1- Building a simple model & saving (Just to get used to SMS Modules).

1-1. Creating Nodes & arrange positions.
" Lines
" polygons
} general comment on Creation Vs. selection

1-2. Redistribute vertices → difference between nodes & vertices.

1-3 * Change polygon model type to adcirc.
* Preview mesh. (Sometimes bias works!)
* See attributes (Change mesh according to preview).
* convert coverage to mesh.

1-4 * Check model.
Preview height / elevation / bathymetry of nodes.
Changing elevation, one by one is possible.
but what if we want to change the elevation according to a pattern?

1-5. Select a group of nodes.
• Convert mesh to scatter. with selected nodes.
(A new type of object Scatter!)
• turn off mesh.
• turn off map.
• plot scatter contour.

1-6. Data calculation.
• Open Data Calculator.
• Compute new set

1-7. Scatter menu → Interpolate to mesh.

Choose the new data set.

Know the difference between S and Z!

Once assign data set to Z. → note the change of Z mesh data

another time assign data set to S.

1-8- You can get back to original elevation by converting mesh to scatter & interpolate again!

1-9- Save final stage. Note the different files

- Open scatter alone...
- Open map file ...

done with the first phase.

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* Open subgrid in SMS and do the following:

3 step
- Change coords to geographic. Adcirc work with meters.
- Build a scatter out of initial model.
- Save.

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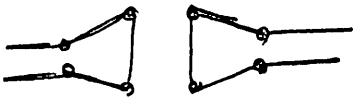
* Put the geareffed picture in background.
* Put GIS shape file and select the road which matches levee. Delete the extra parts.
  - convert all nodes to vertices to check discontinuities.
  - remove discontinuities.

* If no GIS file, just work with geo-refed photo

* Create a node string surronding the road (Levee).
  - Hold shift
  - Finish with double click.

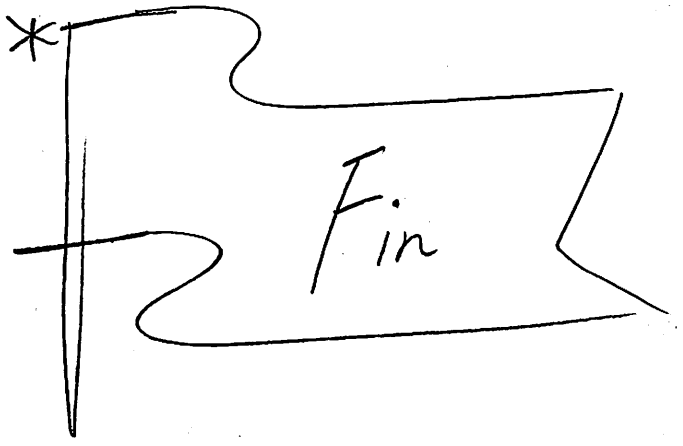
* Convert node string to map.
  - Create a polygon.
  - Delete element with boundary as outside
  - " nodes " " " inside → crazy!

* Now merge the new coverage from mesh & Levee-Path.
* Redistribute vertices! → Import-t.
* Offset levee-path from drop down menu.
  - turn on the image to make sure the levee path is correct!
  - delete the one which you do not like.
  - convert the two prefinal vertices to nodes.
  - reshape end points



  - delete the previous polygon.

* Create new polygon surrounding the levee.
  - Check its attributes.
  - Paving =
  - Scatter set from mesh.
  - Ocean.
* Convert to mesh.
  - Merge to the base mesh
  - Add nodestrings to the merged one. donot delete mesh_0.
  - delete unused node strings.
* Assign BC. as Island Barriers.
  - Assign values as desired and double click to assign. (There is a Update in this section).
  - You can also interpolate!
  - Greened!
* Now Let us look at grd file and where is BC.! important always check!
* Copy subgrid to gridscope folder & merge to the original mesh.
* copy merged file to meshes folder & check levee heights.
* Print fort.13 file!
* You are nearly there! Do not forget the last step.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