

Summary of Wolfgang Cramer's Aperitif Talk:
Dieback of Amazonians forests – a scientist's dilemma
Thursday, 10 September

- What would happen if deforestation had not taken place or we could stop it now?
- Why this different matter? HadCM3
- What would be the time scenario to the end of the 21. Century?
- Q: What happens to the CO₂ effect in the other models? – Situation is 3-4 C° degrees of temperature increases; it is driven by the most positive CO₂ effect, this range of the conditions.
- Q: CO₂ for Africa? – Nothing can be ruled out; looking only on sites how are forest in the 1960 and now.
- Q: Deforestation towards collapse of the forest? –Basic models tipping point show 40% less of the former forest.
- Q: A lot of climate models start with some basic physics. How is it that we end up with such complex models? – different bits to generate similar models; tuning going on, on “Hamburg Models”; some details do not work anymore; we should have more simple models → to experiment more
- Ocean models – rain falls pattern – sea temperature – atmospheric systems → very difficult to predict/ simulate, e.g. Mega El Niños
- Only valuate 1000 years in a model run and that lasts 4-5 months on a computer; for validity you would need a second earth.
- Q: Are trashing and tipping points integrated in the models? – Integrated in intermediate complexity models; some knowledge, but a lot offline situations; these are big complicated models.
- Q: Is El Niño included in the models? –Yes, but it dose not seem to change the picture very much.
- Q: The 40% tipping point is it only for Amazonia? – Only for Amazonia!
- Q: When you show the CO₂ in the air it is much lower that it is today? – We have never tried an 8000 year model with that, but it is not very linear, so it is very difficult to do.
- Q: Can you say something to the 60% (rainforest cover)? – We do a clarification.
- We want to give an honest situation → policy should not ignore the stakeholder!

Protocol by Ulrike Anders