RAPIDC
Regional Air Pollution in Developing Countries

Malé Declaration IIAS

Integrated Information and Assessment System

Training Session, February 2007

Pwint: programming the system

Johan Kuylenstierna: structure of the system/ impacts

Magnuz Engardt: atmospheric transport modelling

Harry Vallack: emissions

Philip Peck: scenarios and policy options

Malé Declaration IIAS

Integrated Information and Assessment System

Aims of the IIAS

- A way to integrate the different Male Declaration activities and data and provide additional information

- A tool to investigate the linkages between emissions, concentrations and deposition of major pollutants and compare to monitoring values

- A tool to look at the risks of the regional background air pollution to different receptors

- A tool to investigate the implications of scenarios including different policy interventions

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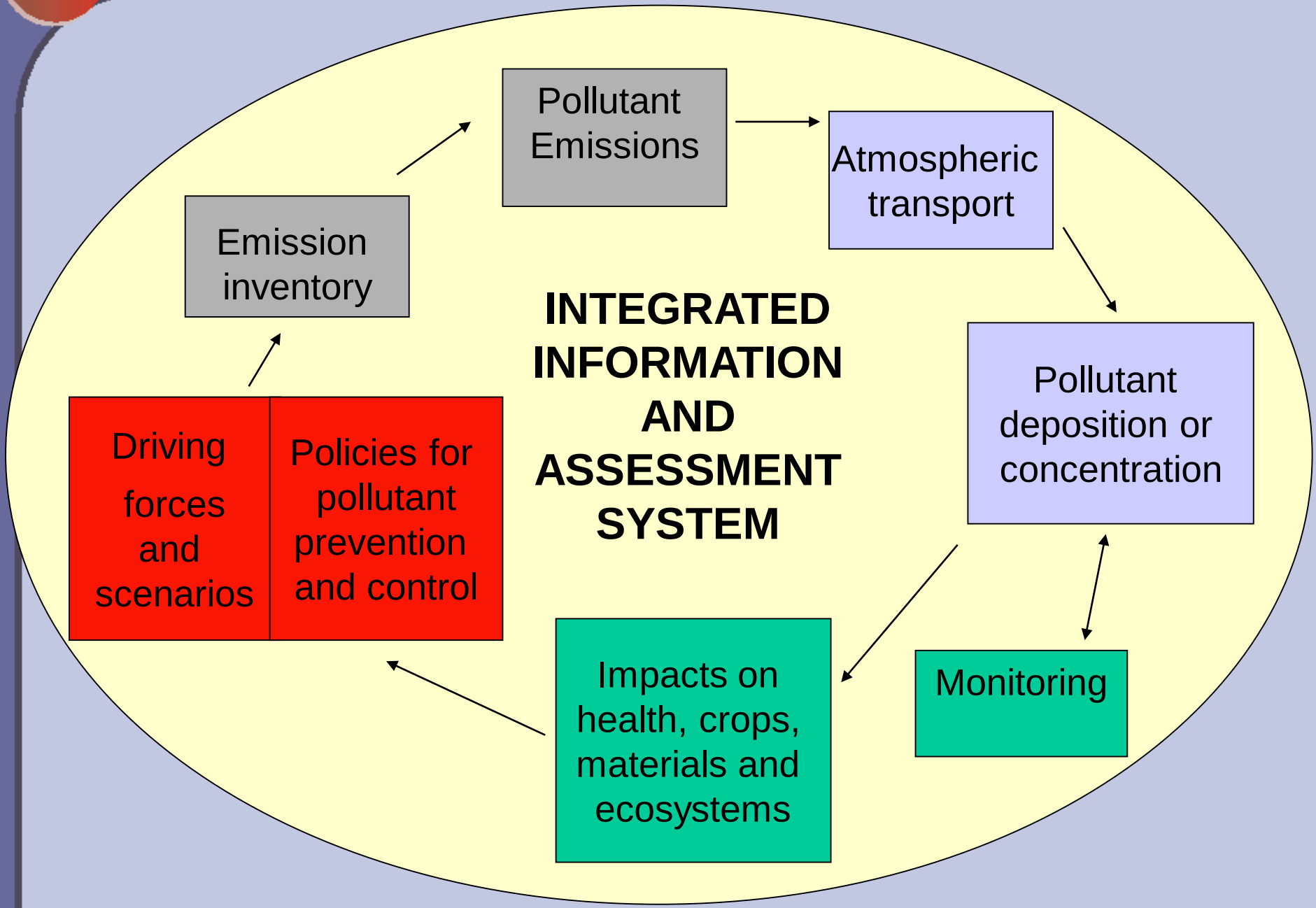
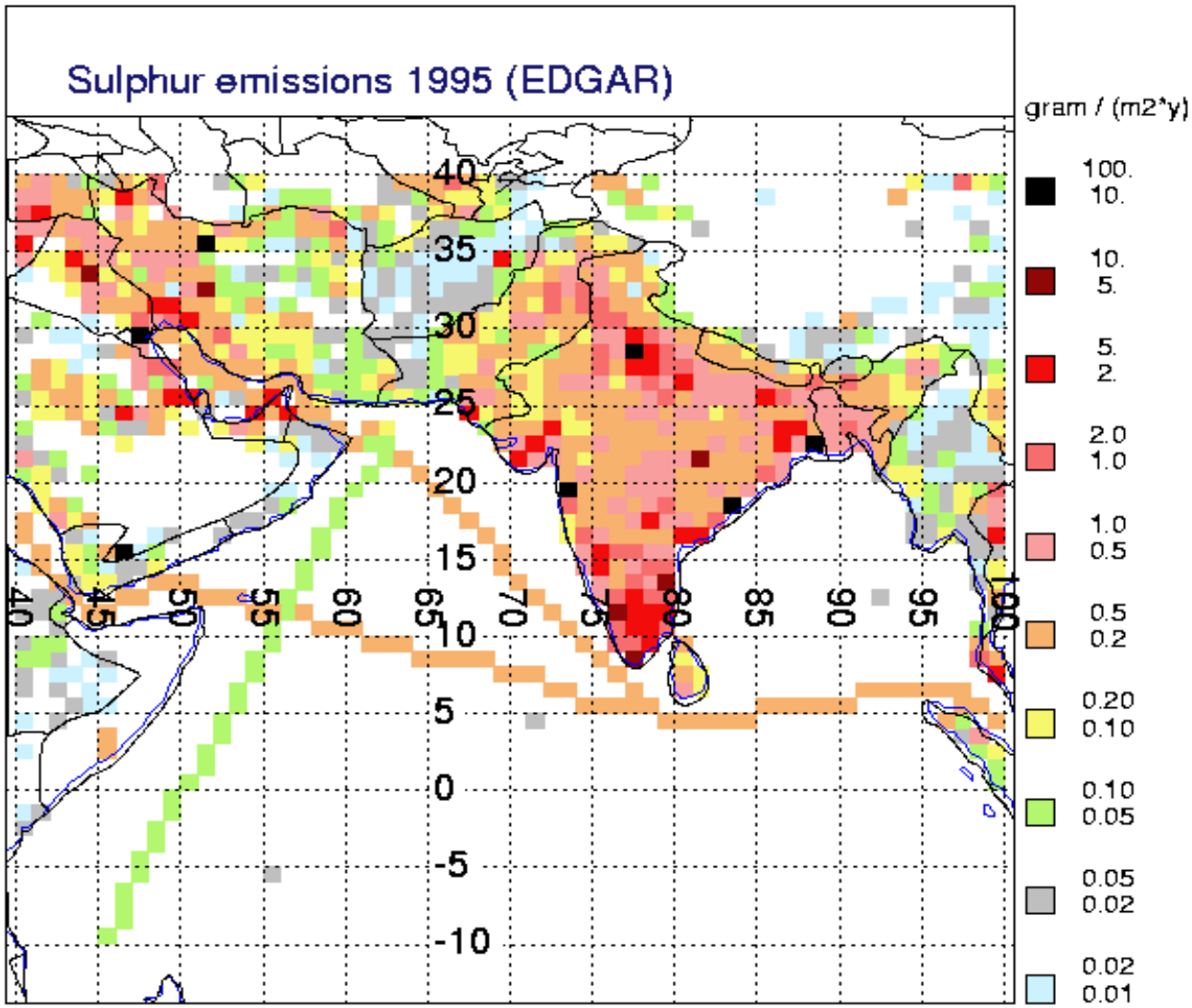
Scientific knowledge to underpin the policy process





EDGAR emissions of sulphur in S Asia

Emission Regions in IIAS

Emission region IAM code	Emission region name	Provinces or states included within the emission region
BDAA	Bangladesh	Whole country
BTAA	Bhutan	Whole country
INCC	India Central	Madhya Pradesh + Chhattisgarh
INEC	East-Central	Bihar + Jharkhand
INEE	India East	Assam – NE Highlands (Arunchal Pradesh; Manipur; Meghalaya; Mizoram; Nagaland; Sikkim; Tripura)
INNC	India North-Central	Uttar Pradesh + Uttaranchal
INNN	India North	Chandigarh - Punjab; Himachal Pradesh -Jammu and Kashmir; Haryana; Delhi
INSC	India South-Central	Andra Pradesh; Karnataka - Goa
INSE	India South-East	West Bengal + Calcutta; Orissa ; Andaman and Nicobar islands
INSS	India South	Kerala - Lakshadweep; Tamil Nadu - Pondicherry
INSW	India South-West	Maharashtra; Dadar and Nagar Haveli -Daman and Diu + Bombay
INWC	India West-Central	Gujarat; Rajasthan
IREE	Iran East	East Azarbayejan; West Azarbayejan; Ardebil; Ilam; Tehran; Chaharmahal & Bakhtiyari; Khuzestan; Zanjan; Qazvin; Qom; Kordestan; Kermanshah; Kohgiluyeh & Boyerahmad; Gilan; Lorestan; Mazandaran; Markazi; Hamadan
IRWW	Iran West	Esfahan; Bushehr; Semnan; Sistan & Baluchestan; Khorasan; Fars; Kerman; Golestan; Hormozgan; Yazd
MVAA	Maldives	Whole country
NPAA	Nepal	Whole country
PKEE	Pakistan East	Northwest Frontier Provinces - FATA -Islamabad; Punjab (incl. Lahore)
PKWW	Pakistan West	Sindh (incl. Karachi); Baluchistan
LKAA	Sri Lanka	Whole country

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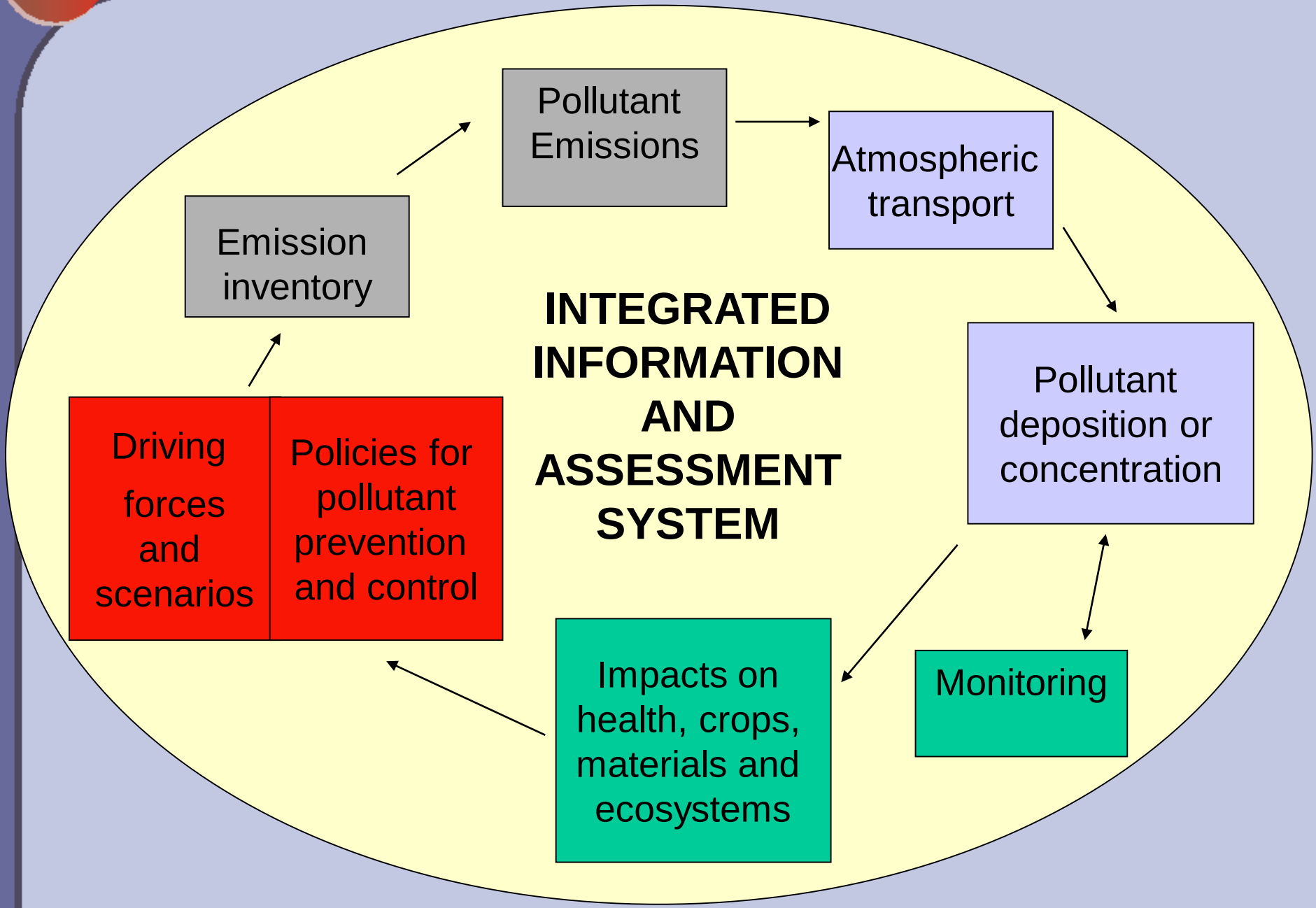
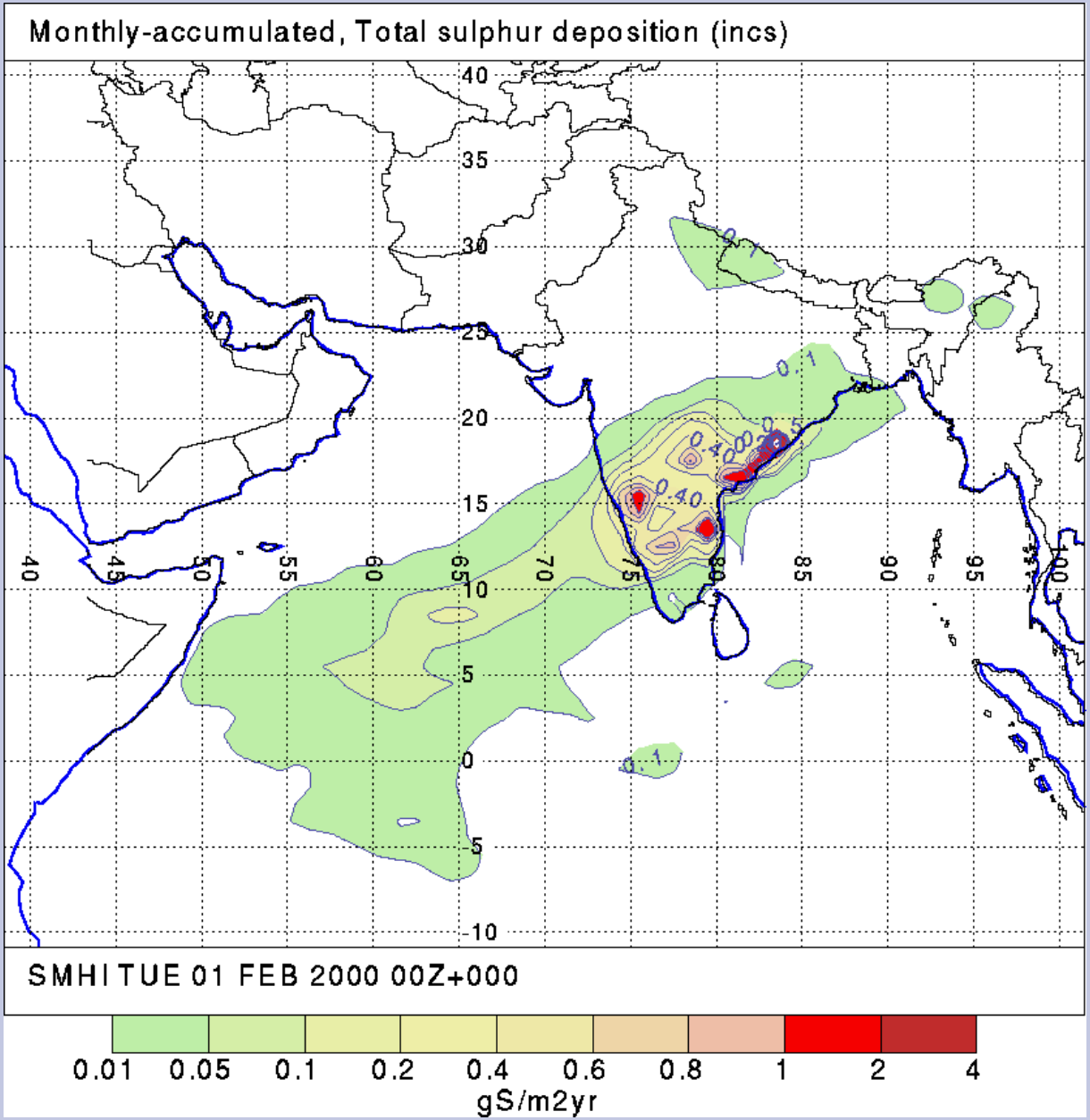
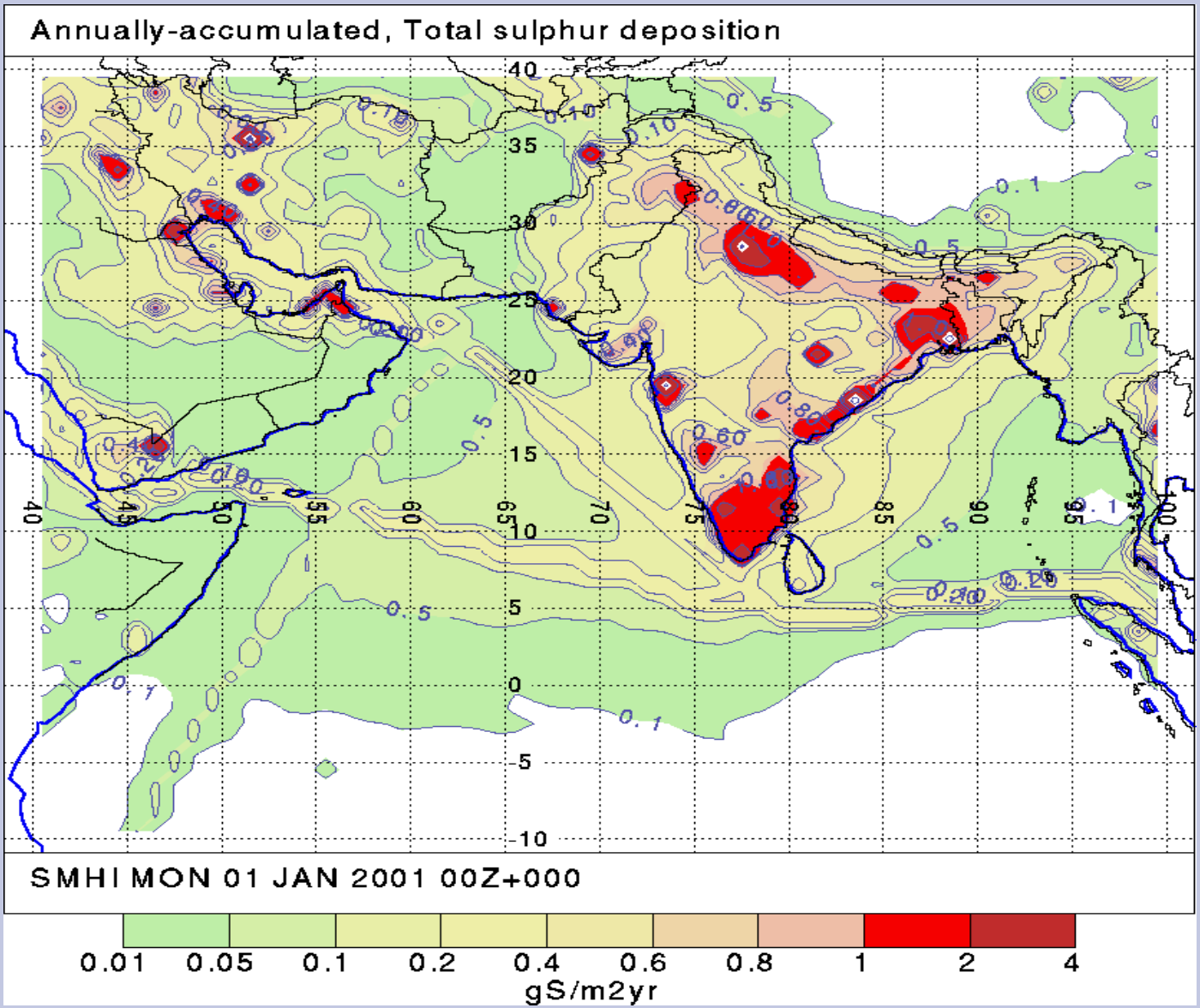




MATCH model run for emission region ‘India south-central’ (Andhra Pradesh + Karnataka + Goa)



Deposition of sulphur in S Asia using the MATCH model

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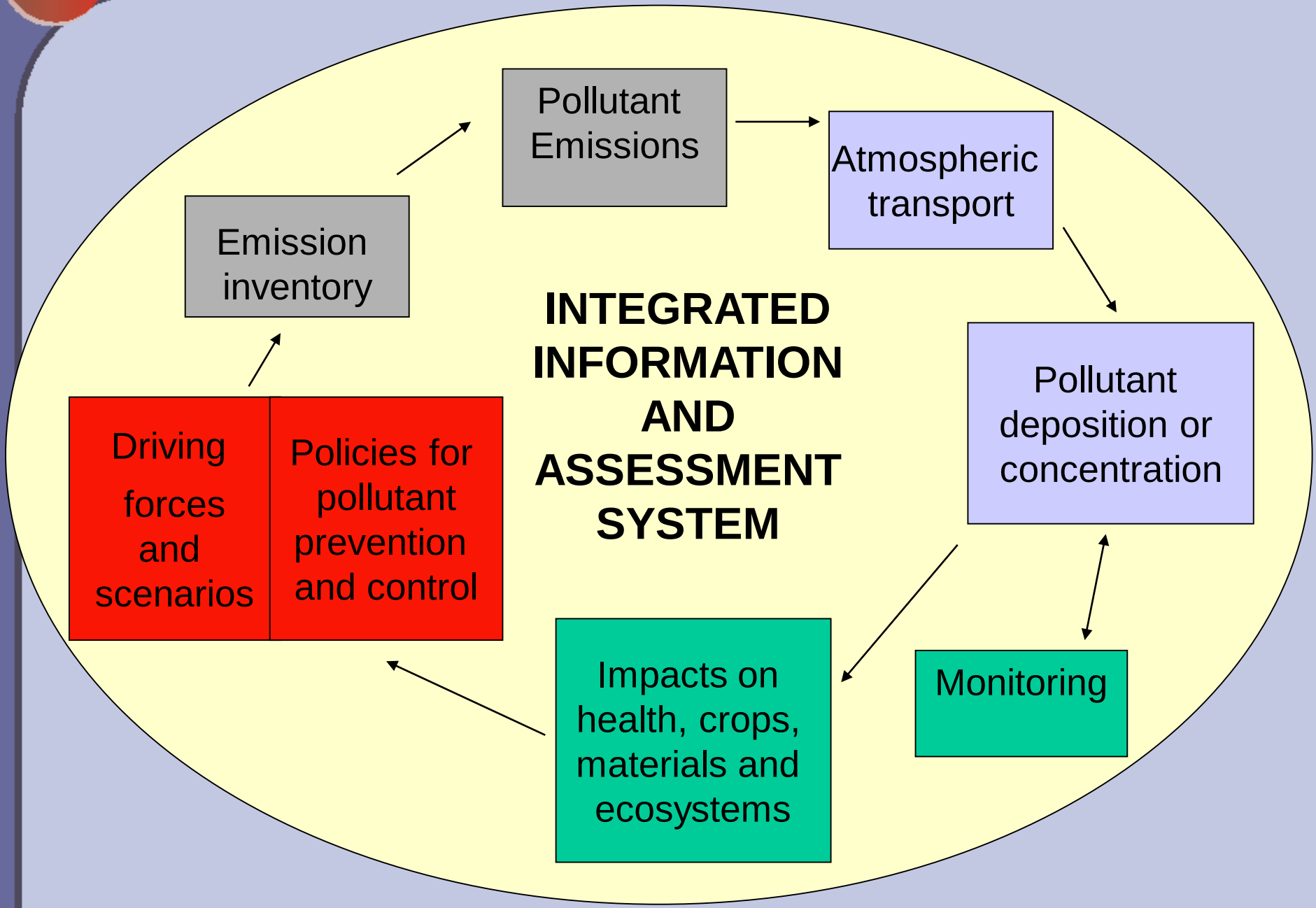
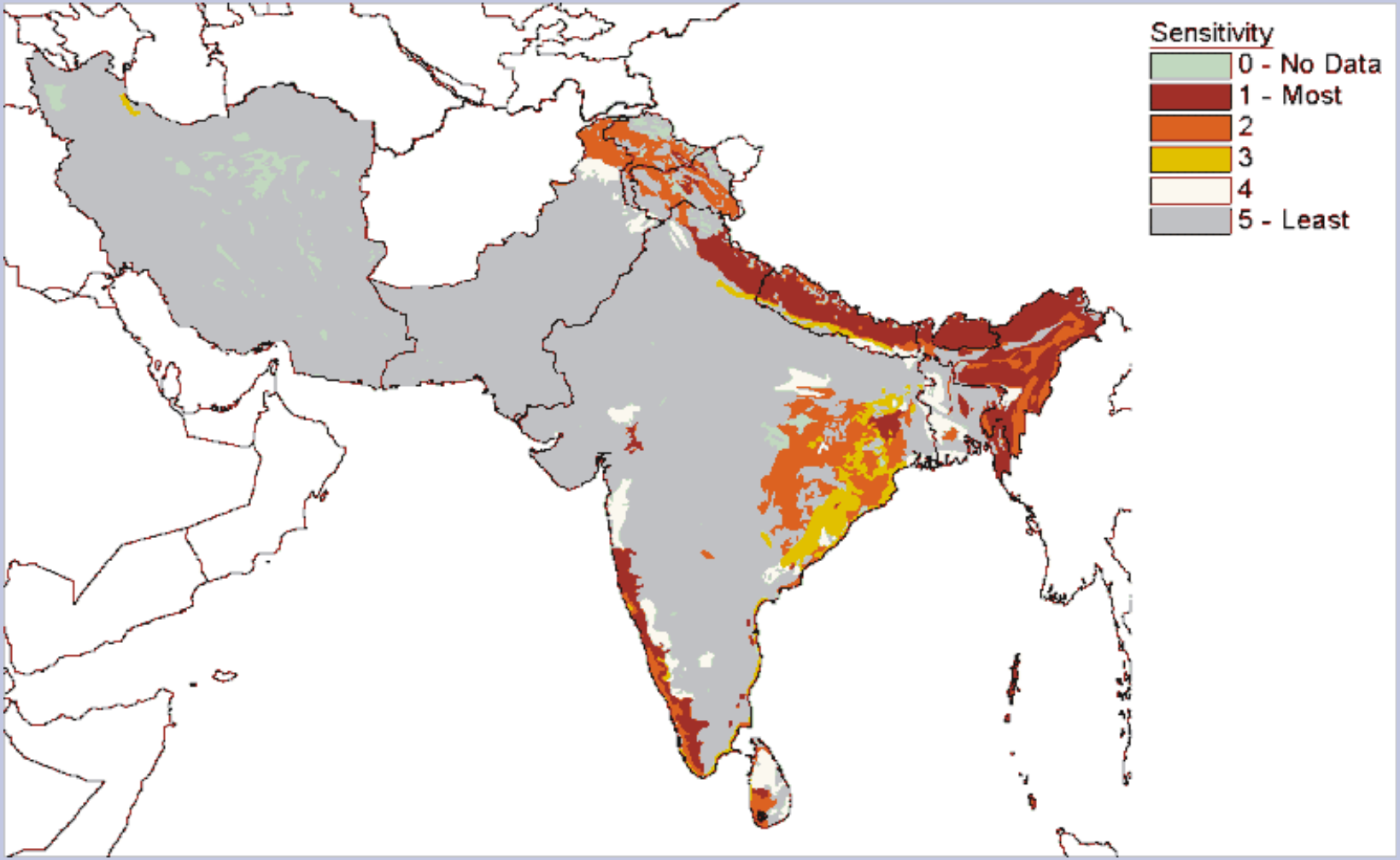
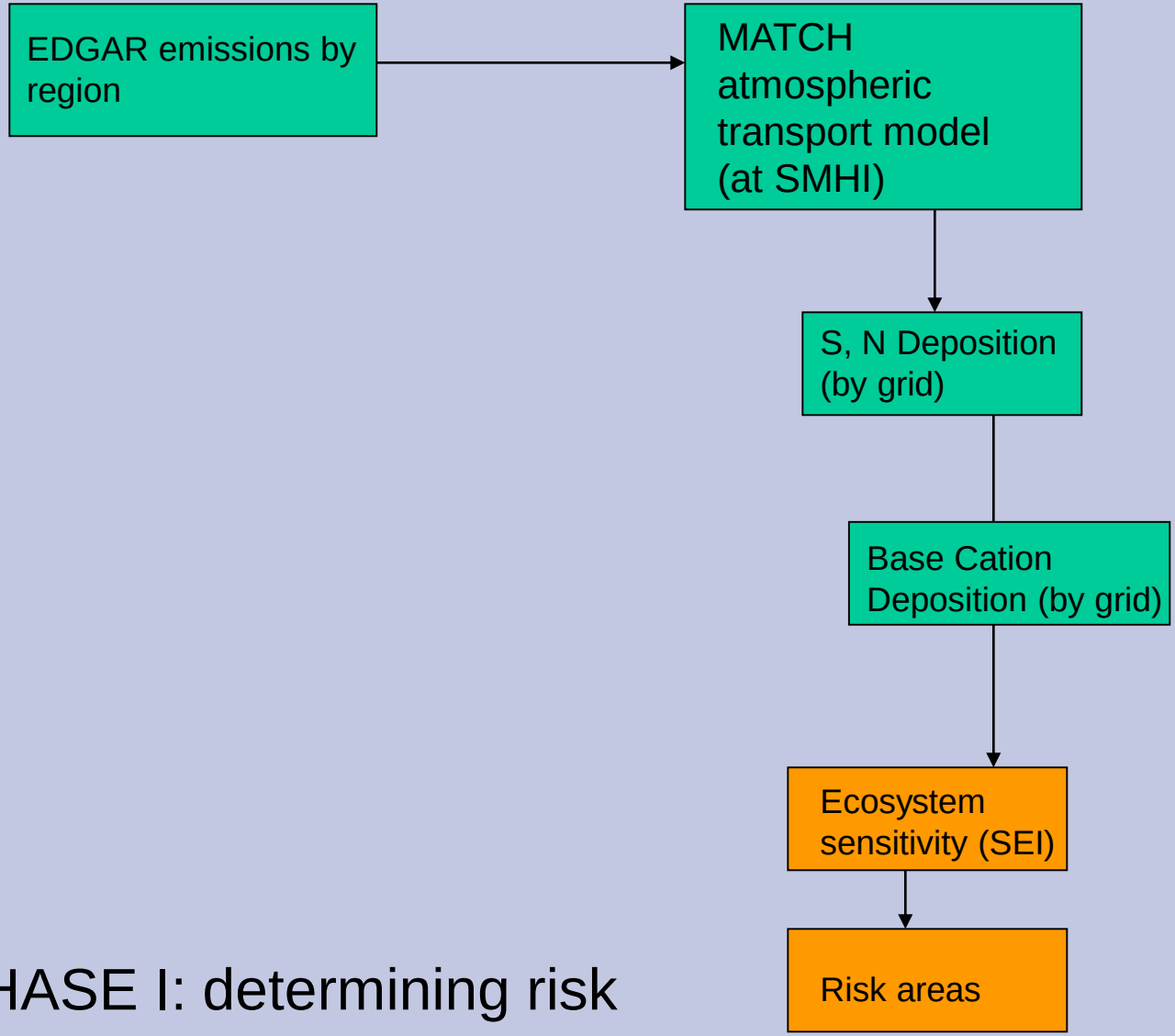
Scientific knowledge to underpin the policy process



Terrestrial Ecosystem Sensitivity to Acidic Deposition in South Asia

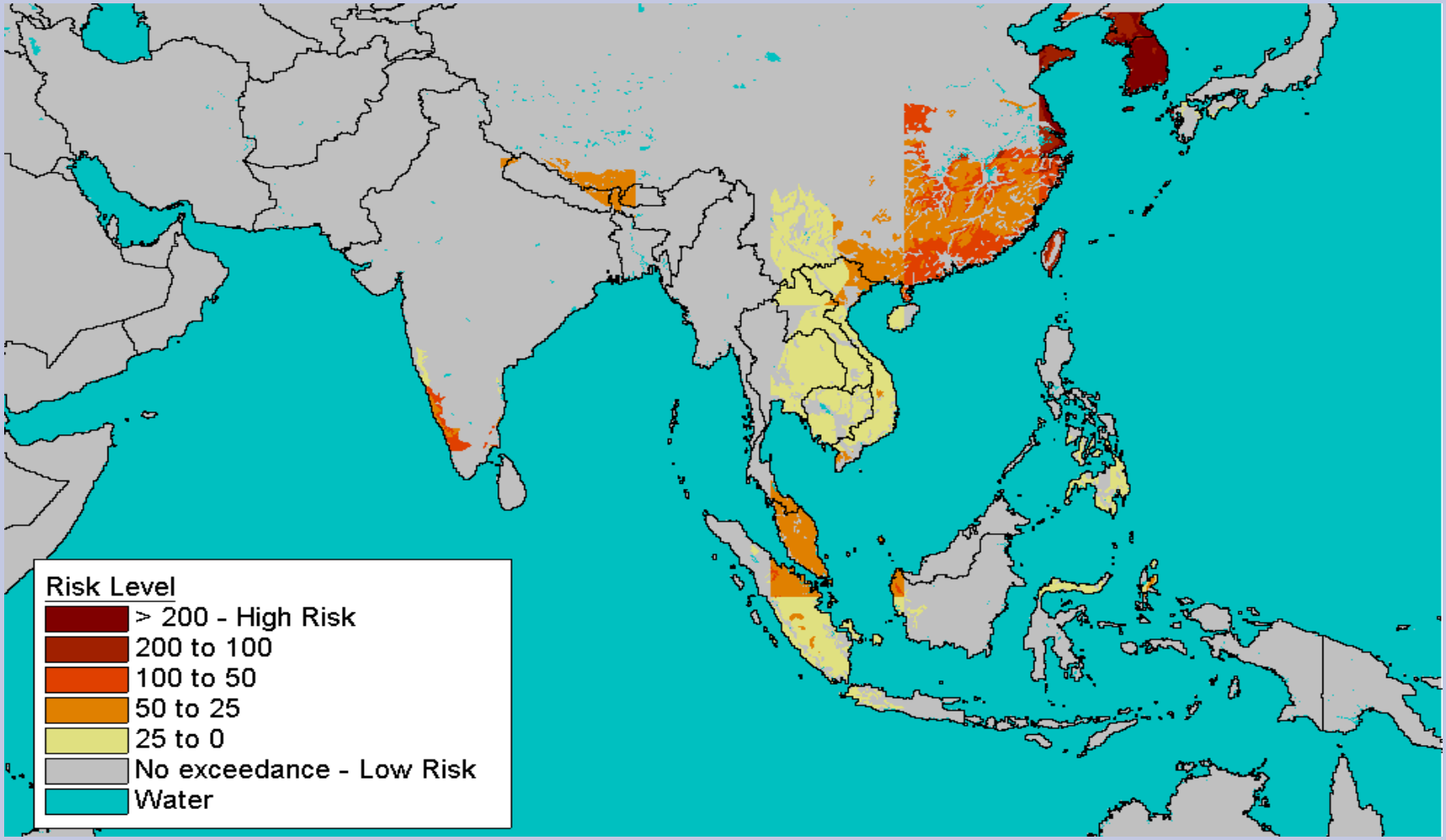


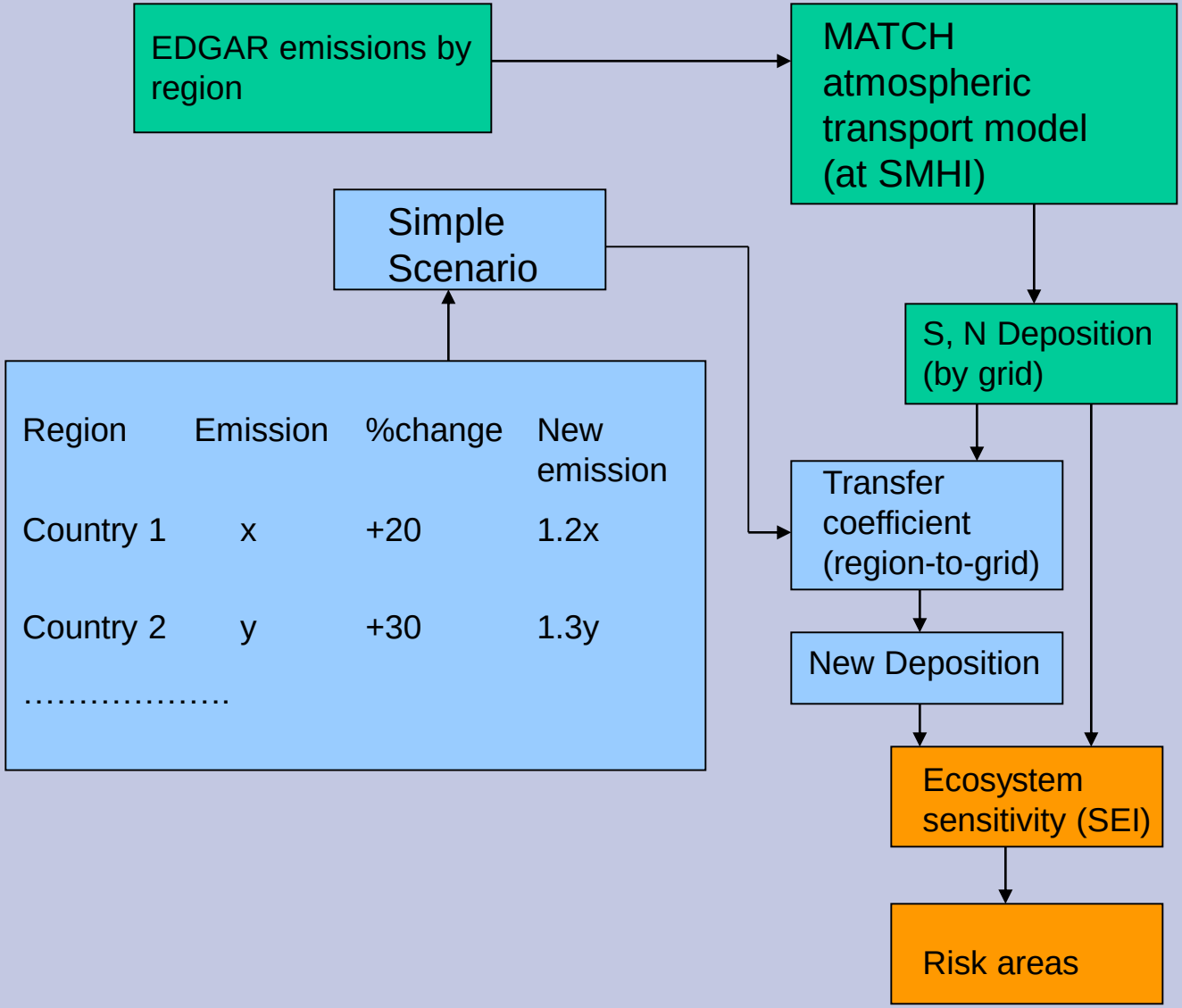
Source: Kuylenstierna *et al*. 2001



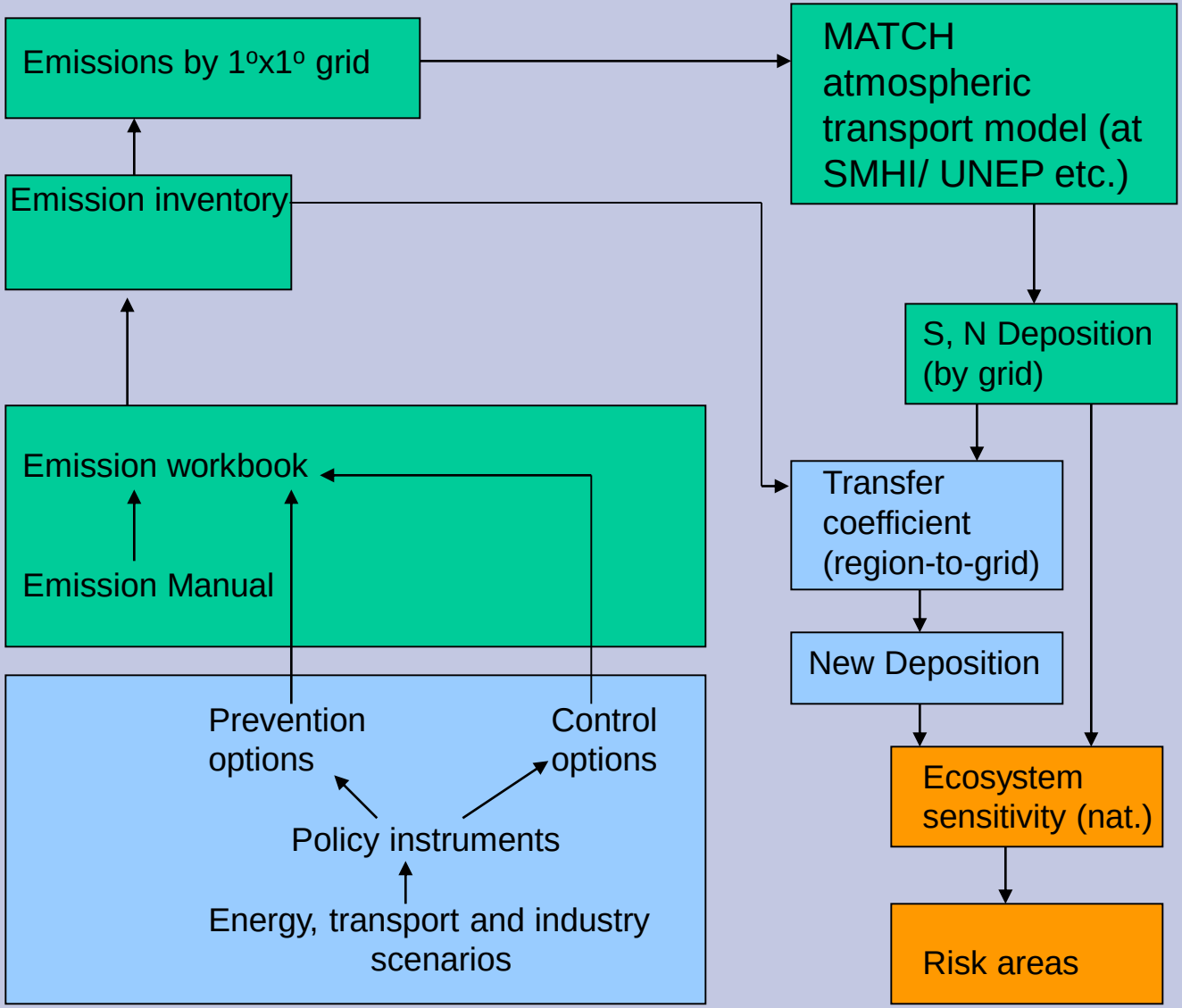
PHASE I: determining risk from available maps

Estimated Risk of acidification





PHASE I: Investigating simple scenarios



PHASE II: Investigating national scenarios

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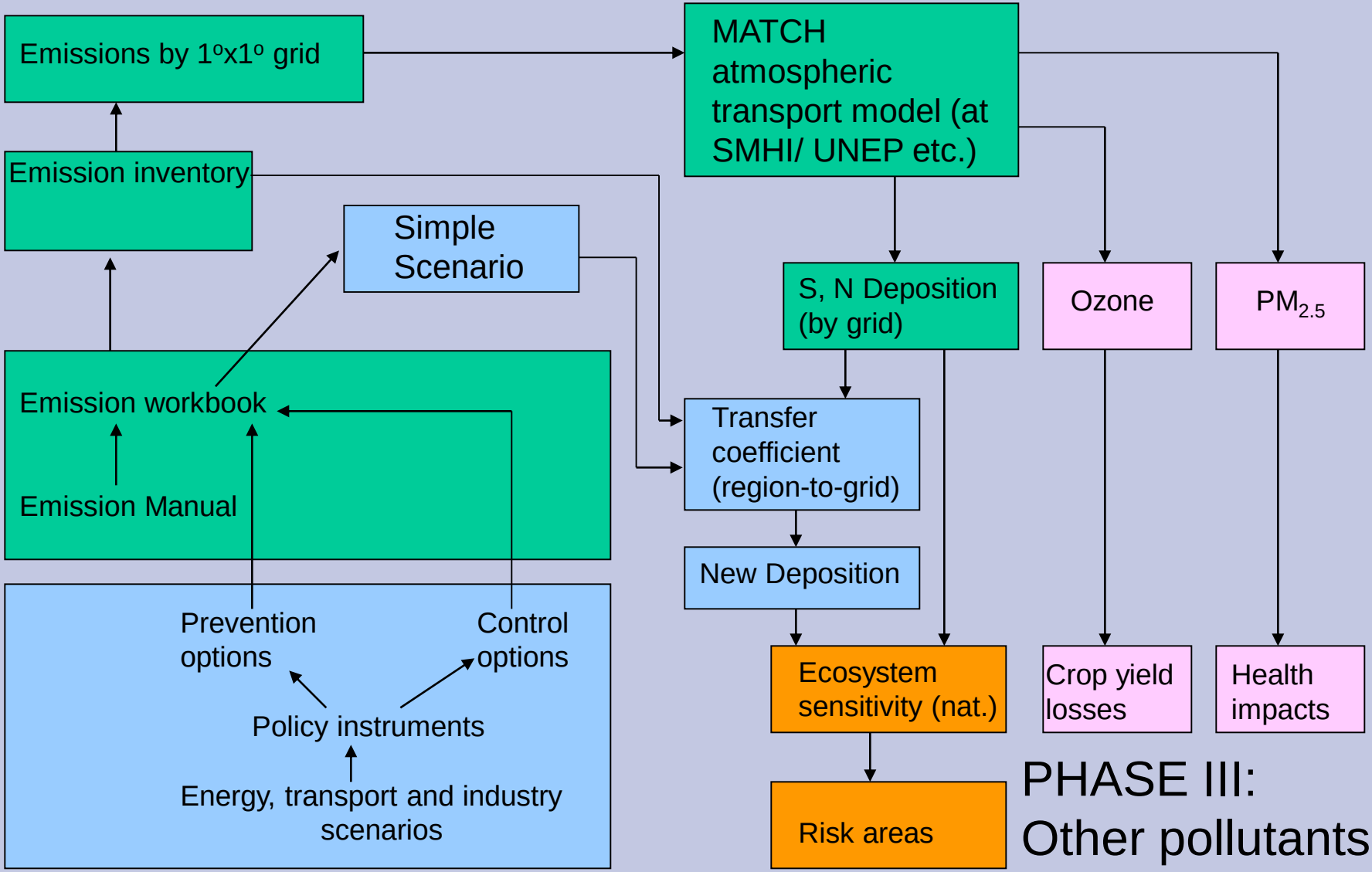

PHASE III: Other pollutants and impacts