Appendix 2

User Manual

INSTALLATION

The easiest way to install and run the Goose Tool is:

1) Copy Folder "PIG" from Appendix 4 (Tool and Python Code) folder and paste to Disk "C:/"

2) Execute the project "Test.aprx"

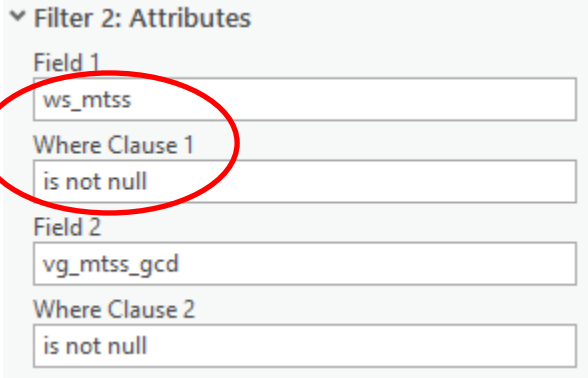
3) Look for the Toolbox named "Test"

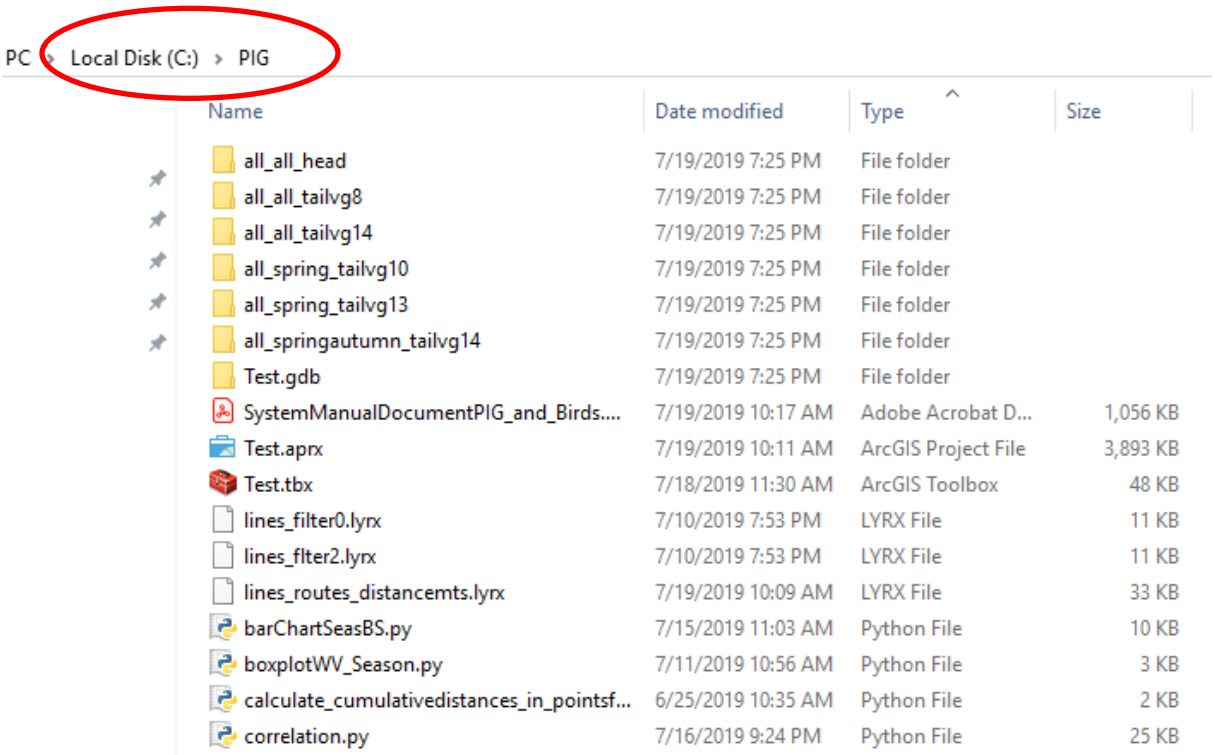
4) Excute Tool "Goose Analysis"

5) Run the tool with default parameters.

Note: Default values are configured to be working in path "C:/PIG"

Caution: The correlation function is sensible to NULL values in the variables. Be sure to use an *attribute filter* for the correlation variables, specially field by default ws_mtss. The attribute filter could be (WS_MTSS IS NOT NULL).




PC › Local Disk (C:) › PIG
Name
Date modified
Type
Size
all_all_head 7/19/2019 7:25 PM File folder
all_all_tailvg8 7/19/2019 7:25 PM File folder
all_all_tailvg14 7/19/2019 7:25 PM File folder
all_spring_tailvg10 7/19/2019 7:25 PM File folder
all_spring_tailvg13 7/19/2019 7:25 PM File folder
all_springautumn_tailvg14 7/19/2019 7:25 PM File folder
Test.gdb 7/19/2019 7:25 PM File folder
SystemManualDocumentPIG_and_Birds.... 7/19/2019 10:17 AM Adobe Acrobat D... 1,056 KB
Test.aprx 7/19/2019 10:11 AM ArcGIS Project File 3,893 KB
Test.tbx 7/18/2019 11:30 AM ArcGIS Toolbox 48 KB
lines_filter0.lyrx 7/10/2019 7:53 PM LYRX File 11 KB
lines_flter2.lyrx 7/10/2019 7:53 PM LYRX File 11 KB
lines_routes_distancemts.lyrx 7/19/2019 10:09 AM LYRX File 33 KB
barChartSeasBS.py 7/15/2019 11:03 AM Python File 10 KB
boxplotWV_Season.py 7/11/2019 10:56 AM Python File 3 KB
calculate_cumulativedistances_in_pointsf... 6/25/2019 10:35 AM Python File 2 KB
correlation.py 7/16/2019 9:24 PM Python File 25 KB

USER INTERFACE

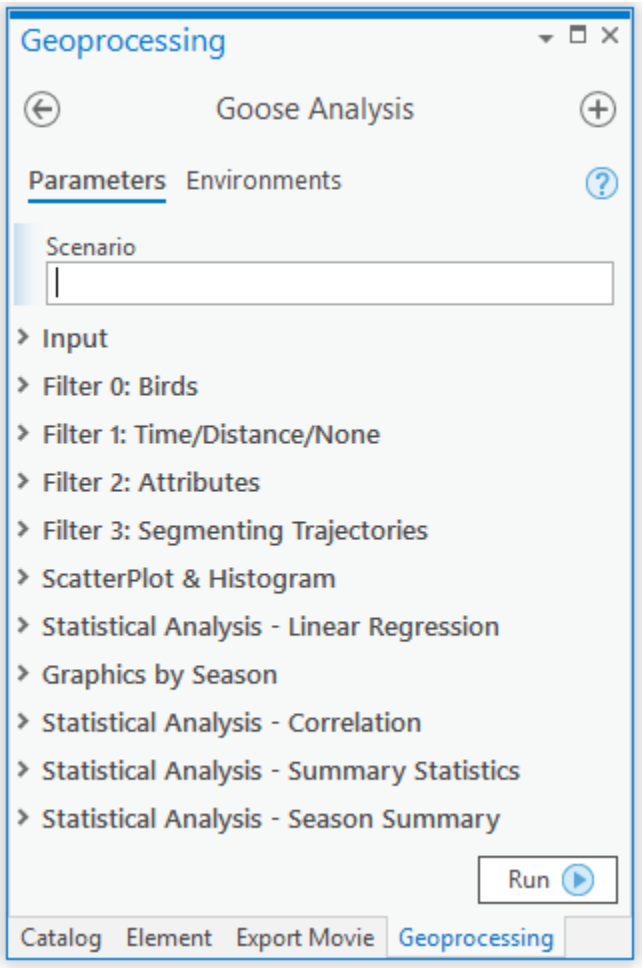
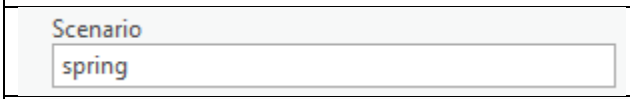
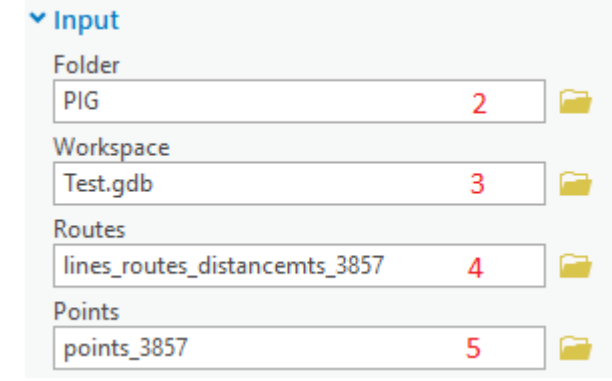
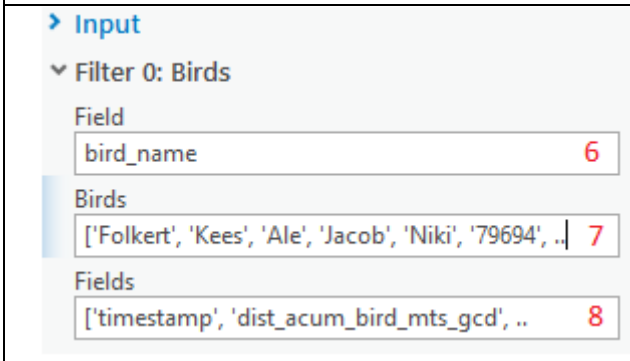
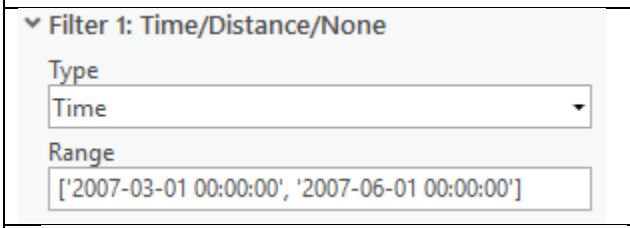
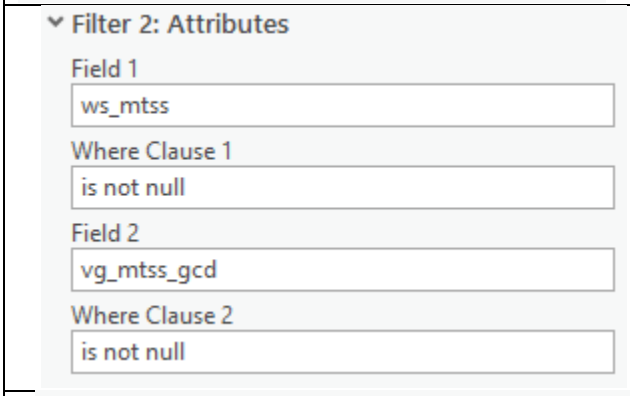
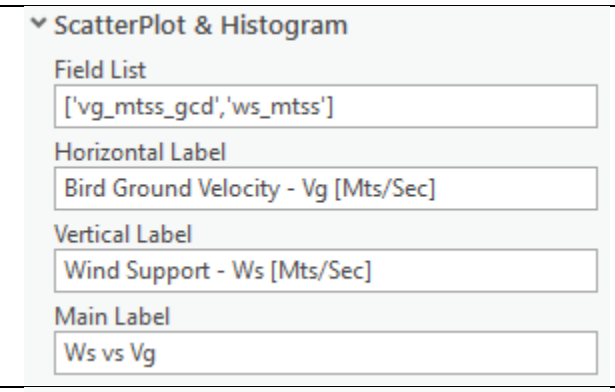
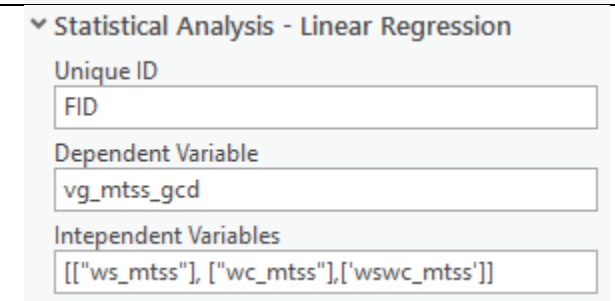
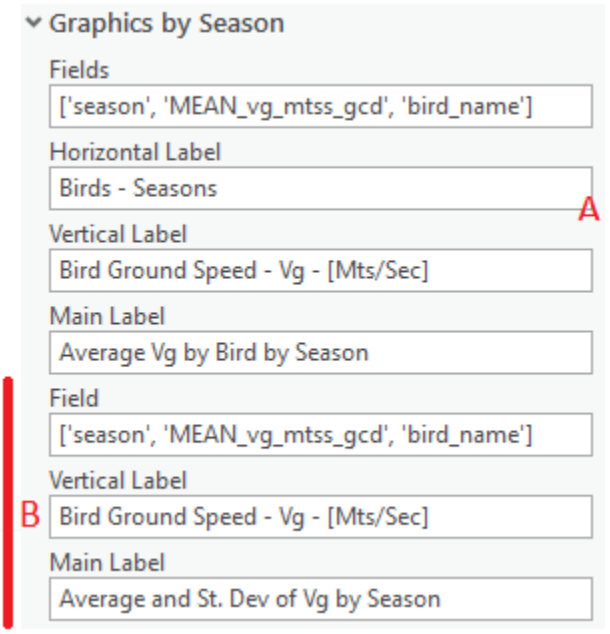
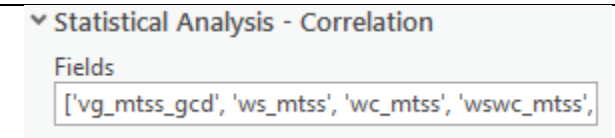
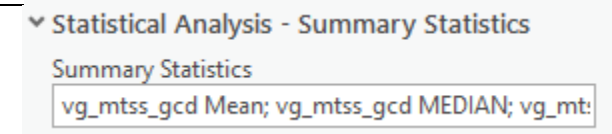


Figure 1. User interface – Goose Analysis Tool

Section	Description of user input
	Scenario: Name of the scenario
	2- Folder: Output base folder 3- Workspace: Input and output file geodatabase 4- Routes: Routes (XYM) of tracked path 5- Points: Tracked bird points with all variables as fields
	6- Field with the bird ID. It could be tag_ident or bird_name 7- List of bird ID. It could be unique values inside tag_ident of bird_name 8- Fields needed for the analysis inside tracked bird points (input 5 in this table) : timestamp, cumulative distance between point and object id
	For type of filter 1, the user can select Time, Distance or None. Either Distance or Time, its range need to be written in Range text box.
	Name of fields and where clause to use as filter by attributes. It is possible to use two fields to filter by attributes Example 1: ws_mtss is not null vg_mtss_gcd is not null Example 2: ws_mtss > 0 vg_mtss_gcd > 2
	Not implemented. Future work.

	Variables and graphic labels to create the scatter plot/histograms graphic.
	Unique ID: existing integer unique ID (different to OBJECTID) inside tracked point feature class (input 4 in this table) Dependent variable Independent variables
	Variables and graphic labels to create graphics by season. Section A: First part A is for the graphic bird-season (X axe with Bird names), Section B: Second part B is for the graphic season-bird (X axe with Season names)
	List of fields to calculate matrix of correlation
	List of fields and statistical parameters names to calculate summary statistics

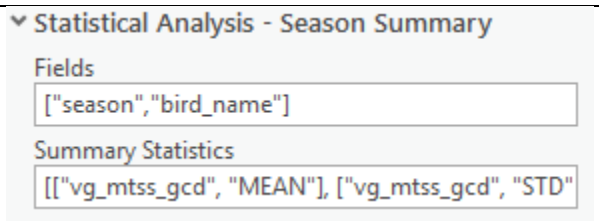
	Fields: List of fields inside Birds point track (input 4 in this table). Summary Statistics: List of fields and statistical parameters names to calculate summary statistics by fields provided in “Fields”

Table 1. Description of the user interface for the tool.