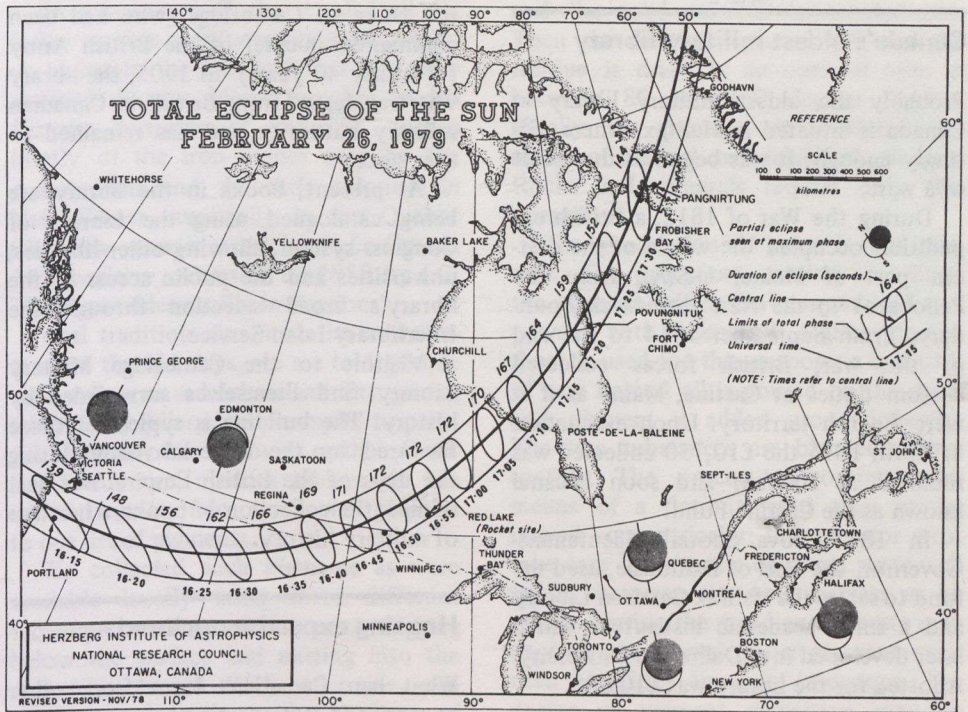


Century's last solar eclipse

For the last time in this century, Canadians will experience the result of the moon passing before the sun's face, bring-



In the composite photograph above, a high altitude atmospheric research rocket, launched by the National Research Council from East Quaddy, Nova Scotia, is shown against the background of the solar eclipse of July 1972. Some 35 similar launchings will take place from a site near Red Lake, Ontario, to examine the effect of the loss of solar particles in the upper atmosphere during the eclipse on February 26.



ing about a total eclipse of the solar light. The next time this phenomenon will occur will be in the year 2024. Somewhere in the Pacific Ocean, at sunrise on February 26, 1979, a small dent will appear at the edge of the solar disc, growing as the earth, moon and sun move in relation to one another.

Travelling at thousands of kilometres an hour across the earth's surface, the moon's shadow will enter Canada from the United States near Monchy, Saskatchewan. Estevan, Saskatchewan, and Winnipeg and Brandon, Manitoba, will be almost in the centre of the path of total blackout. In these locations, the sun will disappear for two minutes and 52 seconds. In other areas only part of the sun's face will be dark and the time duration will vary. Where cities such as Vancouver, Calgary, Regina and Saskatoon will experience near totality, the Lake Ontario and St. Lawrence River communities will witness only a third of the sun obscured. Viewers in the Atlantic provinces will lose about a quarter of the solar disc.

Some phenomena associated with the sun can be observed only during a total eclipse. Most vivid of these is the corona, a bright ring of light which comes into view when the moon blocks the light from the sun. The corona is a high temperature zone around the sun that produces light and low frequency radio signals. Another effect of the eclipse is an abrupt change in the ionised layers of the

earth's atmosphere, which will affect radio communication.

International interest

Both the corona and ion changes will be under scrutiny by National Research Council scientists. Radio telescopes at Algonquin Park, Ontario, will survey the radio signals from the sun, and a temporary rocket-launching site has been established at Red Lake, Ontario, where NRC will welcome a team of scientists from many parts of the world. For a week prior to, during and after the eclipse, 35 rockets will carry instruments to monitor the upper atmosphere. One of these will be a Canadian *Black Brant* rocket, carrying experiments from NRC, York University, Toronto, and the University of Saskatchewan.

Eye-damage warning

NRC cautions strongly against any attempt at viewing the eclipse directly, since serious damage to the eyes could result. Indirect observing by projecting the sun's light through a pin hole in stiff paper onto a sheet of white paper is the recommended method. However, to eliminate any risk whatever, watch the event on television.

Camera buffs, continues the NRC warning, should use the highest shutter speed, smallest aperture, with the lens set at infinity. Do not use the viewfinder. Hope for a clear day.