// FOIA 2011 -- Background and Context ///

"Over 2.5 billion people live on less than \$2 a day."

"Every day nearly 16.000 children die from hunger and related causes."

"One dollar can save a life" -- the opposite must also be true.

"Poverty is a death sentence."

"Nations must invest \$37 trillion in energy technologies by 2030 to stabilize greenhouse gas emissions at sustainable levels."

Today's decisions should be based on all the information we can get, not on hiding the decline.

This archive contains some 5.000 emails picked from keyword searches. A few remarks and redactions are marked with triple brackets.

The rest, some 220.000, are encrypted for various reasons. We are not planning to publicly release the passphrase.

We could not read every one, but tried to cover the most relevant topics such as...

/// The IPCC Process ///

<1939> Thorne/MetO:

Observations do not show rising temperatures throughout the tropical troposphere unless you accept one single study and approach and discount a wealth of others. This is just downright dangerous. We need to communicate the uncertainty and be honest. Phil, hopefully we can find time to discuss these further if necessary [...]

<3066> Thorne:

I also think the science is being manipulated to put a political spin on it which for all our sakes might not be too clever in the long run.

<1611> Carter:

It seems that a few people have a very strong say, and no matter how much talking goes on beforehand, the big decisions are made at the eleventh hour by a select core group.

<2884> Wigley:

Mike, The Figure you sent is very deceptive [...] there have been a number of dishonest presentations of model results by individual authors and by IPCC [...]

<4755> Overpeck:

The trick may be to decide on the main message and use that to guid[e] what's included and what is left out.

<3456> Overpeck:

I agree w/ Susan [Solomon] that we should try to put more in the bullet about "Subsequent evidence" [...] Need to convince readers that there really has been an increase in knowledge - more evidence. What is it?

<1104> Wanner/NCCR:

In my [IPCC-TAR] review [...] I crit[i]cized [...] the Mann hockey[s]tick [...] My review was classified "unsignificant" even I inquired several times. Now the internationally well known newspaper SPIEGEL got the information about these early statements because I expressed my opinion in several talks, mainly in Germany, in 2002 and 2003. I just refused to give an exclusive interview to SPIEGEL because I will not cause damage for climate science.

<0414> Coe:

Hence the AR4 Section 2.7.1.1.2 dismissal of the ACRIM composite to be instrumental rather than solar in origin is a bit controversial. Similarly IPCC in their discussion on solar RF since the Maunder Minimum are very dependent on the paper by Wang et al (which I have been unable to access) in the decision to

reduce the solar RF significantly despite the many papers to the contrary in the ISSI workshop. All this leaves the IPCC almost entirely dependent on CO2 for the explanation of current global temperatures as in Fig 2.23. since methane CFCs and aerosols are not increasing.

<2009> Briffa:

I find myself in the strange position of being very skeptical of the quality of all present reconstructions, yet sounding like a pro greenhouse zealot here!

<2775> Jones:

I too don't see why the schemes should be symmetrical. The temperature ones certainly will not as we're choosing the periods to show warming.

<1219> Trenberth:

[...] opposing some things said by people like Chris Landsea who has said all the stuff going on is natural variability. In addition to the 4 hurricanes hitting Florida, there has been a record number hit Japan 10?? and I saw a report saying Japanese scientists had linked this to global warming. [...] I am leaning toward the idea of getting a box on changes in hurricanes, perhaps written by a Japanese.

<0890> Jones:

We can put a note in that something will be there in the next draft, or Kevin or I will write something - it depends on whether and what we get from Japan.

<0170> Jones:

Kevin, Seems that this potential Nature paper may be worth citing, if it does say that GW is having an effect on TC activity.

<0714> Jones:

Getting people we know and trust [into IPCC] is vital - hence my comment about the tornadoes group.

<3205> Jones:

Useful ones [for IPCC] might be Baldwin, Benestad (written on the solar/cloud issue - on the right side, i.e anti-Svensmark), Bohm, Brown, Christy (will be have to involve him?)

<4923> Stott/MetO:

My most immediate concern is to whether to leave this statement ["probably the warmest of the last millennium"] in or whether I should remove it in the anticipation that by the time of the 4th Assessment Report we'll have withdrawn this statement - Chris Folland at least seems to think this is possible.

/// Communicating Climate Change ///

<2495> Humphrey/DEFRA:

I can't overstate the HUGE amount of political interest in the project as a message that the Government can give on climate change to help them tell their story. They want the story to be a very strong one and don't want to be made to look foolish.

<0813> Fox/Environment Agency:

if we loose the chance to make climate change a reality to people in the regions we will have missed a major trick in REGIS.

<4716> Adams:

Somehow we have to leave the [m] thinking OK, climate change is extremely complicated, BUT I accept the dominant view that people are affecting it, and that impacts produces risk that needs careful and urgent attention.

<1790> Lorenzoni:

I agree with the importance of extreme events as foci for public and governmental opinion [...] 'climate change' needs to be present in people's

daily lives. They should be reminded that it is a continuously occurring and evolving phenomenon

<3062> Jones:

We don't really want the bullshit and optimistic stuff that Michael has written [...] We'll have to cut out some of his stuff.

<1485> Mann:

the important thing is to make sure they're loosing the PR battle. That's what the site [Real Climate] is about.

<2428> Ashton/co2.org:

Having established scale and urgency, the political challenge is then to turn this from an argument about the cost of cutting emissions - bad politics - to one about the value of a stable climate - much better politics. [...] the most valuable thing to do is to tell the story about abrupt change as vividly as possible

<3332> Kelly:

the current commitments, even with some strengthening, are little different from what would have happened without a climate treaty.
[...] the way to pitch the analysis is to argue that precautionary action must be taken now to protect reserves etc against the inevitable

<3655> Singer/WWF:

we as an NGO working on climate policy need such a document pretty soon for the public and for informed decision makers in order to get a) a debate started and b) in order to get into the media the context between climate extremes/desasters/costs and finally the link between weather extremes and energy

<0445> Torok/CSIRO:

[...] idea of looking at the implications of climate change for what he termed "global icons" [...] One of these suggested icons was the Great Barrier Reef [...]

It also became apparent that there was always a local "reason" for the destruction - cyclones, starfish, fertilizers [...] A perception of an "unchanging" environment leads people to generate local explanations for coral loss based on transient phenomena, while not acknowledging the possibility of systematic damage from long-term climatic/environmental change [...] Such a project could do a lot to raise awareness of threats to the reef from climate change

<4141> Minns/Tyndall Centre:

In my experience, global warming freezing is already a bit of a public relations problem with the media

Kjellen:

I agree with Nick that climate change might be a better labelling than global warming

Pierrehumbert:

What kind of circulation change could lock Europe into deadly summer heat waves like that of last summer? That's the sort of thing we need to think about.

/// The Medieval Warm Period ///

<5111> Pollack:

But it will be very difficult to make the MWP go away in Greenland.

<5039> Rahmstorf:

You chose to depict the one based on C14 solar data, which kind of stands out in Medieval times. It would be much nicer to show the version driven by Be10 solar forcing

<5096> Cook:

A growing body of evidence clearly shows [2008] that hydroclimatic variability during the putative MWP (more appropriately and inclusively called the

"Medieval Climate Anomaly" or MCA period) was more regionally extreme (mainly in terms of the frequency and duration of megadroughts) than anything we have seen in the 20th century, except perhaps for the Sahel. So in certain ways the MCA period may have been more climatically extreme than in modern times.

/// The Settled Science ///

<0310> Warren:

The results for 400 ppm stabilization look odd in many cases [...] As it stands we'll have to delete the results from the paper if it is to be published.

<1682> Wils:

[2007] What if climate change appears to be just mainly a multidecadal natural fluctuation? They'll kill us probably [...]

<2267> Wilson:

Although I agree that GHGs are important in the 19th/20th century (especially since the 1970s), if the weighting of solar forcing was stronger in the models, surely this would diminish the significance of GHGs.

[...] it seems to me that by weighting the solar irradiance more strongly in the models, then much of the 19th to mid 20th century warming can be explained from the sun alone.

<5289> Hoskins:

If the tropical near surface specific humidity over tropical land has not gone up (Fig 5) presumably that could explain why the expected amplification of the warming in the tropics with height has not really been detected.

<5315> Jenkins/MetO:

would you agree that there is no convincing evidence for kilimanjaro glacier melt being due to recent warming (let alone man-made warming)?

<2292> Jones:

[tropical glaciers] There is a small problem though with their retreat. They have retreated a lot in the last 20 years yet the MSU2LT data would suggest that temperatures haven't increased at these levels.

<1788> Jones:

There shouldn't be someone else at UEA with different views [from "recent extreme weather is due to global warming"] - at least not a climatologist.

<4693> Crowley:

I am not convinced that the "truth" is always worth reaching if it is at the cost of damaged personal relationships

<2967> Briffa:

Also there is much published evidence for Europe (and France in particular) of increasing net primary productivity in natural and managed woodlands that may be associated either with nitrogen or increasing CO2 or both. Contrast this with the still controversial question of large-scale acid-rain-related forest decline? To what extent is this issue now generally considered urgent, or even real?

<2733> Crowley:

Phil, thanks for your thoughts - guarantee there will be no dirty laundry in the open.

<2095> Steig:

He's skeptical that the warming is as great as we show in East Antarctica -- he thinks the "right" answer is more like our detrended results in the supplementary text. I cannot argue he is wrong.

<0953> Jones:

This will reduce the 1940-1970 cooling in NH temps. Explaining the cooling with sulphates won't be quite as necessary.

<4944> Haimberger:

It is interesting to see the lower tropospheric warming minimum in the tropics in all three plots, which I cannot explain. I believe it is spurious but it is remarkably robust against my adjustment efforts.

<4262> Klein/LLNL:

Does anybody have an explanation why there is a relative minimum (and some negative trends) between 500 and 700 hPa? No models with significant surface warming do this

<2461> Osborn:

This is an excellent idea, Mike, IN PRINCIPLE at least. In practise, however, it raises some interesting results [...] the analysis will not likely lie near to the middle of the cloud of published series and explaining the reasons behind this etc. will obscure the message of a short EOS piece.

<4470> Norwegian Meteorological Institute:

In Norway and Spitsbergen, it is possible to explain most of the warming after the 1960s by changes in the atmospheric circulation. The warming prior to 1940 cannot be explained in this way.

/// The Urban Heat Effect ///

<4938> Jenkins/MetO:

By coincidence I also got recently a paper from Rob which says "London's UHI has indeed become more intense since the 1960s esp during spring and summer".

<0896> Jones:

I think the urban-related warming should be smaller than this, but I can't think of a good way to argue this. I am hopeful of finding something in the

data that makes by their Figure 3.

<0044> Rean:

[...] we found the [urban warming] effect is pretty big in the areas we analyzed. This is a little different from the result you obtained in 1990.

[...] We have published a few of papers on this topic in Chinese. Unfortunately, when we sent our comments to the IPCC AR4, they were mostly rejected.

<4789> Wigley:

there are some nitpicky jerks who have criticized the Jones et al. data sets -- we don't want one of those [EPRI/California Energy Commission meeting].

Jones:

The jerk you mention was called Good(e)rich who found urban warming at all Californian sites

<1601> Jones:

I think China is one of the few places that are affected [urban heat]. The paper shows that London and Vienna (and also New York) are not affected in the 20th century.

<2939> Jones:

[...] every effort has been made to use data that are either rural and/or where the urbanization effect has been removed as well as possible by statistical means. There are 3 groups that have done this independently (CRU, NOAA and GISS), and they end up with essentially the same results.

[...] Furthermore, the oceans have warmed at a rate consistent with the land. There is no urban effect there.

/// Temperature Reconstructions ///

<1583> Wilson:

any method that incorporates all forms of uncertainty and error will undoubtedly result in reconstructions with wider error bars than we currently have. These many be more honest, but may not be too helpful for model comparison attribution studies. We need to be careful with the wording I think.

<4165> Jones:

what he [Zwiers] has done comes to a different conclusion than Caspar and Gene! I reckon this can be saved by careful wording.

<3994> Mitchell/MetO

Is the PCA approach robust? Are the results statistically significant? It seems to me that in the case of MBH the answer in each is no

<4241> Wilson:

I thought I'd play around with some randomly generated time-series and see if I could 'reconstruct' northern hemisphere temperatures.

[...] The reconstructions clearly show a 'hockey-stick' trend. I guess this is precisely the phenomenon that Macintyre has been going on about.

<3373> Bradley:

I'm sure you agree--the Mann/Jones GRL paper was truly pathetic and should never have been published. I don't want to be associated with that 2000 year "reconstruction".

<4758> Osborn:

Because how can we be critical of Crowley for throwing out 40-years in the middle of his calibration, when we're throwing out all post-1960 data 'cos the MXD has a non-temperature signal in it, and also all pre-1881 or pre-1871 data 'cos the temperature data may have a non-temperature signal in it!

<0886> Esper:

Now, you Keith complain about the way we introduced our result, while saying it is an important one. [...] the IPCC curve needs to be improved according to missing long-term declining trends/signals, which were removed (by

dendrochronologists!) before Mann merged the local records together. So, why don't you want to let the result into science?

<4369> Cook:

I am afraid that Mike is defending something that increasingly can not be defended. He is investing too much personal stuff in this and not letting the science move ahead.

<5055> Cook:

One problem is that he [Mann] will be using the RegEM method, which provides no better diagnostics (e.g. betas) than his original method. So we will still not know where his estimates are coming from.

/// Science and Religion ///

<2132> Wigley:

I heard that Zichichi has links with the Vatican. A number of other greenhouse skeptics have extreme religious views.

<4394> Houghton [MetO, IPCC co-chair]

[...] we dont take seriously enough our God-given responsibility to care for the Earth [...] 500 million people are expected to watch The Day After Tomorrow. We must pray that they pick up that message.

<0999> Hulme:

My work is as Director of the national centre for climate change research, a job which requires me to translate my Christian belief about stewardship of God's planet into research and action.

<3653> Hulme:

He [another Met scientist] is a Christian and would talk authoritatively about

the state of climate science from the sort of standpoint you are wanting.

/// Climate Models ///

<3111> Watson/UEA:

I'd agree probably 10 years away to go from weather forecasting to \sim annual scale. But the "big climate picture" includes ocean feedbacks on all time scales, carbon and other elemental cycles, etc. and it has to be several decades before that is sorted out I would think. So I would guess that it will not be models or theory, but observation that will provide the answer to the question of how the climate will change in many decades time.

<5131> Shukla/IGES:

["Future of the IPCC", 2008] It is inconceivable that policymakers will be willing to make billion-and trillion-dollar decisions for adaptation to the projected regional climate change based on models that do not even describe and simulate the processes that are the building blocks of climate variability.

<2423> Lanzante/NOAA:

While perhaps one could designate some subset of models as being poorer in a lot of areas, there probably never will be a single universally superior model or set of models. We should keep in mind that the climate system is complex, so that it is difficult, if not impossible to define a metric that captures the breath of physical processes relevant to even a narrow area of focus.

<1982> Santer:

there is no individual model that does well in all of the SST and water vapor tests we've applied.

<0850> Barnett:

[IPCC AR5 models] clearly, some tuning or very good luck involved. I doubt the modeling world will be able to get away with this much longer

<5066> Hegerl:

[IPCC AR5 models]

So using the 20th c for tuning is just doing what some people have long suspected us of doing [...] and what the nonpublished diagram from NCAR showing correlation between aerosol forcing and sensitivity also suggested.

<4443> Jones:

Basic problem is that all models are wrong - not got enough middle and low level clouds.

<4085> Jones:

GKSS is just one model and it is a model, so there is no need for it to be correct.

/// The Cause ///

<3115> Mann:

By the way, when is Tom C going to formally publish his roughly 1500 year reconstruction??? It would help the cause to be able to refer to that reconstruction as confirming Mann and Jones, etc.

<3940> Mann:

They will (see below) allow us to provide some discussion of the synthetic example, referring to the J. Cimate paper (which should be finally accepted upon submission of the revised final draft), so that should help the cause a bit.

<0810> Mann:

I gave up on Judith Curry a while ago. I don't know what she think's she's doing, but its not helping the cause

<3594> Berger:

Phil,

Many thanks for your paper and congratulations for reviving the global warming.

<0121> Jones:

[on temperature data adjustments] Upshot is that their trend will increase

<4184> Jones:

[to Hansen] Keep up the good work! [...] Even though it's been a mild winter in the UK, much of the rest of the world seems coolish - expected though given the La Nina. Roll on the next El Nino!

<5294> Schneider:

Even though I am virtually certain we shall lose on McCain-Lieberman, they are forcing Senators to go on record for for against sensible climate policy

/// Freedom of Information ///

<2440> Jones:

I've been told that IPCC is above national FOI Acts. One way to cover yourself and all those working in AR5 would be to delete all emails at the end of the process

<2094> Briffa:

UEA does not hold the very vast majority of mine [potentially FOIable emails] anyway which I copied onto private storage after the completion of the IPCC task.

<2459> Osborn:

Keith and I have just searched through our emails for anything containing "David Holland". Everything we found was cc'd to you and/or Dave Palmer, which you'll already have.

<1473> McGarvie/UEA Director of Faculty Administration:

As we are testing EIR with the other climate audit org request relating to communications with other academic colleagues, I think that we would weaken that case if we supplied the information in this case. So I would suggest that we decline this one (at the very end of the time period)

<1577> Jones:

[FOI, temperature data]

Any work we have done in the past is done on the back of the research grants we get - and has to be well hidden. I've discussed this with the main funder (US Dept of Energy) in the past and they are happy about not releasing the original station data.