

Learning what to integrate and when: perspectives of an almost-coordinator

- A little history;
- Why integrate?
- What does it cost?
- Some recommendations

These are outrageously personal views
Integration not the only goal of GEOMON

A Little History

Feb 2005 IMECC I³ submitted (Rayner coordinator) (reserve list);

Nov 2005 GEOMON Phase A submitted (Ciais coordinator);

Nov 2005 Ciais becomes adjoint director LSCE, Rayner scientific coordinator GEOMON;

Feb 2006 GEOMON Phase B submitted and accepted;

jun 2006 IMECC revived, Rayner resigns scientific coordinator GEOMON;

Jun 2010 Rayner returns to Australia.

Why Integrate Observations?

- The Commission likes it and we want the money;
- There are economies of scale;
- There are certain questions you can't answer otherwise;
- Certain phenomena will only become explicable when viewed together.

What does it cost?

- Estimated cost of constructing GEOMON 500KE;
- Estimated cost of this meeting 100KE;
- Incalculable time spent encouraging integration;
- Can we point to a GEOMON result that required two measurement activities?

Why is it so hard

The story of carbon cycle research

- Originally atmospheric and terrestrial communities separate;
- FP5 CarboEurope Cluster began integration;
- FP6 CarboEurope-IP completed community formation;
- Perhaps there are inevitable sociological time-scales?

What would I do?

- **Wait;**
- Federate around single goals, e.g. GEMS constructing a unified assimilation system;
- Federate around headline scientific questions.

Some Examples

- What is the trend of radiative forcing over Europe?
- What is the impact of changing atmospheric composition on agricultural or forest productivity?
- What is the impact of trends in atmospheric composition on human health?

Conclusions

- Integration is expensive;
- It takes time, maybe more than one project;
- Seek concrete goals of integration;
- Success criterion is results combining multiple streams.