Overview of:

Chapter A1. Conceptual Overview of Hemispheric or Intercontinental Transport Processes

Lead Authors:
Owen Cooper
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Authors:
Bill Collins, Ruth Doherty, John Methven, David Stevenson, Andreas Stohl and Peter Hess
Part A. Ozone and Fine Particles
(about 150 pages)

Chapter A1: Conceptual Overview
Chapter A2: Observational Evidence and Capabilities
Chapter A3: Emissions & Projections
Chapter A4: Global and Regional Modeling
Chapter A5: Impacts on Health, Ecosystems, and Climate
Chapter A6: Summary
A1. Conceptual Overview of Hemispheric or Intercontinental Transport Processes

Lead Authors: Owen Cooper and Dick Derwent
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A1.1 Background and Introduction

A1.2 Intercontinental transport of ozone and PM

A1.3 Major types of intercontinental transport processes
A1.3.1 General circulation regimes
A1.3.2 The mid-latitude cyclone airstreams
A1.3.3 Deep convection
A1.3.4 Diffuse or small scale atmospheric boundary layer venting
A1.3.5 Slow, low altitude flow
A1.3.6 Climate variability and its impact on ICT processes

A1.4 Source attribution and source-receptor relationships
A1.4.1 Source attribution
A1.4.2 Source-receptor relationships

A1.5 Impact of intercontinental transport on global pollution distribution, public health and environmental quality
A1.5.1 Episodic export events
A1.5.2 Contribution to background pollution
A1.5.3 Import/export budgets of Asia, North America and Europe
A1.5.4 Impact on public health and environmental quality

A1.6 Interactions between long-range transport of pollutants and climate
A1.6.1 Climate forcing of short lived pollutants
A1.6.2 Impact of concentrated air pollution plumes on transport processes

A1.7 Effects of future changes in emissions and climate on HTAP
A1.7.1 Changes in future emissions on source-receptor relationships
A1.7.2 Climate change and its effects on HTAP

A1.8 Model performance, improvement and validation
A1.8.1 Model performance
A1.8.2 Recommendations for model improvement
A1.8.3 Integration of observations, emissions and modelling

A1.9 Chapter storylines

Appendix A1-1. Transport related terms and definitions

Keep A1.1 through A1.3 as is.

Keep as is, but add section on definition of background/baseline.

Move to Chapter A2.
Move to Chapter A4.
Move to Chapter A5.
Move to Chapter A6.
Move to A1.3, above

Move to Chapter A5

In the interest of space, is this necessary? Part of an executive summary?
Proposed changes to Chapter A1:

A1. Conceptual Overview of Hemispheric or Intercontinental Transport Processes
   Lead Authors: Owen Cooper and Dick Derwent
   Authors: Andreas Stohl, Peter Hess, Ruth Doherty, David Stevenson

A1.1 Background and Introduction (Derwent)

A1.2 Intercontinental transport of ozone and PM
A1.2.1 Major ozone and PM sources (Cooper)
A1.2.2 Major transport pathways (Cooper)
A1.2.3 Definitions of background, baseline and plumes (Derwent, Cooper)

A1.3 Source attribution and source-receptor relationships (Derwent)
A1.3.1 Source attribution
A1.3.2 Source-receptor relationships

A1.4 Major types of intercontinental transport processes (update from HTAP 2007)
A1.4.1 General circulation regimes (Hess)
A1.4.2 The mid-latitude cyclone airstreams (Cooper)
A1.4.3 Deep convection (Stohl)
A1.4.4 Diffuse or small scale atmospheric boundary layer venting (Stohl)
A1.4.5 Slow, low altitude flow (Stohl)
A1.4.6 Present day climate variability and its impact on ICT processes (Doherty)
A1.4.7 Impact of concentrated air pollution plumes on transport processes (Stevenson)

A1.5 Chapter storylines

Appendix A1-1. Transport related terms and definitions
Sections moved from A1 to other Chapters

A1.5.1 Episodic export events (Cooper)  →  Chapter A2
A1.5.2 Contribution to background pollution (Collins)  →  Chapter A2
A1.5.3 Import/export budgets of Asia, North America and Europe (Collins)  →  Chapter A4
A1.5.4 Impact on public health and environmental quality (Doherty)  →  Chapter A5
A1.6.1 Climate forcing of short lived pollutants (Stevenson)  →  Chapter A5
A1.7.1 Changes in future emissions on S-R relationships (Doherty & Stevenson)  →  Chapter A5
A1.7.2 Climate change and its effects on HTAP (Doherty and Collins)  →  Chapter A5
A1.8.1 Model performance (Methven)  →  Chapter A4
A1.8.2 Recommendations for model improvement (Doherty)  →  Chapter A4
A1.8.3 Integration of observations, emissions and modeling (Cooper)  →  Chapter A6