

Future Emission Scenarios

Approach:

- Compile Summary Data for Available Emission Scenarios for 2030-2050
- Compare Future Magnitudes and Spatial Distributions
- Select/Construct 3 Scenarios for Analysis
 - Middle Estimate
 - 2 Extremes (Most Different S/R Relationships)

Future Emission Scenarios

Available Data:

- IPCC “5AR” RCPs
 - IMAGE, MESSAGE, MiniCAM, AIM
- U.S. CCSP
 - MiniCAM, IGSM, MERGE
- GAINS (Royal Society?)

Coming Soon

Redesign of www.htap.org

The screenshot shows a Microsoft Internet Explorer browser window displaying the LRTAP website. The browser's address bar shows the URL <http://www.cleanairinfo.com/test/>. The website has a blue header with the LRTAP logo (a globe with a green orbit) and the text "Task Force on Hemispheric Transport of Air Pollution". A left-hand navigation menu is visible, with categories like Home, General Information, Assessment, Reports, Global & Regional Modeling, Meetings, and Links. The main content area features several news items under the heading "Upcoming meetings":

- Register Now:** The Joint International Conference on Intercontinental Transport of Atmospheric Mercury and Persistent Organic Pollutants, organized by TF HTAP and the UNEP Global Partnership of Atmospheric Mercury Transport and Fate Research, 7-11 April 2008, Rome , Italy .
- Save the Date:** The Global Atmospheric Chemistry and Transboundary Air Pollution Workshop, organized by TF HTAP, the IGAC/SPARC Atmospheric Chemistry and Climate Initiative, and the U.S. National Academy of Sciences Panel on International Transport of Air Pollutants, 9–13 June 2008, Washington , DC , USA .

Below this, there is an "Assessment News" section with a "Call for Authors" notice: "The TF HTAP co-chairs are now accepting nominations and volunteers for authors for the 2009 assessment report. If you are interested in volunteering or nominating authors, please email Terry Keating and André Zuber (keating.terry@epa.gov , andre.zuber@ec.europa.eu) and indicate the relevant expertise and interest."

Another notice in this section reads: "HTAP 2007 Bibliography Available: The references from the HTAP 2007 report are now available in an Endnote file and other formats."

The "HTAP Intercomparison News" section contains a notice for "Experiment Set 1: See drafts of [PublicationDrafts papers]."

At the bottom of the page, a small text block states: "This page is hosted and maintained by [EC/R Inc.](#)"

The Windows taskbar at the bottom shows several open applications, including "Terry Keating - Inb...", "General comments...", "Website", "wiki-renewal-march...", "Website Map a", "European Address...", and "LRTAP - Task Fo...". The system clock shows the time as 12:51 PM.

Coming Soon

Integration with Juelich Wiki

Expand All | Collapse All

Home

General Information

- Overview
- How to Participate
- Contacts

Assessment Reports

- HTAP 2007
- HTAP 2009
- Bibliography

Global & Regional Modeling

- Background
- Experiment Details
 - Set 1: Source Receptor (SR)
 - Set 2: Diagnostic Tracers (TP)
 - Set 3: Event Simulation (ES)
- Model Descriptions
- Model Problems
- Papers & Analyses
- Useful Tools
- Modeling Discussion

Meetings

- Upcoming Meetings
- Previous Meetings

Address: <http://www.cleanairinfo.com/test/>

Search [] Titles Text

Login

ExperimentSet1

FrontPage RecentChanges FindPage HelpContents **ExperimentSet1**

Immutable Page Info Attachments More Actions: []

ExperimentSet1: SR experiments

This set of common model experiments is designed to estimate intercontinental source-receptor relationships using 20% emission reductions within the HTAP regions.

Status:

Submission completed, analysis ongoing.

Experiment Description and I/O Specification

- General set-up of SR experiments attachment:
- I/O specification for SR: [sr_io_spec.doc](#), [sr_io_spec.pdf](#)
- Specification of vertical profile output [Vertprof.doc](#) (do we need this?)
- Appendix to I/O specification: [exp1_appendix.pdf](#)
- Excel spreadsheet with variable definitions: [HTAP_variables.xls](#) (version of 17 Dec 2007, contains TP1x variables)
- CMOR tables for SR experiments: [Upload new attachment "CMOR-table"](#)

Overview maps of results

Variable	1000 hPa	850 hPa	500 hPa	200 hPa	100 hPa
hus	hus_map_1000hPa.pdf	hus_map_0850hPa.pdf	hus_map_0500hPa.pdf	hus_map_0200hPa.pdf	hus_m...
precip	precip_map.pdf				

Start Terry Keating - Inb... General comments... Website wiki-renewal-march... Website Map a European Address... LRTAP - Task Fo... Microsoft PowerPo... 12:53 PM

Where We Are Going

(for the rest of 2008)

- **Washington, 9-13 June 2008**
 - Organized with
 - U.S. National Academy of Sciences
 - Atmospheric Chemistry & Climate Initiative
 - Topics
 - Review Progress to Date with NAS Panel (Mon-Tues)
 - Plan Future Modeling and Analysis with AC&C (Wed-Fri)
- **Hanoi, 13-14 October 2008**
 - Organized adjacent to EANET SAC
 - Topics
 - Regional-Global Modeling (MICS-Asia)
 - Impacts of Transported Pollutants? Role of Tropics?
 - Observations
 - Emissions

Where We May Go

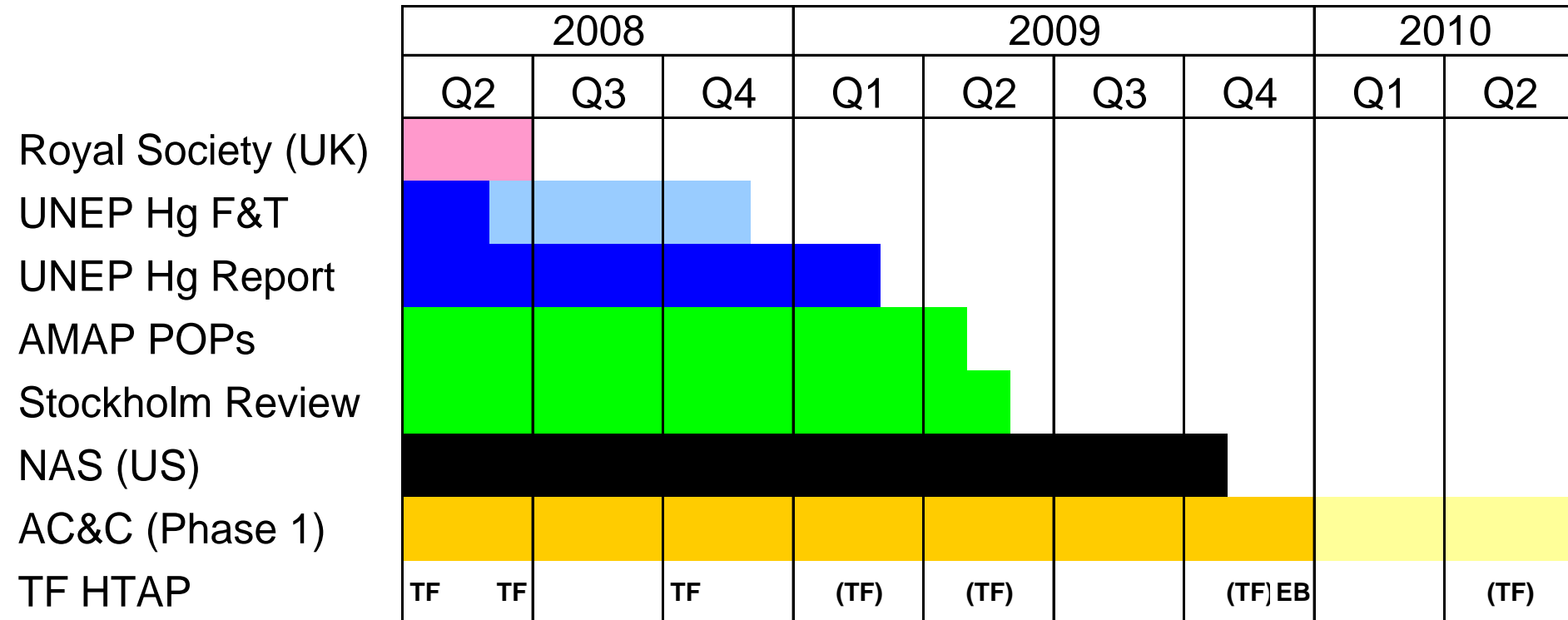
(Possibilities for 2009)

- **St Petersburg, February 2009**
 - Improving Emissions Information for Eastern Europe and Central Asian Countries
- **Paris, Spring 2009**
 - With TF Measurements and Modeling
 - Regional-Global Modeling
 - Linkages with Climate Change
- **Assessment Review Meeting(s)**

Structure of Next HTAP Assessment

- Part 1: Ozone, Aerosols, Deposition
 - Building on 2007 Interim Report
- Part 2: Mercury
 - Building on UNEP F&T Partnership Report
- Part 3: POPs
 - Building on the AMAP and UNEP GMP Reports
- Part 4: Synthesis
 - “Summary for Policy Makers”
- Executive Summary
 - Official Document to the LRTAP Convention

Coordination and Leveraging for the Next HTAP Assessment



What is the best way to

- meet the needs of the Convention?
- leverage other efforts?
- add value from a scientific perspective?

Schedule for Next Assessment

To get to EB 2009

- Invitation to participate Apr 2008
- Final plan and list of authors Jun 2008
- First Annotated Outline Aug 2008
- Revised Annotated Outline Nov 2008
- Internal Draft of Parts 1-3 Feb 2009
- First Review Draft of Parts 1-4,ES May 2009
- Major Review Meeting Jun 2009
- Revised Review Draft of Parts 1-4,ES Aug 2009
- Acceptance Meeting, Finalize ES Nov 2009
- Finalize Parts 1-4 Dec 2009
- Printing Jan 2010

Schedule for Next Assessment

Delayed to 2010

- | | | |
|--|----------|----------|
| • Invitation to participate | Apr 2008 | Jan 2009 |
| • Final plan and list of authors | Jun 2008 | Mar 2009 |
| • First Annotated Outline | Aug 2008 | Jun 2009 |
| • Revised Annotated Outline | Nov 2008 | Sep 2009 |
| • Internal Draft of Parts 1-3 | Feb 2009 | Nov 2009 |
| • First Review Draft of Parts 1-4,ES | May 2009 | Jan 2010 |
| • Major Review Meeting | Jun 2009 | Feb 2010 |
| • Revised Review Draft of Parts 1-4,ES | Aug 2009 | Apr 2010 |
| • Acceptance Meeting, Finalize ES | Nov 2009 | Jun 2010 |
| • Finalize Parts 1-4 | Dec 2009 | Jul 2010 |
| • Printing | Jan 2010 | Aug 2010 |

Policy-Relevant Science Questions

1. How does hemispheric transport affect air pollution?
2. How much do emissions in one country or region affect air pollution in another country or region?
3. How confident are we of the results and what is our best estimate of the uncertainties?
4. How will changes in emissions in one country or region affect air pollution in another country or region?
5. How may the source-receptor relationships change over the next 20 to 50 years due to changes in emissions?
6. How may the source-receptor relationships change due to climate change?
7. What efforts are needed to develop an integrated system of observation data and models?

Structure of Each Part

- A: Conceptual Overview
- B: Observational Evidence
- C: Emissions and Projections
- D: Regional and Global Modeling
- E: Impacts

Questions for Discussion

Are we asking the right questions?

What's missing?

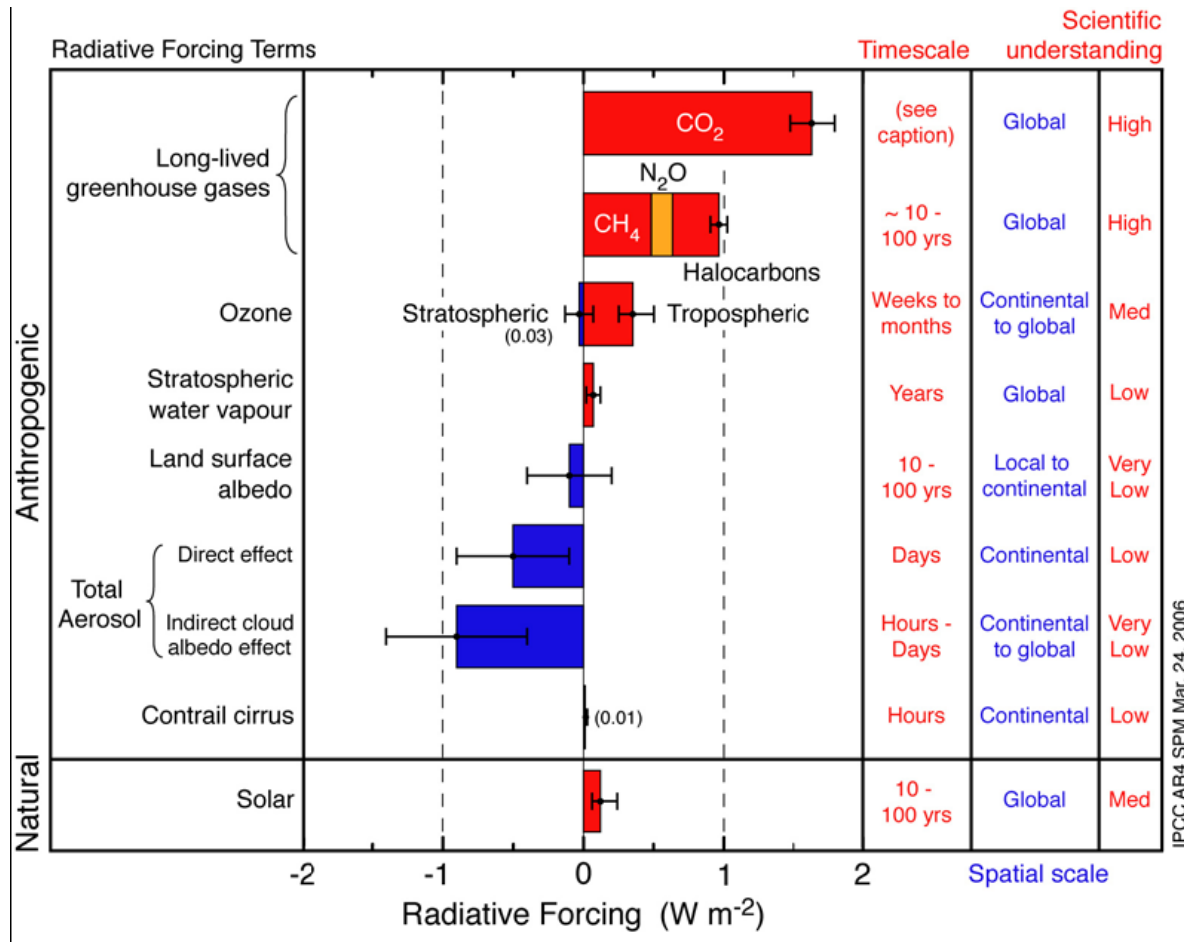
Are there other ways of organizing this?

Given our starting points (2007, UNEP, AMAP, ...), what can we improve?

What are our biggest challenges?

Where do we need consistency across parts?

Do we need common metrics for sensitivity, significance, and confidence?



IPCC AR4 SPM Mar. 24, 2006