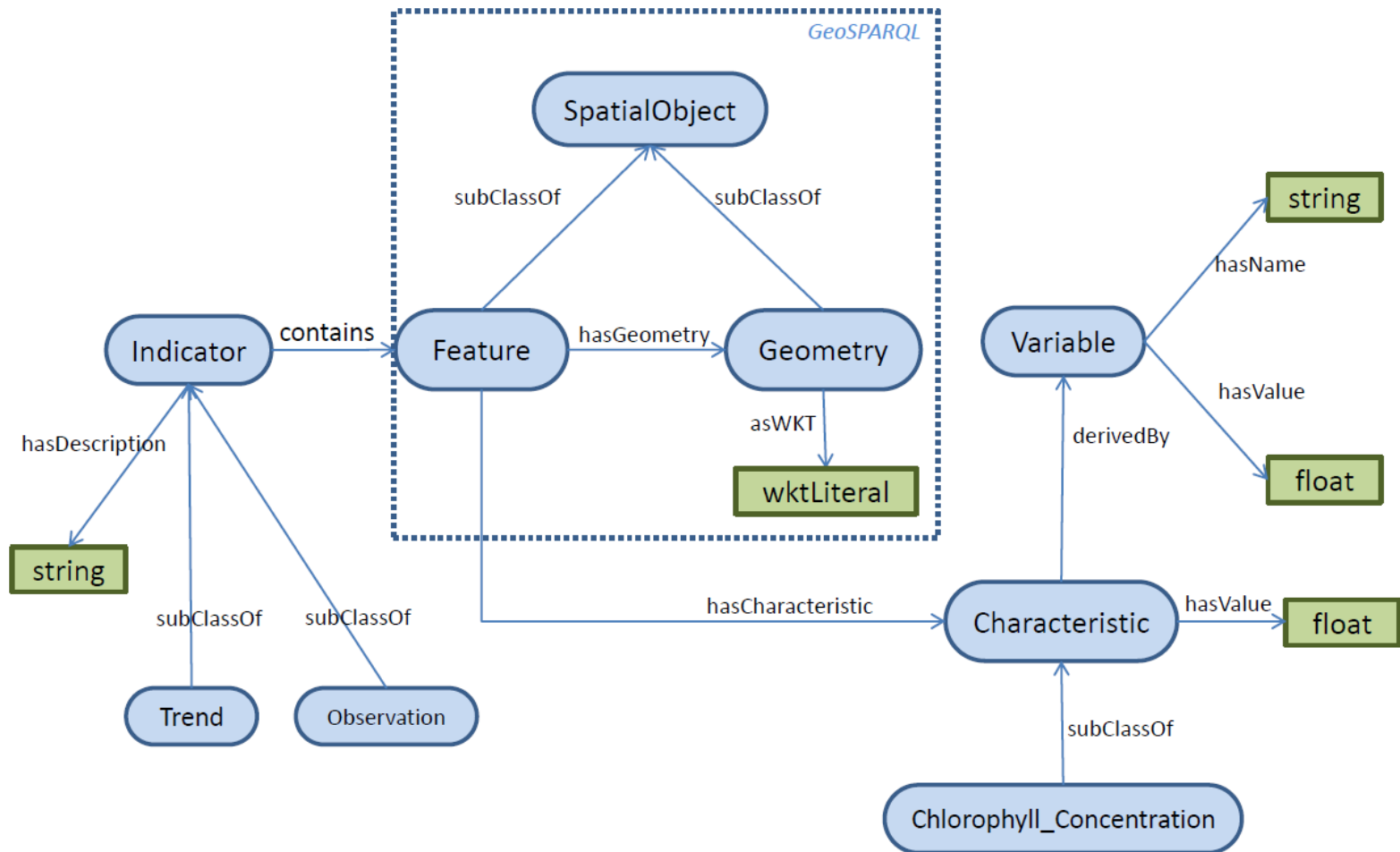


# WP6 processing chain details

WP2 cloud processing



# Ontology diagram



# RDF example

- PREFIX mel-onto: <http://melodiesproject.eu/myocean/ontology#>
- PREFIX mel: <http://melodiesproject.eu/myocean/id/>
- PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
- PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
  
- mel:indicator\_1 rdf:type mel-onto:Observation.
- mel:indicator\_1 mel-onto:hasDescription "Summer chlorophyll-a concentrations in European Seas, 2010".
  
- mel:characteristic\_1 rdf:type mel-onto:Chlorophyll\_Concentration.
- mel:characteristic\_1 mel-onto:hasValue "12.3"^^xsd:float.
  
- mel:indicator\_1 mel-onto:contains mel:feature\_1.
- mel:feature\_1 mel-onto:hasCharacteristic mel:characteristic\_1.
- mel:feature\_1 mel-onto:belongsTo mel:area\_1.
- mel:area\_1 mel-onto:hasName "Black Sea".
- mel:feature\_1 geo:hasGeometry mel:geo\_1.
- mel:geo\_1 geo:asWKT "POINT((31.5, 45.7))"^^geo:WKT.
  
- mel:characteristic\_2 rdf:type mel-onto:Chlorophyll\_Concentration.
- mel:characteristic\_2 mel-onto:hasValue "8.4"^^xsd:float.
  
- mel:indicator\_1 mel-onto:contains mel:feature\_2.
- mel:feature\_2 mel-onto:hasCharacteristic mel:characteristic\_2.
- mel:feature\_2 mel-onto:belongsTo mel:area\_2.
- mel:area\_2 mel-onto:hasName "Baltic Sea".
- mel:feature\_2 geo:hasGeometry mel:geo\_2.
- mel:geo\_2 geo:asWKT "POINT((31.3, 42.7))"^^geo:WKT.

# SPARQL example

---

- -----
- select ?x ?wkt
- where {
- ?x mel-onto:hasCharacteristic ?c.
- ?
- ?x geo:hasGeometry ?g.
- ?
- ?g geo:asWKT ?wkt.
- ?c rdf:type mel-onto:Chlorofyll\_Concentration.
- ?c mel-onto:hasValue ?v.
- ?
- FILTER (?v < 10)
- ?
- }