EMICOPFTDSP.DOC

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CONTENTS

A. INTRODUCTION

EMICOPFTDSP is used to display projections (PRJs) and/or polar Fourier transforms (PFTs) of the projections of a three-dimensional, icosahedral particle reconstruction. The PFT and PRJ data are computed with EMICOPFT.

The data are displayed on the graphics device starting in the upper left corner (usually THETA,PHI = 69,0) and proceeding to the bottom right (THETA,PHI = 90,32). Each row corresponds to a particular THETA and the PHI values increase to the right across the screen. There is no provision for downsizing the data during display, therefore the entire data set quite often won't fit entirely on the graphics screen. If your only interest is in display of the data, you can go back to EMICOPFT and recalculate the PRJ or PFT data with coarser sampling intervals and with smaller box sizes. Note however, that if you do this, EMICOPFTCC will not work properly with your raw image data.

B. PROGRAM INPUT

1. INPUT FILENAME FOR PRJ OR PFT DATA (A FORMAT)
2. ITYPE (PFT or PRJ) (I FORMAT)
3. IDIFF (I FORMAT)
4. IMG1, IMG2, IMG_STEP (3I FORMAT)
5. DISPLAY AVERAGE AT SCREEN CENTER? Y/<N> (TOUCH-KEY FORMAT)
6. DISPLAY ANY MORE? Y/<N> (TOUCH-KEY FORMAT)
7. ERASE SCREEN? Y/<N> (TOUCH-KEY FORMAT)

1. INPUT FILENAME FOR PRJ OR PFT DATA (A FORMAT)

   This identifies the file containing the data you wish to display.

2. ITYPE (I FORMAT)

This signifies the type of input data. The DEFAULT is PFT-type
data. Use ITYPE = 1 to signify PRJ-type data.

3. IDIFF (I FORMAT)

   The data are typically displayed unaltered (DEFAULT). Set
IDIFF = 1 to display difference data wherein the average PRJ or
PFT is first subtracted from each "image".

4. IMG1, IMG2, IMG_STEP (3I FORMAT)

   Use IMG1, IMG2, and IMG_STEP to specify the first, last, and
increment for the "images" you want displayed.

5. DISPLAY AVERAGE AT SCREEN CENTER? Y/<N> (TOUCH-KEY FORMAT)

   Hit "Y" to display the global average "image" at the center of
the graphics screen.

6. DISPLAY ANY MORE? Y/<N> (TOUCH-KEY FORMAT)

   Hit "Y" if you want to continue displaying more data.

7. ERASE SCREEN? Y/<N> (TOUCH-KEY FORMAT)

   Hit "Y" to erase the graphics screen before displaying more
data.

C. FLOW CHART FOR EMICOPFTDSP PROGRAM

```
*********************
*       MAIN        *
*  (EMICOPFTDSP.FOR) *
*********************
        *
        *-- LX_INIT
        *
        *-- ICOPFT_FILL -- MAP_SYM -- COPY_R4
        *
        *-- ICOPFT_DSP --|-- LX_PUTIMG
                         |-- GET_YESNO
                         |-- LX_ERASE
```