Solar eclipse leaves most observers jubilant

Responses to the total solar eclipse of June 30 ranged from enthusiasm on the part of professional scientists and amateur eclipse watchers to prayers for the release of the sun by Mauritanian Moslems to fear on the part of the Elmolo tribe in Kenya. The Elmolos stayed in their houses throughout the eclipse, but that may have been partly out of annoyance at television cameramen, who had been harassing them for a week.

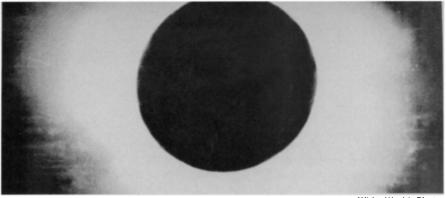
The eclipse was observed from the land, the sea and the air. Two airborne expeditions raced along with the eclipse to keep observing equipment in the shadow of totality for longer than the seven minutes or so available to ground-based observers. One airborne mission was aboard the French-British supersonic transport Concorde; the other was on an NC-135 aircraft of the Los Alamos Scientific Laboratory. The Concorde reportedly gained 74 minutes of totality on its flight.

On the sea at least five ships were positioned in the path of totality: the Estonia and the Professor Vize from the Soviet Union, the Massalia of France, the Texas Clipper from Texas A&M University and the S.S. Canberra. The ships carried both professional and amateur astronomers and tourists. The Canberra's deck was so crowded with camera equipment during the eclipse that there was hardly room for people to stand.

Ground-based expeditions were located across the breadth of Africa from Mauritania to Kenya.

The studies ranged from the usual for solar eclipses—coronal and photosphere studies, searches for intramercurial planets—to a young man who was watching the activities of African ants as part of a project to determine whether animals' behavior cycles are governed by changes in the light or by subtler interior mechanisms.

Most of the expeditions that have so far reported indicate that things went well. At the National Science Foundation expedition site near Lake Rudolph in Kenya, scattered clouds had caused some anxiety early in the day, but the view of the total eclipse was clear, and observers were jubilant. At another American camp at Chinguetti, Mauritania, a dusty wind that had been blowing stopped just before the eclipse began. On the other hand observations from a camp at Atar, Mauritania, were spoiled by dusty wind, mist and clouds. A payload from a rocket sent above the atmosphere to photograph the spectrum of the corona by a group from Kitt Peak National Observatory went



Wide World Photos

Total eclipse as seen from the liner Canberra off the west coast of Africa.

off course and was lost in the desert.

The eclipse, with its seven minutes of totality more or less depending on where along the path one stood, was one of the longest eclipses possible. Its like will not be seen again until 2150.

HEW takes a second look at research cutbacks

Lights are going out in laboratories across the country, claim scientists who see dark days ahead if the Administration's plan to phase out training and fellowship grants is carried out. Scientists from a variety of fields have raised their voices, signed petitions, talked to the President and, in general, made much ado about the nothing the Administration plans to give them (SN: 4/21/73, p. 256; 5/12/73, p. 306). Someone, it appears, has heard their call. Sen. Edward M. Kennedy (D-Mass.) and Rep. Paul G. Rogers (D-Fla.) are sponsoring a bill that would authorize more than \$200 million for training and research (SN: 6/16/73, p. 386).

The Administration's argument has been that enough scientists will be employed and much research will be funded through targeted research such as a large-scale cancer program. But at Senate health subcommittee hearings last week, Albert Sabin, developer of the oral polio vaccine, emphasized the need for freedom and flexibility in basic research. Sabin's success, for instance, came as the result of 50 years of research in diverse fields such as virology and tissue culture—not from a polio project.

In response to these arguments, and possibly to ward off Congressional action, the Administration has reversed its course. Charles C. Edwards, Health, Education and Welfare assistant secretary for health, told the Senate subcommittee that "we have decided to consider a revision" of the phase-out plan. A new plan that HEW says will "make the best use of scarce research funds" is expected to be announced next week.

A Presidential boost for energy research

President Nixon last week created a new Energy Policy Office at the White House and appointed Colorado Gov. John Love to head it. The President announced that he was sending to Congress proposals to make the energy office a cabinet level position and to spend \$10 billion on energy research over the next five years. He called on all Americans to start conserving energy and promised that the Government would lead the way.

The President's new statement, issued at the Western White House in San Clemente, updates his formal energy message (SN: 4/28/73, p. 269) and shows how the Administration's thinking has changed in response to the developing energy crisis.

The Energy Policy Office (EPO) supercedes the Special Energy Committee and the National Energy Office set up in April. Charles DiBona, the President's special consultant on energy matters, will join the new office. Love, as director, will be the Administration's chief policy officer with respect to energy, responsible for identifying major problems, recommending policies, coordinating work between Government and other agencies and initiating studies dealing with energy.

April's energy message was criticized for not providing enough R&D funds, particularly for coal. In response, the President authorized a boost of \$100 million for fiscal 1974 (which began this week), half of it going to find ways to burn coal more cleanly. (See special article on coal, this issue, p. 10.)

The proposed legislation would create a new Department of Energy and Natural Resources (DENR) to coordinate development and conservation of all the country's power and mineral wealth, and an independent Energy Research and Development Administration (ERDA) to guide and fund research.

The Atomic Energy Commission would be split up with the AEC's uranium and thorium assessment program

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