**Assignment 4**

Name: Hassan ragab hassan

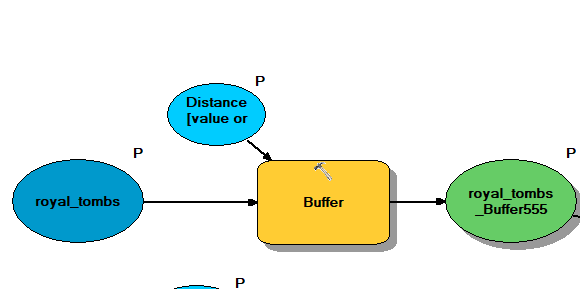
ID: 20190177

Group: S4

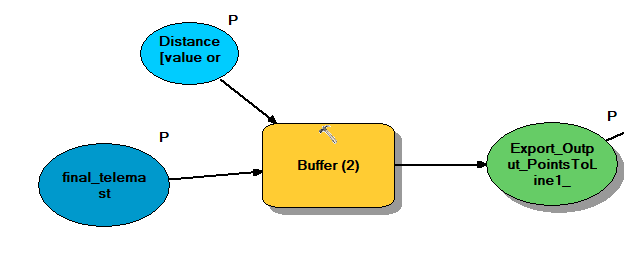
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***Exercise 1: Create a tool to obtain a feature class with preclusive areas***

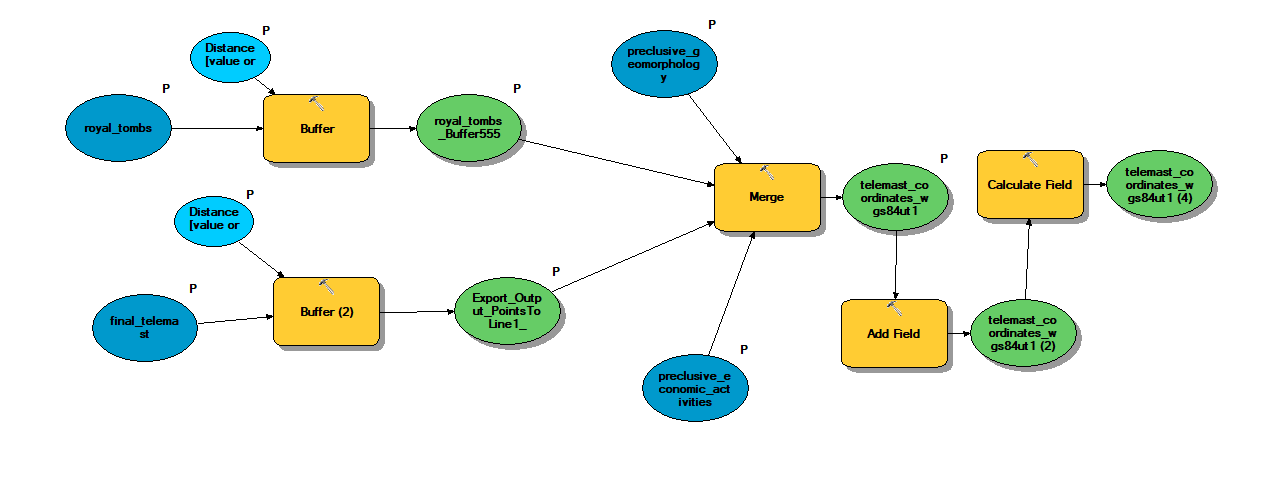
* Create a new model tool named **“Exercise1”**
* Build a model for the following workflow:
  + **“royal\_tombs”** buffered with **3000 m**



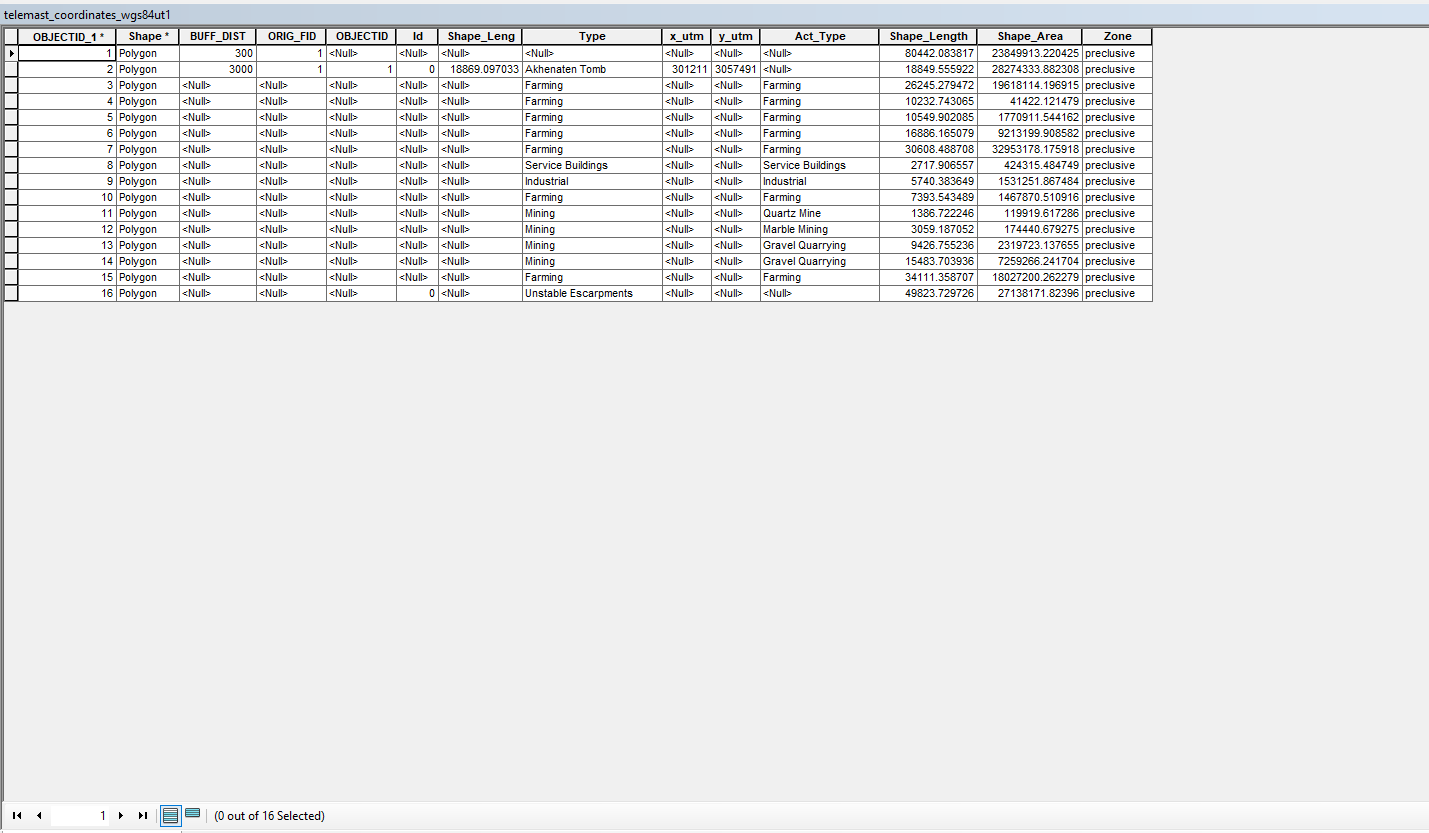
* + **“telemasts\_PointsToLine”** buffered with **300 m**



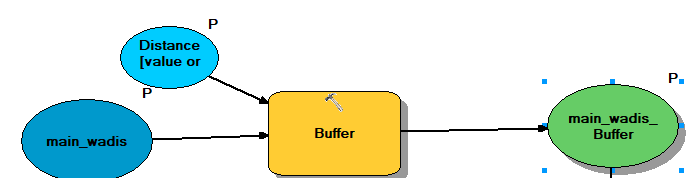
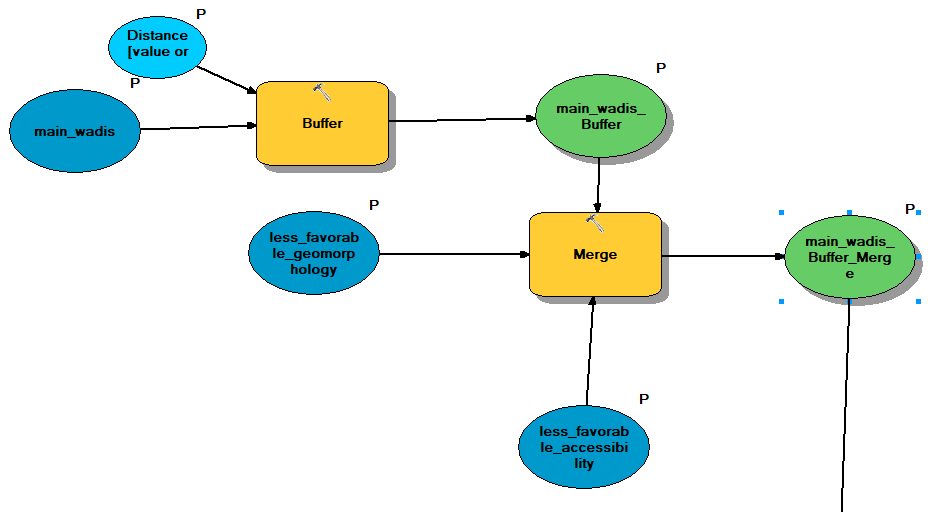
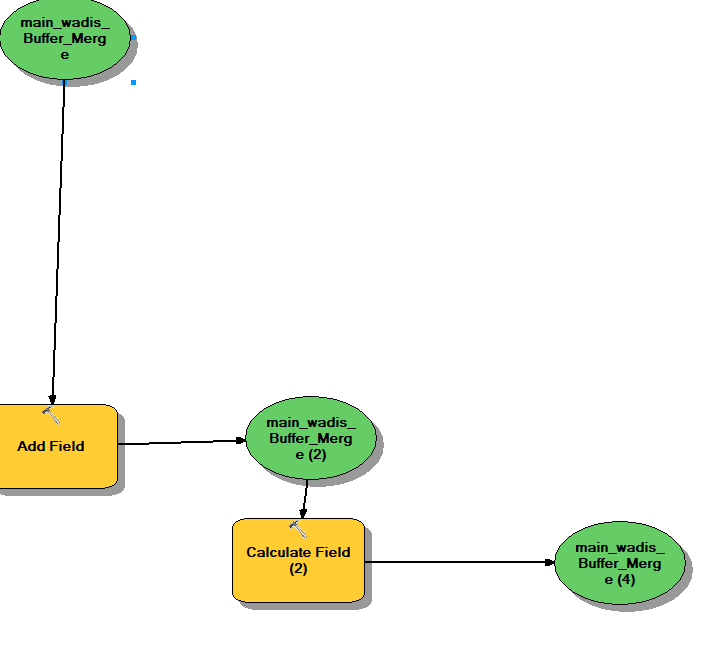
* the both **Output Datasets** should be overlayed with the **“*Merge*”** tool together with the datasets **“preclusive\_geomorphology”** and **“preclusive\_economic\_activities”**
* ***Add Field*** to the Merge Output Dataset named **“Zone”**

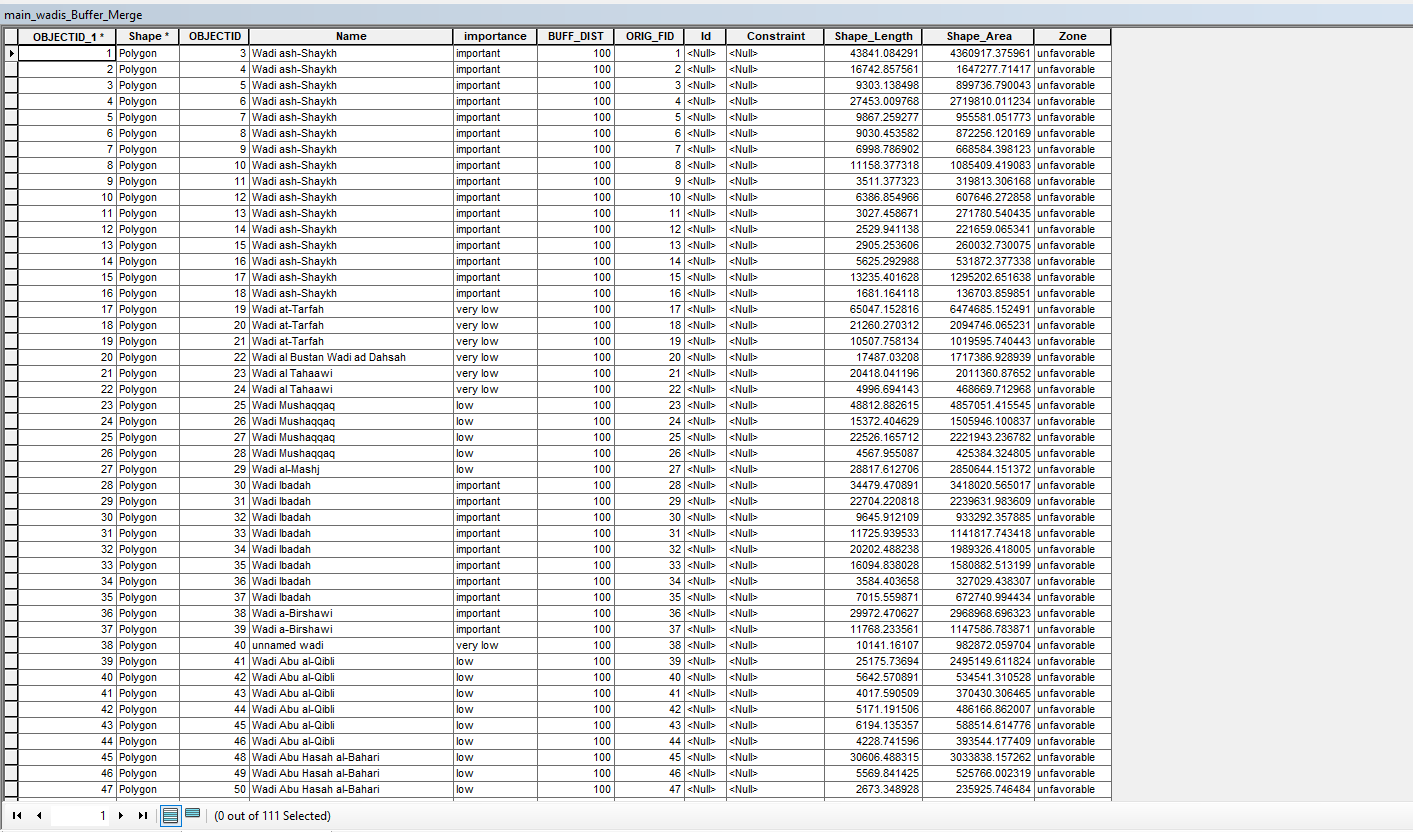


* Use the ***“Calculate Field”*** function to **attribute all features** with **“preclusive”** (field “Zone”)



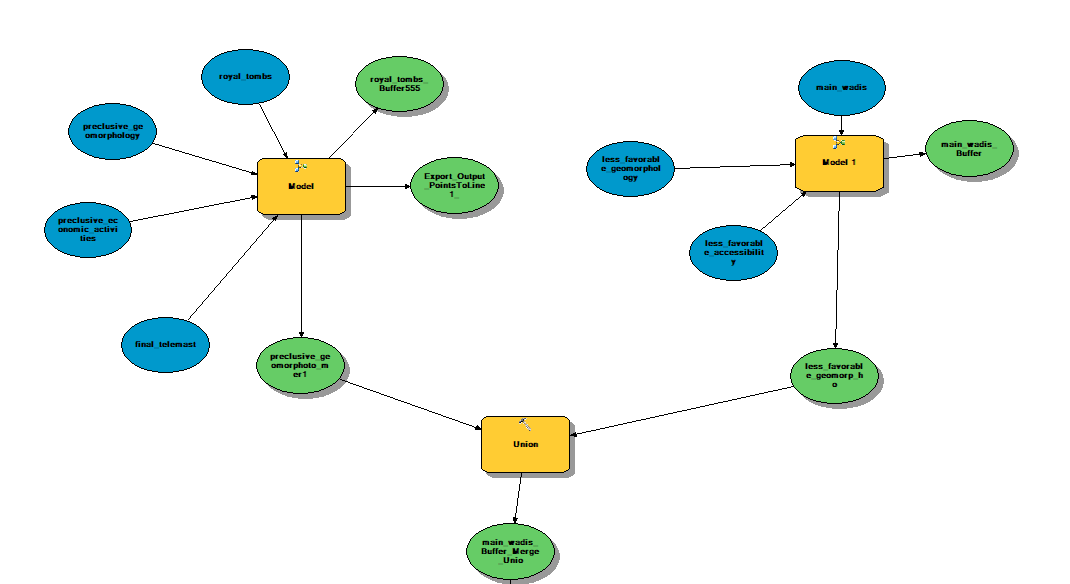
***Exercise 2: Create a tool to obtain a feature class with unfavorable areas***

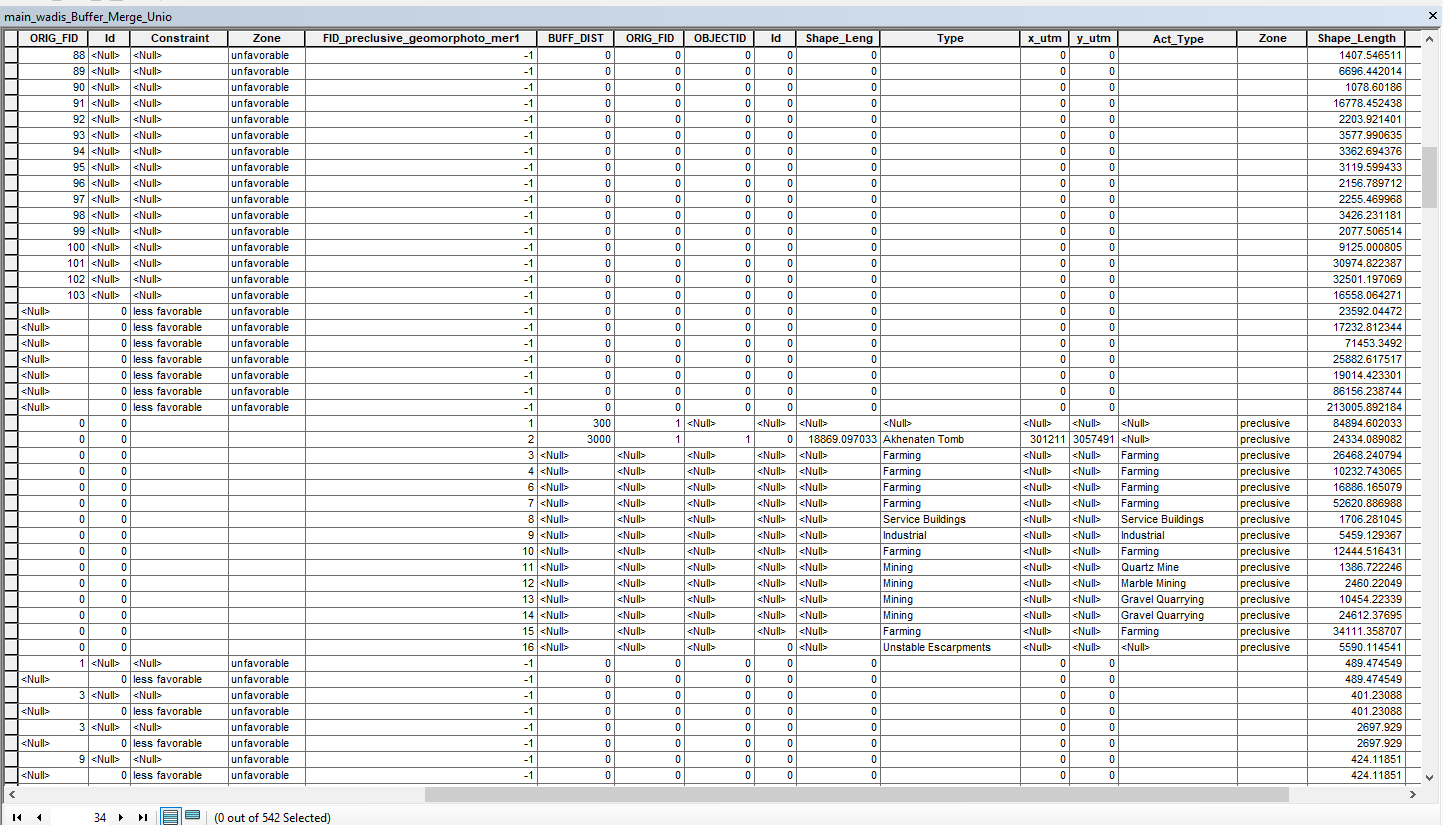
* Create a new model tool named **“Exercise2”**
* Build a model for the following workflow:
  + “main\_wadis\_of\_importance” buffered with 100 m
  + “Merge” the Output Dataset with the datasets “less\_favorable\_geomorphology” and “less\_favorable\_accessibility”
* Add Field to the Merge Output Dataset named “Zone”
* Use the “Calculate Field” function to attribute all features with “unfavorable” (field “Zone”)

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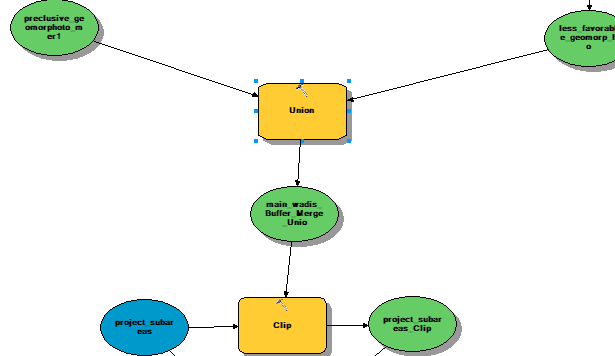
***Exercise 3: Integrating a model within a model Create a tool to obtain a feature class with all preclusive & unfavorable areas:***

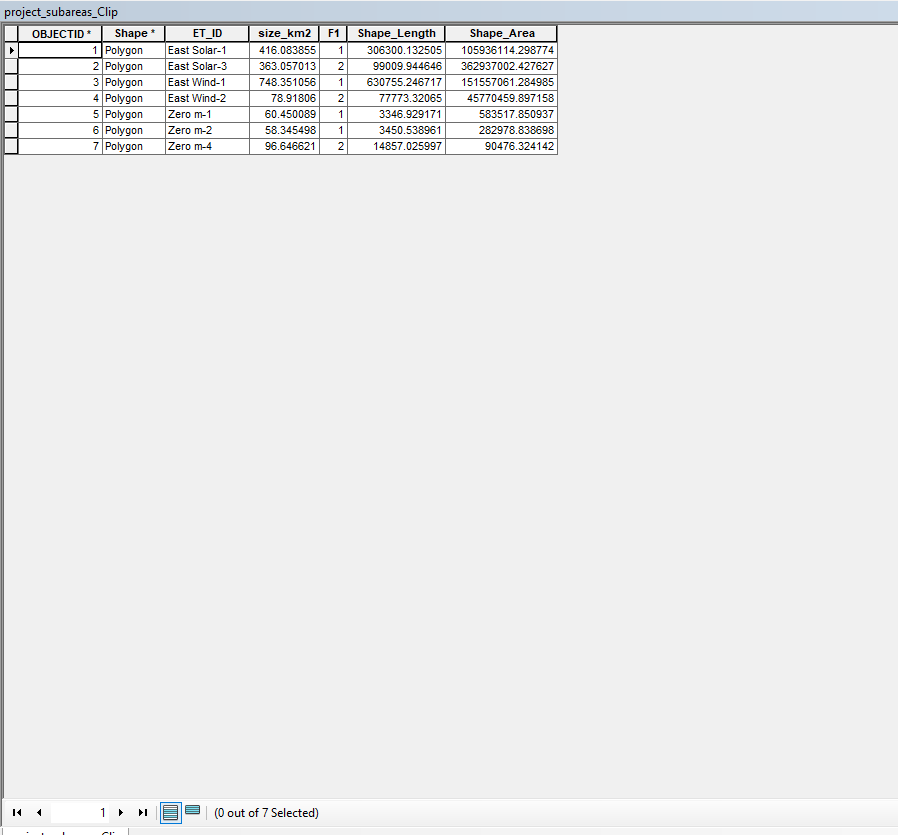
* Overlay the Output Datasets of both previous models using the tool “Union”





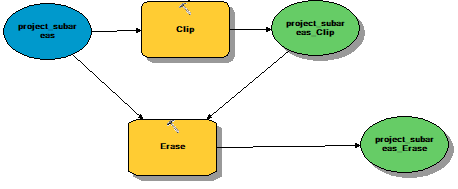
* Clip the Union Output Dataset to the “project\_subareas”



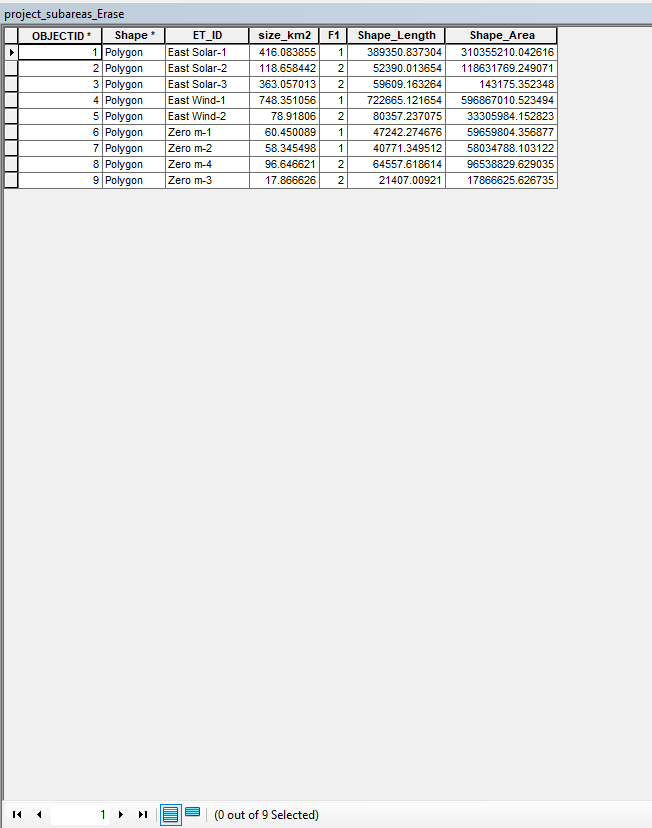


* Add the result to Display

***Erase project-subareas***

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***Solution forward***

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