GUYMASTER Release Notes
For version 5.2.0 as of June 27, 2016

1. Because it is becoming more common to shroud antenna systems and towers, the SHROUD appurtenance has been added to allow the user to define and show shrouds. All things inside the shroud cross-section will be included in weight calculations but not in wind calculations. Within the shroud's region, the wind will be determined based on the shape and size of the SHROUD itself.

SHROUDS

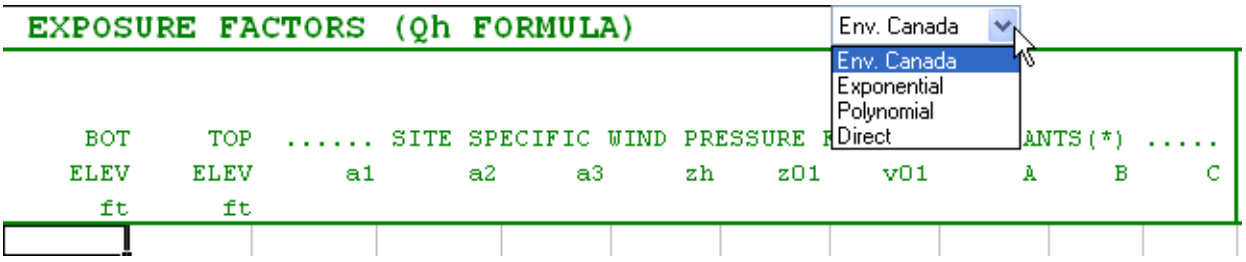
..ELEVATION OF.. BOTTOM ft	TOP ft	TYPE OF MATERIAL	NO. OF SDES	OUTSDE DIAMETER in	THICK-NESS in	ORIENTATION deg
40.000	50.000	2	0	36.00	0.25	0.00

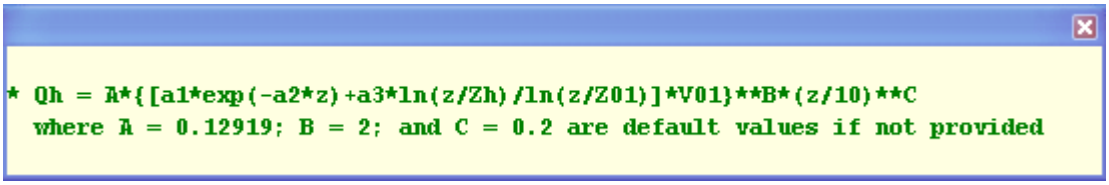
2. Monopole analysis for TIA-222-F standard are added.

3. We have increased the ways in which the change in wind with height can be specified. GUYMASTER already provided, under EXPOSURE FACTORS, for supply of the EC (Environment Canada) formula and for a direct method using zones of linearly varying values. To these we have now added exponential and polynomial formulas, which will allow more profiles to be applied without calculating the segmental values needed in our previous approach.

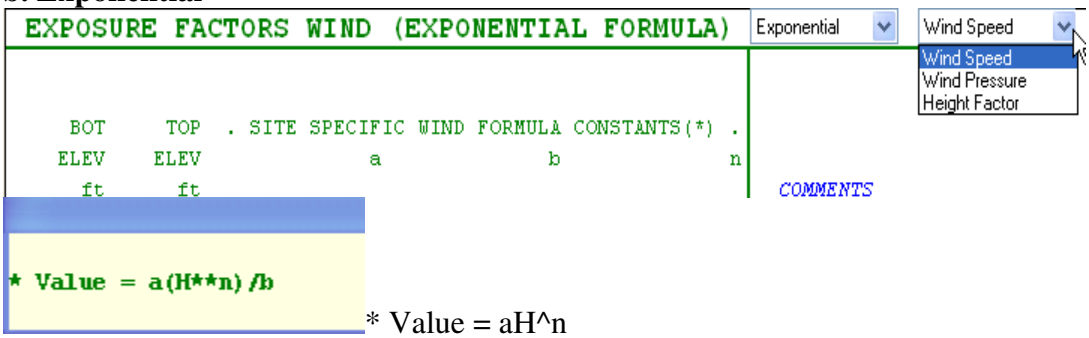
   The user will select the preferred approach, from a drop down list, when he goes to the EXPOSURE FACTORS table. A second drop down list allows the user to choose specifying the profile for wind speed variation, wind pressure variation, or height factor variation.

a. Environment Canada Formula



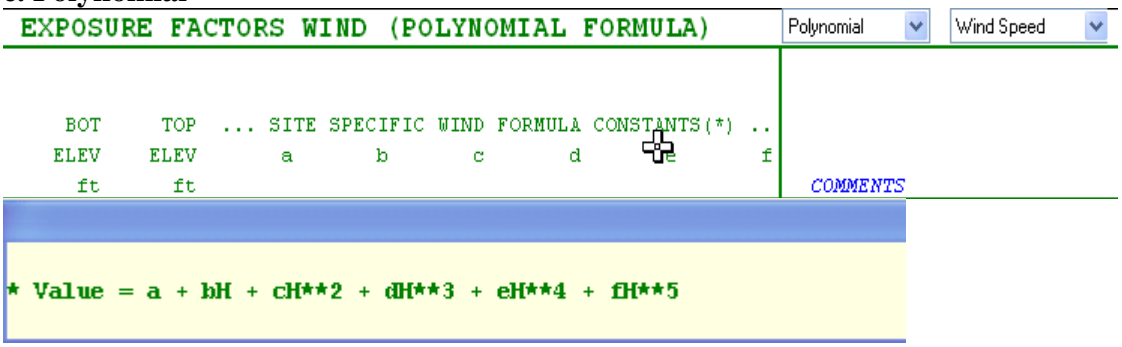


b. Exponential

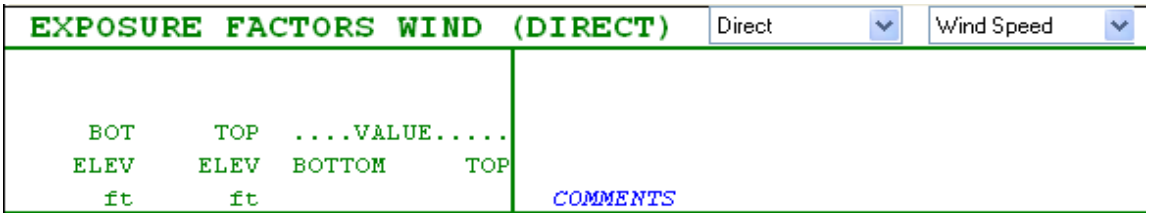


* Value = aH^n

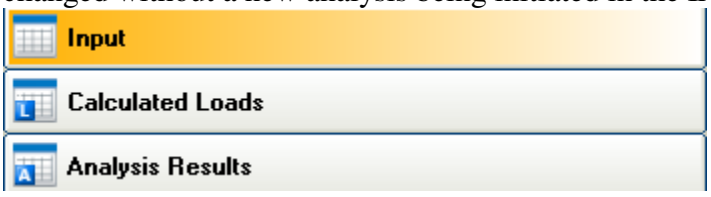
c. Polynomial



d. Direct



4. The user can now select to work with GUYMASTER in either INPUT or OUTPUT mode. The INPUT mode is what the user has always seen through GUYMASTER. The new OUTPUT mode provides for the screen display of the results of an analysis in tabular format. This new approach gives the user the ability to quickly go to the output data of interest and view it in a convenient format. The user may highlight any portion of the table and copy it, if desired, to another document. The data in the output cannot be changed without a new analysis being initiated in the INPUT mode.



5. We have added a backup feature that is automatically activated when the user saves a Project. Should there be a problem during the SAVE operation, the user can go back to the backup project, which will have everything as it was before the modifications made before the save operation was invoked.

6. The Cd (Ca) drag factor is now calculated separately for each ladder component (e.g. Rails, Rungs and Safety Rail) taking into account its orientation to the wind and aspect ratio.

7. This version eliminates the occasional problem with unit conversions from metric to imperial, which would not be restored in case of failure.

8. This version improves the recognition by GUYMASTER of when an appurtenance is in the inclusion zone.

9. This new version calculates the aspect ratio of attachments using original length / width and not the projection on the plane normal to the wind direction.

10. Draw Tower now draws the top horizontal of the tower only if it is, in fact, included in the LATTICE MAST MATERIALS table.