

Air Quality & GEOSS Meeting Goals & Overview

David McCabe

Terry Keating

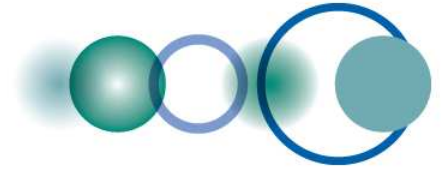
US Environmental Protection Agency

GEO – VI Plenary

Washington, DC, USA

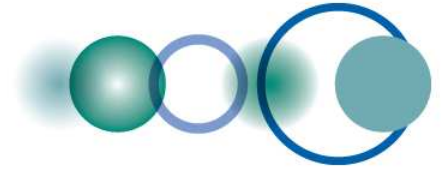
18 November 2009





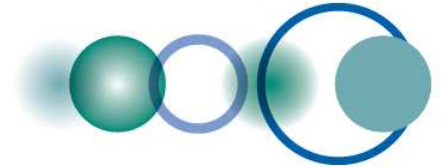
Meeting Goals

- Learn about Air Quality Projects building GEOSS
 - Forecasting & Public Information:
 - MACC, AIRNow, SERVIR, WMO/Sand & Dust Storm WAS, WMO/GURME
 - Air Quality Model Evaluation:
 - AMEN/HTAP Network, AQMEII
 - Integration of Space Observations:
 - CEOS/ACC, NASA, NOAA



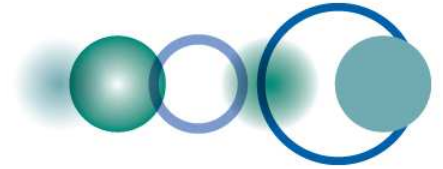
Meeting Goals

- Learn about Air Quality Projects building GEOSS
- Discuss the emerging infrastructure being built by GEO and others to support data access and interoperability
 - Is this infrastructure what we need?
 - Best practices for use of the infrastructure (exposing datasets to GEOSS)
 - How do we get needed data exposed to GEOSS?



Meeting Goals

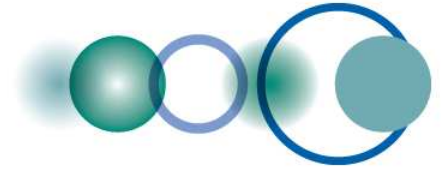
- Learn about Air Quality Projects building GEOSS
- Discuss the emerging infrastructure being built by GEO and others to support data access and interoperability
- Moving forward: better communication, coordination
 - Activating a GEO AQ Community of Practice, getting GEO recognition
 - What does a CoP mean?
 - Logistics
 - Next steps



Building upon existing work

Air Quality Tasks in the GEO 2009 – 2011 Work Plan

- [HE-09-02a](#): Aerosol Impacts on Health and Environment
- [HE-09-02b](#): AQ Observations, Forecasting & Public Info
- [HE-09-02c](#): Global Monitoring for Persistent Organic Pollutants
- [HE-09-02d](#): Global Monitoring for Atmospheric Mercury
- [DA-09-02d](#): Atmospheric Model Evaluation Network



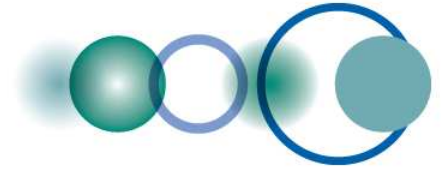
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Plus three general tasks with important AQ input:

- [US-09-01b](#): Development of Communities of Practice
- [AR-09-01b](#): GEO Architecture Implementation Pilot
- [US-09-01a](#): Identifying User Requirements for SBAs



Air Quality Forecasting & Public Information

8:50 - 9:05	MACC
9:05 - 9:20	AIRNow-International
9:20 - 9:35	SERVIR-Air
9:35 - 9:50	WMO Sand & Dust Storm WAS
9:50 - 10:05	WMO GURME Program
10:05 - 10:30	<i>Break</i>

Air Quality Model Evaluation

10:30 - 10:45	HTAP and AMEN
10:45 - 11:00	AQMEII

Integrating AQ Satellite Observations

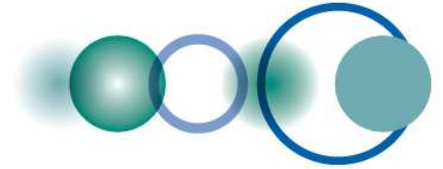
11:00 - 11:15	NASA perspective
11:15 - 11:30	NOAA NESDIS perspective

IT Infrastructure: GCI, Portals, Community Infrastructure

11:30 - 11:50	GCI, portals, Air Quality Community Infrastructure
11:50 - 12:15	Discussion: Infrastructure
12:15 - 13:30	<i>Lunch</i>

Discussion, Next Steps

13:30 - 13:45	Viewpoints on Communities of Practice
13:45 - 14:45	Discussion: Priorities, Roles Moving Forward
14:45 - 15:00	Next Steps
15:00	<i>Adjourn</i>



Air Quality & GEOSS

A Scenario for the Envisioned System of Systems

Terry Keating

David McCabe

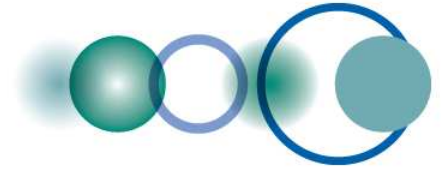
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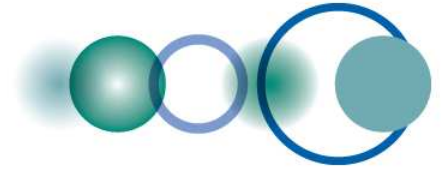
A vision of GEOSS for Air Quality Decision-makers

Example Decision Makers

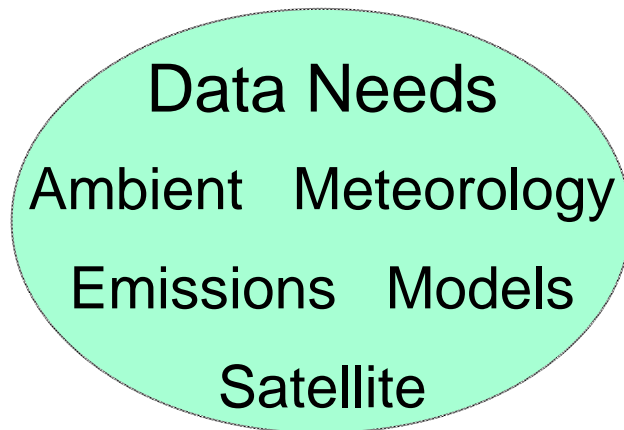
Policy maker assessing
intercontinental transport

AQ manager assessing an
exceptional event

Public planning activities
today and tomorrow²



A vision of GEOSS for Air Quality Decision-makers



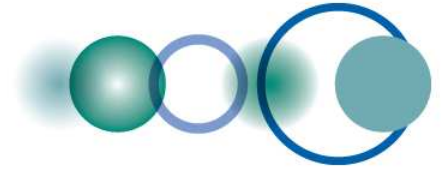
*Decision-makers depend on
common observations and data*

Example Decision Makers

Policy maker assessing
intercontinental transport

AQ manager assessing an
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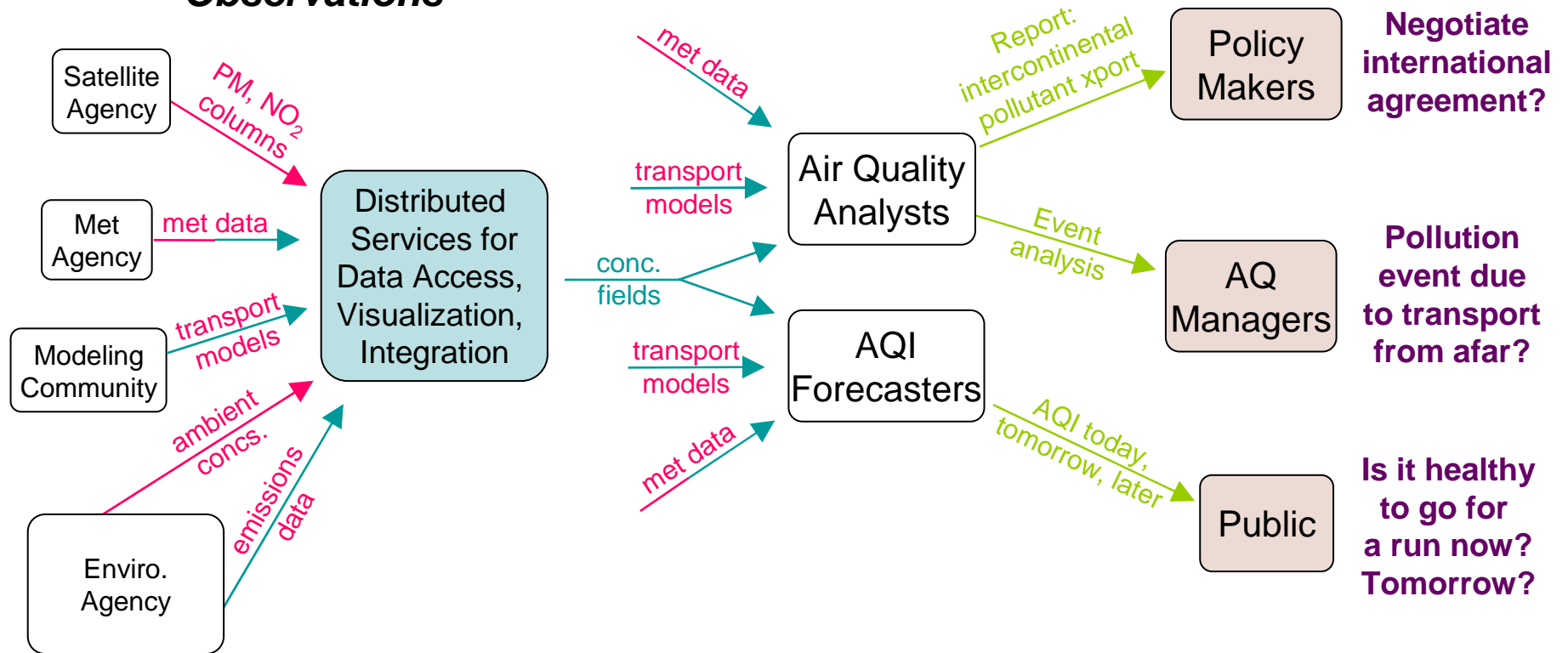
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The AQ Vision

Earth Observations

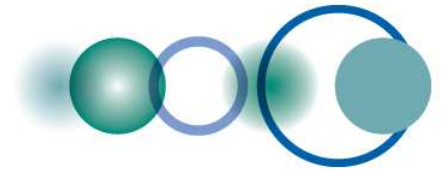
Example Decision Makers & Decisions



Pink: exists, hard to get, hard to use: *GEOSS (GCI) can help*

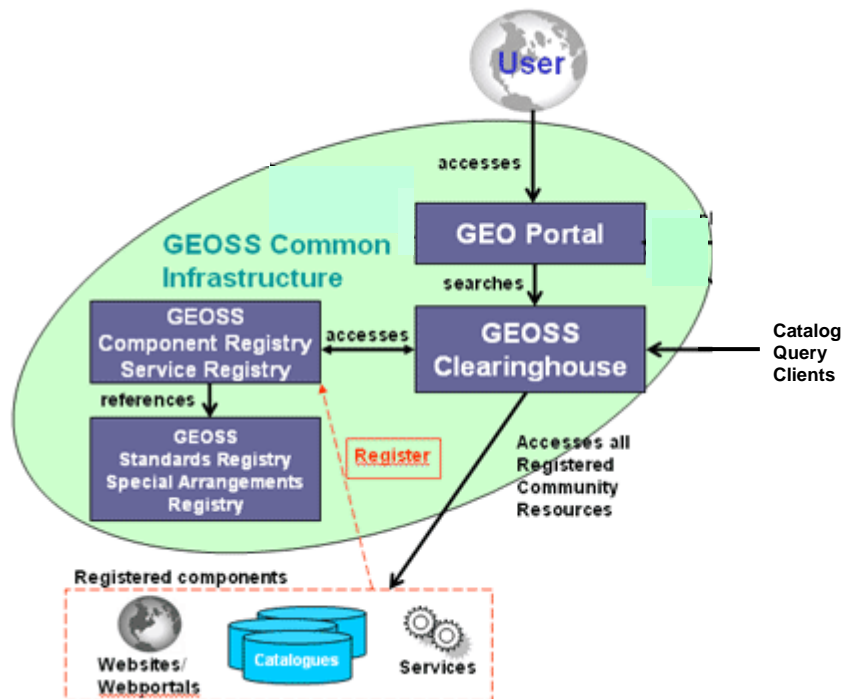
Blue: not currently operationally existent; *our goal for broad GEOSS*

Green: not currently adequate; *what society needs from GEOSS*



GEOSS Common Infrastructure and beyond

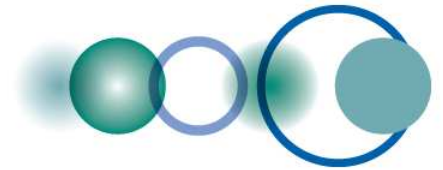
GEOSS is built around a minimal central clearinghouse and other components of a Common Infrastructure. This **GCI** is not to house data or tools for using data – it is used to enable users to find that data.



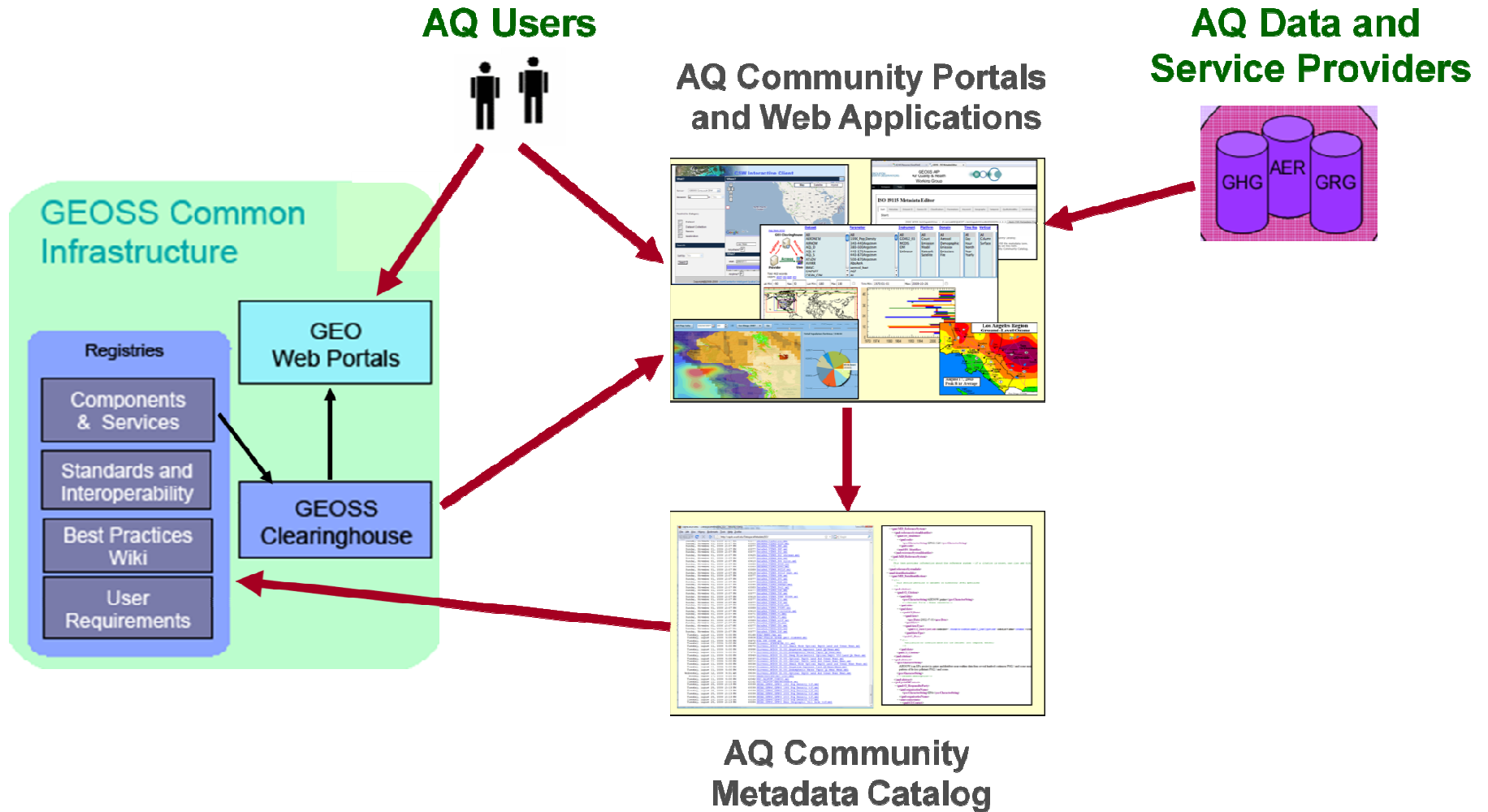
GEOSS registries are designed to work with ‘any’ observation, so metadata is minimal.

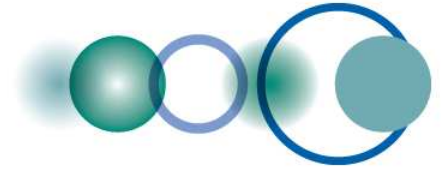
Community catalogs and portals are a response to the need for a richer access point, tuned for a particular user community.

GEOSS is about decision support. The GCI won’t provide that. It is set up as a base for service oriented architecture which will in turn improve decision support.

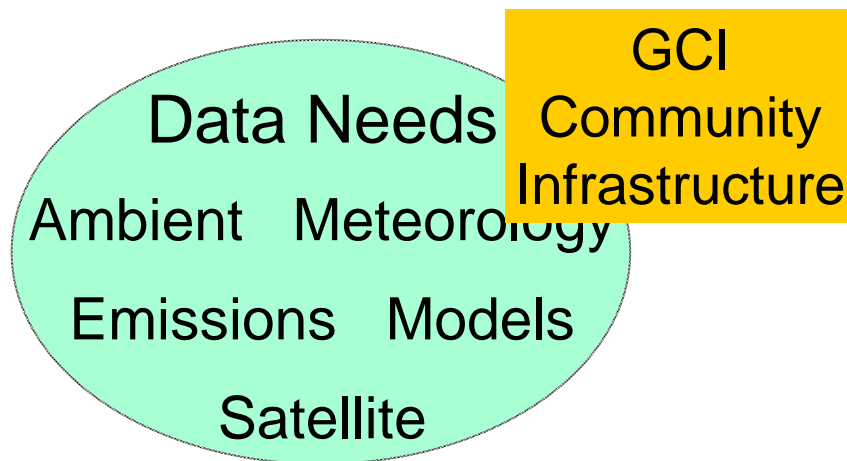


GEOSS Common Infrastructure and beyond





A vision of GEOSS for Air Quality Decision-makers



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