#scienceatrisk

**Science at risk workshop**

Day one of the NDIIPP Science at Risk workshop at Library of Congress

**Trending Words**

science, rt, @docfreeride:, &, open, data, -, citizen, scientific, scientists, smith:, notebook, online, @boraz, archiving

**Event Participants**
RT @BoraZ: #ScienceAtRisk @arfon Smith: 3 rules: collaborators, not users; contribute to real research; don't waste people's time

26-Jun-12 23:29 | tjowens

Such a great day talking with folks at #ScienceAtRisk sorry to have to dart out to catch the last train home! Looking forward to tomorrow.

26-Jun-12 23:08 | tjowens

RT @ndiipp: RT @pmhswe Rhiannon Cain of Cornell Lab of Ornithology on Yardmap (in beta), http://t.co/apo5mOCB #ScienceAtRisk

26-Jun-12 21:42 | briaz861

We provide PhD peer review services, support tools & resources. It's open, supportive community building that's challenging #ScienceAtRisk

26-Jun-12 21:36 | Journal_Prepp

RT @docfreeride: PLoS plans to experiment w/ open peer review (& maybe even publishing of best reviews) #ScienceAtRisk

26-Jun-12 21:24 | jbowdie

RT @docfreeride: Dissemination. PLoS trying to do better, working with FigShare and Dryad #ScienceAtRisk

26-Jun-12 21:19 | balapagos

RT @pmhswe Rhiannon Cain of Cornell Lab of Ornithology on Yardmap (in beta), http://t.co/apo5mOCB #ScienceAtRisk

26-Jun-12 21:19 | ndiipp

RT @BoraZ #ScienceAtRisk Old Weather reminds me of historical records from fishing ships http://t.co/UGC6AdhL

26-Jun-12 21:19 | ndiipp

RT @tjowens Link to LC's web archives that @nullhandle just described http://t.co/UZ0K5Eru #ScienceAtRisk

26-Jun-12 21:18 | ndiipp

RT @MarthaBunton #scienceatrisk Len Bruno displaying early manuscripts of inventors and scientists http://t.co/26RVteaQ

26-Jun-12 21:18 | ndiipp

RT @tjowens Now @MarthaBunton talking about the Science as an open enterprise report http://t.co/ofH85L4X #ScienceAtRisk

26-Jun-12 21:17 | ndiipp

? RT @docfreeride: Might recap highlights of bar-fight after the fact. Expect Rashomon-like accuracy. #ScienceAtRisk

26-Jun-12 21:04 | Chemjobber

And the debates will continue at Bullfeathers! #ScienceAtRisk

26-Jun-12 21:01 | pmhswe

Might recap highlights of bar-fight after the fact. Expect Rashomon-like accuracy. #ScienceAtRisk

26-Jun-12 21:01 | docfreeride

Relying on scientists' selfish *or* selfless motives apt to be insufficient for our preservation needs. #ScienceAtRisk

26-Jun-12 21:00 | docfreeride
Efforts to identify early-career people who are going to be important in field, interview them early & archive it. #ScienceAtRisk

RT @netpreserve: Follow #scienceatrisk for tweets from @ndiipp meeting "Science at Risk: Towards a National Strategy for Preserving Online Science"

Documenting the "afterwards" of scientific results (esp. understanding how society responds, copes) - how to do it? #ScienceAtRisk

Pritsker: what would be usage of archived materials? If we answer this question, then we could have start of business model. #ScienceAtRisk

@jakkbl: future preservation interventions may be prohibitively expensive; best to address challenges when content is created #scienceatrisk

(Future researchers, though, might have different preservation priorities. Get the time machine!) #ScienceAtRisk

What to select, preserve? Uni libraries have focused audience who can nominate targets. #ScienceAtRisk

Kunze: at content production need to be mindful of archiving, partner w/ content vendors to create in survivable formats. #ScienceAtRisk

Content producers shld create with eye to what will be archive-able. Archivists can't count oh having $ to migrate, reformat #ScienceAtRisk

Challenges archiving websites: diff file formats, interactive bits. Some shared stds wld make it easier to capture content #ScienceAtRisk

Smith Rumsey on phased approach to long-term preservation, i.e., what can we do in short-term, locally, first & build on? #ScienceAtRisk

MT @netpreserve: Follow #scienceatrisk for @ndiipp meeting "Science at Risk: Towards a National Strategy for Preserving Online Science"

Preserving the discussion vs. preserving "the answer". (But having same convo after answer is known can be a problem) #ScienceAtRisk

@momentofscience Of course! We try to dedicate every moment to #science! :-) #ScienceAtRisk

Follow #scienceatrisk for tweets from @ndiipp meeting "Science at Risk: Towards a National Strategy for Preserving Online Science"
@experrinment I am! Super honored to be included among the prestigious group here at #scienceatrisk 26-Jun-12 20:30 | Thescienceofant

@KristenRatan: how do we better integrate social graph in commentary on published science? #altmetrics #scienceatrisk 26-Jun-12 20:29 | nullhandle

Are authority and authenticity in tension in these different modes of scientific communication, engagement? #ScienceAtRisk 26-Jun-12 20:29 | docfreeride

@MPritsker thinks alternate types of scientific communication need to be counted diff so we don’t destroy currency of science #ScienceAtRisk 26-Jun-12 20:28 | docfreeride

RT @momentofscience: Anyone else following the #ScienceAtRisk Tweets? They're quite interesting! (We <3 #Science!) 26-Jun-12 20:28 | portscafesci

(Muchas gracias to the #ScienceAtRisk tweeps, next best thing to actually being there.) 26-Jun-12 20:27 | sennoma

People still hesitant to make open comments on other researchers’ papers. (Conservative compared to what they'll say at bar) #ScienceAtRisk 26-Jun-12 20:27 | docfreeride

The public? RT @docfreeride: For whom are the #altmetrics most useful? (People doing science vs. people studying scientists) #ScienceAtRisk 26-Jun-12 20:26 | mrgunn

RT @momentofscience: Anyone else following the #ScienceAtRisk Tweets? They're quite interesting! (We <3 #Science!) 26-Jun-12 20:26 | ChristianFaty


Anyone else following the #ScienceAtRisk Tweets? They're quite interesting! (We <3 #Science!) 26-Jun-12 20:25 | momentofscience

For whom are the alt-metrics most useful? (People doing science vs. people studying scientists) #ScienceAtRisk 26-Jun-12 20:25 | docfreeride

@KristenRatan: scientific reputation metrics increasingly taking non-traditional fora (e.g., blogs, video) into account #scienceatrisk 26-Jun-12 20:23 | nullhandle

(Hope that video formats don't become obsolete in that time.) #ScienceAtRisk 26-Jun-12 20:22 | docfreeride

JoVE archives all its articles in PubMed Central, will be freely accessible in 2 years. #ScienceAtRisk 26-Jun-12 20:22 | docfreeride
RT @docfreeride: Dissemination. PLoS trying to do better, working with FigShare and Dryad #ScienceAtRisk

Producing effective videos yourself is hard; OA alternatives to JoVE haven't taken off (... but aren't useless) #ScienceAtRisk

@mpritsker: will scientists be any better able to anticipate what to include in videos as opposed to describe in article? #scienceatrisk

JoVE won't work on pay-per-article model, says @MPritsker Problem that institutional budgets might preclude subscription #ScienceAtRisk

Pritsker: huge amt of historical data re: how experiments are done 2day; in future, will be done differently. Need 2 preserve #ScienceAtRisk

How experiments are done will change over time. Document ALL experiments (all versions) & archive them? #ScienceAtRisk

I wish there was information about #ScienceAtRisk outside of Twitter. It sounds like something I'd want to follow in more detail.

Win nat'l strategy for preserving science, where does JoVE fit? Has huge amt of real historical data on how expts done now #ScienceAtRisk

Pritsker: Article starts as text submission. JoVE films video in scientist's lab. Has network of videographers around globe. #ScienceAtRisk

(But since the raw footage is edited, still making call about what details are important/unimportant.) #ScienceAtRisk

How it works: You do the expts, JoVE films in your lab, edited to the 10 min of comprehensive demonstration. #ScienceAtRisk

NIH is top traffic-source for JoVE. Total traffic > 250k unique visitors/month. #ScienceAtRisk

Might be interesting but not sure HOW RT @docfreeride: Still, initial resistance to publishing in JoVE. We fear change. #ScienceAtRisk

Subscriptions (from universities, biotech companies, research institutes) #ScienceAtRisk

Also publication costs http://t.co/AVmWdG0n RT @docfreeride: Still, initial resistance to publishing in JoVE. We fear change. #ScienceAtRisk
(Videos of transfer of solutions via micropipette don't add that much info, in my estimation.) #ScienceAtRisk

RT @surlyF: UVA fixed now. Turning attention back to scienceatrisk

RT @surlyF: UVA fixed now. Turning attention back to scienceatrisk

UVA fixed now. Turning attention back to scienceatrisk

RT @docfreeride: Scientists need to feel like there's a benefit to them for engaging. (And not a risk ...) #ScienceAtRisk

Food security and climate change, Seeddaily, http://t.co/Jcr1YEZf water #ScienceAtRisk

Videos include scientists introducing method, an animation via diagram, then video of actual procedure (watching expt done) #ScienceAtRisk


@jeannegarb We're all over it! @docfreeride: show it in video (but traditional text still part of the story) #ScienceAtRisk

@jeannegarb We're all over it! @docfreeride: show it in video (but traditional text still part of the story) #ScienceAtRisk

JoVE says: show it in video + text rather than text alone (but traditional text still part of the story) #ScienceAtRisk

RT @nullhandle: @arfon: machines will find what you ask them to look for; people will find that and more galaxyzoo scienceatrisk

RT @docfreeride: Video can be less ambiguous than even the most careful text description of a procedure. #ScienceAtRisk

RT @nullhandle: @arfon: galaxyzoo contributors primarily motivated by perception of value in contributing to research scienceatrisk

Video can be less ambiguous than even the most careful text description of a procedure. #ScienceAtRisk
| @MPritsker: overlooked indicator of preserved science: ability for other scientists to reproduce results | #scienceatrisk | 26-Jun-12 19:50 | nullhandle |
| Moshe Pritzker (Jrnl of Visualized Experiments) shows 1943 article describing experiment & questions whether reproducible. #ScienceAtRisk | 26-Jun-12 19:50 | pmhswe |
| Changes in technology, terminology, "common knowledge" results in loss of knowledge. Text suboptimal at preserving knowledge #ScienceAtRisk | 26-Jun-12 19:48 | docfreeride |
| RT @docfreeride: Also negative results as part of the story of science that traditionally was left out. #ScienceAtRisk | 26-Jun-12 19:46 | PeppeGanga |
| Describing how to do the experiment versus showing how to do the experiment; small but crucial details not clear in text. #ScienceAtRisk | 26-Jun-12 19:46 | docfreeride |
| RT @nullhandle: @arfon: machines will find what you ask them to look for; people will find that and more #galaxyzoo #scienceatrisk | 26-Jun-12 19:45 | KarenLMasters |
| RT @nullhandle: @arfon: #galaxyzoo contributors primarily motivated by perception of value in contributing to research #scienceatrisk | 26-Jun-12 19:45 | KarenLMasters |
| JoVE as example of video-based science journal. #ScienceAtRisk | 26-Jun-12 19:44 | docfreeride |
| RT @docfreeride: Tell the scientific story in new ways. (Problems with old ways?) Add multimedia, background, follow-up #ScienceAtRisk | 26-Jun-12 19:44 | nailest |
| Improving usefulness requires getting a sense of what ppl want to do/what extra info they need to do it. #ScienceAtRisk | 26-Jun-12 19:43 | docfreeride |
| Copy & paste that includes the URL of the source. (The New Yorker has this feature.) #ScienceAtRisk | 26-Jun-12 19:42 | docfreeride |
| Tracking which figure in article ppl downloaded most - journals didn't use this capability. WTH not? #ScienceAtRisk | 26-Jun-12 19:41 | docfreeride |
| RT @docfreeride: Scientists need to feel like there's a benefit to them for engaging. (And not a risk ...) #ScienceAtRisk | 26-Jun-12 19:39 | MU_Peter |
| Tracking attention easier than tracking intention. (I assume you'd need reliable sentiment-mining for the latter) #ScienceAtRisk | 26-Jun-12 19:39 | docfreeride |
| @KristenRatan: those reading articles often interested in atomic component part that may've been truncated in final pub #scienceatrisk | 26-Jun-12 19:39 | nullhandle |
Mining, http://t.co/BZ789kYt, re-use tools as something PLoS and other journals may investigate going forward. #ScienceAtRisk

RT @docfreeride: Also negative results as part of the story of science that traditionally was left out. #ScienceAtRisk

#ScienceAtRisk

RT @docfreeride: Shoutout to "Story behind the paper" from @phylogenomics on "Tree of Life" blog. #ScienceAtRisk

PLoS adding lots of metadata to figures/images to make them more portable, reusable. #ScienceAtRisk

Since consumers don't want everything from every article, looking for ways to deconstruct the container, atomize the info #ScienceAtRisk

RT @docfreeride: Coming up at #ScienceAtRisk @boraz on science blogging and @TheScienceofFant on open notebook science.

Dissemination. PLoS trying to do better, working with FigShare and Dryad #ScienceAtRisk

Shoutout to "Story behind the paper" from @phylogenomics on "Tree of Life" blog. #ScienceAtRisk

RT @BoraZ: #ScienceAtRisk Old Weather reminds me of historical records from fishing ships http://t.co/oGjwx0uv

RT @docfreeride: Tell the scientific story in new ways. (Problems with old ways?) Add multimedia, background, follow-up #ScienceAtRisk

@KristenRatan: article is constrained container that we've become too accustomed to; opportunity for publishing innovation #scienceatrisk

Also negative results as part of the story of science that traditionally was left out. #ScienceAtRisk

Tell the scientific story in new ways. (Problems with old ways?) Add multimedia, background, follow-up #ScienceAtRisk

Infrastructure to move papers through more quickly, connect to right editors & reviewers faster, etc. Capturing author data #ScienceAtRisk
Since @MPritsker is only publisher in the room, @KristenRatan plans to speak freely abt. publishing #ScienceAtRisk

Next up: @KristenRatan talks about PLoS and @MPritsker talks about JoVE, both "new models of sci pub" #ScienceAtRisk

The user interface changes how ppl enter data. (& data entry embeds ontological commitments) #ScienceAtRisk

Changes in user experience in citizen science projects can also have huge impact on data entry already done. #ScienceAtRisk

@docfreeride "Science" being decentralized again (away fr academic domain) may require new methods of review, archives #ScienceAtRisk

You can have versioned history of what's been done in citizen sci project but reproducing as it was months ago--LOT of work. #ScienceAtRisk

@docfreeride Citizen Science used to just BE science - societies, etc, published papers. These days, need lots of degrees 1st #ScienceAtRisk

Japanese govt. urged to use citizen science to track post-Fukushima radiation levels. Responded "What's citizen science?" #ScienceAtRisk

Infrastructure for preserving diff kinds of data driven in part by funding, what funders recognize as worth saving. #ScienceAtRisk

RT @docfreeride: NatGeo support for http://t.co/tbleQXH shaky. http://t.co/53HgWU2B is functionally the replacement #ScienceAtRisk

Can't plan fully for the stuff you don't know is going to happen. #ScienceAtRisk

RT @docfreeride: Blogging software just as useful in promoting denialism as in promoting science #ScienceAtRisk

Real concern in citizen science projects for current inability to preserve discussions happening in community forums. #ScienceAtRisk

RT @docfreeride: (I'd note lots of academics blog w/no intention of being full-time "science writers") #ScienceAtRisk

+1 RT @docfreeride: Do you have a duty to submit to #OA journals so citizen participants can access work they contributed to? #ScienceAtRisk
RT @docfreeride: (I'd note lots of academics blog w/no intention of being full-time "science writers") #ScienceAtRisk

26-Jun-12 18:55 | drugmonkeyblog

It overjoys me that we got #realwomenofscience trending last week, and now it's #scienceatrisk. It's a science twitter take over, I approve!

26-Jun-12 18:54 | LizTapanes

Need to tailor activities to what people CAN do, and what they're willing to do #ScienceAtRisk

26-Jun-12 18:53 | docfreeride

@boraz asks how to control for subjective bias in large-scale citizen science #scienceatrisk

26-Jun-12 18:53 | nullhandle

Different particular classifications tasks (can be good at one, bad at another) #ScienceAtRisk

26-Jun-12 18:53 | docfreeride

Galaxy Zoo spent much time, effort demonstrating that crowdsourced classifiers were reliable. #ScienceAtRisk

26-Jun-12 18:52 | docfreeride

Weeding out biased reports/reporters is important. Comparison w/ experts' predictions #ScienceAtRisk

26-Jun-12 18:51 | docfreeride

Dangers of systematic subjective bias in citizen science? (Does it cancel out or lean in same direction?) #ScienceAtRisk

26-Jun-12 18:51 | docfreeride

Even Cornell Lab of Ornithology leaks data, despite thinking hard about archiving (e.g., Flikr pics of birs w/metadata) #ScienceAtRisk

26-Jun-12 18:49 | docfreeride

Videostream from cameras near nests plus moderated livechats. A detailed annotation that disappeared. #ScienceAtRisk

26-Jun-12 18:48 | docfreeride

Desire to share data driving researchers, birders to report in same format. #ScienceAtRisk

26-Jun-12 18:48 | docfreeride

Knowledge collected at Avian Knowledge Network (including data on reliability of each birder) #ScienceAtRisk

26-Jun-12 18:47 | docfreeride

http://t.co/3vdAEnCe draws on data birders were already collecting. A competitive bunch. #ScienceAtRisk

26-Jun-12 18:47 | docfreeride

crain: citizen science conversations that take place on social media platforms quickly disappear from view #scienceatrisk

26-Jun-12 18:47 | nullhandle

Entangled: data collection, environmental awareness, scientific understanding. #ScienceAtRisk

26-Jun-12 18:47 | docfreeride
Cain: citizen sci communities are cropping up, such as on FB & conduct serious, resolution-reaching forums. How to preserve? #ScienceAtRisk

26-Jun-12 18:45 | pmhswe

Clebrate Urban Birding as less competitive than most birding; entry-point project #ScienceAtRisk

26-Jun-12 18:45 | docfreeride

Cornell Lab of Ornithology Project Feeder Watch tracks data on invasive species #ScienceAtRisk

26-Jun-12 18:45 | docfreeride

Not all citizen science is online citizen science #ScienceAtRisk

26-Jun-12 18:45 | docfreeride

We know what to do with the data that gets generated, but not with distillations of other info #ScienceAtRisk

26-Jun-12 18:44 | docfreeride

Also blog content #ScienceAtRisk

26-Jun-12 18:44 | docfreeride

http://t.co/EQeYq90n has tutorial about how to use Excel to analyze data #ScienceAtRisk

26-Jun-12 18:44 | docfreeride

Archiving those forum discussions may be a challenge #ScienceAtRisk

26-Jun-12 18:44 | docfreeride

Discussions w/in community of classifiers (recognizing that you've found something) #ScienceAtRisk

26-Jun-12 18:44 | docfreeride

RT @BoraZ: #ScienceAtRisk Rhiannon Crain: http://t.co/VVz9fyA5 - you really get to know your yard!

26-Jun-12 18:43 | Mary_Thill

Publications which convey results (methods to produce them often lost) #ScienceAtRisk

26-Jun-12 18:43 | docfreeride

Products of Citizen Science? Lots of user-generated classificatory data (only of use w/data being classified) #ScienceAtRisk

26-Jun-12 18:42 | docfreeride

crain: crowd-produced data is great for publishing papers, but even better when it's connected to people's lives #scienceatrisk

26-Jun-12 18:42 | nullhandle

Also of educational value. #ScienceAtRisk

26-Jun-12 18:42 | docfreeride

RT @BoraZ: #ScienceAtRisk Old Weather reminds me of historical records from fishing ships http://t.co/oGjwx0uv

26-Jun-12 18:42 | toniife
Cain: Yardmap, http://t.co/8IUXp2RG, is about collecting data about bird habitats, using micromaps. #ScienceAtRisk cc @maplibrarian

#ScienceAtRisk Rhiannon Crain: http://t.co/VVz9fyA5 - you really get to know your yard!

#ScienceAtRisk Rhiannon Crain: Nest Watch - monitoring eggs, hatching, fledging of birds....

Valuable because of scale of data in need of human classifiers #ScienceAtRisk

#ScienceAtRisk Rhiannon Crain - birdfeeder count tracked superfast spread of invasive pigeon species, escaped from petzoo in Bahamas

RT @docfreeride: Ethics of crowdsourced sci: 2. Contribute to real research. #ScienceAtRisk

RT @docfreeride: Ethics of crowdsourced sci: 1. Collaborators, not users, #ScienceAtRisk

RT @pmhswe: Rhiannon Crain of Cornell Lab of Ornithology on Yardmap (in beta), http://t.co/pnx7AwmI #ScienceAtRisk

Ethics of crowdsourced sci: 3. Don't waste people's time. #ScienceAtRisk

Ethics of crowdsourced sci: 2. Contribute to real research. #ScienceAtRisk

Ethics of crowdsourced sci: 1. Collaborators, not users, #ScienceAtRisk

Zooniverse collects citizen science projects of various sorts (a universe of "zoos") #ScienceAtRisk

Why do people contribute to citizen science? Big A: see value in contributing to research. #ScienceAtRisk

Other data from ship records besides weather (e.g., sickbay spikes w/1918 flu epidemic) #ScienceAtRisk

Data exist, just not in machine-readable form. Crowdsourcing transcription can help. #ScienceAtRisk
http://t.co/V92H4FUG as way to crowdsourcing analysis of images. 175,000 volunteers, going on 40 pubs
#ScienceAtRisk

RT @BoraZ: #ScienceAtRisk @arfon Smith: 3 rules: collaborators, not users; contribute to real research; don't waste people's time

Classification of galaxies by shape something astronomers like to do. Computers not good at it. #ScienceAtRisk

Amount of data >> grad student eyeballs, hours. Training the public helps science. #ScienceAtRisk

Zooniverse set up to tackle a research problem that needs solving - need a trained human brain but not nec a grad stud #ScienceAtRisk

Arfon Smith zooniverse, soc'l contract when crowds'rcing: community = collab not usrs, contrib 2 real research, no waste time #scienceatrisk

Fold It At Home "players" have become best protein-folders in the world. #ScienceAtRisk

SETI at home is not citizen science (volunteer computing) but is PPSR #ScienceAtRisk

RT @docfreeride: NatGeo support for http://t.co/tbleqQXH shaky. http://t.co/53HgWU2B is functionally the replacement #ScienceAtRisk

#ScienceAtRisk Old Weather reminds me of historical records from fishing ships http://t.co/oGjwx0uv

Now @arfon talks about Zoonivers and public participation in scientific research (PPSR) -- aka citizen science #ScienceAtRisk

Bloggers who are artists/photographers may be pickier about how you can use the images they post. #ScienceAtRisk

"Give peas a chance." #groan / RT @BoraZ: #ScienceAtRisk @arfon Smith: discovery of the Green Pea galaxies - new knowledge.

"Give peas a chance." #groan / RT @BoraZ: #ScienceAtRisk @arfon Smith: discovery of the Green Pea galaxies - new knowledge.

#ScienceAtRisk @arfon Smith: http://t.co/e5y18Uym looks for exoplanets
#ScienceAtRisk @arfon Smith: ethics of crowdsourcing - social contract: 3 rules:

@arfon: #galaxyzoo contributors primarily motivated by perception of value in contributing to research #scienceatrisk

#ScienceAtRisk @arfon Smith: 650,000 people total volunteered to different Zooniverse projects.

#ScienceAtRisk Check out http://t.co/QXj0dsmi’s featured search on climate change http://t.co/R19ZS9gi

#ScienceAtRisk @arfon Smith: lots of great weather information from colonial times, rotting in cellars of Nairobi, should be digitized, used.

RT @BoraZ: #ScienceAtRisk Arfon Smith: Old Weather project - weather records from the past, citizen science project

#ScienceAtRisk @arfon Smith: hurricane in England? Yes, once. See the model of the weather put together.

#ScienceAtRisk Arfon Smith: Navy obsessed with recording weather all the time: pooling all the historical information, digitizing organizing

#ScienceAtRisk @Thescienceofant points out big differences in organization between wiki and blog Open Notebooks. #iswt12 #iste12 #edchat

@arfon: recent progress in imaging tech has vastly increased # of astral bodies needing manual classification #galaxyzoo #scienceatrisk

RT @pmhswe: Now up: Arfon Smith on citizen science projects in Zooniverse, http://t.co/YQMCWQVR #ScienceAtRisk

#ScienceAtRisk Arfon Smith: Old Weather project - weather records from the past, citizen science project

RT @cboettig: Loving the discussion of open notebook science from @Thescienceofant's presentation at #ScienceAtRisk right now!

Thanks everyone at #scienceatrisk for all the amazing questions!

#ScienceAtRisk Arfon Smith: Galaxy Zoo - millions of images, far too many, but required human eyes and brains, thus crowdsourcing.
Next at #ScienceAtRisk - Zooniverse and citizen science

RT @BoraZ Oh no, @docfreeride hit the Twitter daily limit - #ScienceAtRisk // Quick -- let's talk trash about her while she can't reply! >:)

@docfreeride Traceable changing protocol to protect content....Transparency of notebooks as insurance against dishonesty, #ScienceAtRisk

Oh no, @docfreeride hit the Twitter daily limit - #ScienceAtRisk

RT @docfreeride: Quoth @boraz: "Tenure track *is* an alternative science career path now." #ScienceAtRisk

@thescienceofant: open notebook has made me a better scientist; transparency disincentivizes questionable shortcuts #scienceatrisk

Since aggregates only aggregate links (& from people who ask to be aggregated), copyright issues haven't been a problem. Yet. #ScienceAtRisk

RT @docfreeride: Science blogosphere big enough that lots of parts are not in good contact with each other. #ScienceAtRisk

RT @MPritsker: Anthony Salvagno @Thescienceofant PhD student showed good application of Open Notebooks in his research #ScienceAtRisk http://t.co/FrnajtjV

Loving the discussion of open notebook science from @thescienceofant’s presentation at #ScienceAtRisk right now!

Transparency of notebooks as insurance against dishonesty, shortcuts (since others could be watching) #ScienceAtRisk

RT @pmhswe: Q: What do you consider your final product? Salvagno (@thescienceofant): My notebook is my final product. #ScienceAtRisk

Should we be worried about vulnerability/breakability of online open notebooks? If it breaks, how to defend self? Backups #ScienceAtRisk

Anthony Salvagno @Thescienceofant PhD student showed good application of Open Notebooks in his research #ScienceAtRisk http://t.co/FrnajtjV

#ScienceAtRisk Jyanpani kataramai paryo ta :P
Many PIs are not feeling ONS at all. Trainees, attend to what makes your PI comfortable! #ScienceAtRisk

26-Jun-12 17:49 | docfreeride

RT @Thescienceoffant: In case you want to know, here is my presentation that I'll be giving at #scienceatrisk meeting http://t.co/Mmhc0bKE

26-Jun-12 17:48 | figshare

But @Thescienceoffant says once you're going, keeping the open notebook isn't TOO time consuming #ScienceAtRisk

26-Jun-12 17:48 | docfreeride

RT @docfreeride: Posting photos as well as plotted data; using FigShare repository to share data with others. #ScienceAtRisk

26-Jun-12 17:48 | figshare

(Some types of science may just be inappropriate for ONS. Privacy issues, patentable info, time required) #ScienceAtRisk

26-Jun-12 17:47 | docfreeride

@thescienceoffant's open notebook isn't a website so much as a constellation of websites #scienceatrisk

26-Jun-12 17:46 | nullhandle

Q: Any way to "close" pages on "open" notebooks (e.g., to protect human subjects)? A: Private posts still hackable ... #ScienceAtRisk

26-Jun-12 17:46 | docfreeride

RT @docfreeride: Quoth @boraz: "Tenure track "is" an alternative science career path now." #ScienceAtRisk

26-Jun-12 17:46 | nullhandle

What does it take to get lurkers to engage (visibly) with open notebooks? #ScienceAtRisk

26-Jun-12 17:44 | docfreeride

Salvagno mentions @olendorf - librarian at U. New Mexico - who uses GitHub as open notebook: http://t.co/XvN2MOoR #ScienceAtRisk

26-Jun-12 17:44 | nullhandle

Made students keep open notebooks (in different platforms) and interact w/ each other. Interesting pilot study #ScienceAtRisk

26-Jun-12 17:44 | nullhandle

Stuff in Google docs presents its own archiving challenges ... #ScienceAtRisk

26-Jun-12 17:42 | nullhandle

#ScienceAtRisk @Thescienceoffant points out big differences in organization between wiki and blog Open Notebooks. Different archiving needs.

26-Jun-12 17:42 | docfreeride

Another locus of ONS: http://t.co/wvQ7TIf5h (can upload code directly as textfile -- but what to do when it's overwritten?) #ScienceAtRisk

26-Jun-12 17:42 | docfreeride

How to archive OpenWetWare (when things are constantly updated & reorganized)? #ScienceAtRisk

26-Jun-12 17:41 | docfreeride
After #scio12 got help writing grant -- peer review via Twitter! #ScienceAtRisk

When @Thescienceoffant realized his open notebook was also a blog: when he started venting (& getting his ass handed to him) #ScienceAtRisk

RT @nullhandle: @boraz: border between science and science blogging becoming increasingly porous #scienceatrisk

RT @docfreeride: Serious aggregation (with quality control) at http://t.co/JzjMudFe (among others) #ScienceAtRisk

Sense of community among open notebook scientists and online scientists more broadly. Ppl happy to point to answers #ScienceAtRisk

RT @pmhswe: Salvagno’s blog on open notebook science - http://t.co/5bwjA0O7 #ScienceAtRisk

Salvagno documents both successful & failed experiments at his blog. Sharing negative results is in spirit of open science. #ScienceAtRisk

Posting photos as well as plotted data; using FigShare repository to share data with others. #ScienceAtRisk

Efforts to replicate published experiments; troubleshooting reasons why replication efforts failed. #ScienceAtRisk

Data points from timed experiments posted as collected (which others could see upon refreshing page) #ScienceAtRisk

Making effort to list & link all details, making everything traceable, requires certain level of OCD #ScienceAtRisk

Protocols aimed at scientists but @Thescienceoffant tries to present w/ minimal jargon, understandable to anyone #ScienceAtRisk

Project planning via Handrite on Android phone, discussion thread w/ colleagues on blog (here’s what to try), etc. #ScienceAtRisk

Salvagno’s blog on open notebook science - http://t.co/5bwjA0O7 #ScienceAtRisk

Includes protocols, equipment lists, negative results, elaborations (e.g., how he made it work), "excessive detail" #ScienceAtRisk
But ... "This is research in real time, not a blog!" OK, it's a special kind of blog. #ScienceAtRisk

Now: @Thescienceoffant on open notebook science. "Blogging" as way to join science & graphic design leanings. #ScienceAtRisk

Applaud #ScienceAtRisk efforts to preserve science online as we continue to provide access @sciencegov @ostigov" http://t.co/xcPFJs4W

MT "@docfreeride: Early science blogging pushback against pseudoscience (ancestors in Usenet) #ScienceAtRisk" Usenet? You’re as old as me?

(My take: blogging about ethical incidents seems to have impact on disciplinary discussions of best practices) #ScienceAtRisk

Great job @BoraZ! Now it's my turn. #ScienceAtRisk

Do science and science blogging still exist in parallel universes that don’t affect each other? @boraz : border now porous #ScienceAtRisk

@boraz: border between science and science blogging becoming increasingly porous #scienceatrisk

Prompted @SciSeeker to investigate archiving/preservation, not just aggregation. #ScienceAtRisk

Sb transfer from MT to WP last week apparently broke archives of departed blogs. History lost b/c wrong switch flipped #ScienceAtRisk

Join interesting conversation about scientific collaboration, digital archiving, blogging. We’d love to hear your thoughts. #ScienceAtRisk

Greybeards who aren't comfortable engaging transparently on blogs (but who call or email the blogger to try to engage) #ScienceAtRisk

Building fence between science blogs and not-real-science blogs important for credibility of bloggers inside the fence #ScienceAtRisk

(Do they want to be found?) #ScienceAtRisk

(I wonder: which science blogs aren't captured by these blog networks and aggregators? How do we find them?) #ScienceAtRisk
RT @docfreeride: NatGeo support for http://t.co/tbleqQXH shaky. http://t.co/53HgWU2B is functionally the replacement #ScienceAtRisk

NatGeo support for http://t.co/tbleqQXH shaky. http://t.co/53HgWU2B is functionally the replacement #ScienceAtRisk

RT @AtmosNews: Following #ScienceAtRisk "Science at Risk: Towards a National Strategy for Preserving Online Science" @ Library of Congress #data #curation

attending meeting Strategy for Preserving Online Science at the Library of Congress #ScienceAtRisk. LC does massive archiving of websites.

http://t.co/tbleqQXH aggregating blog posts about peer reviewed research (assuming blogs register, insert the code) #ScienceAtRisk

meeting #ScienceAtRisk at the Library of Congress: @boraz overview history of science blogging

Zivkovic: If global warming denialists want to be part of scienceblogging, it's not going to happen. Part of self-policing. #ScienceAtRisk

find hundreds of searchable citizen science projects here: http://t.co/YwjSsjaw @docfreeride #ScienceAtRisk

Serious aggregation (with quality control) at http://t.co/JzjMudFe (among others) #ScienceAtRisk

Nodes of organization: media entities, professional societies, self-organized communities #ScienceAtRisk

Zivkovic on science blogs, history & categories, boom started as "anti" sites, anti-creationists, anti-global-warming-deny-er #scienceatrisk

RT @docfreeride: Quoth @boraz: "Tenure track *is* an alternative science career path now." #ScienceAtRisk

Science blogging networks as assurance of expertise/quality of blogs. (Hasn't been 100% successful. #pepsigate ... ) #ScienceAtRisk

RT @docfreeride: Quoth @boraz: "Tenure track *is* an alternative science career path now." #ScienceAtRisk

Science bloggers more than, say, knitting bloggers interested in self-policing, engaging in quality control. #ScienceAtRisk
<table>
<thead>
<tr>
<th>Time</th>
<th>Username</th>
<th>Tweet</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-Jun-12 17:08</td>
<td>dofreeride</td>
<td>Science blogosphere big enough that lots of parts are not in good contact with each other. #ScienceAtRisk</td>
</tr>
<tr>
<td>26-Jun-12 17:08</td>
<td>pkrautz</td>
<td>.@boraz amazing history of sciblogs, straight from the blogfather -- feeling n00bish to the n-th degree. #scienceatrisk</td>
</tr>
<tr>
<td>26-Jun-12 17:08</td>
<td>dofreeride</td>
<td>(I'd note lots of academics blog w/no intention of being full-time &quot;science writers&quot;) #ScienceAtRisk</td>
</tr>
<tr>
<td>26-Jun-12 17:08</td>
<td>dofreeride</td>
<td>Science blogging as way to move into sci journalism/writing #ScienceAtRisk</td>
</tr>
<tr>
<td>26-Jun-12 17:07</td>
<td>dofreeride</td>
<td>@NSDL check out #ScienceAtRisk conf @ Library of Congress #datamgmt #datacuration</td>
</tr>
<tr>
<td>26-Jun-12 17:06</td>
<td>AtmosNews</td>
<td>In 2003, @boraz started as a political blogger; didn't want to stop, so took up science blogging #ScienceAtRisk</td>
</tr>
<tr>
<td>26-Jun-12 17:06</td>
<td>pmhswe</td>
<td>Now Bora Zivkovic on science blogging - <a href="http://t.co/DwgYTUuZ">http://t.co/DwgYTUuZ</a> #ScienceAtRisk</td>
</tr>
<tr>
<td>26-Jun-12 17:05</td>
<td>dofreeride</td>
<td>Early science blogging as pushback against pseudoscientific movements (ancestors in Usenet) #ScienceAtRisk</td>
</tr>
<tr>
<td>26-Jun-12 17:05</td>
<td>pmhswe</td>
<td>Harbster at LC proposes to collect science blogs: what blogs do you follow, what's useful to consider, what's at risk? #ScienceAtRisk</td>
</tr>
<tr>
<td>26-Jun-12 17:05</td>
<td>dofreeride</td>
<td>Other nodes of blogosphere emerged (based in professions, subject matter, DIY political and cultural commentary) #ScienceAtRisk</td>
</tr>
<tr>
<td>26-Jun-12 17:04</td>
<td>dofreeride</td>
<td>.@boraz explaining what a blog is. (You all know this, right?) Separation of 2 blogospheres: SV techies and personal diarists #ScienceAtRisk</td>
</tr>
<tr>
<td>26-Jun-12 17:03</td>
<td>AtmosNews</td>
<td>Following #ScienceAtRisk &quot;Science at Risk: Towards a National Strategy for Preserving Online Science&quot; @ Library of Congress #data #curation</td>
</tr>
<tr>
<td>26-Jun-12 17:02</td>
<td>dofreeride</td>
<td>Historical perspective (up through today) on science blogging. Scientists have been using web since its invention. #ScienceAtRisk</td>
</tr>
<tr>
<td>26-Jun-12 17:02</td>
<td>jcmeloni</td>
<td>One of my fave profs ever is in town for #ScienceAtRisk, which means dinner out! Also, saving science, archives, etc. @dofreeride</td>
</tr>
<tr>
<td>26-Jun-12 17:01</td>
<td>Thescienceofant</td>
<td>RT @dofreeride: Coming up at #ScienceAtRisk @boraz on science blogging and @Thescienceofant on open notebook science.</td>
</tr>
</tbody>
</table>
Like @StephenAtHome 's text during "The Word" only less hilarious. #ScienceAtRisk

Fair warning: my tweets during @boraz 's science blogging talk likely to be my reactions rather than straight-up notes #ScienceAtRisk

Coming up at #ScienceAtRisk @boraz on science blogging and @Thescienceofant on open notebook science.

@jenunexpected Check out the #ScienceAtRisk hash tag; they are talking librarian-type stuff.

Tell your Congresscritter that @libraryofcongress needs resource to access proprietary info that could serve public #ScienceAtRisk

Potential for @libraryofcongress to move into collecting some of what CRS collects w/out undermining Congressional needs? #ScienceAtRisk

Firewall between Congressional Research Service (confidential) and what @libraryofcongress collects. #ScienceAtRisk

Archived spaces diff from open web. Twitter Archive != Twitter, web archives != Google. #ScienceAtRisk

Security of social media apparently a topic close to Hillary Clinton's heart. #ScienceAtRisk

Borderline between Q and T categories in @libraryofcongress cataloguing has become extremely controversial. #ScienceAtRisk

Also, Google isn't an archive or library. (Different needs and skills and resources.) Best to see Google as partner #ScienceAtRisk

Google cache-layer & text-archive (which drives advertising); doesn't create archival records b/c doesn't help business #ScienceAtRisk

... but content-generators so far are psyched when asked for permission to be crawled and collected #ScienceAtRisk

Who's using (or asking to use) the existing web archives so far? Not many requests so far, ... #ScienceAtRisk

random thought: we all need to become a little bit of a librarian to ensure our online work can be archived & accessed #scienceAtRisk
IIPC web curator’s listserv: Smithsonian archiving blogs & Facebook stuff from members #ScienceAtRisk

Including polar bears & climate change, atmospheric sciences, mathematics (Jennifer Harster’s favorite nominations) #ScienceAtRisk

Single Sites collection (began 2006), archiving single sites on unrelated topics, selected to enhance existing holdings #ScienceAtRisk

Collaborative projects on Hurricanes Katrina & Rita; sites captured Sep 4-Nov 8 2005. News, personal, relief, govt sites #ScienceAtRisk

Sites that can’t be easily captured are hard to archive. (One issue: too much multi-media stuff on page) #ScienceAtRisk


Librarian’s role in web archiving: Subject Matter Expert (SME). Select websites, nominate using in house curator tool #ScienceAtRisk

Information w/ cultural & scholarly significance that can only be found on websites; if not archived can be lost to future #ScienceAtRisk

Permissions-based approach (from site-owners) to web archiving -- for crawling & redisplaying offsite. #ScienceAtRisk

RT @tjowens: Link to LC’s web archives that @nullhandle just described http://t.co/sxmltp1F #ScienceAtRisk

Crawlers may lose good bits of “web 2.0” stuff. Replay may lose interactive that’s essential to thing we’re preserving #ScienceAtRisk

URLs crawler can’t see that we want/URLs crawler can see that we don’t #ScienceAtRisk

@docfreeride Thanks! Looking forward to learn more about it when the meeting is done. #ScienceAtRisk

RE: social environment, aligning interests of content creators and content curators #ScienceAtRisk

Link to LC’s web archives that @nullhandle just described http://t.co/sxmltp1F #ScienceAtRisk
Diff collection strategies (broad vs. deep, thematic, event-based) #ScienceAtRisk

Amazing! W translation tools #STEM research is more accessible. #ScienceAtRisk RT @docfreeride Holdings incl. 470 languages, prints, images

Lots of different scales and scopes of web archiving. (High potential for duplication, things falling through the cracks) #ScienceAtRisk

Others archiving it: International Internet Preservation Consortium members, universities, NGOs, schools, ... #ScienceAtRisk

Web archiving part of preserving US history and culture #ScienceAtRisk

Web archiving = robust capture, preservation of all assets on website (including metadata); NOT bookmarking, SEO, etc. #ScienceAtRisk

Nicholas Taylor & Jennifer Harbster on 10 yrs of web-archiving at @libraryofcongress #ScienceAtRisk

Immense amount of agricultural data collected; where do you put it? (Researcher's garage is suboptimal repository) #ScienceAtRisk

Discussions w/ sci&tech agencies abt plans for preserving, archiving their data, other digital products #ScienceAtRisk

Pilot project involving NDIIPP partner geospatial data sets #ScienceAtRisk

@aehrens Not yet; reports will be produced after meeting has concluded. #ScienceAtRisk

Twitter Retrospective Archive (2006-2010, 20 billion tweets); provides experience in accessioning, managing large datasets #ScienceAtRisk

Is there a website that lists the ideas and conclusions of the #ScienceAtRisk meeting everybody is talking about?

Q holdings 1969-present comparable to 1900-1969 #ScienceAtRisk

Science (Q) 340k titles 1969-present; Tech (T) 348k 1969-present #ScienceAtRisk
Every item submitted for US copyright registration considered for selection (books, pamphlets, journals, etc.) #ScienceAtRisk

peter young: scale of @librarycongress acquisitions and processing is like "henry ford's assembly line" #scienceatrisk

8 million technical reports, 60 billion Tweets, 0.5 million US nat'l, international, and foreign standards #ScienceAtRisk

... pieces of music, sound records, serials, e-resources, films & television & videos, manuscripts 151 million items (FY2011) #ScienceAtRisk

Holdings so far include books & other printed materials in 470 languages, prints, photos, drawings, posters, maps #ScienceAtRisk

Should possess in some useful form records of past & present societies #ScienceAtRisk

@libraryofcongress shld possess all books & materials which record life & achievement of the American people #ScienceAtRisk

@ToshibaInnovate insofar as suggests the potential bias in what of whole of science may be represented by "online science" #scienceatrisk

Cannons of @libraryofcongress: shld possess all books & materials necessary for Congress, Fed Govt to perform their duties #ScienceAtRisk

Quality discussion at Lib of Congress mtg "Science at Risk: Toward a National Strategy for Preserving Online Science" #ScienceAtRisk

Archival presentations = increased awareness! via @MarthaBunton: Len Bruno displaying early manuscripts http://t.co/9Z4eyEfc #scienceatrisk

Peter R. Young on history of science collections at @libraryofcongress #ScienceAtRisk

Next up at #ScienceAtRisk: stage-setting abt. existing collection practices. @libraryofcongress NOT lobbying to do all preservation!

RT @MarthaBunton: #scienceatrisk Len Bruno displaying early manuscripts of inventors and scientists http://t.co/hgLREAxM

Len Bruno just shared some wonderful manuscripts. Wright brothers, Einstein, Freud, AG Bell, more. #ScienceAtRisk #fb http://t.co/VlcRo21e
#ScienceAtRisk

RT @docfreeride: Universities as natural home for archiving collides with budgetary realities (which are bad) #ScienceAtRisk

26-Jun-12 14:31 | gailst

#scienceatrisk Len Bruno displaying early manuscripts of inventors and scientists http://t.co/hgLREAxM

26-Jun-12 14:30 | MarthaBunton

RT @docfreeride: Science as a primary moral sphere in society. Creates certain ethical obligations, including stewardship. #ScienceAtRisk

26-Jun-12 14:23 | thewanetrain

We agree @docfreeride. The preservation of science is important not just to scientists but to the community! #ScienceAtRisk

26-Jun-12 14:22 | Toshibalinnovate

RT @docfreeride: Science as a primary moral sphere in society. Creates certain ethical obligations, including stewardship. #ScienceAtRisk

26-Jun-12 14:19 | charlesmire

But first: some treasures from @libraryofcongress (science manuscripts displayed by Leonard Bruno) LEAVE YOUR COFFEE! #ScienceAtRisk

26-Jun-12 14:15 | docfreeride

RT @docfreeride: Science as a primary moral sphere in society. Creates certain ethical obligations, including stewardship. #ScienceAtRisk

26-Jun-12 14:15 | SandlinSeguin

RT @docfreeride: Science as a primary moral sphere in society. Creates certain ethical obligations, including stewardship. #ScienceAtRisk

26-Jun-12 14:14 | LianaBrooks

In other words: we're on the hook to do important work here, that matters to scientists, historians, society at large. #ScienceAtRisk

26-Jun-12 14:13 | docfreeride

Smith: stewardship is an ethical obligation, especially given the moral domain of science. #ScienceAtRisk

26-Jun-12 14:13 | pmhswe

Science as a primary moral sphere in society. Creates certain ethical obligations, including stewardship. #ScienceAtRisk

26-Jun-12 14:13 | docfreeride

Smith: early-stage scientists value "social media as locus of scientific discourse"--part of curating professional persona #ScienceAtRisk

26-Jun-12 14:10 | pmhswe

RT @docfreeride: Early-career scientists identify social media as important site of scientific communication. #ScienceAtRisk

26-Jun-12 14:10 | yasmeen_azadi

RT @drugmonkeyblog: "in my hand I have clear evidence of *yellowing pages* brought out by @Elfsevier at great risk..." #ScienceAtRisk

26-Jun-12 14:09 | docfreeride

Really enjoying the #ScienceAtRisk stream, but wish I were there!

26-Jun-12 14:09 | yasmeen_azadi
<table>
<thead>
<tr>
<th>Name</th>
<th>Tweet</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>@librarycongress</td>
<td>thanks for hosting #ScienceAtRisk</td>
<td>26-Jun-12</td>
</tr>
<tr>
<td>Abby Rumsey</td>
<td>Universities imperfect science repositories. May be parochial, not concerned w/ larger domain, funding risk. #scienceatrisk</td>
<td>26-Jun-12</td>
</tr>
<tr>
<td></td>
<td>Divide among respondents: those w/ robust faith in institutions and those who don't. (Generational?) #ScienceAtRisk</td>
<td>26-Jun-12</td>
</tr>
<tr>
<td>Smith</td>
<td>Use of pseudonyms in social media is challenge in online science. Lack of accountability. Need to address. #ScienceAtRisk</td>
<td>26-Jun-12</td>
</tr>
<tr>
<td>@docfreeride</td>
<td>I think @docfreeride is working up to suggesting we invade the Netherlands to seize Elsevier’s archives. Kinda like Iraq #ScienceAtRisk</td>
<td>26-Jun-12</td>
</tr>
<tr>
<td>&quot;New&quot; things look familiar (blog posts like unpublished science, science tweets like science news); archive accordingly? #ScienceAtRisk</td>
<td>26-Jun-12</td>
<td></td>
</tr>
<tr>
<td>Inherent, intractable tension between global nature of science &amp; parochial nature of the institutions that support scientists #ScienceAtRisk</td>
<td>26-Jun-12</td>
<td></td>
</tr>
<tr>
<td>rumsey: no workshop survey respondents mentioned @usnatarchives as logical curatorial home for science data #scienceatrisk</td>
<td>26-Jun-12</td>
<td></td>
</tr>
<tr>
<td>Smith</td>
<td>Stewarding online science takes informatics, tech, domain science. Also: team of good lawyers &amp; good revenue model. #ScienceAtRisk</td>
<td>26-Jun-12</td>
</tr>
<tr>
<td>Universities as natural home for archiving collides with budgetary realities (which are bad) #ScienceAtRisk</td>
<td>26-Jun-12</td>
<td></td>
</tr>
<tr>
<td>Govt data primed to be stewarded by the govt sector. (National Archives not mentioned by any of the 19 respondents) #ScienceAtRisk</td>
<td>26-Jun-12</td>
<td></td>
</tr>
<tr>
<td>No free ride for preserving digital science; need to clearly articulate value of materials &amp; why preserving them matters #ScienceAtRisk</td>
<td>26-Jun-12</td>
<td></td>
</tr>
<tr>
<td>Interesting that Libraries have moved away from &quot;just in case&quot; collection development but data archiving renews that focus. #ScienceAtRisk</td>
<td>26-Jun-12</td>
<td></td>
</tr>
<tr>
<td>Need to lower costs/administrative burdens of long-term preservation &amp; access; some institutions better at this than others #ScienceAtRisk</td>
<td>26-Jun-12</td>
<td></td>
</tr>
</tbody>
</table>