

AERMAP Briefing for the
Regional State and Local Government Modeler's
Workshop

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Introduction

Treatment of Critical Hill Height Receptors

Use with SDTS File Format

Use with Mixed DEM Datums

Ability to Read 7 Digit Northing Coordinates

Better Error Checking

Use of XYZ Terrain Data for Input

Use of Various Nodes Spacings

Status of Aermap

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Testing

Questions?

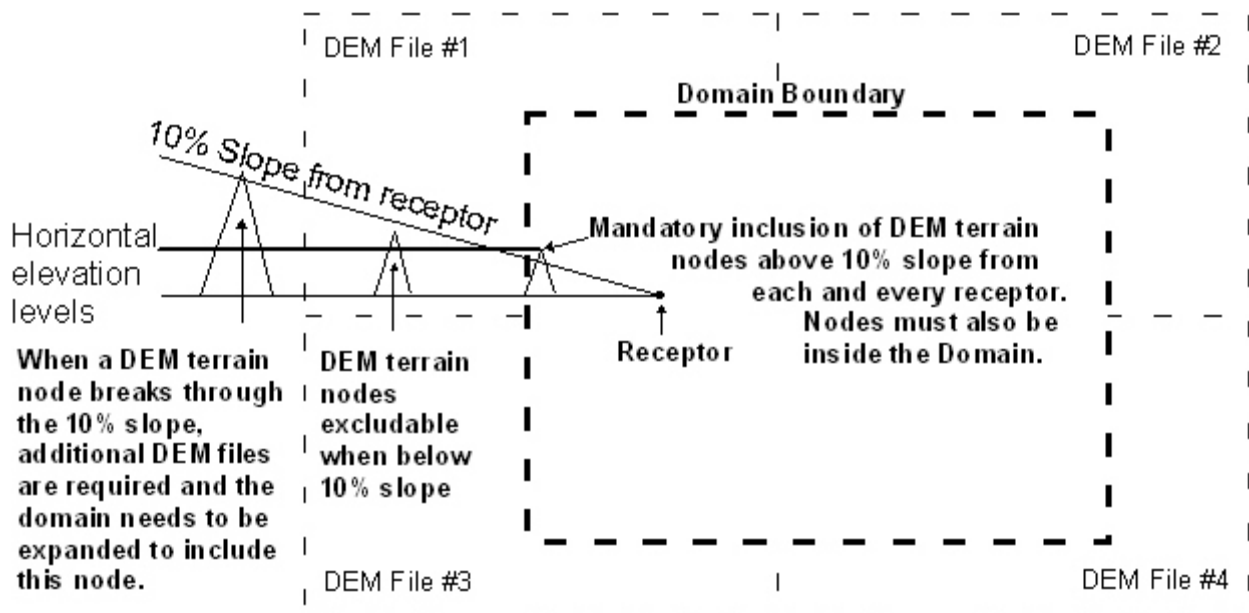
Treatment of Critical Hill Height Receptors

Public comment:

Critical Hill Heights could vary based on domain size which did affect the results

Response:

Search for terrain that breaks through a 10% slope from a receptor.



Use with SDST File Format

Public Comment:

Provide ability to read SDTS formats

Response:

SDTS - Spatial Data Transfer Standard

Available on several internet sites for “free”. May find some download restrictions

SDTS files are preprocessed and reconstituted into the old “native” DEM file format using the SDTS2DEM program

Batch file system being included with AERMAP package. Important to read instructions and comments

Use with Mixed DEM Datums

Public Comment:

Want to use AERMAP with two different datums

Response:

Can process 7.5-minute files with:

North American Datum 1927,
North American Datum 1983,
Old Hawaiian Datum, and
Puerto Rico and Virgin Island Datums

Can process 1-Degree files with:

World Geodetic System 1972, and
World Geodetic System 1984 Datums

Need to add a Datum code at end of the ANCHOR keyword line in input file

Ability to Read 7-digit Northing Coordinates

Public Comment:

AERMAP was not able to fully process the 7-digit Northing Coordinate

Response:

Done by using Double Precision variables and double to single and single to double precision functions.

Better Error Checking

Public Comment:

There was a need sighted for better error checking of the raw data

Response:

Additional error checks were added to AERMAP

DEM files were scrutinized for problems and better READ algorithms were developed

Additional debug statements were added

An additional debug strategy is being reviewed

Use of XYZ Terrain Data

Public Comment:

There is a need to be able to read user-prepared XYZ in a user-specified format

Response:

A draft method has been developed where the user copies a DEM file and fills in the appropriate field with their own data.

The X and Y values must be evenly spaced

The values can be in UTM or Arc-seconds

The user needs to understand the USGS “Blue Book” format standard

A draft User’s Guide has been prepared

Use of Various Node Spacings

Emailed Comment:

The USGS SDTS files have node spacings of 10 meters that cause AERMAP to crash

Response:

The X, Y, and Z spacing values and units which are found in the DEM file header are now read and utilized in AERMAP.

These values are used instead of the previously fixed values.

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