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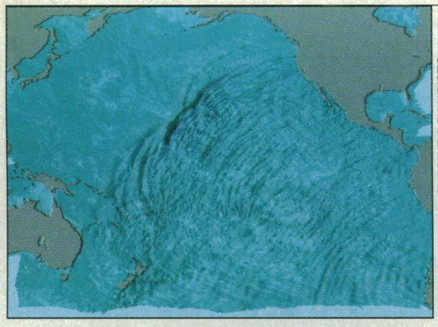

CATHERINE DEVINE/CTC

A new wave. NSF will chart new course for its supercomputer program. Cornell center re-created tsunami waves from 1960 earthquake.

NSF Supercomputer Program at Crossroads

The National Science Foundation (NSF) is about to embark on a year-long effort to chart a new course for one of the biggest of its big-ticket items, the $60-million-a-year supercomputer centers program. Last week the NSF's oversight body, the National Science Board (NSB), approved plans for the review as well as a 2-year extension of funding for the four current supercomputer centers.*

NSF launched the program 10 years ago to increase scientists' access to supercomputers, and most would agree it has succeeded. In 1986, 1336 users logged 29,485 hours on the machines; by 1993, the numbers had grown to 7735 users and 910,088 hours.

But scientists have raised some questions about NSF's investment in supercomputers, and NSB members in recent meetings have echoed these concerns. For instance, NSF staffers say, the board has asked whether the NSF centers are still a unique resource in light of a proliferation of U.S. supercomputer centers. A second issue is whether the centers cater to "big-science" projects that consume much of the available computer time. In addition, when the centers were created, NSF was not seen as a source of permanent funding. "There is a general feeling [on the NSB] that the centers do not have tenure," Massachusetts Institute of Technology physicist Bernard Burke, an NSB member, told *Science*.

Over the next year, NSF plans to hold a series of workshops and gather comments about the fate the centers. A report to the NSB, to be delivered in November 1995, is expected, at a minimum, to call for a new peer-reviewed competition for centers seeking funding, says Robert Borchers, director of NSF's division of advanced scientific computing. At the same time, Borchers says, NSF is loath to pull the plug on a valuable resource. "We don't want to throw the baby out with the bathwater," he says.

*The Cornell Theory Center in Ithaca, the National Center for Supercomputing Applications in Champaign-Urbana, the Pittsburgh Supercomputing Center, and the San Diego Supercomputer Center.

Russian Satellite Will Help Meteorology

Scientists are looking forward to a view of Earth previously accessible only to spies, as Russia plans to launch its first geostationary weather satellite next week.

When the program began two decades ago, the Soviets intended to keep the satellite data secret, but now Russia is expected to make it cheaply available to meteorologists worldwide. The GOMS spacecraft, which has sensors to monitor weather patterns and the magnetosphere, will provide data from parts of Asia not now scanned by any geostationary weather satellite.

GOMS's launch has been delayed for two decades. During the Cold War the Russians designed the satellite to encrypt data, but encryption proved to be a technical nightmare and was scrapped several years ago, says Sergey Avdjushin of the Russian Federal Service for Hydrometeorology and Environmental Monitoring. In addition, he says, engineers had trouble getting a multispectral scanner to work.

The launch comes as a relief to meteorologists, who saw an opportunity to gather data from Asia go up in smoke in April when a Chinese weather satellite was destroyed in an explosion at a ground-based test facility.

NIH Alternative Medicine Job Draws Crowd

Some people get out of the kitchen when the temperature rises, but others are drawn to the heat—or so it seems, to judge by the jockeying among candidates who want to become the next director of the controversial Office of Alternative Medicine (OAM) at the National Institutes of Health (NIH).

The post was vacated 3 weeks ago when director Joseph Jacobs quit, charging that activists had banded with Senator Tom Harkin (D–IA) in an effort to direct OAM's $6-million-a-year research program (*Science*, 30 September, p. 2000). No sooner had Jacobs left, however, than job seekers started lining up at the gate. According to NIH sources, one candidate is OAM's acting director, physician Alan Trachtenberg, who until September was at the National Institute on Drug Abuse. Other candidates are the OAM deputy director, a Food and Drug Administration staffer, and a colonel at the Walter Reed Army Institute of Research.

But the candidate with the most clout appears to be James Gordon, chair of the OAM advisory committee. A Georgetown psychiatry professor, Gordon has won the endorsement of ex-congressman Berkeley Bedell, a champion of alternative medicine and buddy of Senator Harkin's. Although Harkin's office isn't commenting on the case, NIH staffers say the senator—who chairs the subcommittee that approves the NIH budget—has made it known he would like to see Gordon appointed OAM director. NIH Deputy Director Ruth Kirschstein, who is overseeing the search for an OAM chief, hopes to fill the post by the end of the year.

Analysis Questions BST's Safety to Cows

The smoldering controversy over genetically engineered bovine somatotropin (BST)—a hormone that increases milk yields—is about to reignite in the wake of a paper in the 20 October issue of *Nature* claiming that BST may harm cows. Perhaps even more damaging, however, the article suggests that Monsanto Co., which makes BST, blocked an attempt to publish the analysis.

Monsanto has waged a long fight to market BST, which opponents claim increases the incidence of udder infections, or mastitis, in treated cows. The debate over BST's effects on animals lengthened a safety review by the U.S. Food and Drug Administration, which approved BST for use in November 1993.

The new analysis, from a group led by University of Sussex policy researcher Erik Millstone, combines data from eight studies covering more than 300 BST-treated cows. The team found that total cell counts in milk were 19% higher in treated animals. Because infections trigger the release of white blood cells into milk, says Millstone, "somatic cell count is an indicator of mastitis."

The article also documents attempts to publish this analysis. Notably, in 1991 the *Veterinary Record* agreed to publish it—if the scientists got permission from Monsanto, which provided the data. Monsanto denied the request. Doug Hard of Monsanto's animal sciences division, who made that decision, says the company intended to give priority to Monsanto-supported scientists who had actually gathered the data. Their report, published in the *Journal of Dairy Science* earlier this year, found no evidence of mastitis, beyond that expected from increased milk yield, in 1500 BST-treated cows.

Biotech supporters fear a renewed debate may hurt BST's chances of approval in the European Union (EU), which must decide by year's end whether to extend a ban on BST use.