



Committee on Earth Observation Satellites

## 3.2 CEOS-GEO Coordination

### CEOS Support to GEOGLAM

### Essential Agriculture Variables

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SIT-35 Virtual Meeting

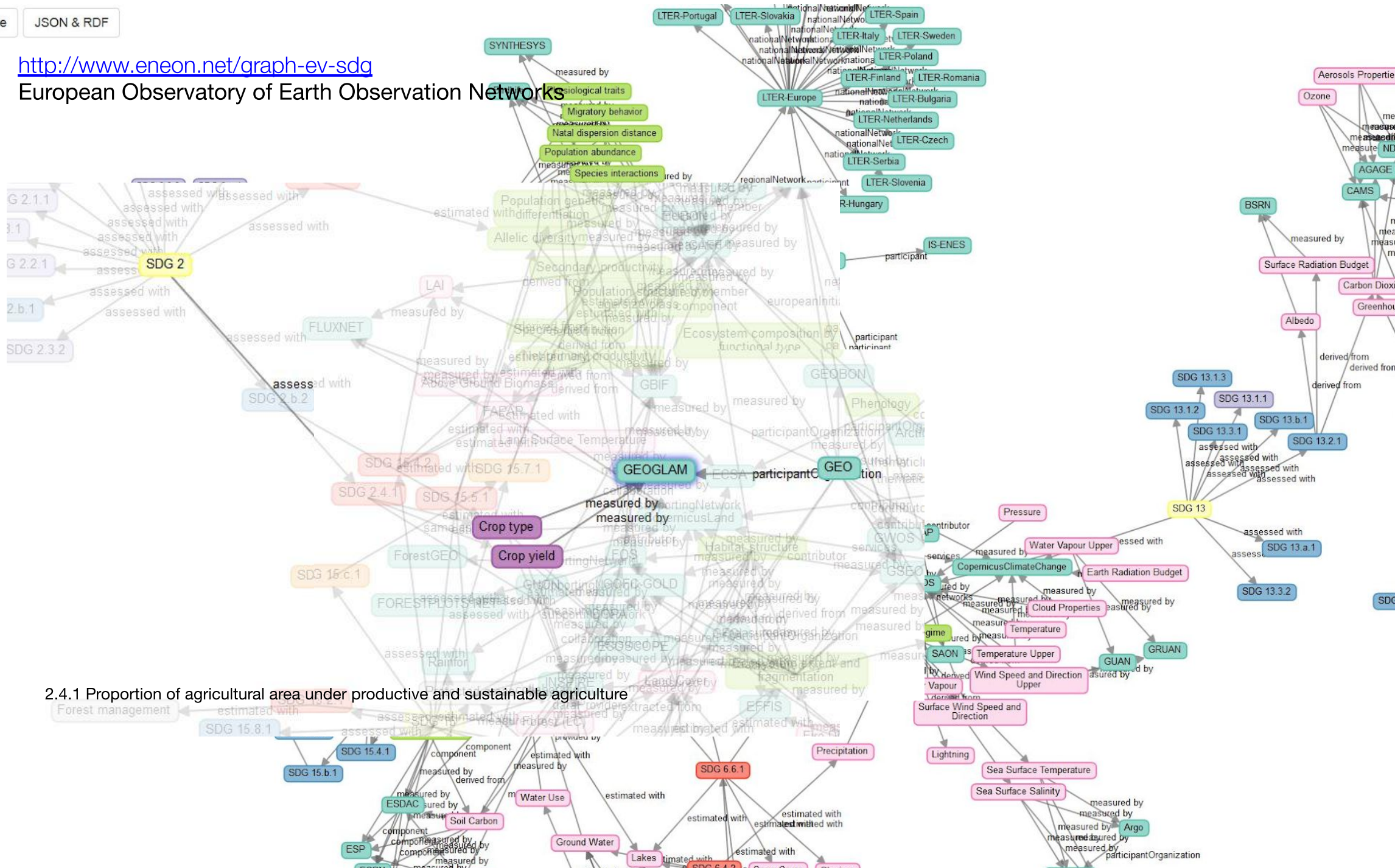
26 March, 2020



- EONNetwork
- SDG
- SDGindicator\_I
- SDGindicator\_S
- SDGindicator\_R
- SDGindicator\_P
- EBV
- ECV
- SocioEcoV
- EAV

<http://www.eneon.net/graph-ev-sdg>

# European Observatory of Earth Observation Networks

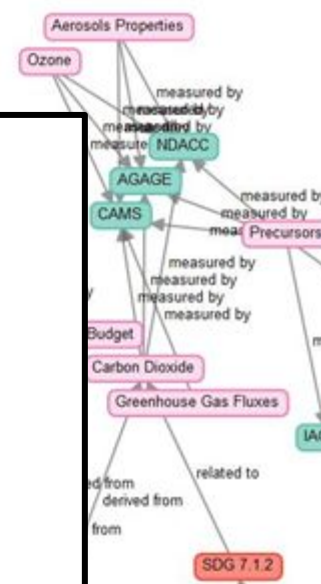
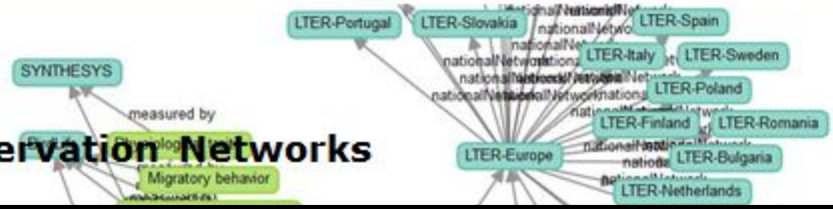


2.4.1 Proportion of agricultural area under productive and sustainable agriculture

<http://www.eneon.net/graph-ev-sdg>

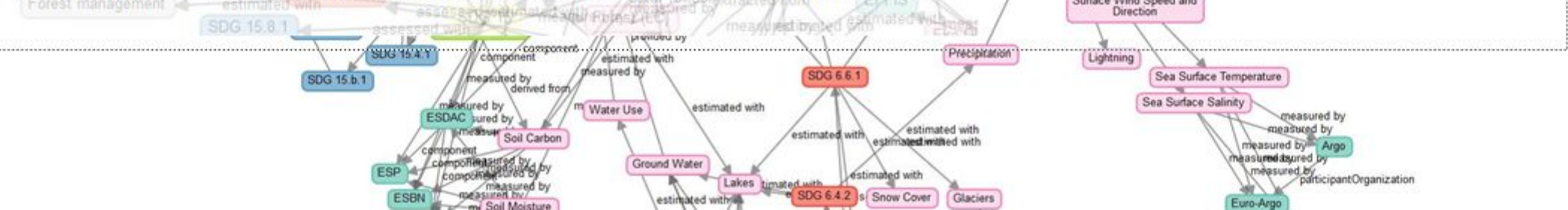
# European Observatory of Earth Observation Networks

# How does one community deal with this complexity?



- G 2.1.1
- 3.1
- G 2.2.1
- 2.b.1
- SDG 2.3.2

## 2.4.1 Proportion of agricultural area under productive and sustainable agriculture



# How Does One Community Deal with the Complexity of the Policy Landscape?

- Information produced by the GEOGLAM community can support a multitude of policy targets
- Almost all targets and goals require information integrated across multiple science communities
- Need for a common approach across communities to enable integration and information sharing

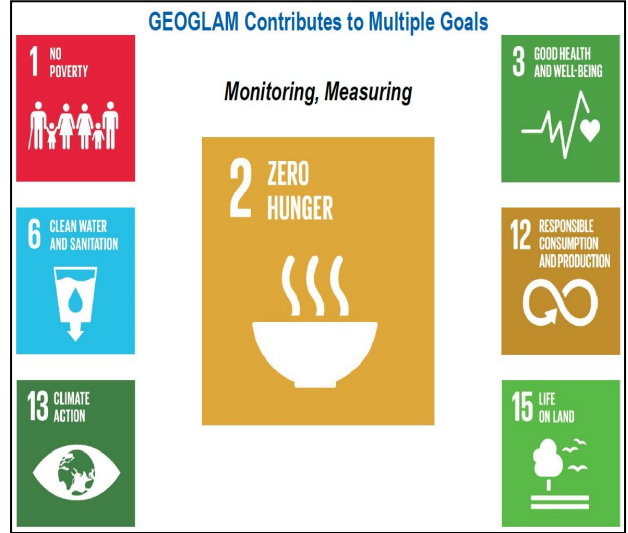


**GEOGLAM believes Essential Agricultural Variables are the way forward**



**GEOGLAM Contributes to Multiple Goals**

*Monitoring, Measuring*



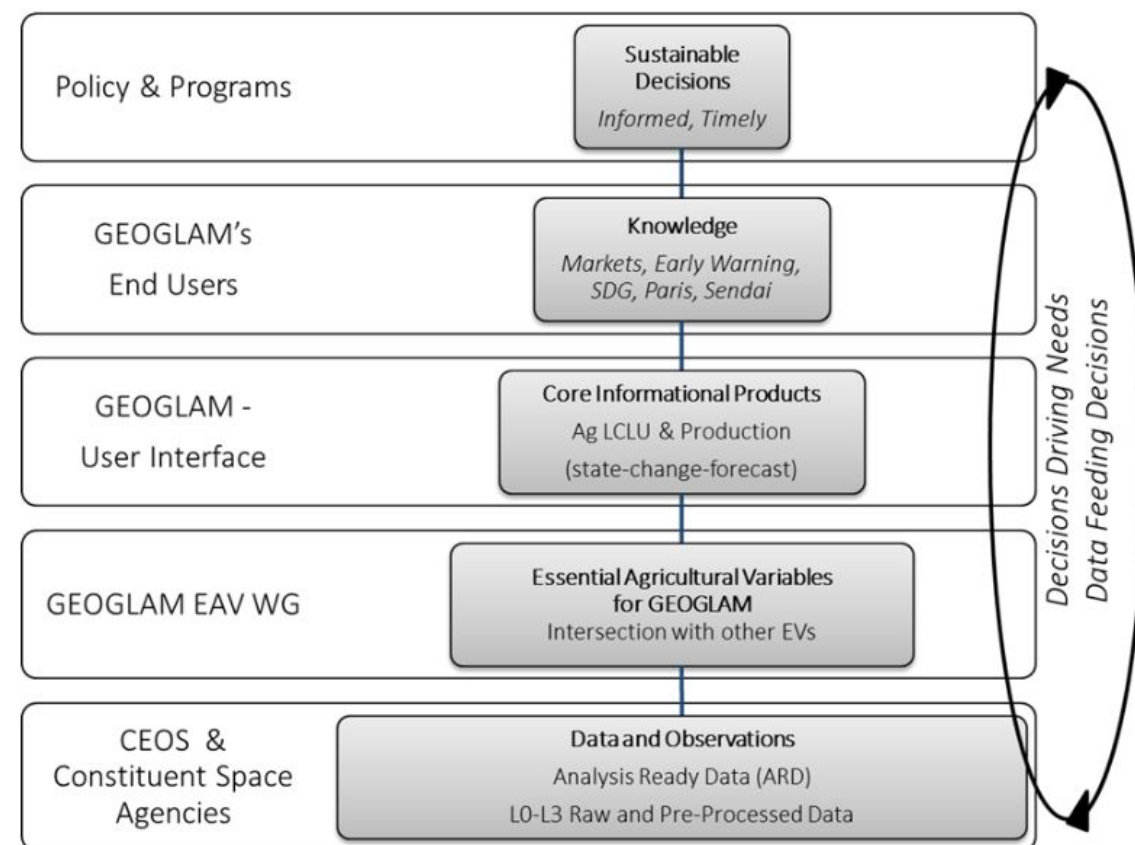
# Essential Variables in Support of Multiple Policy Drivers

## Essential Agricultural Variables for GEOGLAM

- The concept of Essential Variables (EV's) suggests a minimum set of fundamental variables required to characterize state and change in a system
- EAV's are at a minimum a useful **communication device**, at best it allows us to **reduce complexity** when faced with multiple needs, **focus our activities**, and **communicate our outputs** in a way that supports coordination and integration with other science domains

## High level Essential Variables

- Crop mask, type, area, condition and yield estimates/forecast
  - Within growing season, inter-annual to decadal
  - Next EAV working group meeting June 26, Ottawa



# Implications for CEOS

1. EAV's driving data needs
2. EAV's driving R&D priorities
3. EAV's and potential implications for ARD-ARD+
4. EAV's and Support for SDG's, seeking a new paradigm

## Final Point:

**GEOGLAM requirements will grow and we would benefit from broader space agency representation on the CEOS-GEOGLAM Working Group**