

El Niño Is the Answer, But What Is the Question?

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The issues at hand are that much of the ongoing climate modeling, and forecast capability is focused on producing consensus amongst modelers, rather than providing useful, locally or regionally verifiable (or falsifiable) process or forecast results such as upper ocean thermal structures, current strengths, local precipitation, extreme warm or cold periods, etc., which are the necessary information from which responses by agricultural or fisheries interests might be able to find alternatives to business as usual. The basis of the issue is the lack of accountabilities of the academic or Agency research programs, which tend to be self-serving, and apparently unconcerned with either commercial interests, or constituents beyond their own consensus groups.

Resource management, sans context, is a social travesty. Scientific research sans verification is usually a sign of extreme egotism, and irresponsibility. There are signs of progress in both arenas, yet it seems that using excuses about computer capacity, when lack of understanding is the main problem is a bit specious. It was only after nearly a decade of complaints that the subsurface ocean has begun to be included in climate modeling, as a forcing function, although even the novice physicist knows that the upper few meters of the ocean has much higher heat content, and therefore dramatic affect on climate, than does the entire atmosphere. Such dilemmas plague climate science. The most troubling of all is the fact that we are about nine thousand years into the next ice age, as recognized by every paleoclimatologist and geologist, yet the greatest "dread factor" that the climate modeling community can dream up to fuel their arguments for bigger and faster computers, while natural resources and critical habitats are being squandered from lack of environmental monitoring systems and credible management schemes. There does seem to be a mismatch between the necessary, and funding priorities.

Until there are appropriate in situ environmental monitoring devices distributed over the planet that there will be fortunes squandered on new space toys and rediscovering of wheels. The involvement of industry, on land, at sea, and in the air is a much more cost effective method for building and operating the necessary monitoring scheme than allowing government agencies and academia to continue leading themselves on merry chases over favored tracks. What is simply untenable is the continuance of the practice of deploying new technologies every few years, and turning off long-term data collection sites, simply because they have yet to produce the climatic equivalent of a cure for cancer. The entire era of satellite technology, combined together has collected more bytes of information than ever existed from all previous monitoring tools, yet nearly none of it has been organized and looked at, and that has been is not yet worthy of the label "climate data".