PACIFIC REGION TECHNICAL NOTES

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# The Pacific Weather Centre Satellite AIDS Program

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## INTRODUCTION

Hard copy satellite imagery is received at PWC via a GOES tap from Seattle. This imagery has been of enormous benefit to support PWC forecasts and services. Unfortunately, much information on atmospheric motion and processes is certainly lost with still images. Animated sequences of satellite imagery is the next development that must be implemented operationally to support PWC operations.

Animation will be one of the capabilities of the Vancouver GOES System. However, delivery of the interactive part of the GOES station is not scheduled until 1982. Until then, even some animation capability would be of great benefit. For this reason, the Pacific Weather Centre is implementing the Satellite AIDS Program (Animated Imagery Display System).

## METHOD

The basic idea of using a videotape system to create animated loops from still imagery originated with Dave Raimer, OIC Vancouver Observing Office. The operational procedure was carefully developed and is under implementation by Bob Loveless, PWC-ODIT Technician. All PWC Operations Technicians are currently receiving training on the operation of the videotape system.

All the GOES hard copy infrared imagery with a ZA enhancement and covering a UC-2 sector are used for this routine. An example is shown in figure 1. The hard copy picture is mounted on the wall and is recorded for about15 seconds by the video camera (See figure 2). Using the editing equipment (Figure 3) a short predetermined length is placed on the operational tape.

A series of such "takes" results in an animated sequence. The operational cassette is then given to the satellite meteorologist who can play the sequence on a dedicated player connected to a video display located at the "Satellite" desk (See figure 4).

The videotape is updated daily by Bob Loveless. When the Operations Technicians are fully trained the sequence may be updated on a real time basis.

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COMMENTS

This routine results in a somewhat crude but useful animation sequence. One major problem seems to be the existence of large gaps in the reception of IR-ZA UC2 sector imagery. (These gaps result in a "jerky" sequence). This problem will be eliminated when the Vancouver Receiving System is operational. The Pacific Weather Centre will then have control over sectors and enhancements and will be able to schedule as required.

NOTE

Approval has been granted to purchase hardware that should greatly enhance the effectiveness of the AIDS program. A new videotape player with a programmer will be located at the satellite desk. This unit will allow the satellite meteorologists to:

1. define videotape segments to be played and repeated continuously. This is the equivalent of a film loop.

2. stop the tape at any frame.

3. vary the speed.

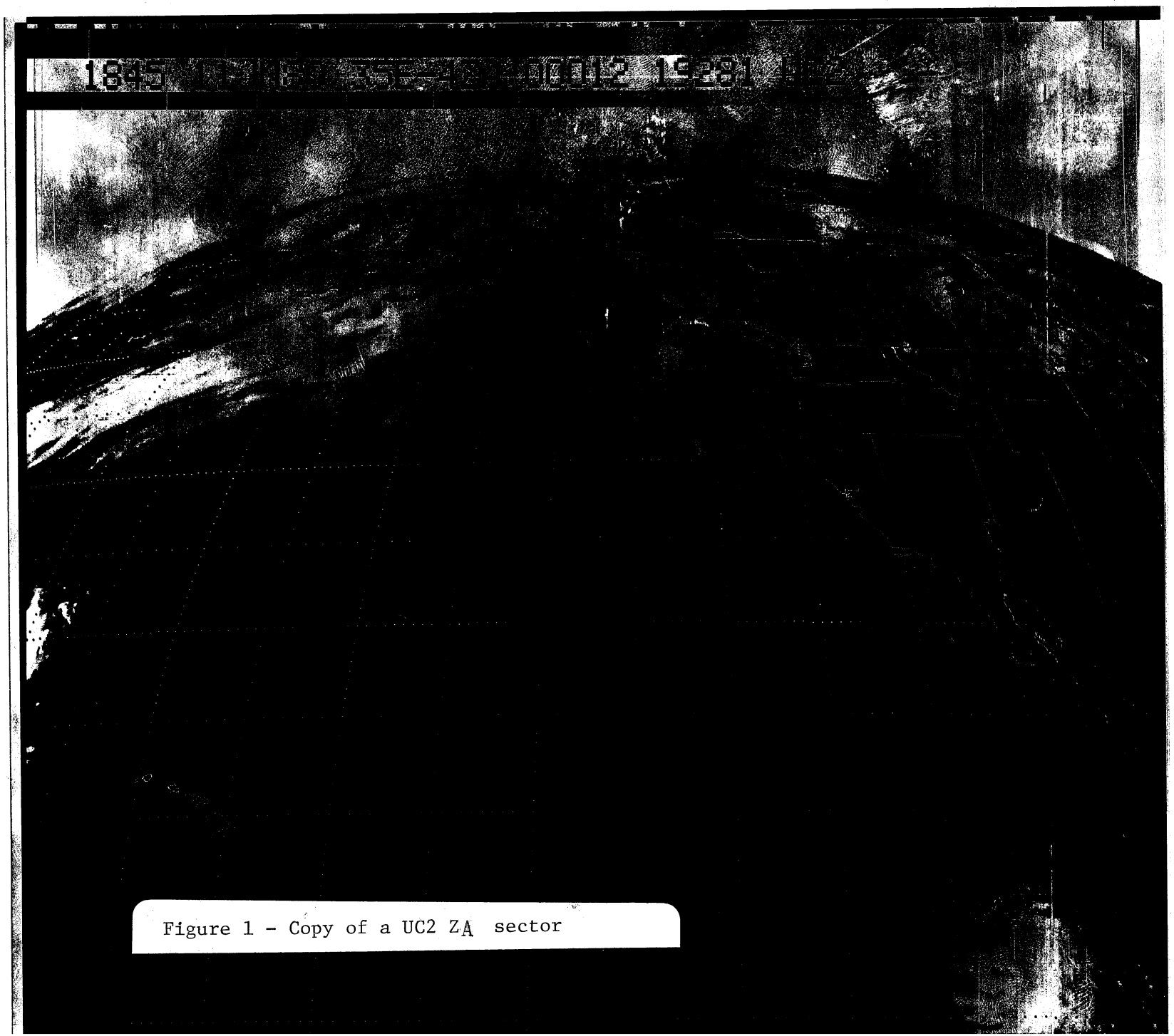


Figure 1 - Copy of a UC2 ZA sector

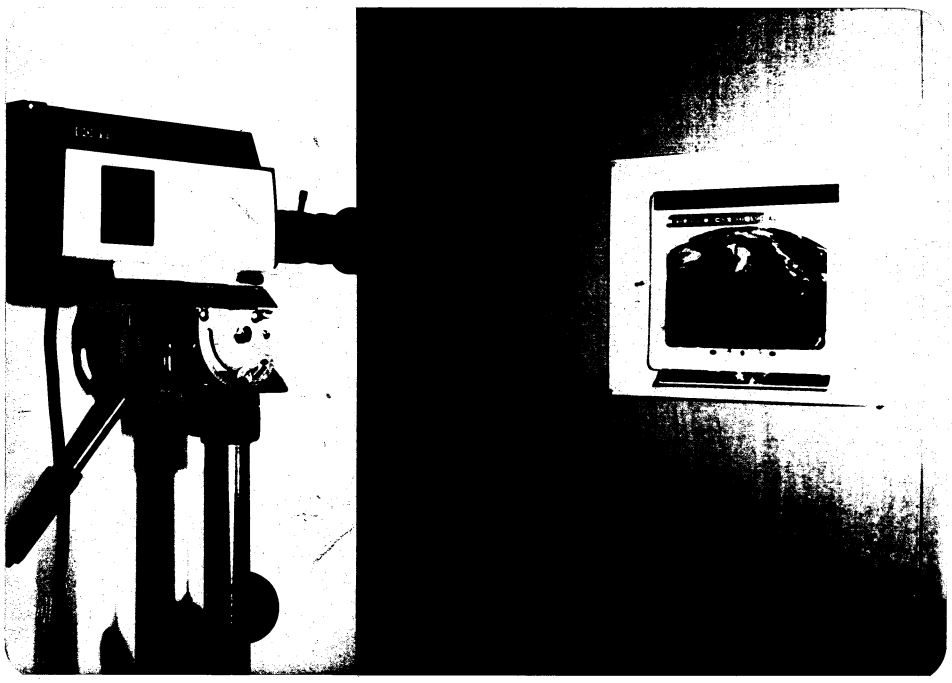
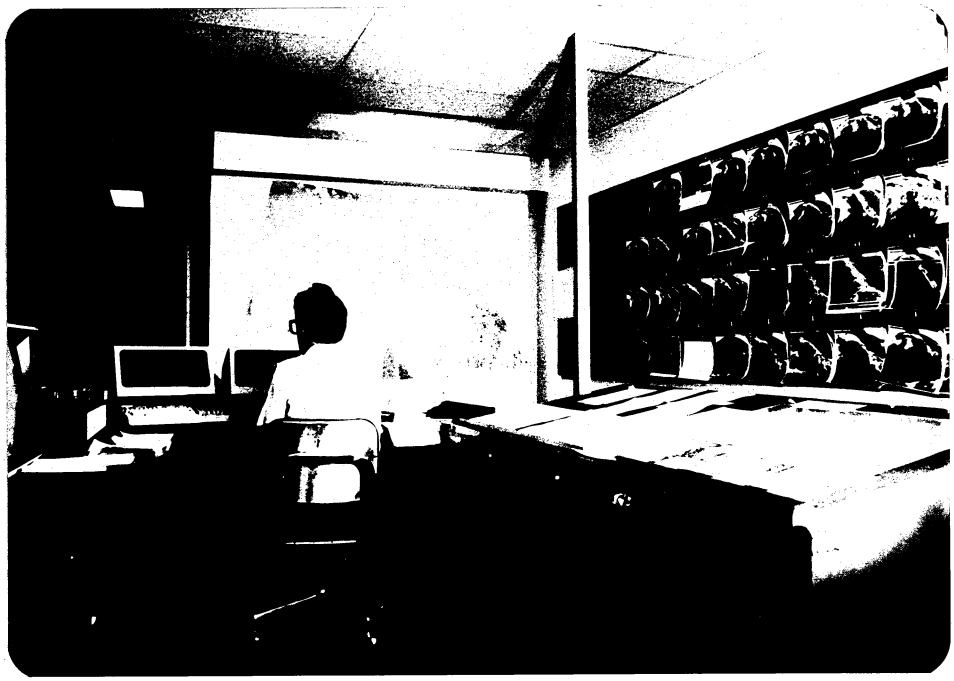


Figure 2 - Videocamera + mounting frame

Figure 3 - Editing equipment with B. Loveless at the control panel.



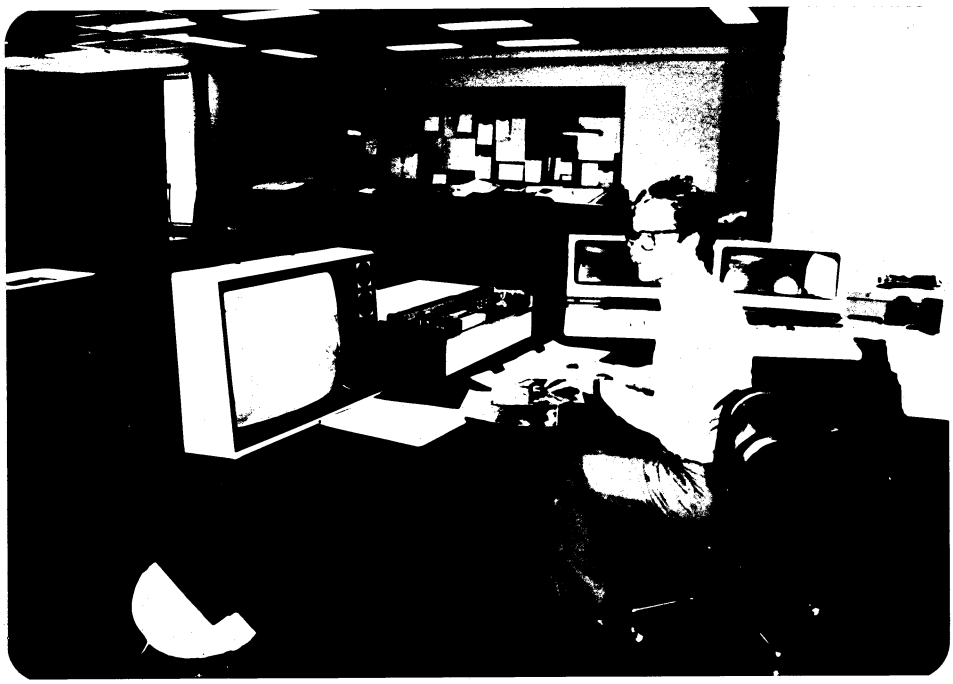


Figure 4 - (a) Picture of Satellite desk
(b) Picture of video display

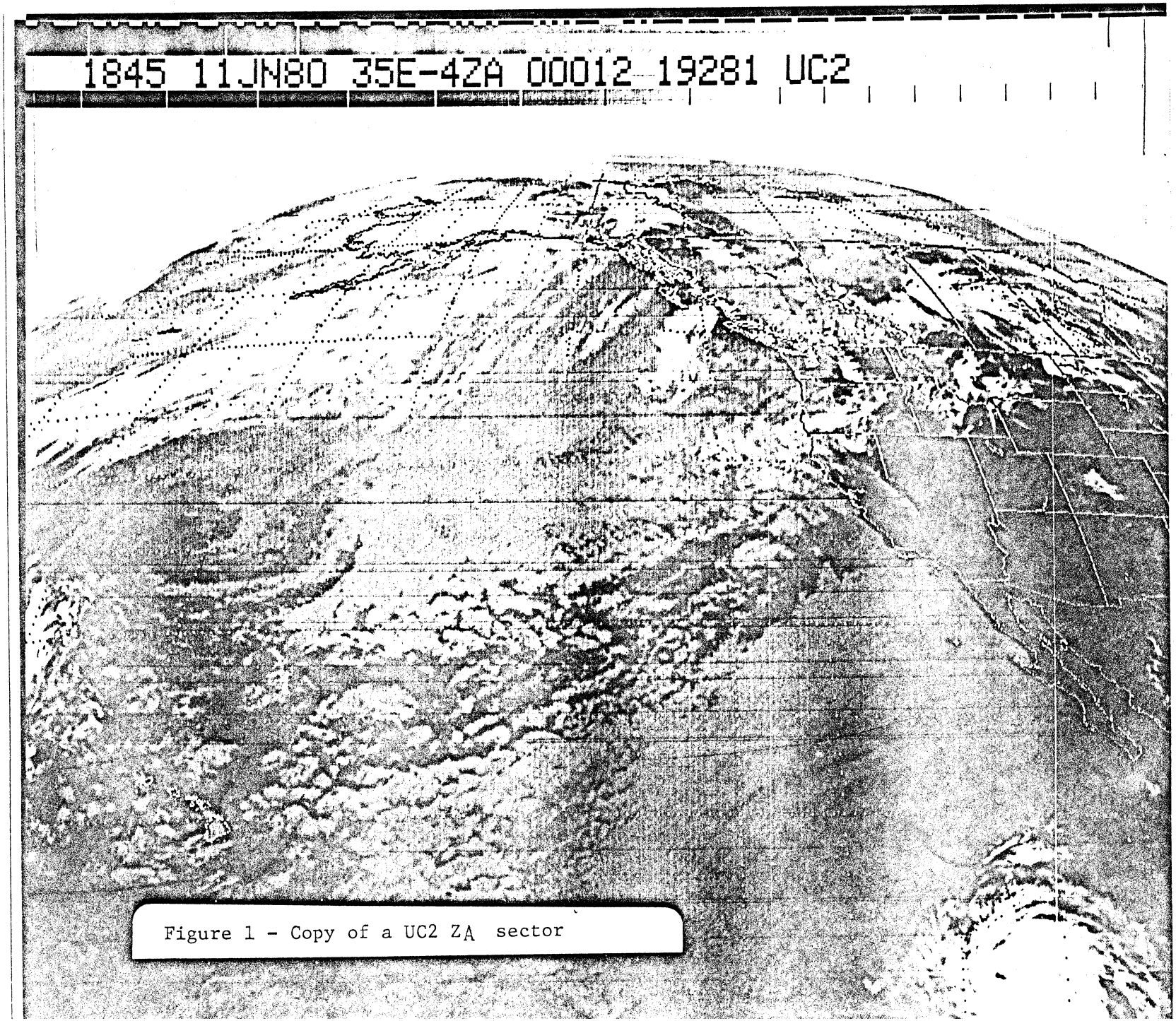



Figure 1 - Copy of a UC2 ZA sector