

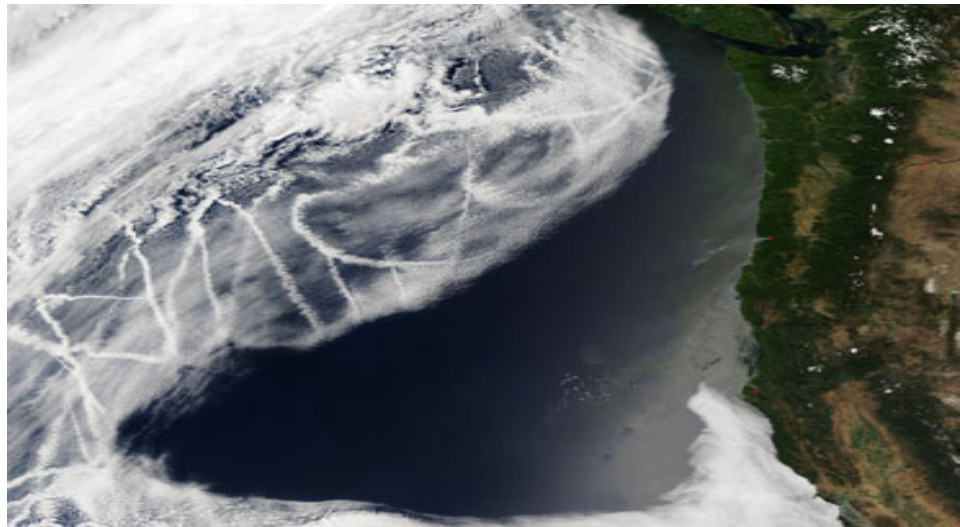
Current activities using NorESM in Stockholm

Annica M. L. Ekman^{1,2}

annica@misu.su.se

¹)Department of Meteorology, SU

²)Bolin Centre for Climate Research, SU



Current projects at SU involving NorESM:

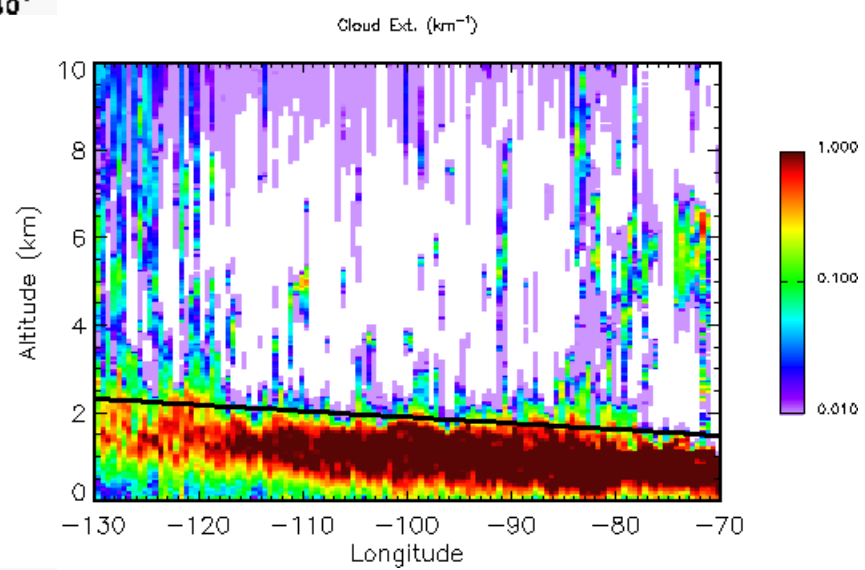
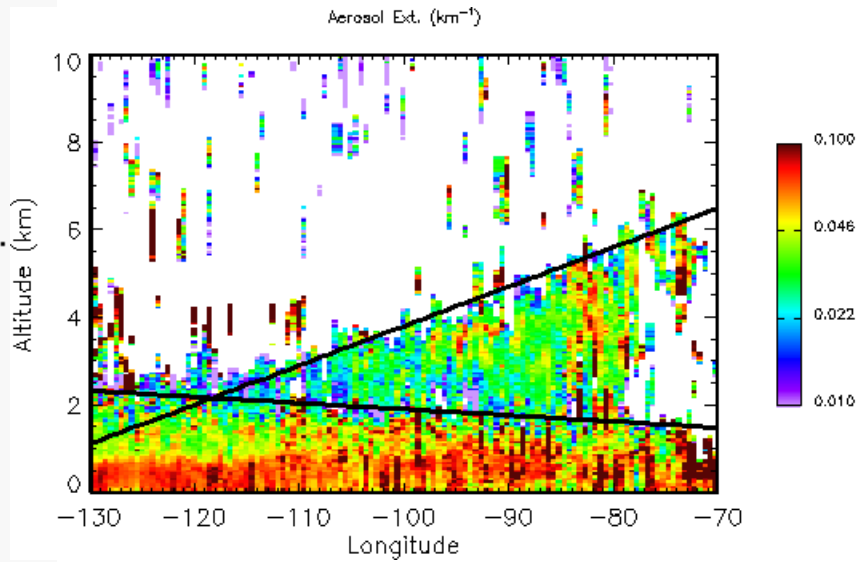
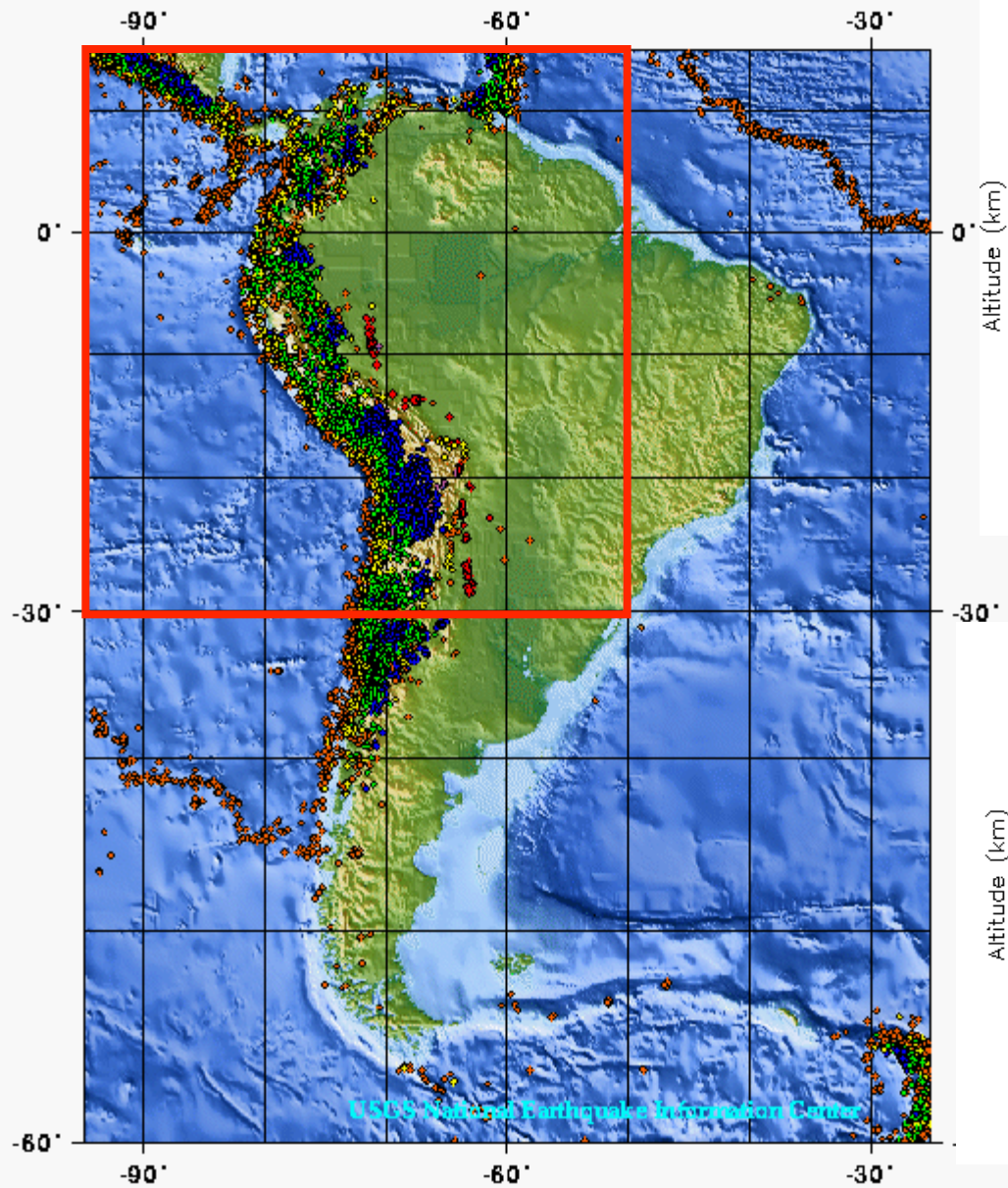
- **Juan Acosta** (PhD student, ITM): Biogenic Volatile Organic Compounds (BVOCs) in the atmosphere: Model study of past millennium emissions and aerosol formation. (Supervisor: Ilona Riipinen, Annica Ekman). **Also involved in:**
- **Vidya Varma** (Post Doc, MISU): Aerosol emission reductions over the 20th and 21st century and their impact on polar climate. (Advisors: Annica Ekman, HC Hansson, Ilona Riipinen)
- **Anna Lewinschal** (Post Doc, MISU): Large-scale modeling of short-lived climate forcers. (Advisors: Annica Ekman, HC Hansson)
- **Matt Salter** (Post Doc, ITM), **Juan Acosta**: Sea spray emissions in a changing climate. (Advisors: Douglas Nilsson, Ilona Riipinen)
- **Frida Bender** (Assistant Professor, MISU): Correlation between aerosol radiative forcing and temperature response. **PhD student: Lena Frey (just started).**

Current projects at SU involving NorESM:

- **Francesco Pausata** (Post Doc, MISU): Influence of Laki volcanic eruption on North Atlantic Oscillation and climate.
- **Jenny Lindvall** (Post Doc, MISU): Effects on climate from nuclear war (Advisor: Gunilla Svensson).
- **Narges Rastak** (PhD student, ITM): Consistent hygroscopicity treatment in NorESM (Advisor: Ilona Riipinen, Annica Ekman).

NorESM related activities:

- **Marc Chiacchio (post-doc, MISU)**. Potential effects of aerosols on tropical cyclones.
- **Gabriele Messori (post-doc, MISU)**.
- **Quentin Bourgeois (post-doc, MISU)**. Transport of aerosols along and over the Andes.
- **Linda Megner (assistant professor) and Koen Hendrickx (PhD student)**. Upper atmosphere modelling (WACCAM)



Future plans:

- Continue with NorESM "user meeting" at SU.
- NorESM2?
- eSTICC
 - Integrate data and computational tools from CRAICC, SVALI and DEFROST
 - Facilitate the information flow between experimentalists and modelers
 - Improve handling and processing of large measurement and model data sets
 - Enhance inverse modelling tools
- NordESM (Gunilla Svensson, deputy leader)

Questions/discussion points

- NorESM wiki: usage, access etc.
- NorESM2 in Stockholm
 - Wait for first version from Alf G. (~beginning of 2015)
 - Exchange Stockholm <-> Oslo to implement parameterizations (and test and evaluate....)
 - Start using NorESM2
 - AMIP (fixed SST) in late 2015?
 - Fully coupled (fall 2016)
- Parameterization development (NorESM1/NorESM2?)
 - Sea spray
 - DMS
 - Aerosol hygroscopicity