



QUEBEQUOIS ECLIPSE SOLEIL MARRED BY CLOUDS



Nancy McCracken shows Cap Chat souvenir—with disappointment.

A rather large number of NCA members were at their telescopes on Quebec's Gaspé Peninsula on Monday afternoon July 10, hoping for as spectacular a view of total solar eclipse as they experienced in the United States in March 1970. Most were greatly disappointed. After days of nearly clear weather, a weak low-pressure center began moving across southeastern Quebec on July 10. On the path of totality far to the north, little more than a blurred inner corona was visible through nearly overcast middle and high clouds at 4:30 AST that afternoon.

The two largest groups from NCA were located on the southeastern shore and on the north central shore of the Gaspé. At New Carlisle, the Legowiks (including his parents from Montana), the Opies, and the Freunds observed with an assortment of telephoto lenses, 6-inch reflectors, and small refractors. Also present were Dr. Everett Hurlburt, formerly of NSF, and Dr. Engelbrettsen from the Hayden Planetarium.

At Cap Chat were the Wrights, McCrackens, Krebs, Hudsons, Trexlers, and Leideckers, as well as Bolster, Winkler, Gottlieb, Jean Radoane, Ellen Vartanoff, Mabel Sterns, Grace Spitz, and Estelle Finkle. Associated with this group were Don Rippey of NBS, Jon Vanderwall of HDL, and Leith Holloway and Norman Sperling of Princeton. They used an extremely wide range of telescopes, photometers, and cameras. These ranged from a 10-inch Wright-Schmidt and other large instruments to telephoto-equipped movie cameras. Vanderwall produced an elaborate time-base generator.

On the evenings of July 7 and 8, members saw fairly prominent auroral displays in the northeastern sky before midnight. These were probably related to two class-1 solar flares that erupted on the morning of July 6 (NOAA data).

At Cap Chat, the anticipated shortages and traffic jams did not materialize; the picturesque little town was enthusiastically — and opportunely — prepared with ample stocks, including "eclipse soleil" lapel buttons, pennants, banners, and nightly town-sponsored eclipse parties. The multitude, dealing heavily in maimed French, was absorbed as competently as the spring tides of the Gaspé.

Star Dust will present available 1972 eclipse pictures in coming issues.

SUMMER CALENDAR

Friday, August 4, 11, 18, 25, 7:30 PM — Telescope-making classes at American University, McKinley Hall basement. Information: Jerry Schnall, 362-8872.

Monday, August 7, 14, 21, 28, 7:30 PM — Telescope-making classes at Chevy Chase Community Center, Connecticut Avenue and McKinley Street, NW. Information: Jerry Schnall, 362-8872.

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CALENDAR - continued

Saturday, August 19, 9:00 PM; September 16, 8:00 PM - Exploring the Sky, presented jointly by NCA and National Park Service, Glover Road south of Military Road, NW, near Rock Creek Nature Center. Information: Bob McCracken, 229-8321.

Saturday, September 9, 8:15 PM - NCA monthly meeting at the Department of Commerce Auditorium, 14th and E Streets, NW. Dinner with the speaker prior to the meeting. Details to be announced in September issue.

OFFICERS FOR 1972-1973 ELECTED

At the June annual meeting (postponed from May for lack of a quorum) members elected the entire slate of people chosen by the nominating committee. The new officers, with their telephone numbers, are:

President - Dr. John Eisele (423-1586)
Vice President - Dr. Henning Leidecker (864-6816)
Secretary - Estelle Finkle (338-2493)
Treasurer - Richard Horwitz (578-0963)
Sergeant-at-Arms - Lawrence Torrance (843-6534)
Trustees - John Eisele (ex officio chairman)
 Robert Bolster (765-1921)
 Worth Crowley (362-0751)
 Alexander White (461-9681)
 William Winkler (762-5135) (elected 1972)

NCA thanks all those whose efforts during the past year made 1971-72 such a fine one.

MEMBERSHIP NOTES

President Eisele will be the new delegate to the Washington Academy of Sciences, replacing William Winkler.

Please return your blue *Sky and Telescope* cards promptly to the treasurer with your check when you receive his bill. Note that NCA members receive *Sky and Telescope* magazine at considerably reduced rates.

John and Bonnie Legowik have moved to:

TUSLOG DET 47
APO NY 09289

The Legowiks continue as NCA members, and we wish them success in their new assignments.

Dr. and Mrs. James Krebs' new address is:

617 E Street, SE
Washington, D. C. 20003
Telephone: 544-5080

NOTE ON CURRENT RESEARCH

HD 24712: A unique magnetic star - In July 15 *Astrophysical Journal*, G. W. Preston of Hale Observatories reports on extensive spectroscopic observations of this object with the 200-inch and 100-inch Coude instruments. The surface magnetic field of HD 24712 averages 3,000 Gauss (compared with 1 Gauss for the general solar field - ed.). The magnetic field varies in strength with a period of 12.45 days without reversal of polarity. When the field is strongest, spectral lines of heavy elements such as Europium are most intense while lines of the light elements, such as magnesium, are weakest. Spectral line strength variation increases with atomic number.

These observations fit an increasingly accepted model for a rotating star with one pole inclined sharply toward the earth. Elements are viewed as concentrated in bands parallel to the stellar equator with the lightest elements

MORE QUEBEQUOIS CAPERS

As eclipse preparations begin, many instruments are assembled aboard the Bolater mount. At right, McCracken adjusts the shadow-band and coronal photometers; HDL's Jonathan Vanderwall (foreground) prepares the time-base generator. Winkler's fish-eye panorama (left) shows the observation site at the motel. Since it was only July 10, and the pool had not yet been filled for the short swimming season, it was used as a windbreak for equipment set up in it later in the day and operated by Radoane and Vartanoff.



Lower right — Checking his 10-inch Wright-Schmidt, Hudson hides behind wife Nancy, who restrains local curiosity. Jean Radoane hides behind McCracken's 6-inch refractor, sun hides behind cloud, McCracken despairs. Bolater hides behind camera here and for picture at top right.



concentrated at one pole, the heaviest elements at the other. Three competing theories attempt to explain this distribution.

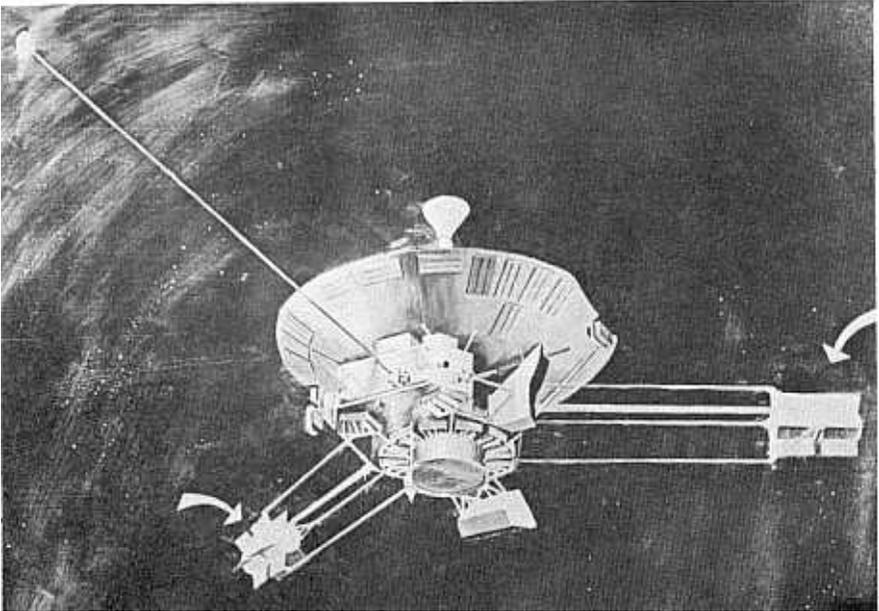
The value of an atlas catalog as an aid to understanding such reports as the above paper may be easily demonstrated. The *Henry Draper Catalog* section of the *Skalnate Pleso Atlas Catalog* lists HD24712 as *Boss General Catalog* star 4729. The *Boss General Catalog* section of the *Skalnate Pleso Atlas Catalog* lists HD 24712 as a 5.9 visual magnitude, peculiar A star in Eridanus. It is located at RA 3h53m, Dec -12.15°.

SUGGESTED READING

A summary of the Astronomy Survey Committee report to the National Academy of Science appears in July 14 *Science*, page 247. Jesse L. Greenstein of California Institute of Technology elaborates on his assessment that we are now in a golden age of astronomy.

Paul E. Roques of Griffith Observatory discusses astronomical photography in the August *Griffith Observer*, page 13. With tutorial illustrations, he emphasizes the powerful techniques of using color filters.

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ANOTHER FIRST — NASA's Pioneer Jupiter probe, now transiting the asteroid belt, is supplied electrical power by four AEC-developed nuclear thermoelectric generators (arrows), and twelve radioisotopic heaters protect against the extreme cold. (NASA photo courtesy Dick Horwitz).

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 Dr. John A. Elias, 310 Curtis Drive, Apt. 202, Hillcrest Heights, Md. 20022 (423-1482).
 Vice President, Dr. Henning Leide (407) Tennessee-membership, Richard Horvitz
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