Environment Canada Environnement Canada

Climatic Perspectives

May 24 to 30, 1988 *A weekly review of the Canadian climate* *Vol. 10 No. 22*

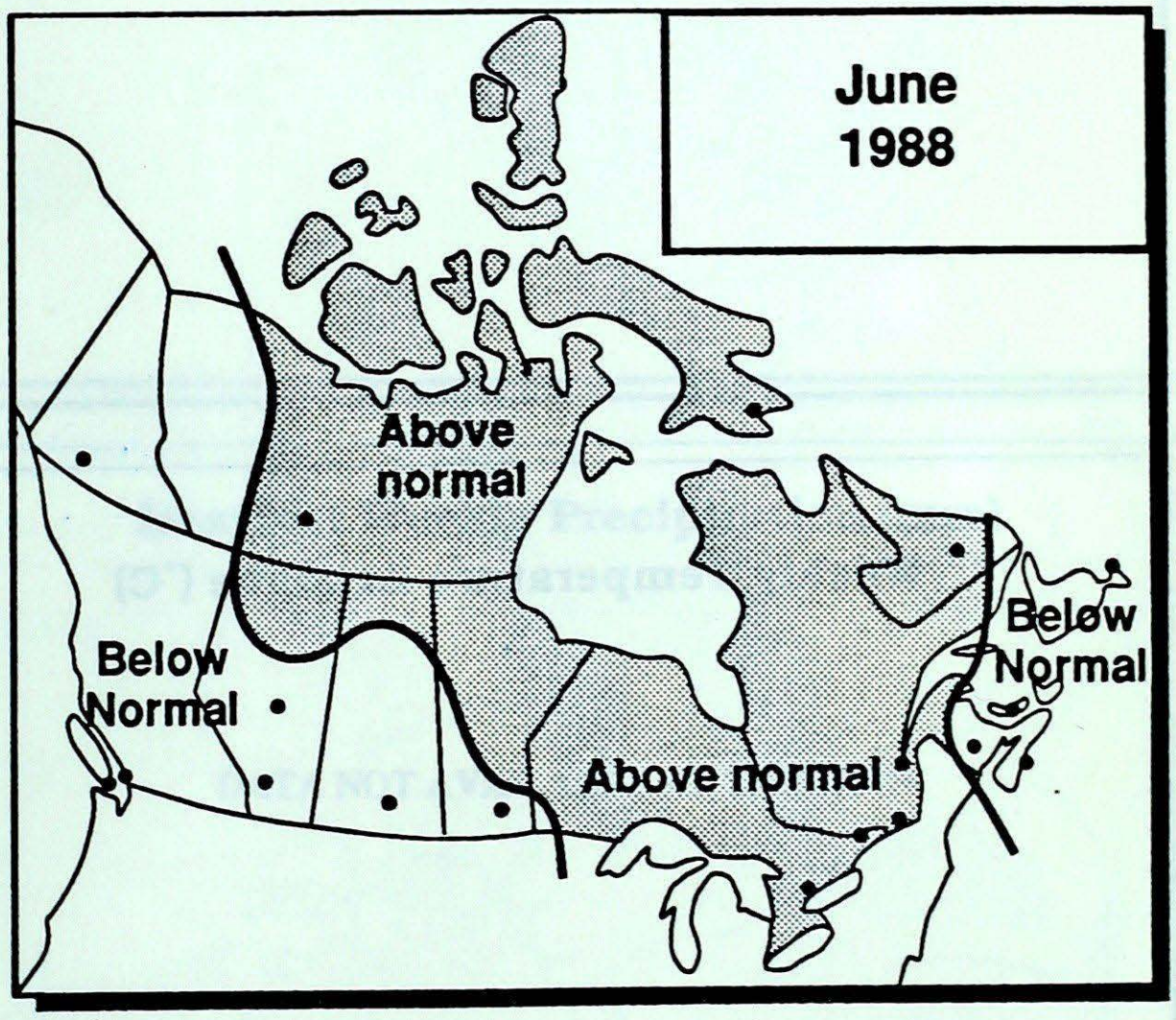
Environment Canada Environnement Canada

Atmospheric Environment Service Service de l'environnement atmosphérique

MONTHLY TEMPERATURE FORECAST

Normal temperatures for June, °C

Whitehorse	12	Toronto	18
Yellowknife	13	Ottawa	18
Iqaluit	3	Montreal	18
Vancouver	15	Quebec	16
Victoria	14	Fredericton	16
Calgary	13	Halifax	14
Edmonton	15	Charlottetown	15
Regina	16	Goose Bay	11
Winnipeg	17	St. John's	11



Canada

On May 15, 1988, the first official monthly temperature forecast was made public, and is now available at all A.E.S. weather centres and offices in a map version transmitted on the national facsimile network, and a text version on the national telecommunications network.

Rain at last!

– Drought partially alleviated western Prairies

– Severe weather in Saskatchewan

Canada

MAP NOT AVAILABLE

Weekly Temperature Extreme (°C)

DATA NOT AVAILABLE AT THIS TIME

ACROSS THE COUNTRY . . .

Yukon and Northwest Territories

In the southern Yukon, temperatures returned to more seasonal values. Showers developed along a frontal zone, which lingered across the Territory and stretched eastwards across the Great Slave Lake region, where it was for the most part cool, breezy and unsettled. The weather was uneventful in the eastern Arctic, with a mixture of cloud and sun and light snowfalls. Temperatures regularly climbed above freezing during the day, reaching as high as 11°C over northern Baffin Island.

British Columbia

A number of frontal weather systems affected the province, resulting in a primarily cool and cloudy week. Fort Nelson established a new 24-hour precipitation record on two consecutive days. Combined, the 51 mm of rain almost equals their monthly normal for May. A band of thunderstorms moved through the Prince George area on the 28th, producing hail, which caused minor but widespread damage. The Thompson Region remained dry, while the rest of the south received substantial amounts of rain. The Swiftsure Yacht Race held in Victoria over the weekend was held under ideal weather conditions. The wet weather is keeping the fire hazard down.

Prairie Provinces

Variably sunny weather in Alberta gave way to increased cloud, shower and thundershower activity. The last two days of the period saw much-needed rain falling in many areas of the province.

It was sunny and very warm across Saskatchewan and Manitoba. A frontal disturbance moved across Saskatchewan on the 24th, and worked its way eastward into Manitoba, triggering scattered thundershowers across the southern half both provinces. Some of the storms produced hail and wind gusts to 160 km/h. Funnel clouds and a possible tornado were reported near Grenfell, Kamsack and Leslie, Saskatchewan. More significant rainfalls reached the drought stricken areas late on the 29th and 30th, as a low pressure system gathered strength over the American plains and edged northward. See the story on page 3. Searing temperatures during the latter

part of the period nudged the upper thirties in the southeastern agricultural districts. In contrast, the maximum temperature reading at Churchill on Sunday barely reached the freezing mark.

Ontario

A couple of frosty nights at the beginning of the week gave way to a summery weather regime by the weekend, with low humidity and maximum temperatures reaching the thirties through most of the province. The mercury soared to 34C at a number of locations in southern Ontario on the 30th, the warmest May readings in more than a decade. Although it remained warm in northern Ontario, it was a little more unsettled with showers. Precipitation totals were generally less than 10 mm.

Quebec

The week started out cool, with some light snow reported falling in the James Bay area the first two days. Under mainly sunny skies, temperatures rebounded quickly to more seasonal values as an area of high pressure dominated. Frontal systems crossing the region over the weekend were weak, and produced only scattered showers. The north coast received the highest rainfall amounts from disturbances crossing the Gulf of St. Lawrence. There were five forest fires reported burning in the province.

Atlantic Provinces

There were varying amounts of cloud and sun over the Maritimes. Showers and thundershowers occurred primarily during the first half of the period. On the 24th, golf ball size hail was reported in the Lake George area a few kilometres east of Greenwood. Daily temperature records, in the mid- to upper twenties, were recorded during the latter half of the week.

It was a generally unsettled week in Newfoundland as a series of disturbances deposited significant amounts of rain. Southern locations reported thundershowers on the May 24. Occasional light snow fell in the northern reaches of the Island the last day of the period. In Labrador, where it was cold and unsettled most of the week, several centimetres of fresh snow covered the ground.

MAP NOT AVAILABLE

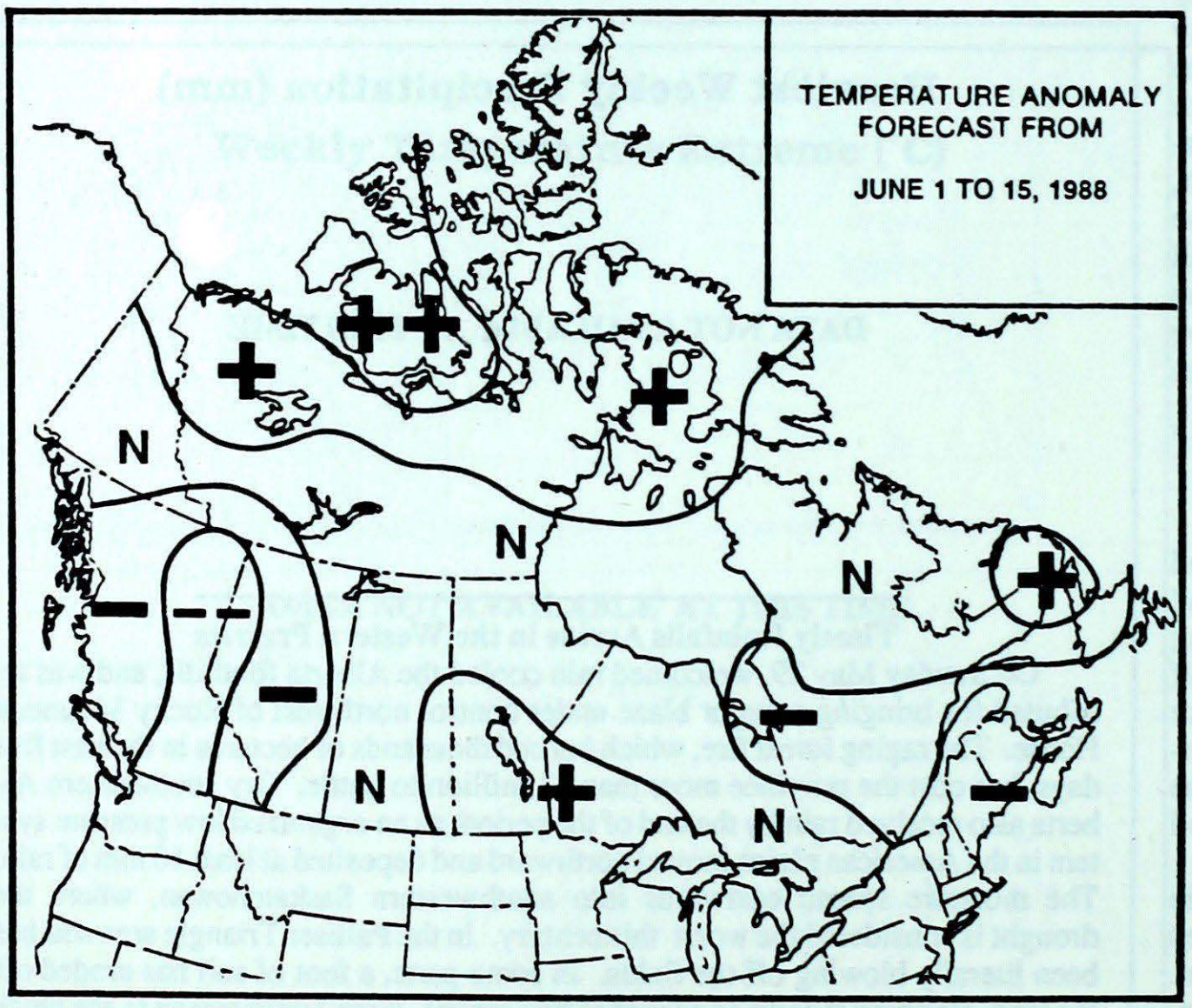
Heaviest Weekly Precipitation (mm)

DATA NOT AVAILABLE AT THIS TIME

Timely Rainfalls Arrive in the Western Prairies

On Sunday May 29, welcomed rain cooled the Alberta foothills, and was attributed for bringing a major blaze under control northwest of Rocky Mountain House. The raging forest fire, which burned thousands of hectares in the past five days, has cost the province more than $1 million to battle. Dry southeastern Alberta also received rain by the end of the period, as an organized low pressure system in the American plains moved northward and deposited at least 10 mm of rain. The moisture spread eastwards into southwestern Saskatchewan, where the drought is considered the worst this century. In the Palliser Triangle area soil has been literally blowing off the fields. In some parts, a foot of soil has eroded off the land, stripping it down to a layer of fine gravel. It isn't uncommon to see black clouds of dust rising off the fields. In southern Alberta, ranchers have reported calves dying of dust poisoning due to range cattle kicking up dust. Many farmers are in the process of reseeding their fields, and the significant rainfalls of the past three days have been a blessing. As of the 31st, showers and thunderstorms have deposited between 20 and 35 millimetres of much needed moisture.

SOIL MOISTURE MAP NOT AVAILABLE



++ much above normal
\+ above normal
N normal
\- below normal
-- much below normal

Temperature Anomaly Forecast

This forecast is prepared by searching historical weather maps to find cases similar to the present. The historical outcome during the 15 days subsequent to the chosen analogues is assumed to be a forecast for the next 15 days from now.

CLIMATIC PERSPECTIVES VOLUME 10

Managing Editor ..... P.R. Scholefield
Editors-in-charge
weekly ..... A.K. Radomski
monthly ..... A.A. Caillet
Data Manager ..... M. Skarpathiotakis
Art Layout ..... K. Czaja
Word Processing ..... P. Burke/U. Ellis
Translation ..... D. Pokorn
Cartography ..... G. Young/T. Chivers

Regional Correspondents
Atlantic: F.Amirault; Quebec: J.Miron; Ontario: B.Smith; Central: J.F.Bendell; Western: W.Prusak; Pacific: E.Coatta; Yukon Weather Centre: J.Steele; Frobisher Bay and Yellowknife Weather Offices; Newfoundland Weather Centre: G.MacMillan; Ice Central Ottawa

ISBN 0225-5707 UDC 551.506.1(71)

Climatic Perspectives is a weekly bilingual publication of the Canadian Climate Centre, Atmospheric Environment Service, 4905 Dufferin St., Downsview, Ontario, Canada M3H 5T4
☎ **(416) 739-4438/4436**

The purpose of the publication is to make topical information available to the public concerning the Canadian Climate and its socio-economic impact.

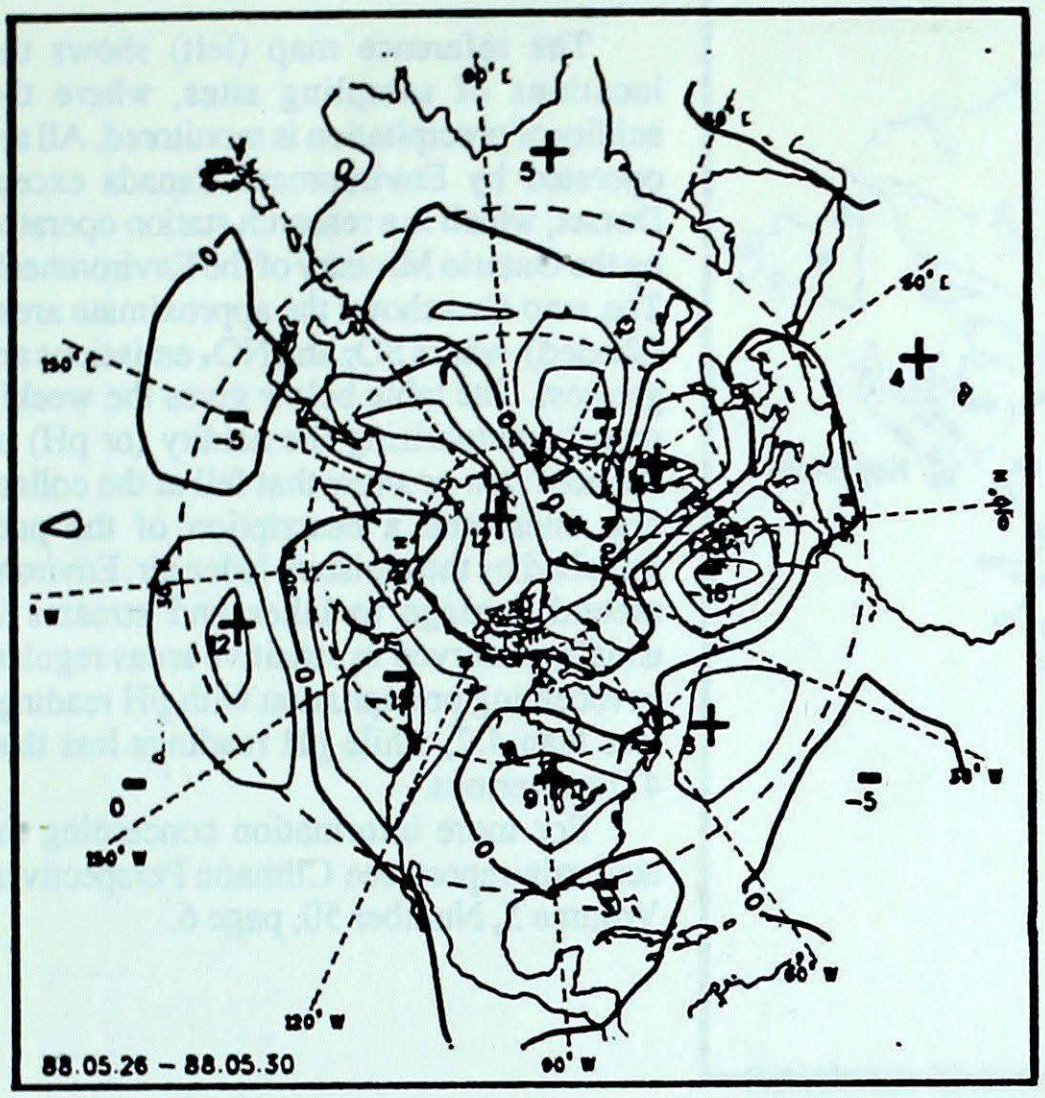
Unsolicited articles are welcome but should be at maximum about 1500 words in length. They will be subject to editorial change without notice due to publishing time constraints. The contents may be reprinted freely with proper credit.

The data in this publication are based on unverified reports from approximately 225 Canadian synoptic weather stations. Information concerning climatic impacts is gathered from AES contacts with the public and from the media. Articles do not necessarily reflect the views of the Atmospheric Environment Service.

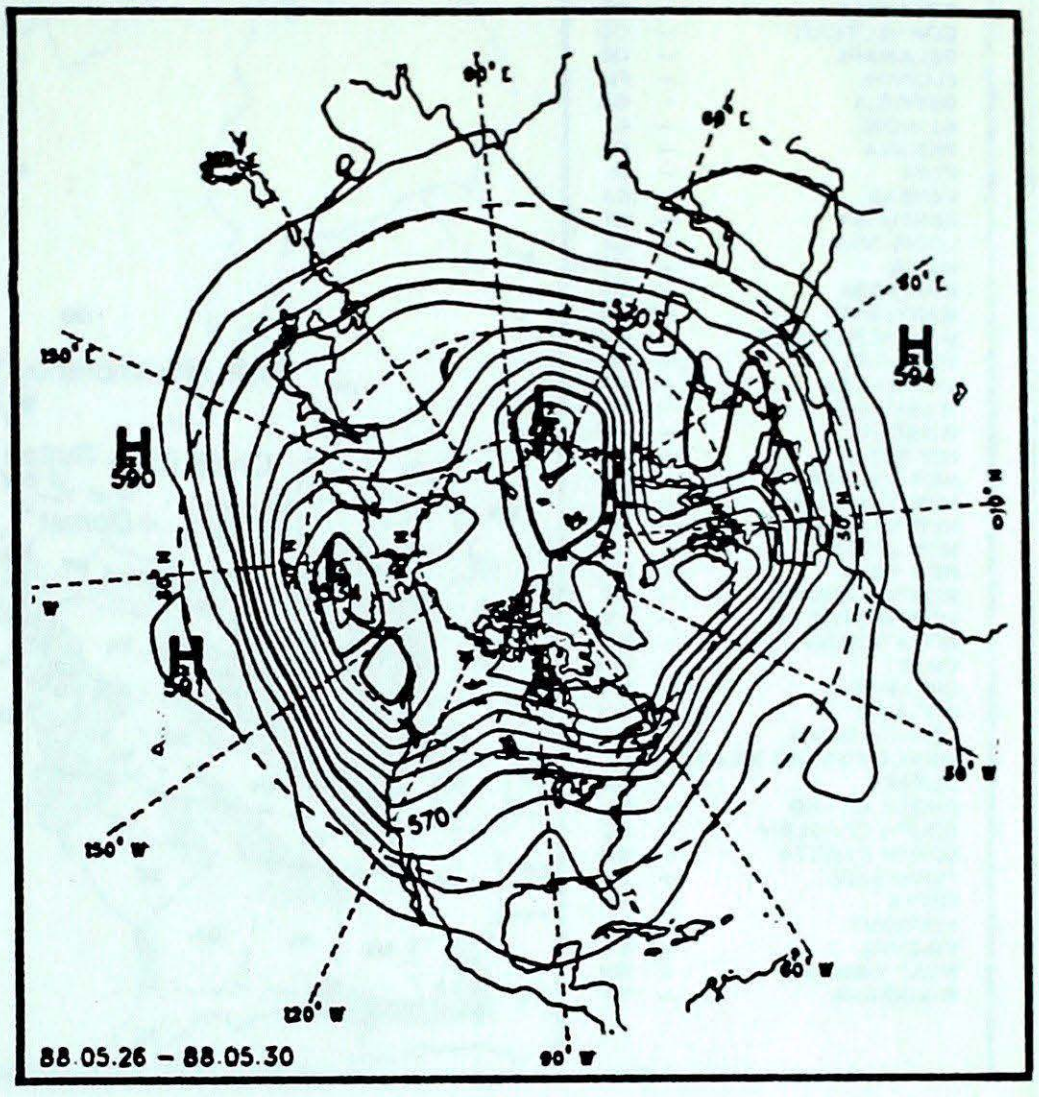
Annual Subscriptions
weekly and monthly supplement: $35.00
foreign: $42.00
monthly issue: $10.00
foreign: $12.00

Orders must be prepaid by money order or cheque payable to Receiver General for Canada. **Canadian Government Publishing Centre, Ottawa, Ontario, Canada K1A 0S9 (819) 997-2560**

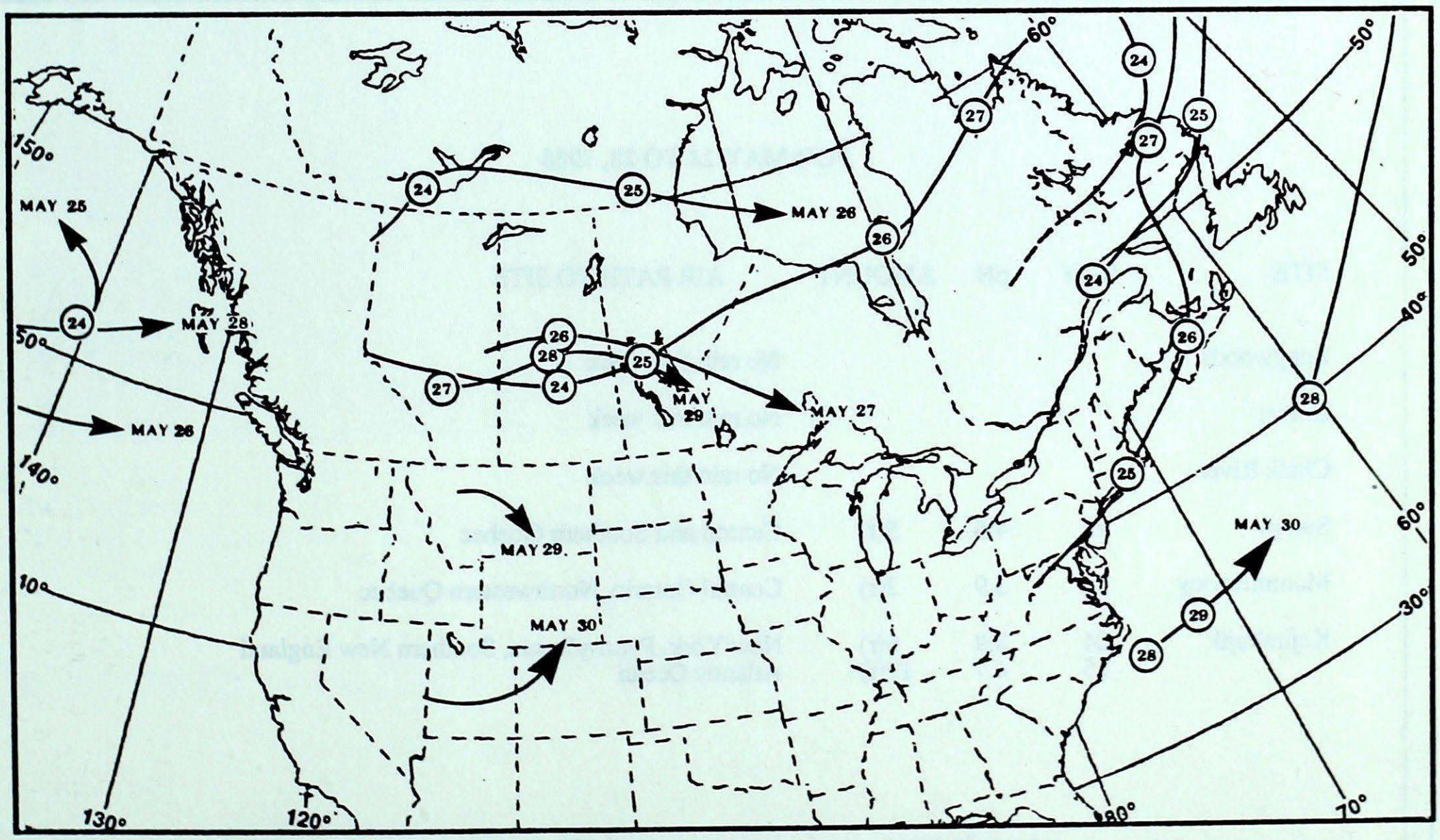
50 kPa ATMOSPHERIC CIRCULATION



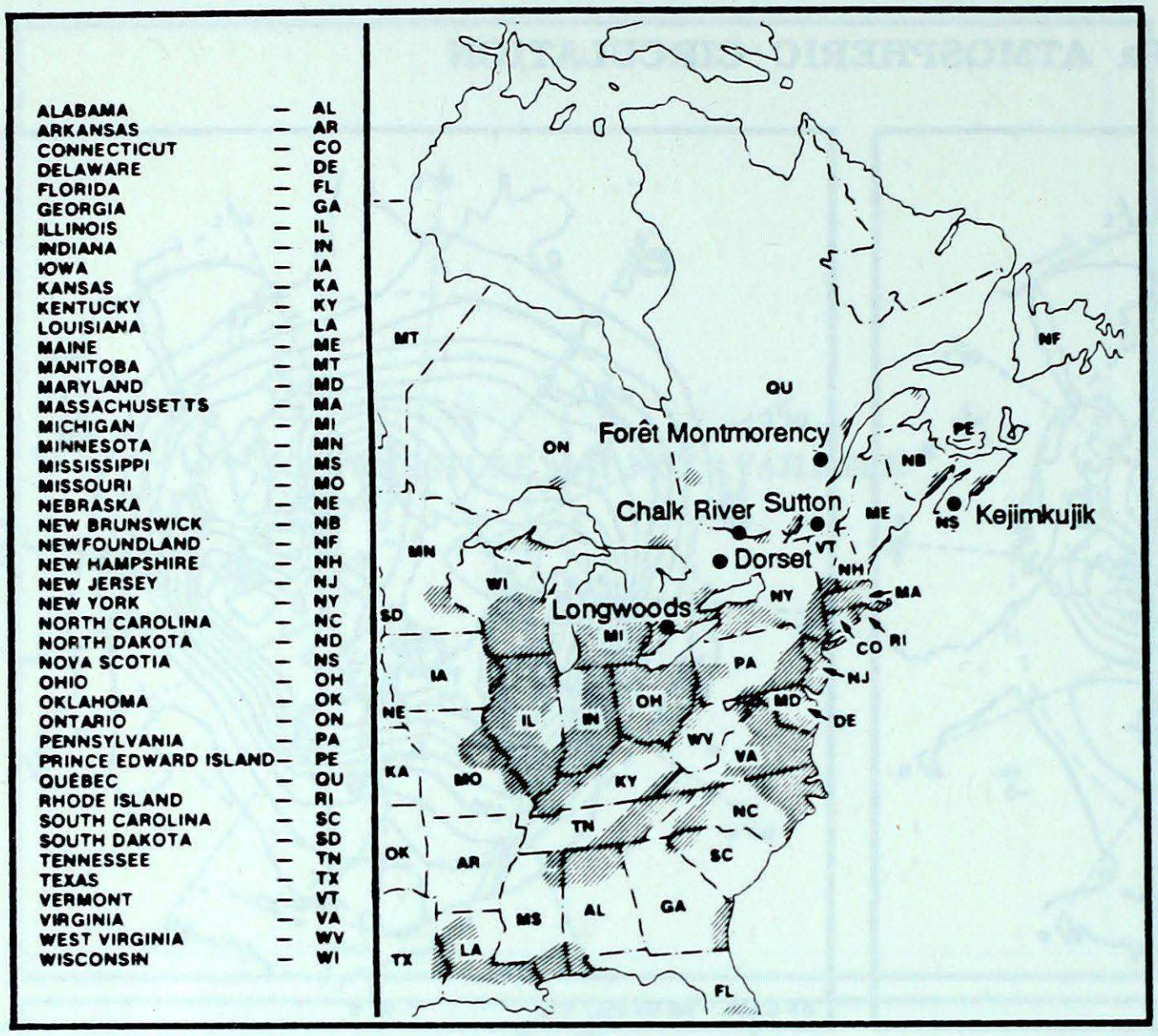
Mean geopotential height anomaly
50 kPa level (5 decameter intervals)



Mean geopotential height
50 kPa level (5 decameter intervals)



Storm track - Position of storm at 12 GMT during the period: May 24 to 30, 1988



ACID RAIN REPORT

The reference map (left) shows the locations of sampling sites, where the acidity of precipitation is monitored. All are operated by Environment Canada except Dorset, which is a research station operated by the Ontario Ministry of the Environment. The map also shows the approximate areas (shaded), where SO_2 and NO_x emissions are greatest. The table below gives the weekly report summarizing the acidity (or pH) of the acid rain or snow that fell at the collection sites, and a description of the path travelled by the moisture laden air. Environmental damage to lakes and streams is usually observed in sensitive areas regularly receiving precipitation with pH readings less than 4.7, while pH readings less than 4.0 are serious.

For more information concerning the acid rain report, see Climatic Perspectives, Volume 5, Number 50, page 6.

FOR MAY 22 TO 28, 1988

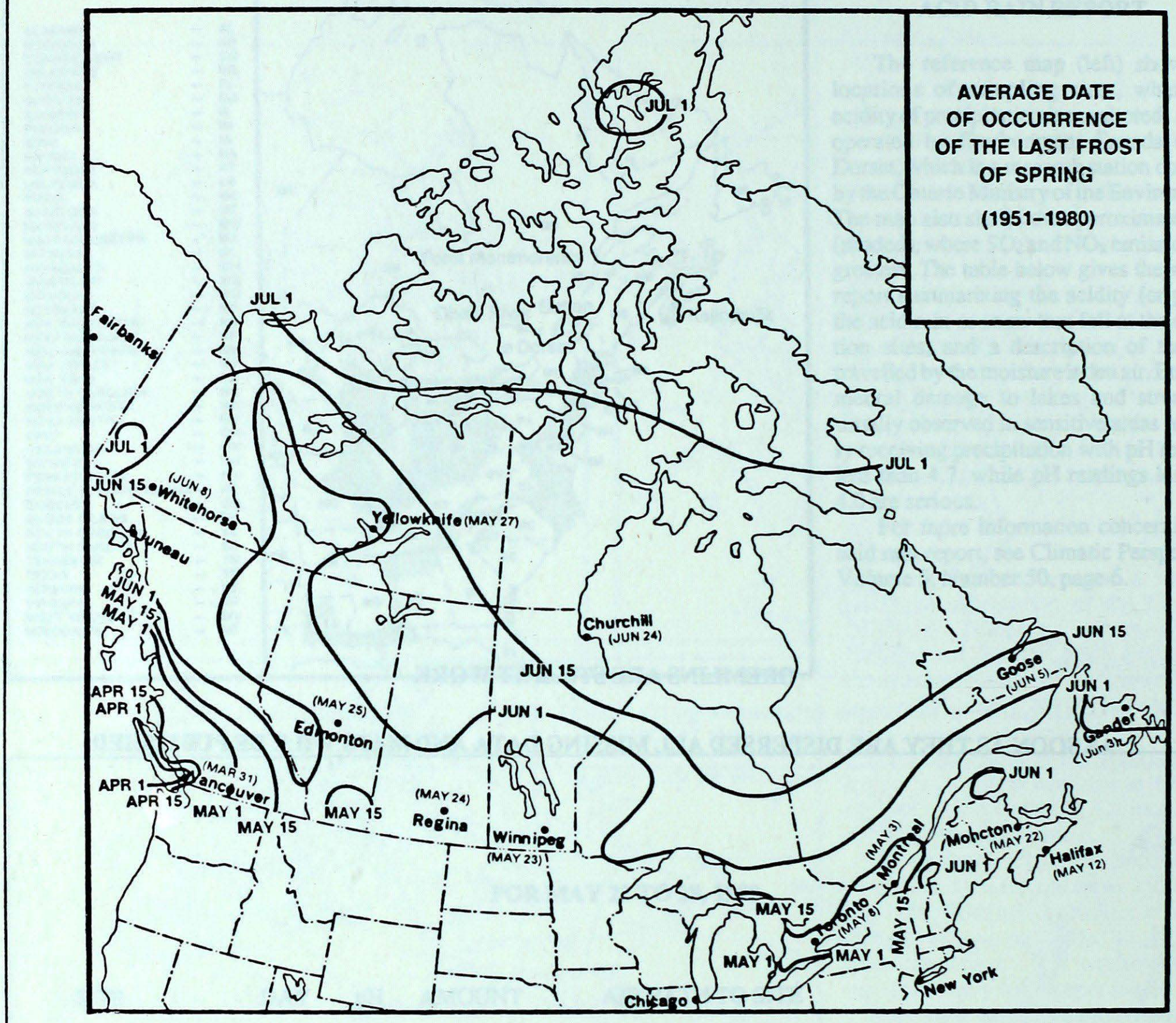
SITE	DAY	pH	AMOUNT	AIR PATH TO SITE
Longwoods				No rain this week
Dorset				No rain this week
Chalk River				No rain this week
Sutton	25	4.5	5(r)	Central and Southern Quebec
Montmorency	22	3.9	2(r)	Central Ontario, Northwestern Quebec
Kejimkujik	24	3.9	5(r)	New York, Pennsylvania, Southern New England
	25	4.7	17(r)	Atlantic Ocean

r = rain (mm), s = snow (cm), m = mixed rain and snow (mm)

STATISTICS FOR THE WEEK ENDING 0600 GMT May 31, 1988

GREMLINS ARE STILL AT WORK

AS SOON AS THEY ARE DISPERSED ALL MISSING DATA AND MAPS WILL BE PUBLISHED



Environment CANADA Environnement
1005959D VOL 10 ISS 22 880524
REF # 002
ARCHIVES--------PERIODICALS
CLIMATIC PERSPECTIVES

OTM