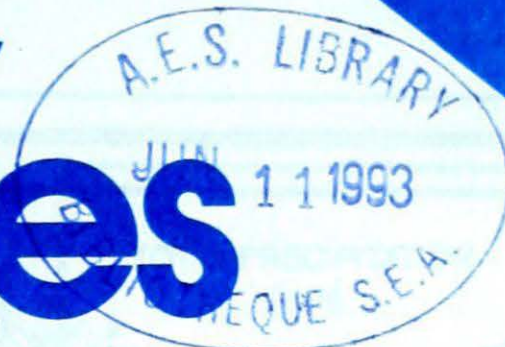




# Climatic Perspectives



May 31 to June 6, 1993

A weekly review of Canadian climate and water

Vol. 15 No. 23

## What ever happened to spring?

*Unlike British Columbia and the Peace River district of central Alberta, where temperatures have been averaging above normal for eleven to fifteen consecutive weeks, residents of central and eastern Canada have been plagued by below-normal temperatures since the middle of May.*

In Ontario it was another unseasonably cool and showery week across the province. Blooming of this year's strawberry crop has been delayed, and as a result, the berry harvest will, like last year, be later than normal. In fact, a late frost on May 29, damaged an estimated 5 to 15 percent of the berry crop in the agricultural region near Toronto. Frost was also reported across northern Ontario on June 4. Growing degree days at Vineland, in the Niagara Peninsula, for example, have totalled 294 so far this spring, compared to a normal to the end of May of 354. Last year at this time only 283 growing degree days had accumulated.

Since the Victoria Day weekend, approximately 75 to 100 millimetres of rain has fallen in some parts of northern and central Ontario, saturating soils and raising lake and river water levels as much as 26 cm, to their seasonal highs. There is concern, that another heavy rainfall event could cause flooding in the feeder watersheds of the Trent-Severn Waterway between Lake Ontario and Georgian Bay.

The cool and wet conditions has also put a damper on the spirits and activities of Quebecers eagerly awaiting summer-like temperatures after a snowy winter. Agricultural activities are at least one to

two weeks behind schedule. On a positive note, there have been fewer occurrences of severe weather this spring, with only a couple of episodes of hail or flash flooding related to severe thunderstorms. Also, there have been far few incidents of forest fires. Only 218 forest fires were reported this spring, destroying 251 hectares of timber. This is less than half the average.

### Elsewhere...

In the Yukon, the week started off warm and sunny but became more unsettled. A forest fire a few kilometres from Whitehorse was quickly extinguished with the help of water bombers. More frequent showers towards the end of the period lowered the fire hazard.

Temperatures across the Arctic average well-above normal, which at this time of year means that daily highs were able to climb as much as 5 to 10 degrees above freezing. Several centimetres of fresh snow fell on Baffin Island. Ferry service in the Mackenzie River delta has begun subject to ice still flowing down the Mackenzie and Peel Rivers.

Well-above normal temperatures triggered heavy shower and thunderstorm activity in the B.C. interior. A nearly stationary disturbance off the west coast spread bands of moisture inland from the southwest, providing coastal regions of the province with cloud, fog and rain.

Changeable weather conditions affected the Prairies, with the heaviest rainfalls reported across parts of the south. Temperatures were unseasonably cold,

with the mercury dropping below freezing on a few occasions. A large fire burning northeast of Cold Lake, produced smoky conditions in central and northern Alberta over the weekend, prompting some concern over air quality.

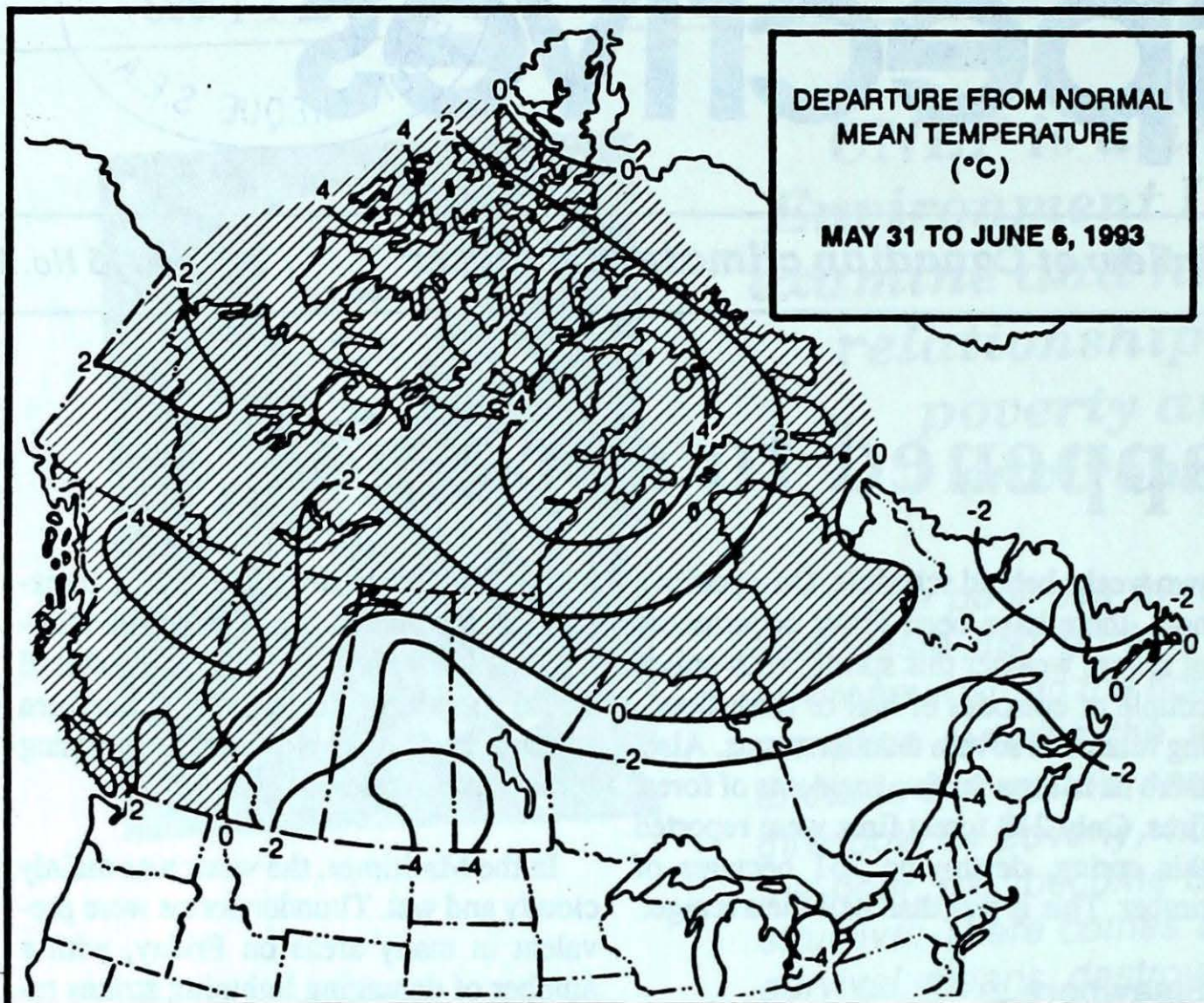
In the Maritimes, the week was mainly cloudy and wet. Thunderstorms were prevalent in many areas on Friday, with a number of damaging lightning strikes reported. A small plane was forced to land at Moncton, N.B., after being hit by lightning. A New Brunswick man was killed and another injured, while working in a field. A church in Halifax was also damaged.

A cool northeasterly flow produced drizzle and fog along the northern and eastern sections of Newfoundland at the start of the period. Rain and fog affected the Island during the middle of the week. The weekend saw clearing skies and warmer temperatures, as a ridge of high pressure took hold.

Mainly sunny skies with near-normal temperatures started off the week in Labrador, with cloud, rain and even some snow moving in by mid-week. Fair, but cool weather moved in for the weekend.

### A look ahead...

For the week of June 14, below-normal temperatures are expected in B.C., Alberta, the southern half of the Yukon, Newfoundland and Labrador. Above-normal values are likely for the Arctic Islands, southern Manitoba, Ontario, southwestern Quebec and the Maritimes. Elsewhere, near normal temperatures will occur.



DEPARTURE FROM NORMAL  
MEAN TEMPERATURE  
(°C)  
MAY 31 TO JUNE 6, 1993

**Weekly normal temperatures (°C)**

	max.	min.
Whitehorse A	16.9	4.0
Iqaluit A	3.4	-1.9
Yellowknife A	15.6	5.3
Vancouver Int'l A	18.7	10.0
Victoria Int'l A	18.6	8.6
Calgary Int'l A	19.3	6.0
Edmonton Int'l A	20.7	6.1
Regina A	21.6	7.5
Saskatoon A	21.2	7.7
Winnipeg Int'l A	21.5	8.9
Ottawa Int'l A	22.3	10.5
Toronto (Pearson Int'l A)	22.0	9.5
Montréal Int'l A	22.1	10.8
Québec A	20.2	8.4
Fredericton A	20.6	8.0
Saint John A	17.4	7.1
Halifax (Shearwater)	16.5	7.8
Charlottetown A	17.3	7.5
Goose A	15.0	3.4
St John's A	13.7	3.8

**Weekly temperature and precipitation extremes**

	Maximum temperature (°C)	Minimum temperature (°C)	Heaviest precipitation (mm)
British Columbia	Kamloops A 30	Clinton (aut) 4	Smithers A 51
Yukon Territory	Whitehorse A 25	Komakuk Beach A -2	Teslin (aut) 18
Northwest Territories	Fort Simpson A 30	Alert -9	Coppermine A 11
Alberta	High Level A 28	Banff (aut) -1	Pincher Creek (aut) 36
Saskatchewan	Meadow Lake A 24	La Ronge A -2	Yorkton A 17
Manitoba	Thompson A 26	Grand Rapids (aut) -4	Churchill A 14
Ontario	Thunder Bay A 24	Armstrong (aut) -2	Simcoe 66
		Geraldton A -2	
Quebec	Val-d'Or 24	La Grande IV A -3	Baie Comeau A 54
New Brunswick	Charlo A 22	St Stephen (aut) 1	Saint John A 59
Nova Scotia	Greenwood A 20	Greenwood A 3	Yarmouth A 63
Prince Edward Island	Charlottetown A 19	Charlottetown A 3	Charlottetown A 5
Newfoundland	Goose A 24	Badger (aut) -3	Port Aux Basques 24

**Across The Country...**

Highest Mean Temperature	Lytton (B.C.) 19
Lowest Mean Temperature	Alert (N.W.T.) -5

93/05/31-93/06/06

CLIMATIC PERSPECTIVES  
VOLUME 15

Managing editor . . . . . *A.Saulesleja*  
Editor English version *Andrew Radomski*  
French version . . . . . *Alain Caillet*  
Long-range forecasts . . . . . *Aaron Gergy*  
Data manager . . . . . *M. Skarpathiotakis*  
Computer support . . . . . *Robert Eals*  
Art layout . . . . . *K. Czaja*  
Translation . . . . . *D. Pokorn*  
Cartography . . . . . *T. Chivers*

ISBN 0225-5707 UDC 551.506.1(71)

Climatic Perspectives is a weekly publication (disponible aussi en français) of the Canadian Climate Centre, Atmospheric Environment Service, 4905 Dufferin St., Downsview, Ontario, Canada M3H 5T4

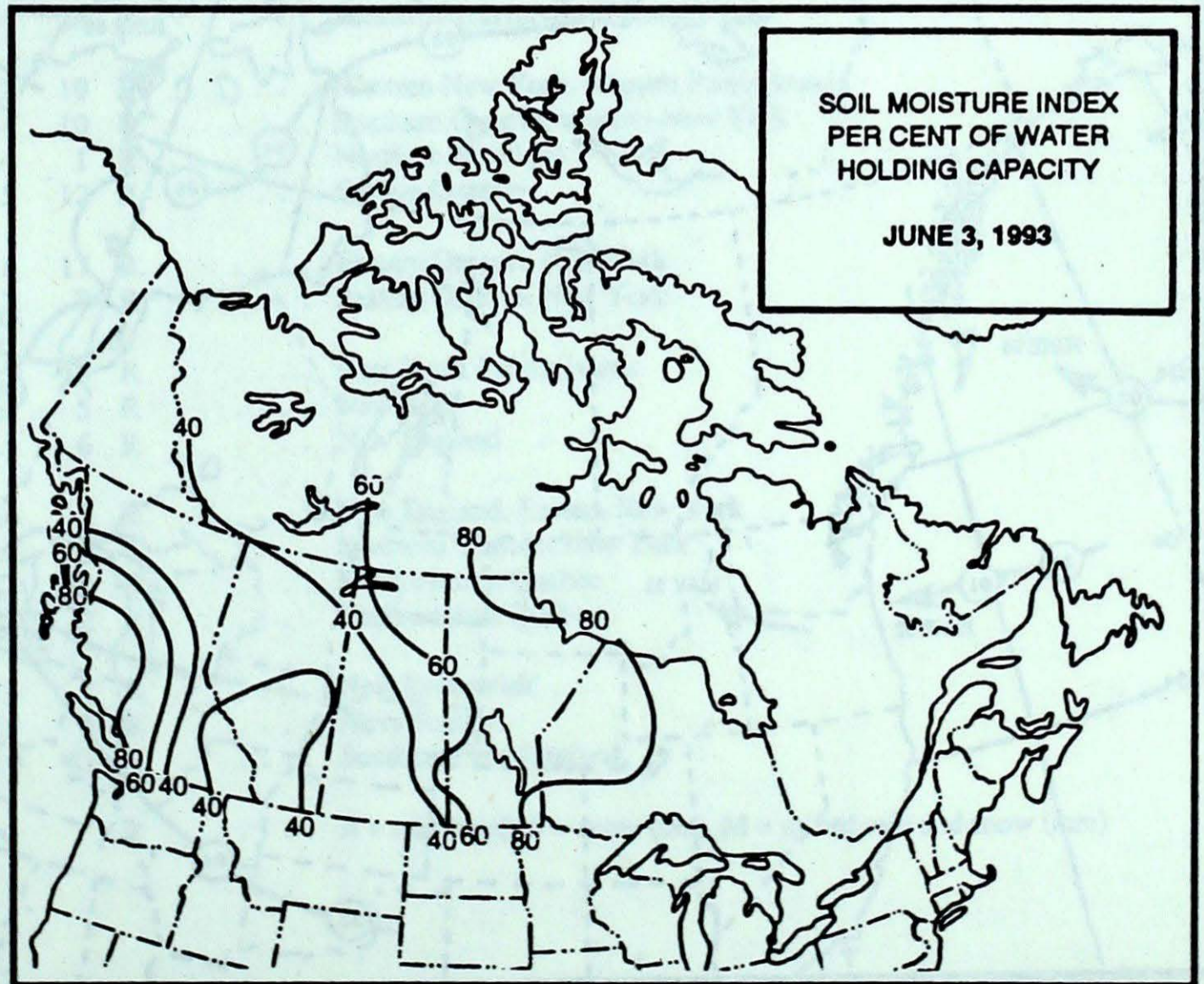
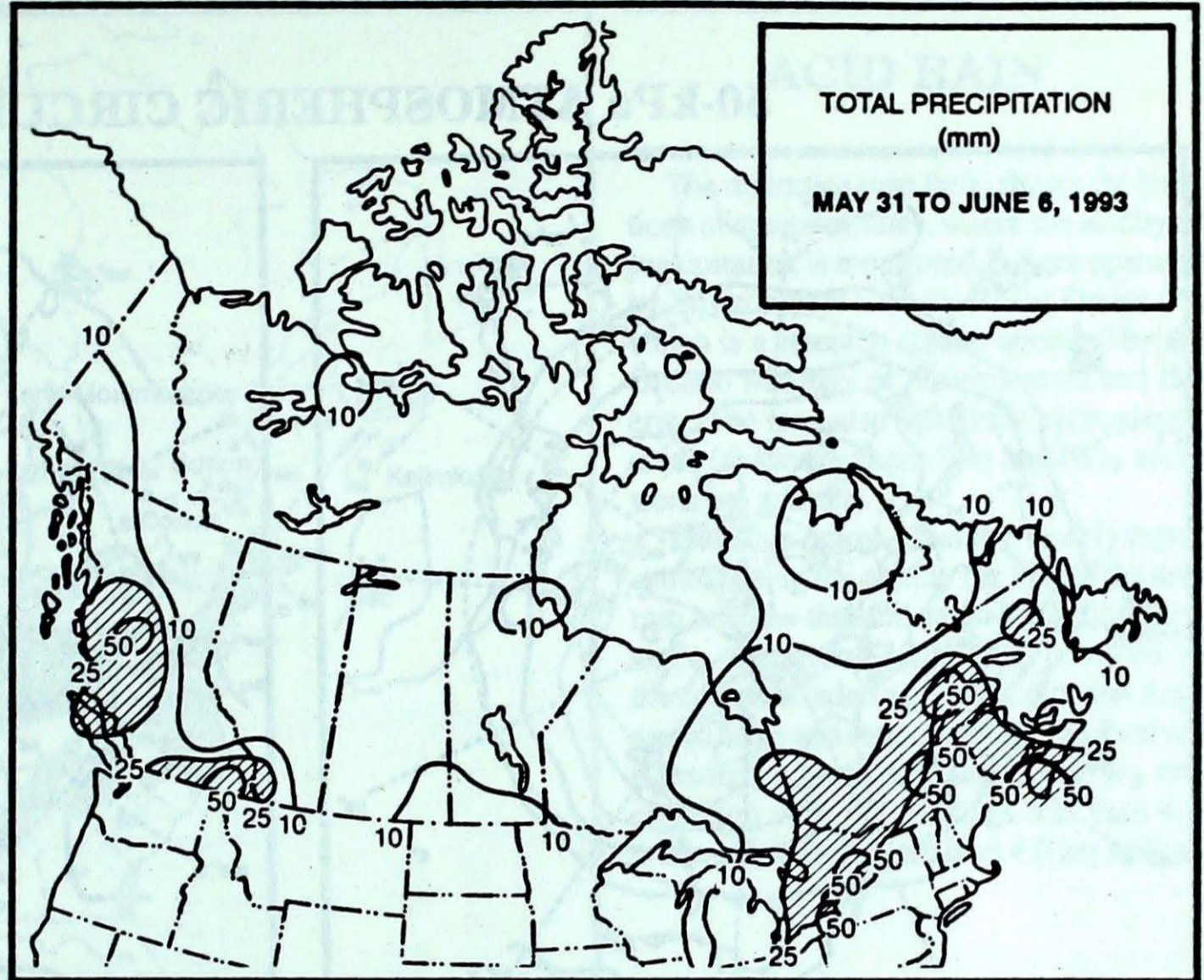
☎ (416) 739-4438/4330  
InterNet (Email):  
CCCOPS@aestor.dots.doe.CA  
Fax: (416) 739-4446

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

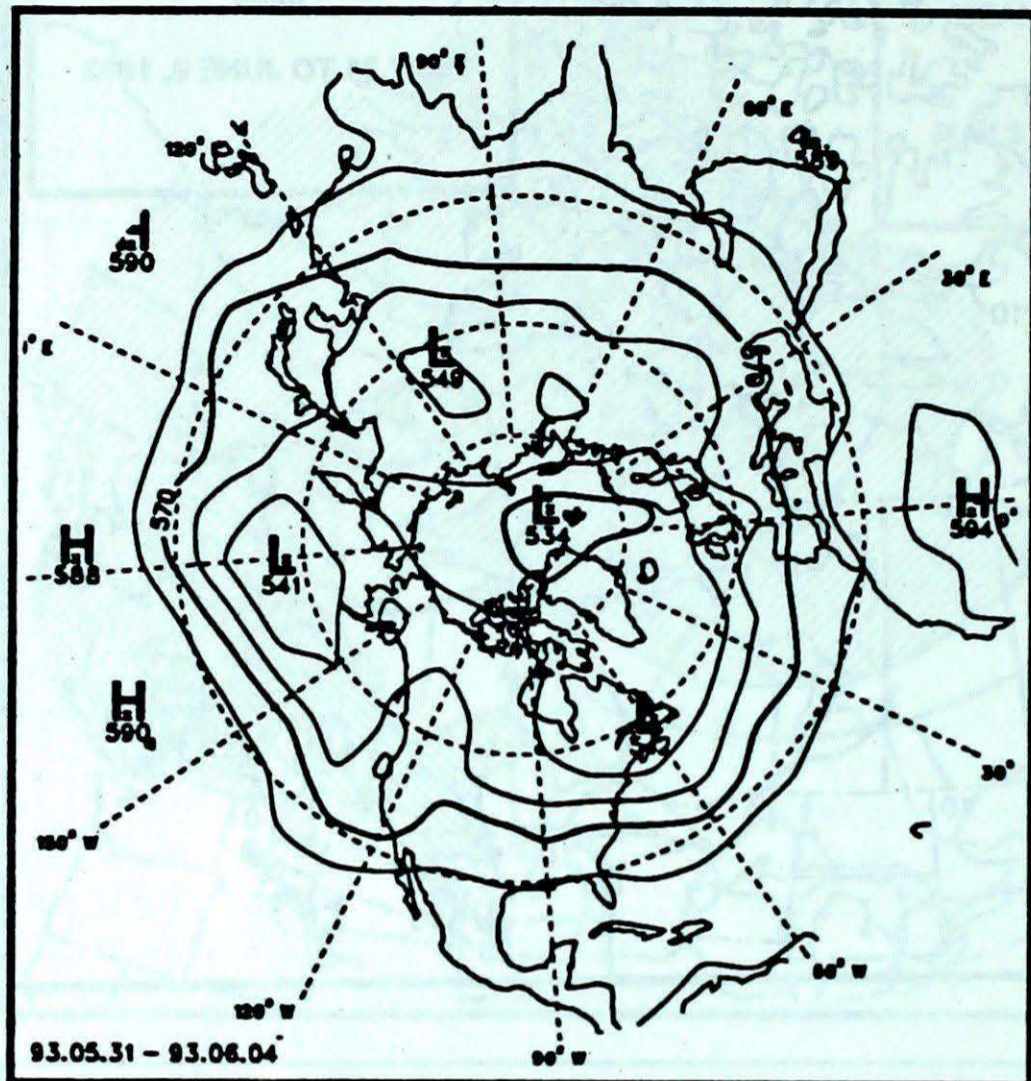
The data in this publication are based on unverified reports from approximately 225 Canadian synoptic weather stations. Information concerning climatic impacts is gathered from AES contacts with the public and from the media. Articles do not necessarily reflect the views of the Atmospheric Environment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

Annual Subscriptions  
and changes:

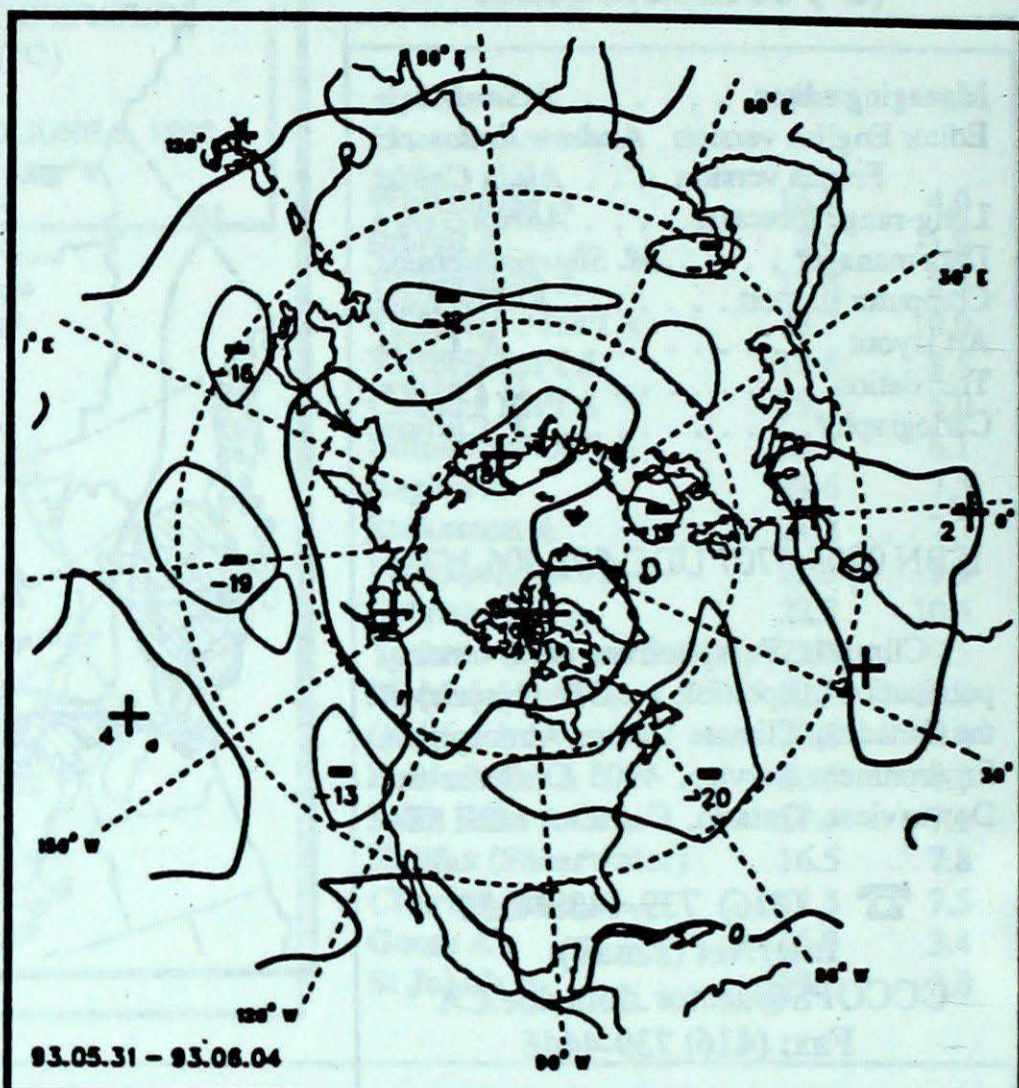
Albert Wright (416) 739-4156  
Fax: (416) 739-4264



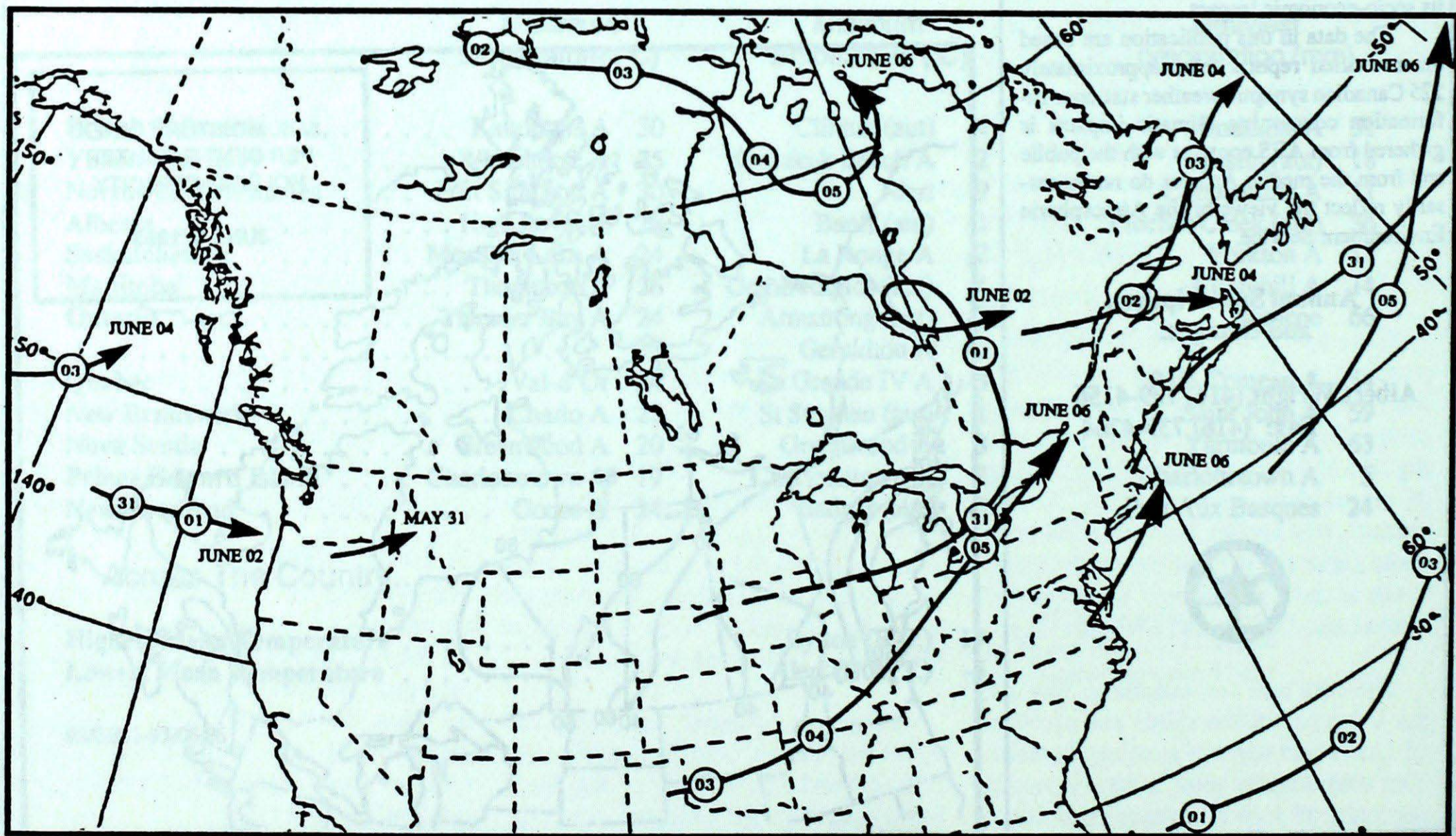
### 50-kPa ATMOSPHERIC CIRCULATION



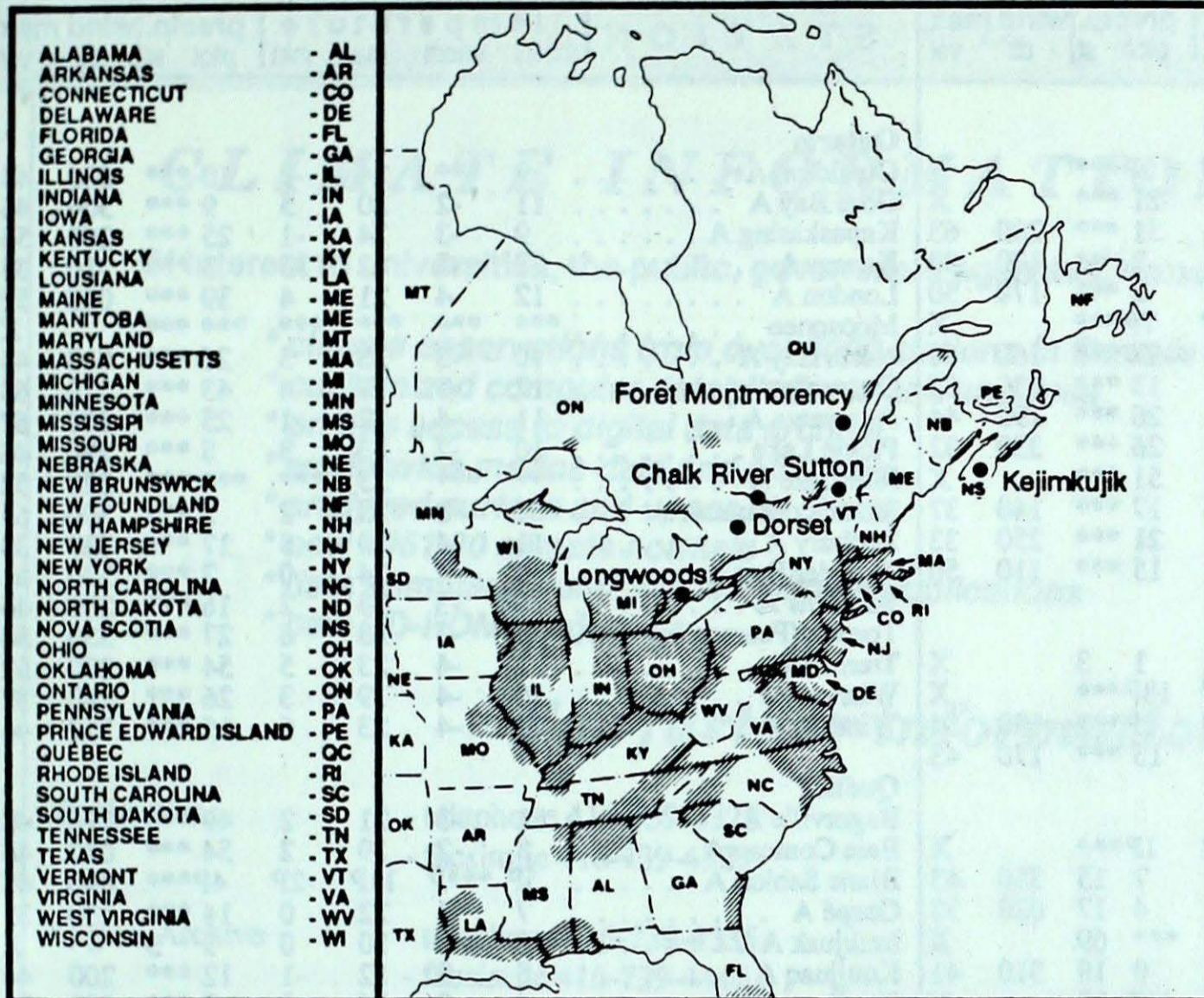
Mean geopotential height  
50-kPa level (10 decametre intervals)



Mean geopotential height anomaly  
50-kPa level (10 decametre intervals)



Tracks of low pressure centres at 12:00 U.T. each day during the period.



## ACID RAIN

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 Environment and Energy. The map also shows the approximate areas (shaded), where SO<sub>2</sub> and NO<sub>x</sub> 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.

SITE	day	pH	amount	AIR PATH TO SITE
May 30 to June 5, 1993				
Longwoods	30	4.6	24 R	..... Western Ohio, Indiana
	04	4.4	20 R	..... Western Pennsylvania, eastern Ohio
Dorset *	30	4.3	10 R	..... Western New York, western Pennsylvania
	31	4.4	10 R	..... Southern Ontario, western New York
	03	4.4	1 R	..... Northern Michigan
	05	4.5	12 R	..... Eastern Ontario
Chalk River	30	4.6	17 R	..... Eastern Ontario, New York
	31	4.2	7 R	..... Eastern Ontario, New York
Sutton	31	4.5	12 R	..... New York, Pennsylvania
	01	4.5	5 R	..... New York
	05	4.5	6 R	..... New England
Montmorency	31	4.6	9 R	..... New England, Eastern New York
	01	4.7	17 R	..... Southern Quebec, New York
	02	5.1	9 R	..... Northwestern Quebec
	03	4.8	2 R	..... Northwestern Quebec
Kejimikujik	30	4.3	1 R	..... New Brunswick
	31	4.4	1 R	..... Nova Scotia
	01	4.9	12 R	..... Southern New England
				..... R = rain (mm), S = snow (cm), M = mixed rain and snow (mm)



# CLIMATE INFORMATION SOURCES

Of interest to universities, the public, government agencies, research and engineering groups . . .

- \* climate observations from over 5000 stations in Canada
- \* customized computer data products and analyses
- \* on-line access to digital data archive
- \* world-wide marine data and analyses
- \* analyzed surface and upper air charts
- \* new 1961-90 climate normals
- \* data summaries and applied climate publications
- \* new CD-ROM products

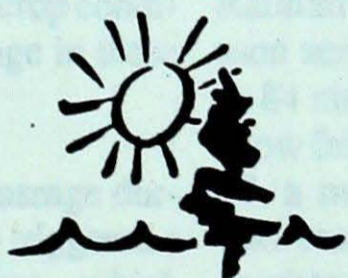
## For further information . . .

Publications - telephone 416-739-4328  
- facsimile 416-739-4329

Digital Archive - telephone 416-739-4335  
- facsimile 416-739-4446

. . . or write to the Climate Information Branch

Canadian Climate Centre  
4905 Dufferin Street  
Downsview, Ontario M3H 5T4



## Environmental Citizenship

*Roddickton, Newfoundland's Junior Forest Wardens cleaned-up and restored 28 hectares of an abandoned, clear-cut logging site, turning it into a model forest. That's something to celebrate during Canadian Environment Week.*

*An environmental citizenship message from Environment Canada.*