Serendipity

Or, What has Software Engineering got to do with Climate Change?

- Home
- About Steve
- Sitemap (blog contents)

Type text to search here...   ◯

Home > AGU fall meeting 2009, Uncategorized > AGU Day 1 part B: The growing need for climate services

AGU Day 1 part B: The growing need for climate services

December 15th, 2009 steve Leave a comment Go to comments

Well, my intention to liveblog from interesting sessions is blown – the network connection in the meeting rooms is hopeless. One day, some conference will figure out how to provide reliable internet…

Yesterday I attended an interesting session in the afternoon on climate services. Much of the discussion was building on work done at the third World Climate Conference (WCC-3) in August, which set out to develop a framework for provision of climate services. These would play a role akin to local, regional and global weather forecasting services, but focussing on risk management and adaptation planning for the impacts of climate change. Most important is the emphasis on combining observation and monitoring services with research and modeling services (both of which already exist) with a new climate services information system (I assume this would be distributed across multiple agencies across the world) and system of user interfaces to deliver the information in forms needed for different audiences. Rasmus at RealClimate discusses some of the scientific challenges.

My concern in reading the outcomes of the WCC this is that it's all focussed on a one-way flow of information, with insufficient attention to understanding who the different users would be, and what they really need. I needn't have worried – the AGU session demonstrated that there's plenty of people focussing on exactly this issue. I got the impression that there's a massive international effort quietly putting in place the risk management and planning tools needed for a us to deal with the impacts of a rapidly changing climate, but which is completely ignored by a media still obsessed with the "is it happening?" pseudo-debate. The extent of this planning for expected impacts would make a much more compelling media story, and one that matters, on a local, scale to everyone.

Some highlights from the session:

Mark Svboda from the National Drought Mitigation Centre at the University of Nebraska, talking about drought planning the in US. He pointed out that drought tends to get ignored compared to other kinds of natural disasters (tornados, floods, hurricanes), presumably because it doesn't happen within

a daily news cycle. However drought dwarfs the damage costs in the US from all other kinds of natural disasters except hurricanes. One problem is that population growth has been highest in regions most subject ot drought, especially in the southwest US. The NDMC monitoring program includes the only repository of drought impacts. Their US drought monitor has been very successful, but next generation of tools need better sources of data on droughts, so they are working on adding a drought reporter, doing science outreach, working with kids, etc. Even more important, is improving the drought planning process, hence a series of workshops on drought management tools.

Tony Busalacchi from the Earth System Science Interdisciplinary Centre at the University of Maryland. Through a series of workshops in the CIRUN project, they've identified the need for tools for forecasting, especially around risks such as sea level rise. Especially the need for *actionable* information, but no service currently provides this. Climate information system needed for policymakers, on scales of seasons to decades, providing tailorable to regions, and with ability to explore "what-if" questions. To build this, needs coupling of models not used together before, and the synthesis of new datasets.

Robert Webb from NOAA, in Boulder, on experimental climate information services to support risk management. The key to risk assessment is to understand it's across multiple timescales. Users of such services do not distinguish between weather and climate – they need to know about extreme weather events, and they need to know how such risks change over time. Climate change matters because of the impacts. Presenting the basic science and predictions of temperature change are irrelevant to most people – its the impacts that matter (His key quote: "It's the impacts, stupid!"). Examples: water – droughts and floods, changes in snowpack, river stream flow, fire outlooks, and planning issues (urban, agriculture, health). He's been working with the Climate Change and Western Water Group (CCAWWG) to develop a strategy on water management. How to get people to plan and adapt? The key is to get people to think in terms of scenarios rather than deterministic forecasts.

Guy Brasseur from German Climate Services Center, in Hamburg. German adaption strategy developed by german federal government, which appears to be way ahead of the US agencies in developing climate services. Guy emphasized the need for seamless prediction – need a uniform ensemble system to build from climate monitoring of recent past and present, and forward into the future, at different regional scales and timescales. Guy called for an Apollo-sized program to develop the infrastructure for this.

Kristen Averyt from the University of Colorado, talking about her "Climate services machine" (I need to get hold of the image for this – it was very nice). She's been running workshops for Colorado-specific services, with beakout sessions focussed on impacts and utility of climate information. She presented some evaluations of the success of these workshop, including a climate literacy test they have developed. For example at one workshop, the attendees had 63% correct answers at the beginning (where the wrong answers tended to cluster and indicate some important misperceptions. I need to get hold of this – it sounds like an interesting test. Kristen's main point was that these workshops play an important role in reaching out to people of all ages, including kids, and getting them to understand how climate change will affect them.

Overall, the main message of this session was that while there have been lots of advances in our understanding of climate, these are still not being used for planning and decision-making.

ShareThis

Tags:
Comments (0) Trackbacks (0) Leave a comment Trackback

1. No comments yet.

1. No trackbacks yet.

	Name (required)
	E-Mail (will not be published) (required)
	Website

Subscribe to comments feed

Submit Comment

Preview

Click the "Preview" button to preview your comment here.
AGU Day 1: Challenges in Engineering Earth System Models
RSS feed

Recent Posts

- AGU Day 1 part B: The growing need for climate services
- AGU Day 1: Challenges in Engineering Earth System Models
- AGU Day 0: Restarting the Climate Conversation
- Do "Many eyeballs make all bugs shallow"?
- Software Quality in Climate Research
- My own hockey stick
- Crisis Mapping
- Climate change is mankind's defining crisis (Mobiot/Lomborg debate)
- Open Climate Science or Denial of Service attacks?
- Where the Denialists Are
- Adaptation just as important as Mitigation
- Will Peak Oil Save us from Climate Change?
- Engineering the Software for Understanding Climate Change
- One Trillion Tonnes of Carbon
- Embodied Social Proxies

Categories

- advocacy
- blogging
- books
- climate modeling
- climate science
- collaborative science
- conferences
- data modeling
- greentech
- humour
- philosophy
- politics
- psychology
- reducing emissions
- research ideas
- research methods
- sociology
- software tools
- sustainability
- systems thinking
- Uncategorized

Archives

- December 2009
- November 2009
- October 2009
- September 2009
- August 2009
- July 2009
- June 2009
- May 2009
- April 2009
- March 2009

December 2009

M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

« Nov

M T W T F S S

Blogroll

- A Few Things Ill-Considered
- Alternative Energy Action Network
- ClimateProgress
- Deltoid
- DeSmogBlog
- Global Warming Art
- Greenfyre's
- Gristmill
- http://www.ecoequity.org/
- James Empty Blog
- Left as an Exercise
- Mind of Dan
- Monbiot.com
- More Grumbine Science
- Only in it for the Gold
- People and Place
- RealClimate
- The Cost of Energy
- The Intersection
- The Way Things Break
- Yale Climate Forum

Colleagues

- Ainsley Lawson
- Brent Mombourquette
- Carolyn's weblog
- Catenary (Jorge Aranda)
- Human Side of SE (Janice Singer)
- Maria Yancheva
- Normally On (Alicia Grubb)
- Samar (Summer) Sabie
- Sarah Strong
- Skoolr (Jon Pipitone)
- The Third Bit (Greg Wilson)

Meta

- Register
- Log in

- Entries RSS
- Comments RSS
- WordPress.org

Top WordPress
Copyright © 2009 Serendipity
Theme by NeoEase. Valid XHTML 1.1 and CSS 3.

☺