

Creation of Smoothed Coherence Mosaic

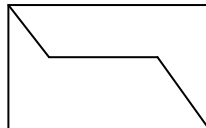
ERDAS IMAGINE 9.1 PC VERSION

Steps for Normal Coherence Blocks:

- 1) In your working directory set up one directory for each block (we did this on MAMM to copy the data out of the mission database).
- 2) Copy the binary, *.hdr, and Corners.map files from the RAMS mission database into the corresponding block in your working directory. It is important to assign an unique name to each file.

ie: blk_82_orb_521_frm_3532

- 3) Run the script imagine.hdr.converter to create the needed ERDAS IMAGINE '8-bit binary' header files in preparation for mosaicking. imagine.hdr.converter was written especially for this project. See end of document.
- 4) Transfer all data files to a PC. From the IMAGINE GUI
 - a. DATA PREP->MOSAIC IMAGINE->MOSAIC PRO
 - b. VIEW->SHOW RASTER
 - c. EDIT->SET OVERLAP FUNCTIN->click on FEATHERING
 - d. EDIT->ADD IMAGES
 - Change file type to GENERIC BINARY
 - Select all the data files (click on first frame, hold down shift key, click on last frame)
 - Click on 'Image Area Options'
 - Click on 'Set'
 - Type in From "255" To "255" for the BACKGROUND VALUE RANGE
 - Deselect Crop Area by clicking in the box
 - OKAY, OKAY
- 5) Click on the 'AUTOMATICALLY GENERATE SEAMLINES' icon (not in the pull down menu) It's the 11th icon from the left and looks something like this:

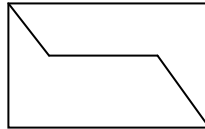


Click on 'Weighted Seamline'. Click OKAY

- 6) PROCESS->RUN MOSAIC
 - a. Type in file name
 - b. Click on OUTPUT OPTIONS, Select Stats Ignore Value "0"
 - i. Ignore Input Value "255"
 - c. Click OKAY twice

Steps for Low Coherence Blocks:

- 1) Assuming steps 1-3 above have been successfully completed:
 - a. DATA PREP->MOSAIC IMAGINE->MOSAIC PRO
 - b. VIEW->SHOW RASTER
 - c. EDIT->ADD IMAGES
 - Change file type to GENERIC BINARY
 - Select all the data files (click on first frame, hold down shift key, click on last frame)
 - Click on 'Image Area Options'
 - Select "COMPUTE ACTIVE AREA"
 - Click on 'Set'
 - Type in From "255" To "255" for the BACKGROUND VALUE RANGE
 - Deselect Crop Area by clicking in the box
 - Select EDGE option**
 - OKAY, OKAY
- 2) Click on the 'AUTOMATICALLY GENERATE SEAMLINES' icon (not in the pull down menu) It's the 11th icon from the left and looks something like this:



Click on 'Overlay-based Seamline'. Click OKAY

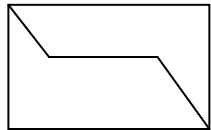
- 3) PROCESS->RUN MOSAIC
 - a. Type in file name
 - b. Click on OUTPUT OPTIONS, Select Stats Ignore Value "0"
 - i. Ignore Input Value "255"
 - c. Click OKAY twice

**For large blocks instead of selecting "Compute Active Area" select "Use Entire Image". Then click OKAY.

If the frame boundaries appear clipped:

- 1) Assuming steps 1-3 above have been successfully completed:
 - a. DATA PREP->MOSAIC IMAGINE->MOSAIC PRO
 - b. VIEW->SHOW RASTER
 - c. EDIT->ADD IMAGES
 - Change file type to GENERIC BINARY
 - Select all the data files (click on first frame, hold down shift key, click on last frame)
 - Click on 'Image Area Options'
 - Click on 'Set'
 - Type in From "255" To "255" for the BACKGROUND VALUE RANGE
 - Deselect Crop Area by clicking in the box
 - Click on the 'EDGE' option
 - OKAY, OKAY

- 2) Click on the 'AUTOMATICALLY GENERATE SEAMLINES' icon (not in the pull down menu) It's the 11th icon from the left and looks something like this:



Click on 'Weighted Seamline' or 'Overlay-based Seamline' depending on your coherence level. Click OKAY

3)PROCESS->RUN MOSAIC

- a. Type in file name
- b. Click on OUTPUT OPTIONS, Select Stats Ignore Value "0"
- c. Ignore Input Value "255"
- d. Click OKAY twice

IMAGINE_HDR_CONVERTER

This script converts Vexcel's *.h & *.map files into ERDAS Generic Binary

#

Written by Stephen Mather, Jan 9, 2007

```
FILELIST=`find . -name "*.map" | sed 's/.map//`
```

```
# For ENVI Files
```

```
EXTENSION='.hdr'
```

```
#set the pixelsize
```

```
PIXELSIZE='200.000000'
```

```
echo Creating World Files...
```

```
for FILE in $FILELIST
```

```
do
```

```
  if [ -f $FILE.h ]
```

```
  then
```

```
    ROWS=`grep lines $FILE.h | awk '{print $2 ; }`
```

```
    COLS=`grep pixels $FILE.h | awk '{print $2 ; }`
```

```
    ULX=`grep min_x $FILE.map | awk '{ print $2 ; }`
```

```
    ULY=`grep max_y $FILE.map | awk '{ print $2 ; }`
```

```
    LRX=`grep max_x $FILE.map | awk '{ print $2 ; }`
```

```
    LRY=`grep min_y $FILE.map | awk '{ print $2 ; }`
```

```
    echo 'BANDS:1' > $FILE$EXTENSION
```

```
    echo 'ROWS: $ROWS >> $FILE$EXTENSION
```

```
    echo 'COLS: $COLS >> $FILE$EXTENSION
```

```
    echo 'INTERLEAVING: NA' >> $FILE$EXTENSION
```

```
    echo 'DATATYPE: U8' >> $FILE$EXTENSION
```

```
    echo 'BYTE_ORDER: MOTOROLA' >> $FILE$EXTENSION
```

```
    echo 'UL_X_COORDINATE: $ULX >> $FILE$EXTENSION
```

```
    echo 'UL_Y_COORDINATE: $ULY >> $FILE$EXTENSION
```

```
    echo 'LR_X_COORDINATE: $LRX >> $FILE$EXTENSION
```

```
    echo 'LR_Y_COORDINATE: $LRY >> $FILE$EXTENSION
```

```
    echo 'PIXEL_WIDTH: $PIXELSIZE >> $FILE$EXTENSION
```

```
    echo 'PIXEL_HEIGHT: $PIXELSIZE >> $FILE$EXTENSION
```

```
    echo 'MAP_UNITS: other' >> $FILE$EXTENSION
```

```
    echo 'PROJECTION_NAME: Unknown' >> $FILE$EXTENSION
```

```
    echo 'PROJECTION_ZONE: NA' >> $FILE$EXTENSION
```

```
    echo 'PROJECTION_PARAMETERS:' >> $FILE$EXTENSION
```

```
    echo ' NA' >> $FILE$EXTENSION
```

```
    echo ' NA' >> $FILE$EXTENSION
```

```
    echo ' NA' >> $FILE$EXTENSION
```

```
    echo ' NA' >> $FILE$EXTENSION
```

```
    echo ' NA' >> $FILE$EXTENSION
```

```
echo ' NA' >> $FILE$EXTENSION
echo ' NA' >> $FILE$EXTENSION
echo ' NA' >> $FILE$EXTENSION
echo ' NA' >> $FILE$EXTENSION
echo ' NA' >> $FILE$EXTENSION
echo ' NA' >> $FILE$EXTENSION
echo ' NA' >> $FILE$EXTENSION
echo ' NA' >> $FILE$EXTENSION
echo ' NA' >> $FILE$EXTENSION
echo ' NA' >> $FILE$EXTENSION
echo 'SPHEROID_NAME: NONE' >> $FILE$EXTENSION
echo 'DATUM_NAME: NONE' >> $FILE$EXTENSION
echo 'SEMI_MAJOR_AXIS: NA' >> $FILE$EXTENSION
echo 'SEMI_MINOR_AXIS: NA' >> $FILE$EXTENSION
echo 'E_SQUARED: NA' >> $FILE$EXTENSION
echo 'RADIUS: NA' >> $FILE$EXTENSION
echo $FILE$EXTENSION has been created.
```

fi

done