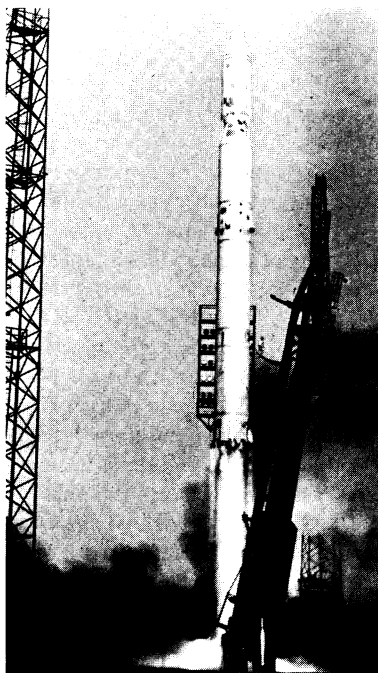


## Briefings

edited by CONSTANCE HOLDEN

### Ozone Mapper Survives Soviet Coup

NASA's latest satellite-borne monitor of the Earth's protective ozone layer went operational a little earlier than planned last month. The unprecedented launch—on a Soviet weather satellite—of the Total Ozone Mapping Spectrometer (TOMS)



**Getting a boost.** A Soviet Cyclone rocket like this one lifted a U.S. ozone monitor into orbit.

took place on 15 August. Three days later so did the coup that has shaken the Soviet Union to its foundations. Recalls project operations director Michael Forman of Goddard Space Flight Center in Greenbelt, Maryland: "One day I'm pictured on the front page of *Pravda* and 3 days later all hell breaks loose."

So, instead of waiting weeks to let the instrument adjust to space conditions, NASA engineers, who were in Moscow to monitor the launch, turned TOMS on before going home—just 5 days post-launch. No problems resulted, and the orbiting instrument, which for the first 2 months of its 2-year mis-

sion will track the formation of this year's Antarctic ozone hole, is now returning data to both U.S. and Soviet ground stations.

The launch of a new TOMS was an urgent imperative for U.S. atmospheric researchers. The old one, now approaching its 13th year in orbit on the NASA satellite Nimbus-7, was showing its age and threatened to quit working. Because of the tight launch schedules following the Challenger disaster, NASA sought outside help to get TOMS off the ground. The Soviet Union turned out to be the best partner: it is developing a new network of Meteor meteorology satellites, and the 1987 U.S./USSR space cooperation agreement allowed the Soviet Cyclone booster to become the Americans' savior.

### Good Yews

Reports that the Pacific Yew is on the verge of extinction are greatly exaggerated, according to a report just released by the U.S. Fish and Wildlife Service (FWS).

The tree's bark is currently the only source of the cancer-fighting drug taxol. Some environmental groups are worried that logging and illegal bark-stripping are threatening the yew supply and hurting the legitimate harvesting of bark for taxol. So last year they petitioned the FWS to add the Pacific Yew (*Taxus brevifolia*) to the List of Endangered and Threatened Plants.

"Every botanist I contacted about the petition—you heard a sigh or saw them roll their eyes," says Jim Bartel, a FWS botanist who wrote the yew report. If the yew were assigned threatened status, he says, so should "any other harvested tree in the United States." His report states that the yew is not rare, "but merely often subdominant throughout millions of acres of forested habitat." In 1990 the U.S. Forest Service estimated that 130 million yew trees existed on national forest lands in the Cascades range of the Pacific northwest.

### Neurosciences & Behavior: Top U.S. Institutions among those publishing more than 500 papers, 1986-90

Rank	Name	No. Papers 1986-90	No. Citations 1986-90	Citations per paper
1	Stanford University	660	6229	9.44
2	Washington University, St. Louis	695	6125	8.81
3	NIMH	1185	9944	8.39
4	Yale University	919	7318	7.96
5	Cornell University	767	6087	7.94
6	University of California, Irvine	655	5048	7.71
7	Harvard University	1419	10905	7.68
8	Johns Hopkins University	955	6675	6.99
9	NINCDS	674	4671	6.93
10	New York University	604	4083	6.76

**Who is tops in brain research?** Among the nation's largest neuroscience research programs, the answer is Stanford, according to a citation analysis by the Institute of Scientific Information (ISI). For large programs—those producing more than 500 papers in 5 years—Stanford ranks first, with 9.44 citations per paper. The University of California at Irvine was a "surprise" among the top 10, says ISI, with an index of 7.71.

But being big doesn't guarantee a high citation rate. ISI found that organizations producing between 100 and 500 papers over the past 5 years were more frequently cited—on average—than the more prolific institutions. Leading the smaller field is Memorial Sloan Kettering Cancer Center (13.38). Outside the United States, the most frequently cited institution in the over 500-paper category was Sweden's University of Lund (7.58). In the under 500 category the Swiss firm of Sandoz (10.38) came out on top.

\*Articles from *Science*, *Nature*, and the *Proceedings of the National Academy of Sciences* were not included in the tabulations because there is as yet no way of tagging those dealing with neuroscience.

Attorney Michael Bean of the Environmental Defense Fund—which joined the petition—says his group finds the FWS report convincing. But he says environmentalists will continue to keep an eye on the Pacific Yew.

### NASA's Fall Colors

When you think of space suits, you usually picture an astronaut who looks like the Michelin Man lumbering across the moon's surface. Now, NASA is unveiling the next generation of "lighter, more comfortable"—and bright yellow—space suits.

The vivid new garment is being checked out at the Naval Air Development Center in Warminster, Pennsylvania.

The suit is made of Goretex, a waterproof, breathable fabric, made from Teflon, that is popular in raingear. Older suits used

urethane-coated nylon. "It's less bulky and requires less effort [for the wearer] to do required tasks," says Bruce Sauser, a NASA manager. It also is cooler and has better ventilation.

A NASA spokesman says the agency hasn't announced which mission will show off the new threads first.



**Sunny suit.** Technician tinkers with new space outfit.