



PACIFIC REGION TECHNICAL NOTES

80-047
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ANNUAL REVIEW (1980) OF THE PACIFIC REGION
TECHNICAL NOTES

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INTRODUCTION

This note is presented as the last technical note of the year and as the 1980 annual review of the Pacific Region Technical Notes. Not only is this a review of the notes by the editors, but also a review by the operational weather offices who are participants in these communicatory notes.

EDITOR'S GENERAL COMMENTS

During the past year 47 technical notes were published (see Appendix A). In terms of quantity, this compares with 40 notes in 1979 and with 51 notes in 1978, our first year of publication.

A wide range of subjects was covered in these 47 notes. The majority of the notes fall into the same three categories as in 1979. Sixteen notes were related to meteorological satellite image interpretation; ten notes dealt with verification and six notes concerned case studies. The forecast investigation series (examination of "bust" or exceptional forecasts) began in late 1979 and resulted in only two notes. Reasons for this low number were due to staff shortage at the PWC, and hopefully the number of really "bust" forecasts has decreased. One mechanism for identification and initiation of a forecast investigation technical note was by request from a field office; in this regard no requests were received during 1980.

Of the 47 notes published, six were contributed by offices within the region other than the PWC. More submissions would be better, (however, up from 4 in 1979) but a good showing nevertheless considering the notes are produced by operational personal who have little time for this type of activity within their shift schedules.

Twenty-six of the technical notes were considered to be of interest to offices outside the Pacific Region and were sent on our national/international mailing list which represents a further 22 addresses.

RESPONSE TO QUESTIONNAIRE

In order to review the impact of the Pacific Region Technical Notes, a questionnaire identical to that of 1978 and 1979 was sent to the 9 Pacific Region W04, W03 weather offices. The questionnaire was mailed in late November. Those offices able to respond by the time of this writing are:

Vancouver, Victoria, Penticton, Kelowna, Castlegar, Kamloops and Prince George.

A summary of the responses from the questionnaire are given in Appendix B.

EDITOR'S SUMMATION

As stipulated in the first technical note #78-001, the purpose of these notes is to provide a medium for timely dissemination of technical operational information pertinent to the members of the Pacific Region. It is this criteria which each annual review considers in order to determine whether the recommendation for continuance or termination be made to the office of the Regional Director.

Based on the editor's review and the results of the questionnaire, it will be recommended that the notes be continued through 1981.

The quality of the reproduced satellite photographs continue to be a problem. We will again make an attempt to locate a better copier machine. Better copies can be made at the printers, however, this incurs delays and extra costs.

The forecast investigation series will be continued and hopefully at least one study a month can be made for "bust" or exceptionally good forecasts. Finally, an effort will be made to curtail the notes from becoming to esoteric.

APPENDIX A

DIRECTORY OF 1980 PACIFIC REGION TECHNICAL NOTES

- 80-001B Jan. 6, 1980
An analysis of verification scores model performance and prognostician skill in selecting the best prognostic guidance during the period Oct. 1 - Nov. 30, 1979.
Peter Haering, Chief Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-002B Jan. 11, 1980
Combining radar and satellite data to estimate precipitation rates over the Pacific.
John Spagnol, Satellite Development Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-003B Jan. 21, 1980
Remote VS on-site forecasting.
W. L. Ranahan, Officer-In-Charge,
CFWO Comox.
- 80-004B Jan. 22, 1980
Update on stability indices for B.C. (1980).
H. W. Raynor, Forestry Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-005B Feb. 11, 1980
Radar rings from the Abbotsford radar.
H. T. Beal, Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-006B Feb. 28, 1980
PWC "Satellite Analysis Chart".
John Thomas, Satellite Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-007A March 10, 1980
Outflow winds in Mainland Inlets.
David Patrick, Meteorologist,
Pacific Weather Centre, Vancouver.

APPENDIX A

DIRECTORY OF 1980 PACIFIC REGION TECHNICAL NOTES

- 80-008B April 8, 1980
The satellite fire weather FX.
John Spagnol, Satellite Development Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-009B April 10, 1980
Possible impact of seasat data on PWC marine forecasts.
John Spagnol, Satellite Development Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-010A April 15, 1980
An analysis of the PWC public forecasts for the month
of February 1980.
Peter Haering, Chief Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-011B April 17, 1980
Weather system analysis procedures Part 1.
John Spagnol, Satellite Development Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-012B April 18, 1980
Weather system analysis procedures Part 2.
John Spagnol, Satellite Development Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-013B April 21, 1980
Kelowna windstorm - Monday, April 14, 1980.
Ralph Janes, Officer-In-Charge,
Kelowna Weather Office, Kelowna.
- 80-014B May 28, 1980
The effect of Mount St. Helens' volcanic eruption May 18,
1980, on ceilings and visibilities over southern B.C.
Mert Horita, Senior Development Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-015A June 5, 1980
An example of Harley's method of forecasting quantitative
precipitation amounts.
Tom Giglotti, Meteorologist,
Pacific Weather Centre, Vancouver.

APPENDIX A

DIRECTORY OF 1980 PACIFIC REGION TECHNICAL NOTES

- 80-016B June 12, 1980
The Pacific Weather Centre Satellite Aids Program.
John Spagnol, Satellite Development Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-017B June 16, 1980
Nomogram for calculating feature speeds on goes satellite
pictures.
Pat Carroll, Satellite Meteorologist,
Pacific Weather Centre.
- 80-018A June 20, 1980
More data relating to the fire weather index to the 500MB
heights.
Vello Puss, Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-019B June 23, 1980
Speed overlays for UC2 and SB6 goes satellite picture.
Louis Legal, Satellite Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-020A July 3, 1980
Verification of forecast snow amounts over south coast
mountains 1979/80.
Vello Puss, Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-021B July 14, 1980
Cloud System Prognosis Program.
John Spagnol, Satellite Development Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-022B July 26, 1980
Mesoscale observations of an outflow wind over the southern
Strait of Georgia.
D. A. Faulkner, Scientific Services Division (SSD),
Pacific Weather Center, Vancouver.

APPENDIX A

DIRECTORY OF 1980 PACIFIC REGION TECHNICAL NOTES

- 80-023A July 24, 1980
Extended Outlook Verification Program.
Peter Haering, Chief Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-024A August 15, 1980
British Columbia Forest Service Lightning Location Project.
Robert Duffy, AES Fire Weather Technician,
Kamloops Weather Office.
- 80-025A August 20, 1980
A case of 10,000 cloud to ground lightning strikes.
Bryan Jensen, Fire Weather Presentation Technician,
Kamloops Weather Office.
- 80-026A August 25, 1980
Lightning, lightning fires, and fire weather indices.
B. A. Jensen, Fire Weather Presentation Technician,
Kamloops Weather Office.
- 80-027A August 26, 1980
Brief analysis of wedge forecasts.
Peter Haering, Chief Meteorologist,
Pacific Weather Centre.
- 80-028A August 28, 1980
Gale force winds and heavy thunderstorm activity over
southern B.C. on Sunday, August 17, 1980. (Forecast
investigation #5).
Peter Haering, Chief Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-029B Sept. 12, 1980
Developing low pressure areas over the northwestern
Pacific. How well are they forecast?
Brian Hammond, Supervising Meteorologist,
Pacific Weather Centre.

APPENDIX A

DIRECTORY OF 1980 PACIFIC REGION TECHNICAL NOTES

- 80-030A Sept. 19, 1980
West Coast "Maps" Stations
Garry Toth, Meteorologist,
Pacific Weather Centre.
- 80-031A Sept. 22, 1980
Non forecast of rain over the Greater Vancouver Area
(June 16, 1980) (Forecast Investigation #6)
Bob Brown, Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-032B Sept. 26, 1980
A Deepening Pacific Storm - January 10-12, 1980.
Brian Hammond, Supervising Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-033B Oct. 1, 1980.
The Pacific Weather Centre Satellite Program.
John Spagnol, Satellite Development Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-034A Oct. 16, 1980.
Usefulness of PAWC isobaric verification scores for
marine wind forecasts.
Pat Morin, Supervising Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-035A Oct. 30, 1980.
Verification of temperature and precipitation forecasts from
FOCN02 spectral output.
Vello Puss, Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-036B Nov. 11, 1980
Turbulence areas inferred from satellite cloud patterns.
Larry Funk, Satellite Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-037B Nov. 13, 1980
An examination of the determination of cloud top height from
satellite pictures.
Bob Brown, Meteorologist,
Pacific Weather Centre, Vancouver.

APPENDIX A

DIRECTORY OF 1980 PACIFIC REGION TECHNICAL NOTES

- 80-038B Nov. 14, 1980
Satellite observed cloud fields and their relationship to
flow patterns - Part A.
Larry Funk, Satellite Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-039B Nov. 25, 1980
Satellite observed cloud fields and their relationship to
flow patterns - Part B.
Larry Funk, Satellite Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-040B Nov. 25, 1980
Characteristics of the CMC 250MB Streamline analysis.
Larry Funk, Satellite Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-041A Nov. 26, 1980
Forecasting aircraft airframe icing.
Garry Toth, Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-042B Dec. 03, 1980
An example of radio ducting from the Abbotsford radar.
Pat Morin, Supervising Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-043A Dec. 04, 1980
The mountain weather observational network in British
Columbia 1980 / 1981.
Vello Puss, Senior Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-044A Dec. 08, 1980
Second Day Forecast Trends - Part A
Pat Morin, Supervising Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-045A Dec. 17, 1980
An update on the public forecast verification scores at
Vancouver.
Vello Puss, Senior Meteorologist,
Pacific Weather Centre, Vancouver.

DIRECTORY OF 1980 PACIFIC REGION TECHNICAL NOTES

- 80-046A Dec. 18, 1980
Second Day Forecast Trends - Part B
Pat Morin, Supervising Meteorologist,
Pacific Weather Centre, Vancouver.
- 80-047A Dec. 31, 1980
Annual review (1980) of the Pacific Region Technical Notes.
Mert Horita, Senior Development Meteorologist,
Pacific Weather Centre, Vancouver.

APPENDIX B

SUMMARY OF RESPONSES TO QUESTIONNAIRE

DISTRIBUTION OF REPLIES

(for comparison, 1978 & 1979 responses are also shown)

	<u>1978</u>	<u>1979</u>	<u>1980</u>
1. Which of the following should be done?			
- Discontinue notes	0	0	0
- Make changes to make it worthwhile	0	0	6
- Leave as is	5	0	0
- Make changes to make it better	6	0	1
- No answer	1	0	0
2. How many of the notes are read?			
- All	8	7	5
- Most of them	3	2	2
- Some	1	0	0
- None	0	0	0
3. Are you saving the notes?			
- All	12	9	6
- Most of them	0	0	0
- Some	0	0	1
- None	0	0	0
4. Will members of your office be contributing articles in the coming 12 months?			
- Yes	4	3	2
- No	0	1	0
- Maybe	8	5	5
5. In general is the quality of zeroxed satellite pictures sufficient to understand the articles?			
- Yes	1	3	1
- Most of them	9	4	5
- Seldom	2	2	1
- No	0	0	0

APPENDIX B (Continued)

Questions 7 and 8 were more subjective in nature. Replies to these questions are repeated below:

7. What change would you like to see in the notes?
- none in particular
 - no specific changes suggested
 - more submittals from Field Officers
 - none
 - most technical notes deal with satellite interpretation. How about some studies on localized problems or explanations of local peculiarities. The paper on "Topographically forced convergence in western Washington State" recently received is a good example.
 - include U.S. Western Region Technical Attachments as "Pacific Region Technical Notes" with cover page.
8. Your general comments about the Technical Notes:
- For the most part they fit the need well. As would be expected some are a little too technical, but not too much so. We welcome the recent trend towards more involvement by technicians.
 - Generally timely enough to be of value.
 - Some of the notes are very technical, but most are well written and understandable. Hope to see them continued.
 - The staff have appreciated them and feel that they are a help in providing needed background information on regional projects and concepts.
 - Good!
 - Most technical notes are very professionally prepared. They provide good food for thought.
 - A high quality Pacific Region Product. An essential communications link would be lost if these notes were discontinued.