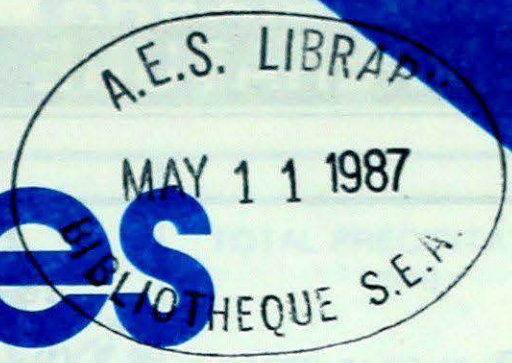




Environment
Canada

Environnement
Canada

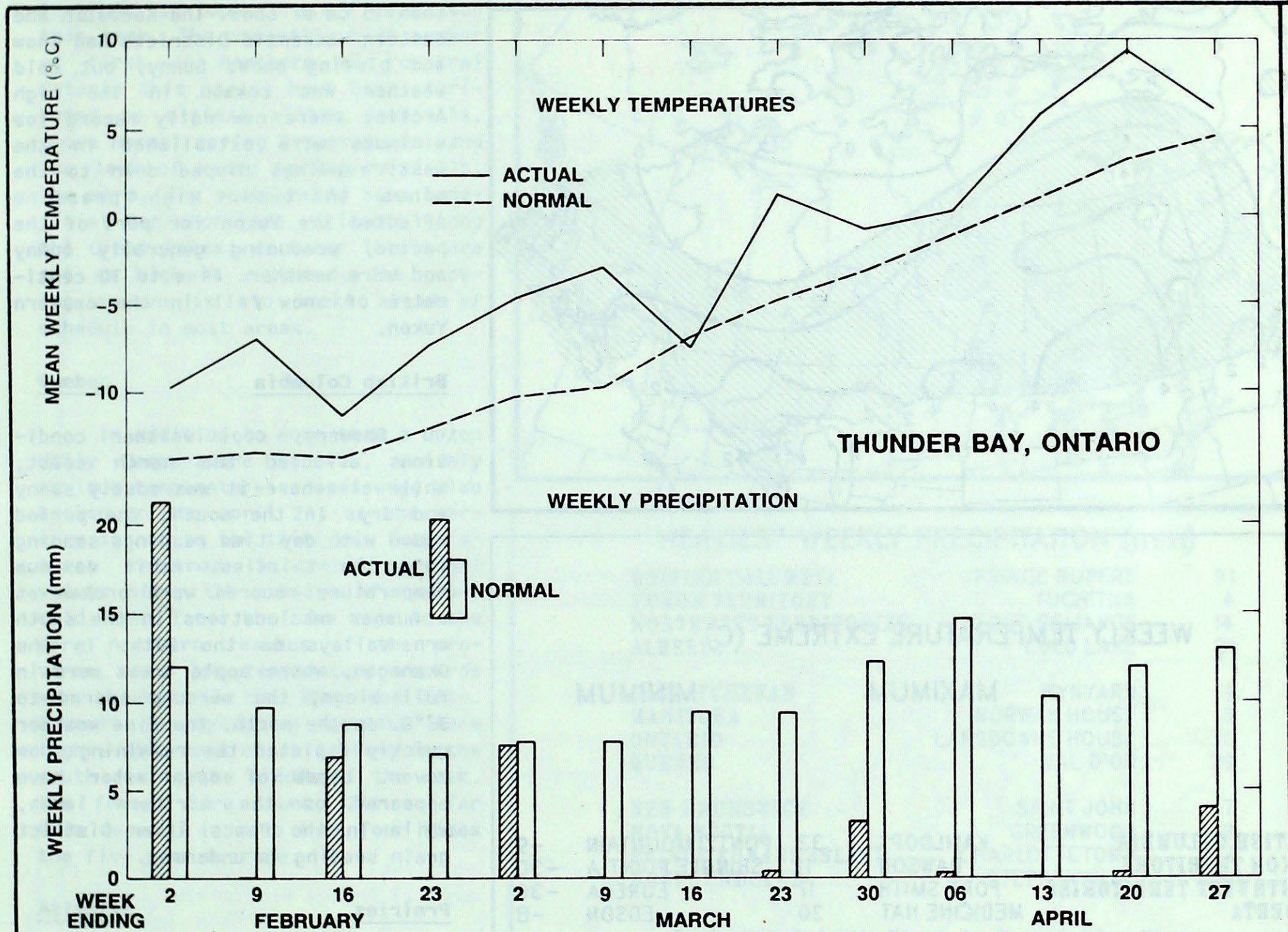
Climatic Perspectives



A weekly review of Canadian Climate

April 21 to 27, 1987

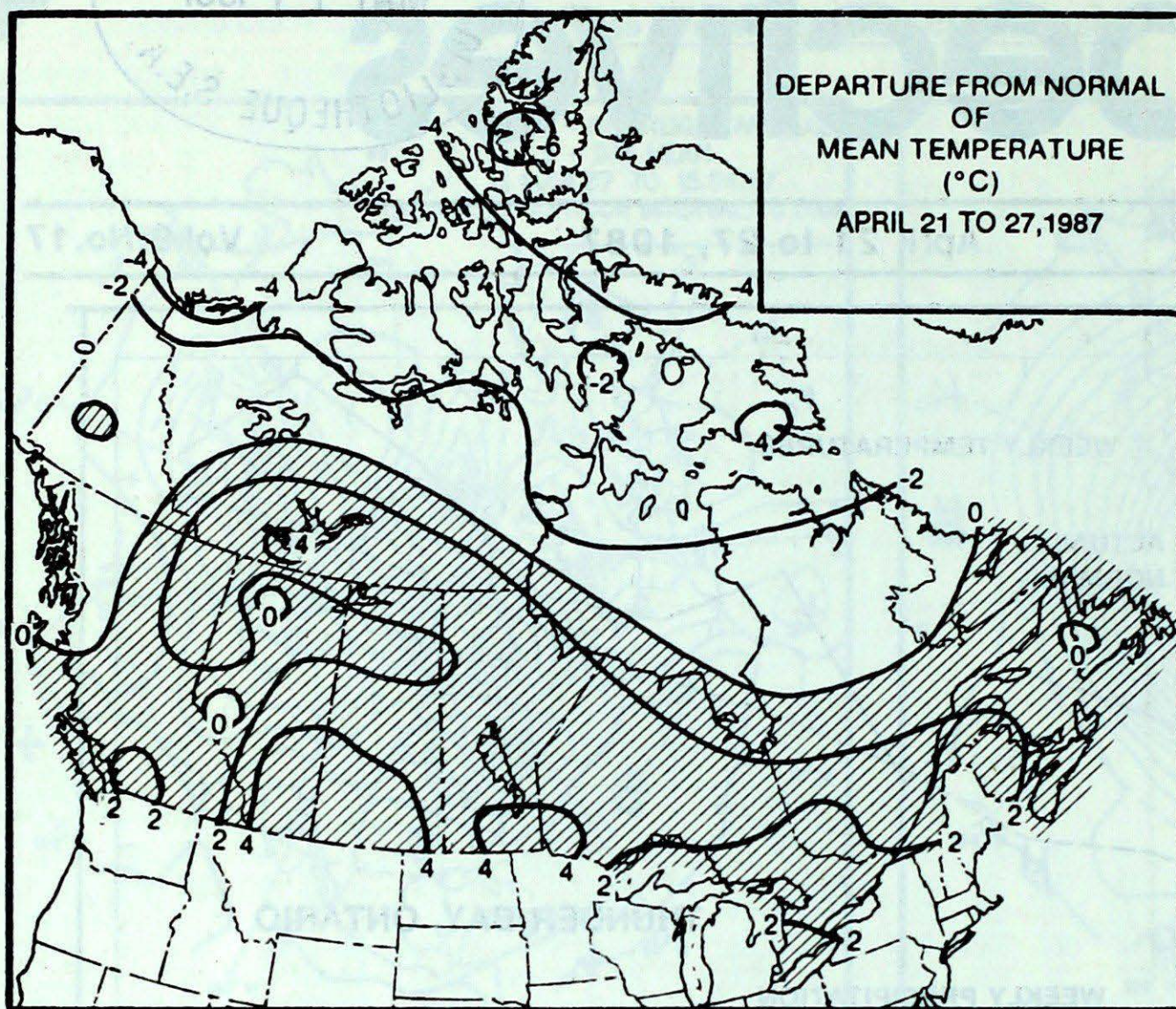
Vol.9 No.17



The mild, dry weather that prevailed throughout much of the winter over northwestern Ontario has persisted into spring, creating a serious forest fire hazard. These graphs, based on our routine weekly data, show the magnitude of the mildness and dryness at Thunder Bay compared to normal (1951-1980) conditions. Since the last wet week of January 27 to February 2, the total precipitation to April 27 has been 22.5 mm compared to the normal 122.2 mm (18% of normal). A similar fire hazard exists in many other parts of the country as well. See page 3 for more details.

- **Continuing dry weather increases forest fire hazard across much of central Canada**
- **Record April warmth in B.C. and parts of eastern Canada**

TEMPERATURE



ACROSS THE COUNTRY...

Yukon and Northwest Territories

As the Arctic continues its seasonal warming trend, precipitation has become more significant. Southern Baffin Island received more than 15 cm of snow. The Keewatin and eastern Mackenzie Districts had snow and blowing snow. Sunny, but cold weather was common in the high Arctic, where new daily record low minimums were established in the west; readings dipped down to the minus thirties. High pressure affected the Yukon for part of the period, producing generally sunny and warm weather. Five to 10 centimetre of snow fell in the eastern Yukon.

British Columbia

Showery, cool weather conditions affected the north coast, while elsewhere it was mostly sunny and dry. In the south, the period ended with day time readings soaring into the thirties. April maximum temperature records were broken at a number of locations in the southern valleys on the 27th. In the Okanagan, where apple trees were in full bloom, the mercury soared to 33°C. In the north, the fine weather quickly depleted the remaining snow cover. Leads of open water have appeared on the northern lakes, while in the Peace River District grain seeding is underway.

Prairies

Overall, it was relatively pleasant, although several disturbances produced partly cloudy conditions. Cool daytime temperatures early in the period moderated into the twenties. In southern Manitoba, daily maximum temperature records were broken on the 22nd. Breezy weather conditions caused blowing dust in southern Alberta. Scattered afternoon showers and thundershowers developed on the 24th and 26th. In Alberta, the forest service is gearing up for the upcoming fire season. In Manitoba, the fire hazard is very high due to an extremely dry April, following a winter with near or below normal precipitation.

WEEKLY TEMPERATURE EXTREME (C)

	MAXIMUM	MINIMUM
BRITISH COLUMBIA	KAMLOOPS 33	PUNTZI MOUNTAIN -9
YUKON TERRITORY	DAWSON 11	SHINGLE POINT A -30
NORTHWEST TERRITORIES	FORT SMITH 17	EUREKA -36
ALBERTA	MEDICINE HAT 30	EDSON -8
SASKATCHEWAN	KINDERSLEY 28	CREE LAKE -7
MANITOBA	GRETNA 26	CHURCHILL -15
ONTARIO	WINDSOR 29	MOOSONEE -7
QUEBEC	ROBERVAL 31	KUUJJIARAPIK -22
NEW BRUNSWICK	CHARLO 29	ST STEPHEN -6
NOVA SCOTIA	GREENWOOD 22	SHELBURNE -6
PRINCE EDWARD ISLAND	CHARLOTTETOWN 21	CHARLOTTETOWN -6
NEWFOUNDLAND	DEER LAKE 20	WABUSH LAKE -15

ACROSS THE NATION

WARMEST MEAN TEMPERATURE	14	HÖPE	BC
COOLEST MEAN TEMPERATURE	-31	EUREKA	NWT

Ontario

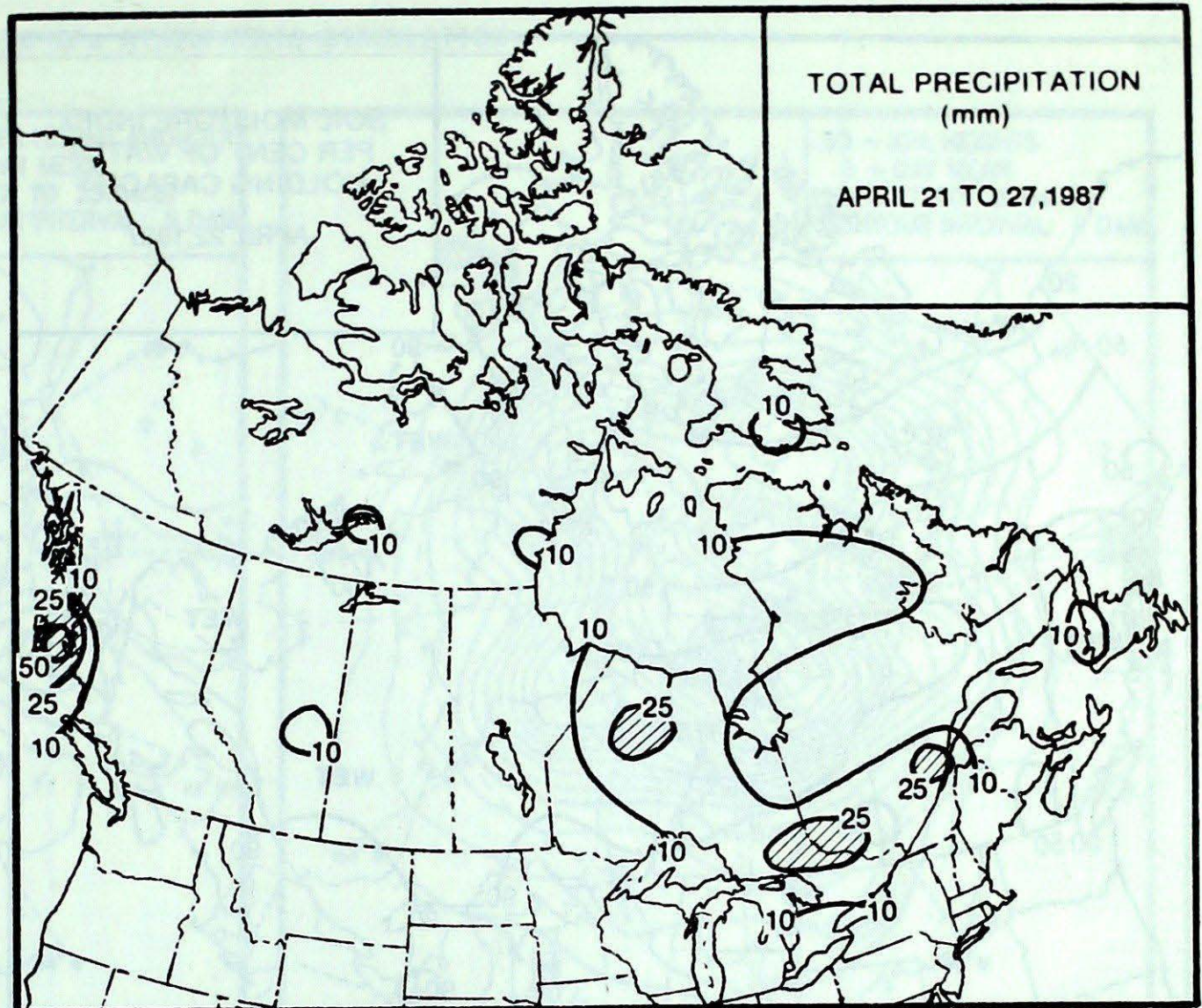
Following the Easter long weekend, temperatures cooled of dramatically. Weather conditions were changeable, with some snow falling in the northwest. Light rain fell in southern and central Ontario during the middle of the week. There is concern over the possibility of a long and serious forest fire season this year. The unusually high number of fires in northern and central Ontario this spring have been attributed to minimal winter snowfalls, above normal spring temperatures, and the lack of heavy spring rainfalls. The warm, dry weather has been beneficial for shoreline residents along the Great Lakes, as water levels are not as high as expected. The growing season is two weeks ahead of schedule in most areas.

Quebec

In addition to more than a dozen daily temperature records, monthly maximum temperature records were also broken on the April 21, as the mercury soared to the thirties. Temperatures returned to more seasonal values after the passage of a sharp cold front later the same day. In the more northern reaches of the province, new low temperature records were broken on the 25th and 26th. Overall precipitation amounts were light, with most of it falling in the south during the middle of the week. The forest fire count, 250 so far this season, is more than four times the five year average.

Atlantic

It was a mild and mostly sunny week. A number of daily maximum temperature records were broken in New Brunswick during the first half of the period. At Charlo, the thermometer registered 29°C on the 21st setting a new monthly record. Cold frontal passages during the middle of the week produced only light precipitation. In Newfoundland, the weather was mainly fair and mild. Rain showers were associated with a cold front crossing the Island on the 24th. Daytime maximums in the teens on the 21st cooled off significantly by mid-week. A series of weak disturbances affected Labrador, giving a mixture of cloud and sun; precipitation was mixed.

**HEAVIEST WEEKLY PRECIPITATION (mm)**

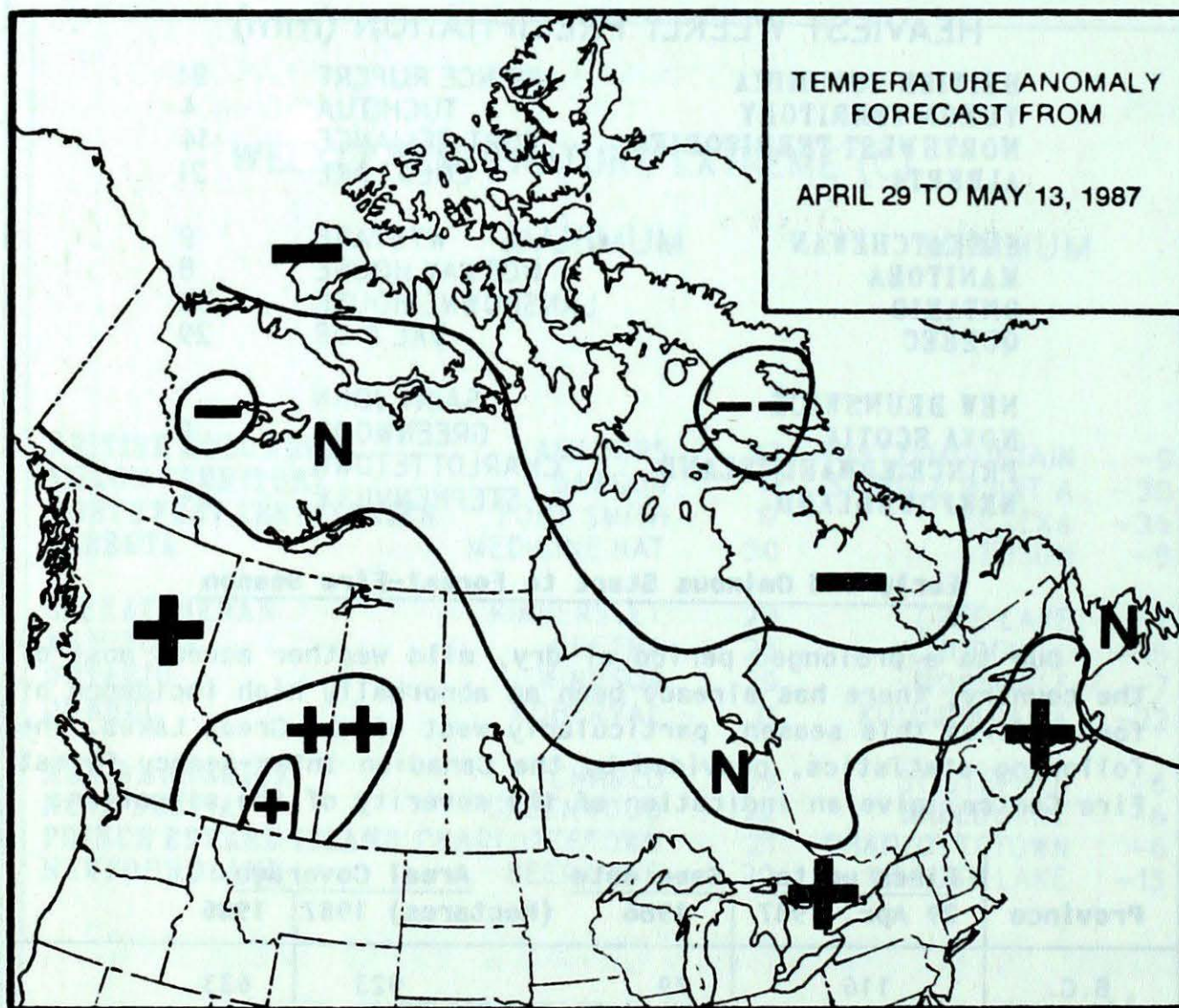
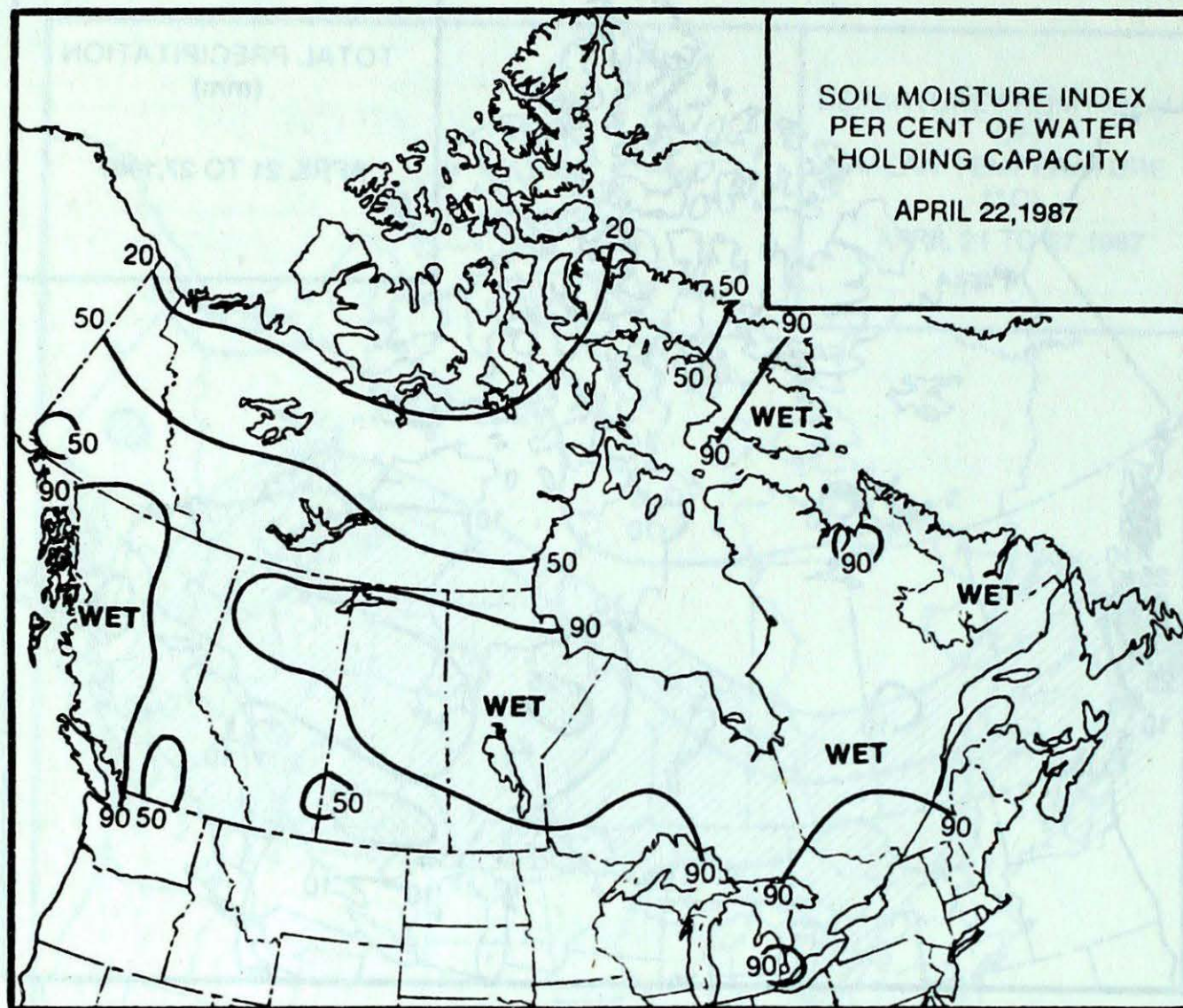
BRITISH COLUMBIA	PRINCE RUPERT	91
YUKON TERRITORY	TUCHITUA	4
NORTHWEST TERRITORIES	FORT RELIANCE	14
ALBERTA	COLD LAKE	21
SASKATCHEWAN	WYNYARD	9
MANITOBA	NORWAY HOUSE	8
ONTARIO	LANSDOWNE HOUSE	30
QUEBEC	VAL D'OR	29
NEW BRUNSWICK	SAINT JOHN	7
NOVA SCOTIA	GREENWOOD	9
PRINCE EDWARD ISLAND	CHARLOTTETOWN	7
NEWFOUNDLAND	STEPHENVILLE	24

Early and Ominous Start to Forest-Fire Season

Due to a prolonged period of dry, mild weather across most of the country, there has already been an abnormally high incidence of forest fires this season, particularly west of the Great Lakes. The following statistics, provided by the Canadian Inter-Agency Forest Fire Centre, give an indication of the severity of the situation.

Province	Fires up to	Same date	Areal Coverage	
	29 Apr. 1987	1986	(hectares) 1987	1986
B.C.	116	79	923	633
Alta.	80	42	3131	130
Sask.	38	15	457	3000
Man.	50	2	1298	5
Ont.	349	155	3556	295
Que.	280	186	821	375
N.B.	118	109 (6 May 80)	365	145 (6 May 86)
N.S.	110	229	142	525

FORECAST



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.

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

CLIMATIC PERSPECTIVES VOLUME 9

Managing Editor P.R. Scholefield
Editors-in-charge

weekly	A.K. Radomski
monthly	A. A. Caillet
Data Manager	M. Skarpathiotakis
Art Layout	M. Baptiste
Word Processing	D. Kilmury/P. Burke
Translation	D. Pokorn
Cartography	G. Young/T. Chivers
	C. Czaja

Regional Correspondents

Atlantic: F. Amirault; Que.: J. Miron
Ont.: B. Smith; Central: B. Tortorelli;
Western: W. Prusak; Pac.: E. Coatta;
Yukon Weather Centre; Frobisher Bay
& Yellowknife Weather Offices;
Newfoundland Weather Centre:
G. MacMillan; AES Satellite Data Lab;
Ice Central Ottawa

ISSN 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, Ont. Canada M3H 5T4. Phone (416) 667-4906/4711.

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.

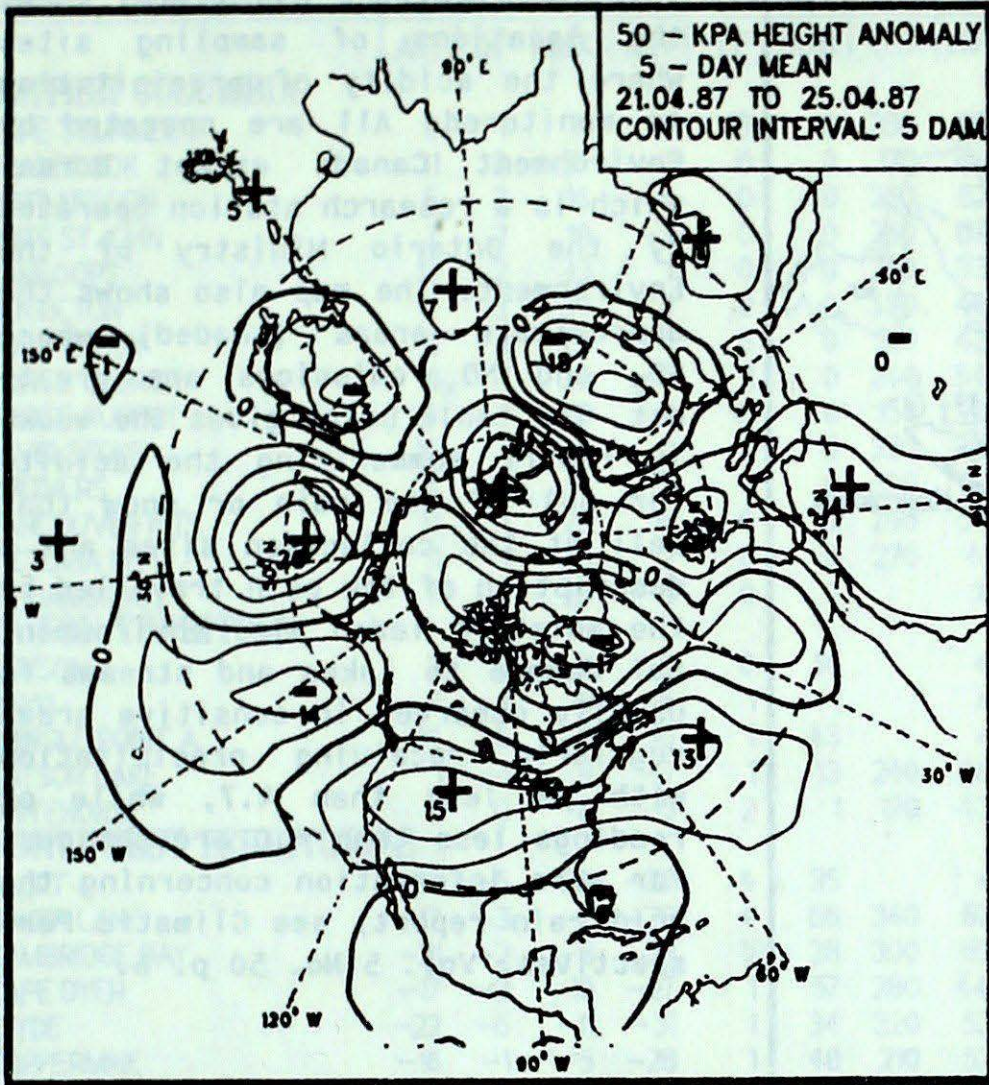
Annual Subscriptions

weekly & monthly supplement:	\$35.00
foreign:	\$42.00
Monthly issue:	\$10.00
foreign:	\$12.00

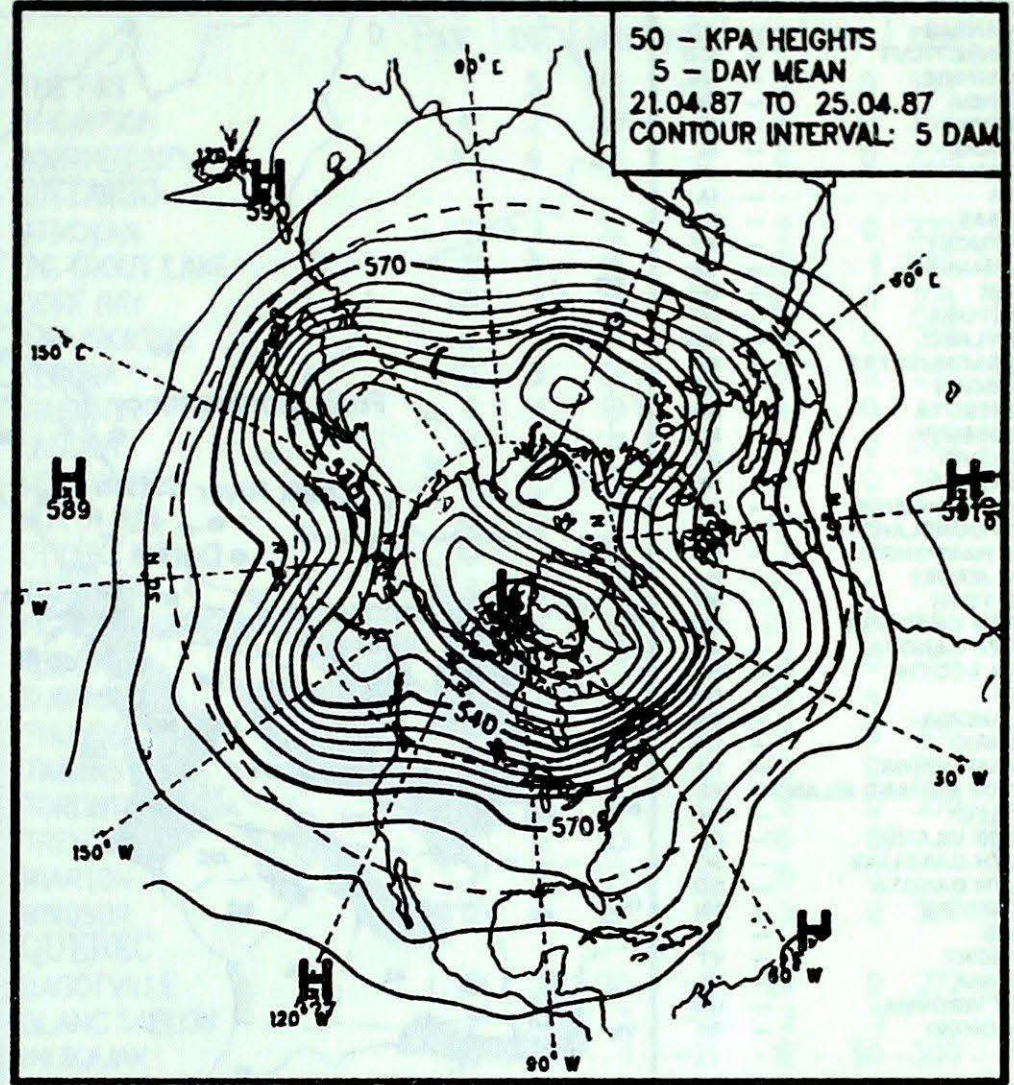
Orders must be prepaid by money order or cheque payable to Receiver General for Canada. Canadian Government Publishing Centre, Ottawa, Ontario K1A 0S9 (613) 994-1495

CIRCULATION

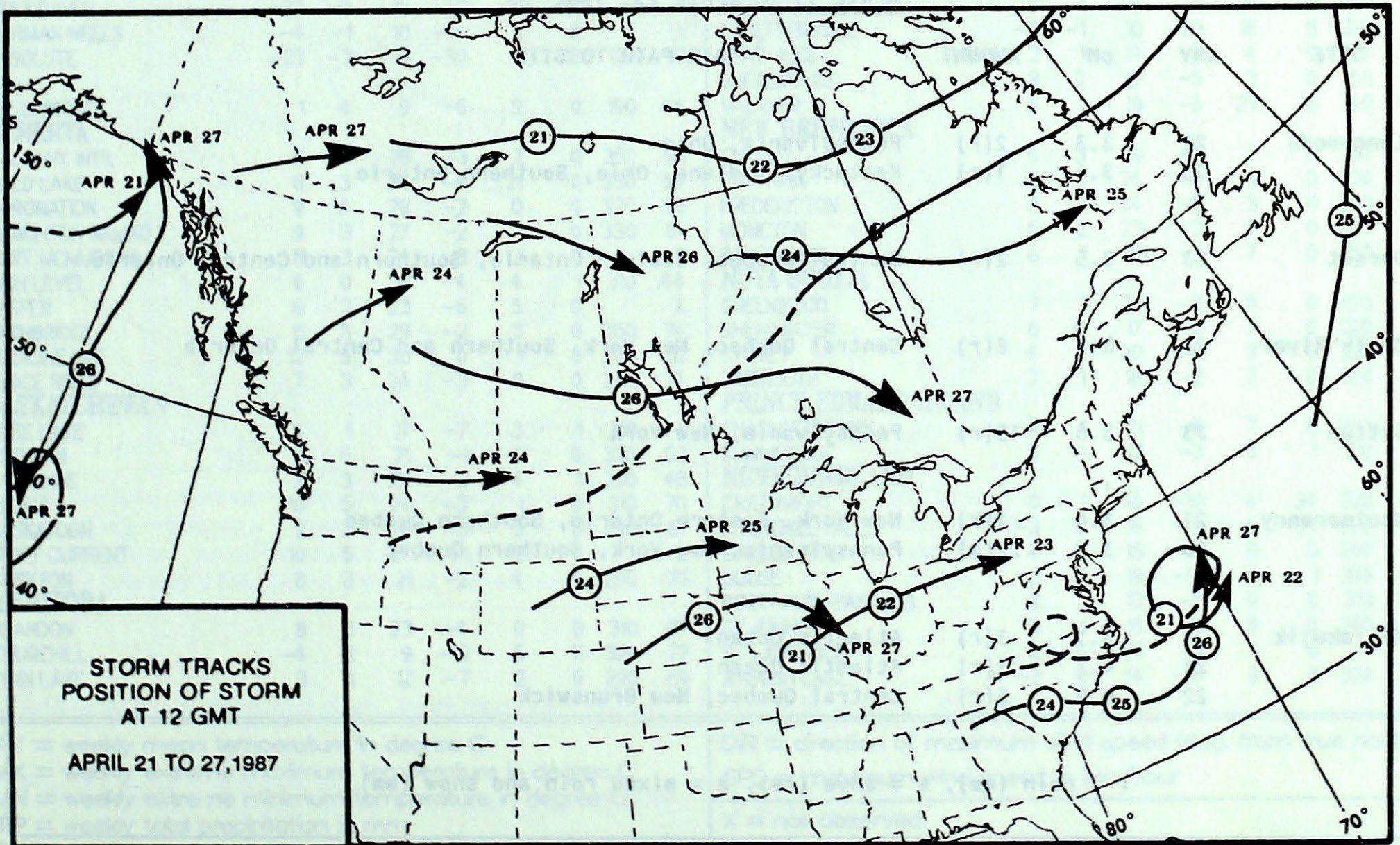
50 KPa ATMOSPHERIC CIRCULATION



MEAN 50 KPa HEIGHT ANOMALY (dam)
April 21 to 25, 1987

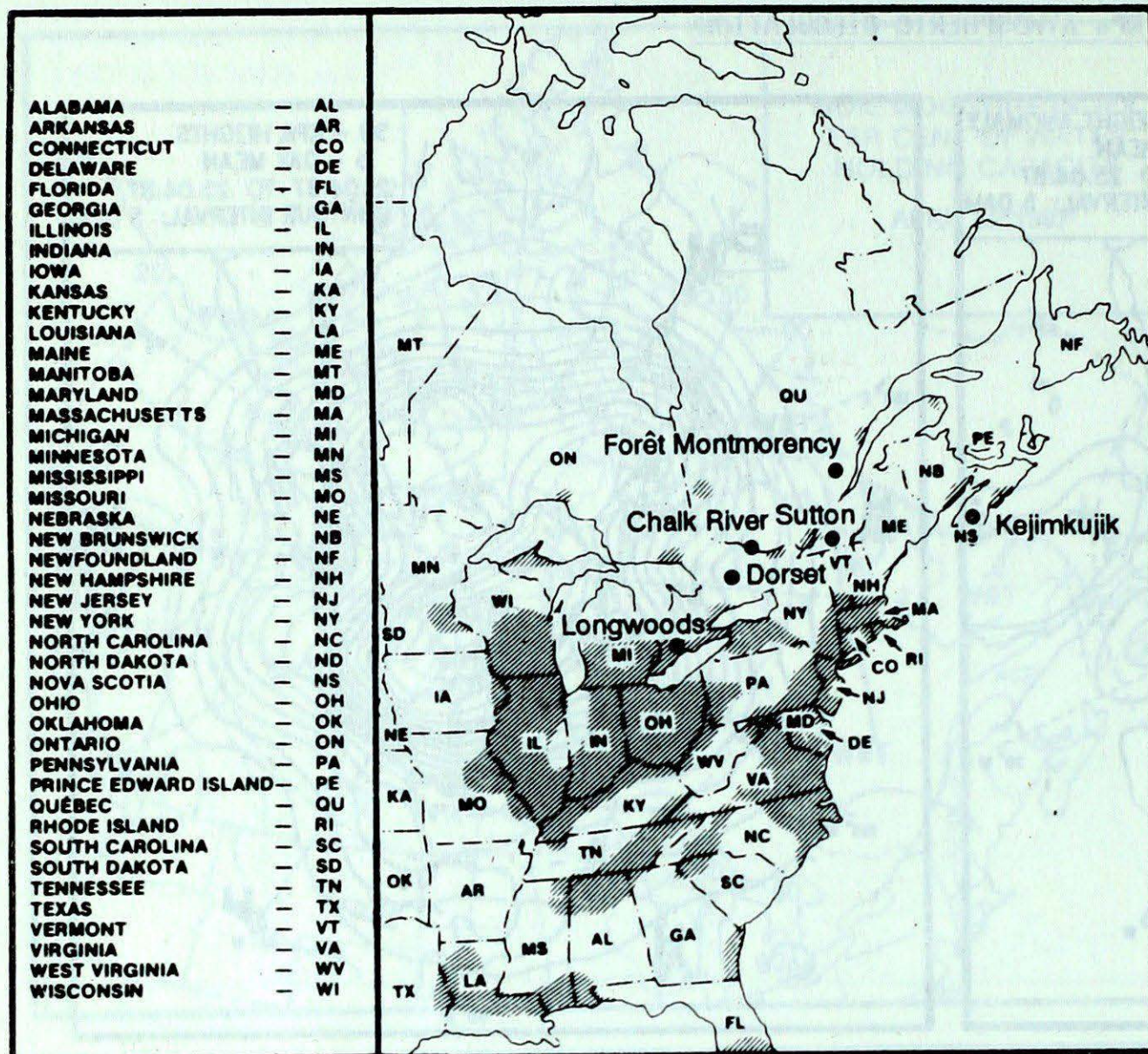


MEAN 50 KPa HEIGHTS (dam)
April 21 to 25, 1987



ACID RAIN

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 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 less than 4.7, while pH readings less than 4.0 are serious. For more information concerning the acid rain report, see Climatic Perspectives, Vol. 5 No. 50 p. 6.

APRIL 19 TO APRIL 25, 1987

SITE	DAY	pH	AMOUNT	AIR PATH TO SITE
Longwoods	22	3.3	2(r)	Pennsylvania, Ohio
	23	3.6	1(r)	Kentucky, Indiana, Ohio, Southern Ontario
Dorset	23	3.5	2(r)	Central Quebec, Eastern Ontario, Southern and Central Ontario
Chalk River	23	3.7	8(r)	Central Quebec, New York, Southern and Central Ontario
Sutton	23	3.6	15(r)	Pennsylvania, New York
Montmorency	21	3.8	1(r)	New York, Eastern Ontario, Southern Quebec
	23	3.8	22(m)	Pennsylvania, New York, Southern Quebec
Kejimikujik	19	5.1	3(r)	Atlantic Ocean
	21	4.7	2(r)	Atlantic Ocean
	22	4.9	5(r)	Central Quebec, New Brunswick

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

STATION	TEMPERATURE			WIND			PRECIP.	TP	SOG	TEMPERATURE			PRECIP.	TP	SOG	WIND DIR.	WIND SP.
	AV	ML	MX	AV	ML	MX				AV	ML	MX					
BRITISH COLUMBIA	
VICTORIA	
SAKATCIWAN	
OTTAWA	
WINDY	

TEMPERATURE, PRECIPITATION AND MAXIMUM WIND DATA FOR THE WEEK ENDING (MO) GMT, APRIL 28 1971

AV = weekly mean temperature in degree C
 ML = weekly extreme minimum temperature in degree C
 MX = weekly extreme maximum temperature in degree C
 TP = weekly total precipitation in mm
 SOG = direction of mean temperature from normal in degree C
 P = value based on less than 1 day
 X = not observed
 DIR = direction of maximum wind speed from true north
 SPD = maximum wind speed in km/h