



# PACIFIC REGION TECHNICAL NOTES

81-030  
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## THE SATELLITE ANALYSIS PROGRAM

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### INTRODUCTION

There is growing recognition that the most effective manner of disseminating information from the Pacific Weather Centre to the regional W04's is through weather depiction charts. The PWC satellite group now issues Cloud Analysis Charts every six hours valid on the main synoptic hours. This program seems to be successful and should be expanded. A copy of a Cloud Analysis Chart is shown in Figure 1.

### ADDITIONAL FIELDS

The following information will also be provided in the future:

#### a) Cloud Tops and Bottoms

Whenever possible, the cloud top and bottoms will be added to the analysis. The following format will be used:

BOT/COVER/TYPE/TOP

where -

BOT, TOP are in hundreds of feet

COVER is ☉ or ⊕

TYPE is AC, SC, CB, CU MXD, etc.

an example is -

30/☉/SC/50

Whenever a bottom or top is unobtainable or not applicable, it will be deleted by default, i.e.

☉/SC/50

The cloud tops and bottoms will be found by the methods described in the PRIN 80-037.

#### b) Remarks

Written remarks will be added to any part of the Cloud Analysis Chart if they serve to convey useful information.

The following information could be provided on a similar but separate chart.

cont...

c) Icing in Cloud

Areas of icing in cloud would probably be better communicated by using a field format. A closed solid line could delineate the geographical sector where icing in cloud is expected.





The area could be annotated by the following information in the following format:

BOT/INTENSITY/TYPE/TOP

where -

BOT, TOP are in hundred of feet

INTENSITY is  (heavy) or  (moderate)

TYPE is CLR, RIME or MXD

Relevant and timely PIREP information could be written on the chart at its valid point.

Methods of inferring icing in cloud information is described in PRTN 80-041.

d) Freezing Levels Above MSL

The freezing level above MSL could be contoured at intervals of two thousand feet. For this field the upper freezing level should be used. The effect of multiple freezing levels could be described in comments anywhere on the chart.

e) Turbulence



Areas of turbulence could be delineated by a dashed line.



The area could be annotated by the following information:

BOT/SEVERITY/TOP

where -

SEVERITY is  (moderate) or  (severe)

Relevant PIREP information could be plotted directly on the chart at its valid point.

Methods of inferring turbulence areas from satellite images is described in PRTN 80-036.

cont...

COMMENTS

The duty Satellite Meteorologist will probably begin to add cloud height information to the Cloud Analysis Chart sometime in January 1982. Because of a heavy workload, it is not possible at this time for the Satellite Meteorologist to routinely construct another chart including information described in (c), (d) and (e). Perhaps the other duty forecaster's (Aviation Forecaster) schedule will allow for this routine.

Comments from the Pacific Region WO4's as to the desirability and benefit of such a chart will be welcomed.

