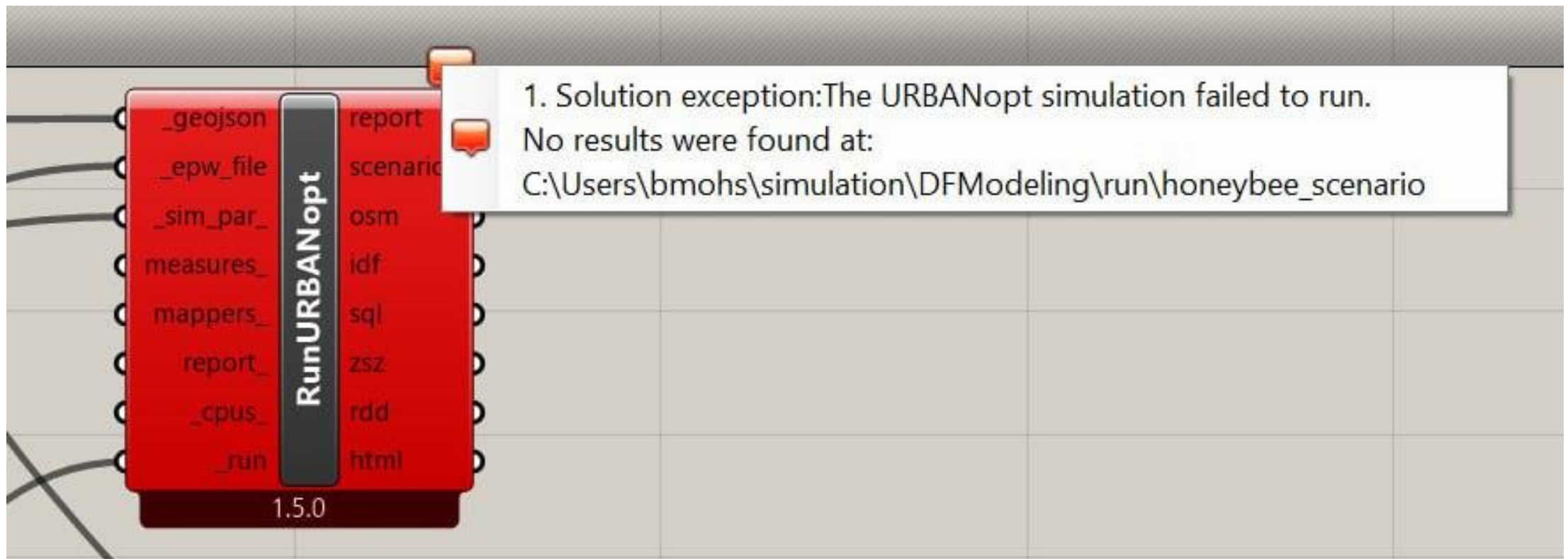


How to tackle the new version
of URBANopt engine in the
DragonFly

What is the challenge?

The engine cannot consolidate the results

Why? Because of the gem dependencies!



How to solve?

Follow the points down step-by-step:

1-Reinstalling (Uninstall and install) the Ladybug tool

2-Using the new Versioner component

<https://discourse.ladybug.tools/uploads/short-url/yEAuNXDUD8iDsdXZvCF7IKugwXI.gh>

3-Typing the code into cmd as an administrator:

```
C:\Users\[USERNAME]\ladybug_tools\python\python.exe -m pip install ladybug-rhino -U
```

4-Delete the old URBANopt project folder (.bundle directory) in the directory

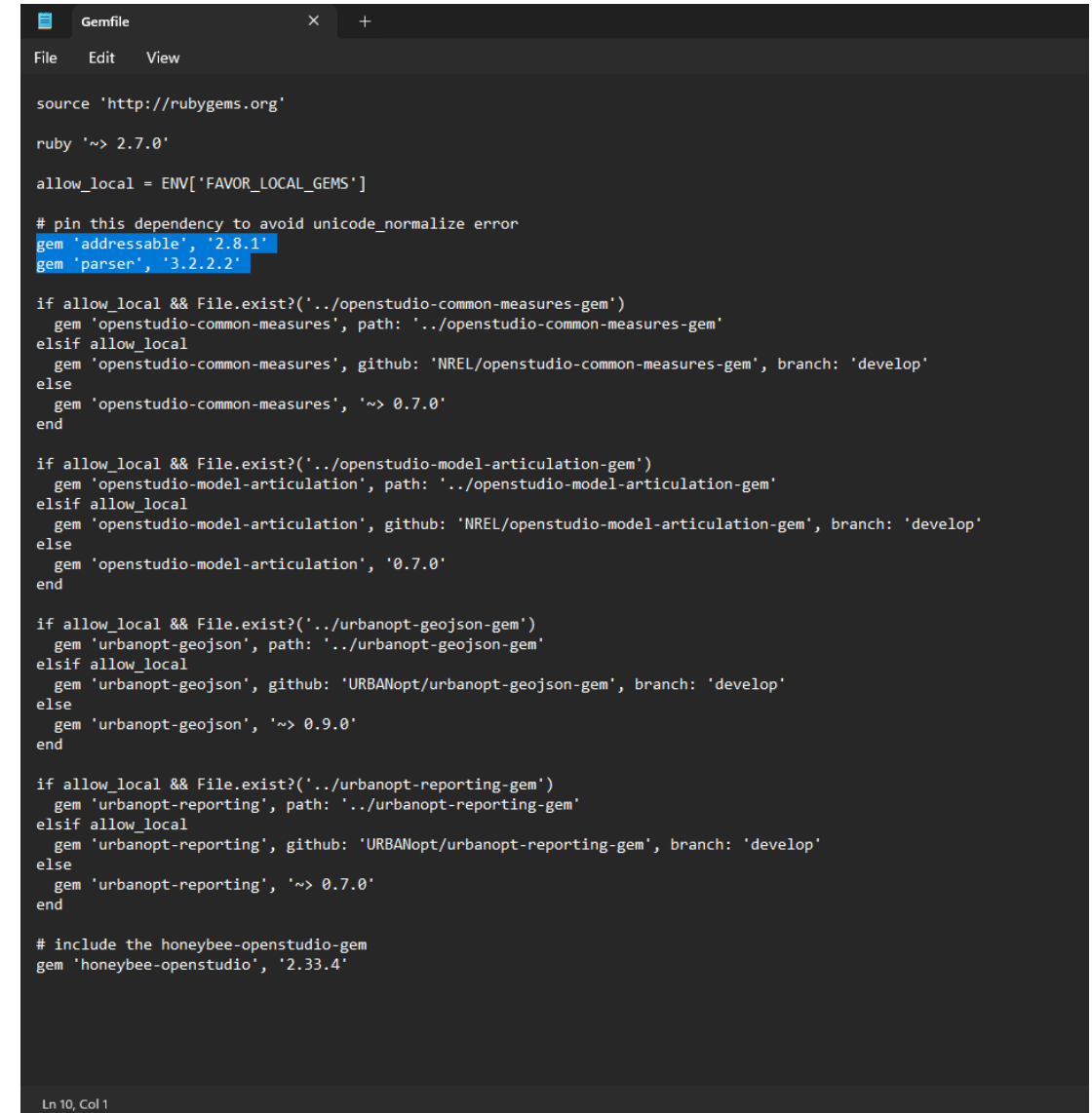
C:\Users\[USERNAME]\simulation\[project name]\[all the .bundle file]

5-Make sure in the file `Gemfile`, there exist two important command as follows

```
gem 'addressable', '2.8.1'  
gem 'parser', '3.2.2.2'
```

If not, you can add it like the picture by yourself

C:\Users\[USERNAME]\simulation\[project name]\Gemfile



```
Gemfile  
File Edit View  
  
source 'http://rubygems.org'  
  
ruby '~> 2.7.0'  
  
allow_local = ENV['FAVOR_LOCAL_GEMS']  
  
# pin this dependency to avoid unicode_normalize error  
gem 'addressable', '2.8.1'  
gem 'parser', '3.2.2.2'  
  
if allow_local && File.exist?('../openstudio-common-measures-gem')  
  gem 'openstudio-common-measures', path: '../openstudio-common-measures-gem'  
elsif allow_local  
  gem 'openstudio-common-measures', github: 'NREL/openstudio-common-measures-gem', branch: 'develop'  
else  
  gem 'openstudio-common-measures', '~> 0.7.0'  
end  
  
if allow_local && File.exist?('../openstudio-model-articulation-gem')  
  gem 'openstudio-model-articulation', path: '../openstudio-model-articulation-gem'  
elsif allow_local  
  gem 'openstudio-model-articulation', github: 'NREL/openstudio-model-articulation-gem', branch: 'develop'  
else  
  gem 'openstudio-model-articulation', '~> 0.7.0'  
end  
  
if allow_local && File.exist?('../urbanopt-geojson-gem')  
  gem 'urbanopt-geojson', path: '../urbanopt-geojson-gem'  
elsif allow_local  
  gem 'urbanopt-geojson', github: 'URBANopt/urbanopt-geojson-gem', branch: 'develop'  
else  
  gem 'urbanopt-geojson', '~> 0.9.0'  
end  
  
if allow_local && File.exist?('../urbanopt-reporting-gem')  
  gem 'urbanopt-reporting', path: '../urbanopt-reporting-gem'  
elsif allow_local  
  gem 'urbanopt-reporting', github: 'URBANopt/urbanopt-reporting-gem', branch: 'develop'  
else  
  gem 'urbanopt-reporting', '~> 0.7.0'  
end  
  
# include the honeybee-openstudio-gem  
gem 'honeybee-openstudio', '2.33.4'  
  
Ln 10, Col 1
```

Sometimes the units are messed-up and you will receive the error in the Grasshopper canvas as a red bubble BUT the results are not complete

You need to check the `run.log'
In this file any shortcoming causing running interruption will pop-up.

The error for the units in the run.log is something like follows:

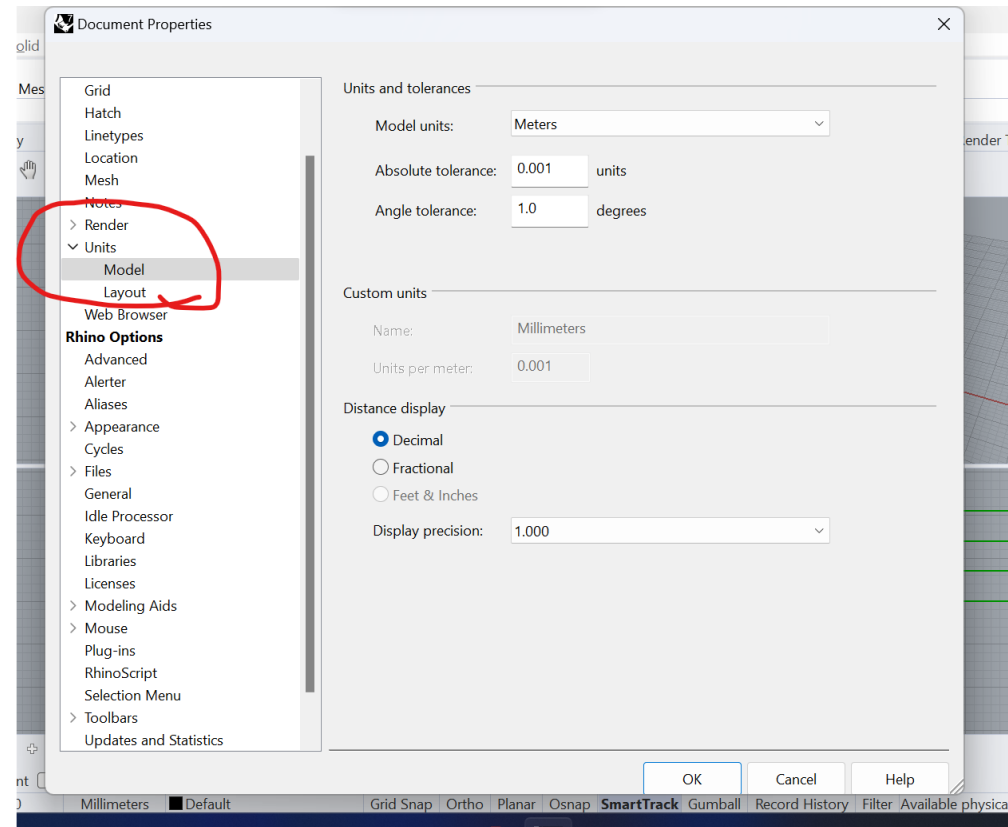
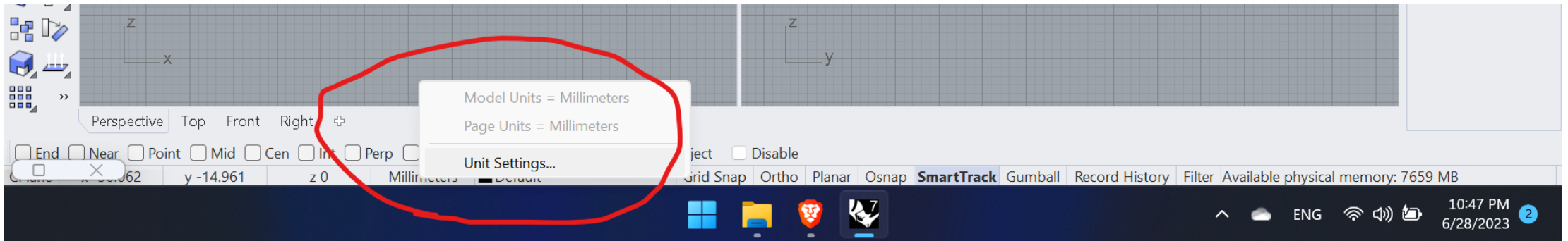
```
[16:53:29.038754 ERROR]
```

```
D:\OSN\src\model\PlanarSurface.cpp@600 : Cannot  
create a surface with vertices [[0.317387, 0.666226, 0],  
[0.317387, 0.666226, 0.0035], [0.31101, 0.653603,  
0.0035], [0.31101, 0.653603, 0]]
```

How to solve the unit problem?

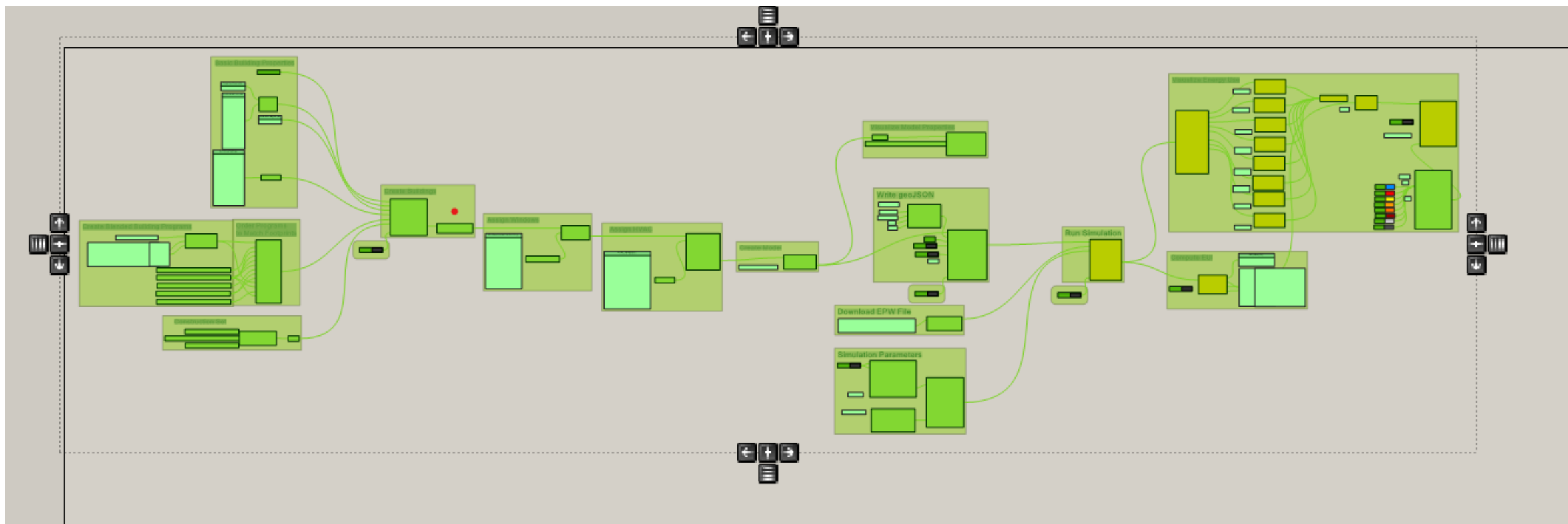
Follow the steps:

- 1-In Rhino, on the bottom line, there is a place showing the units. It is in Millimeter. I right clicked on it and chose Unit Settings. Both 'Model' and 'Layout' should be in Meters.

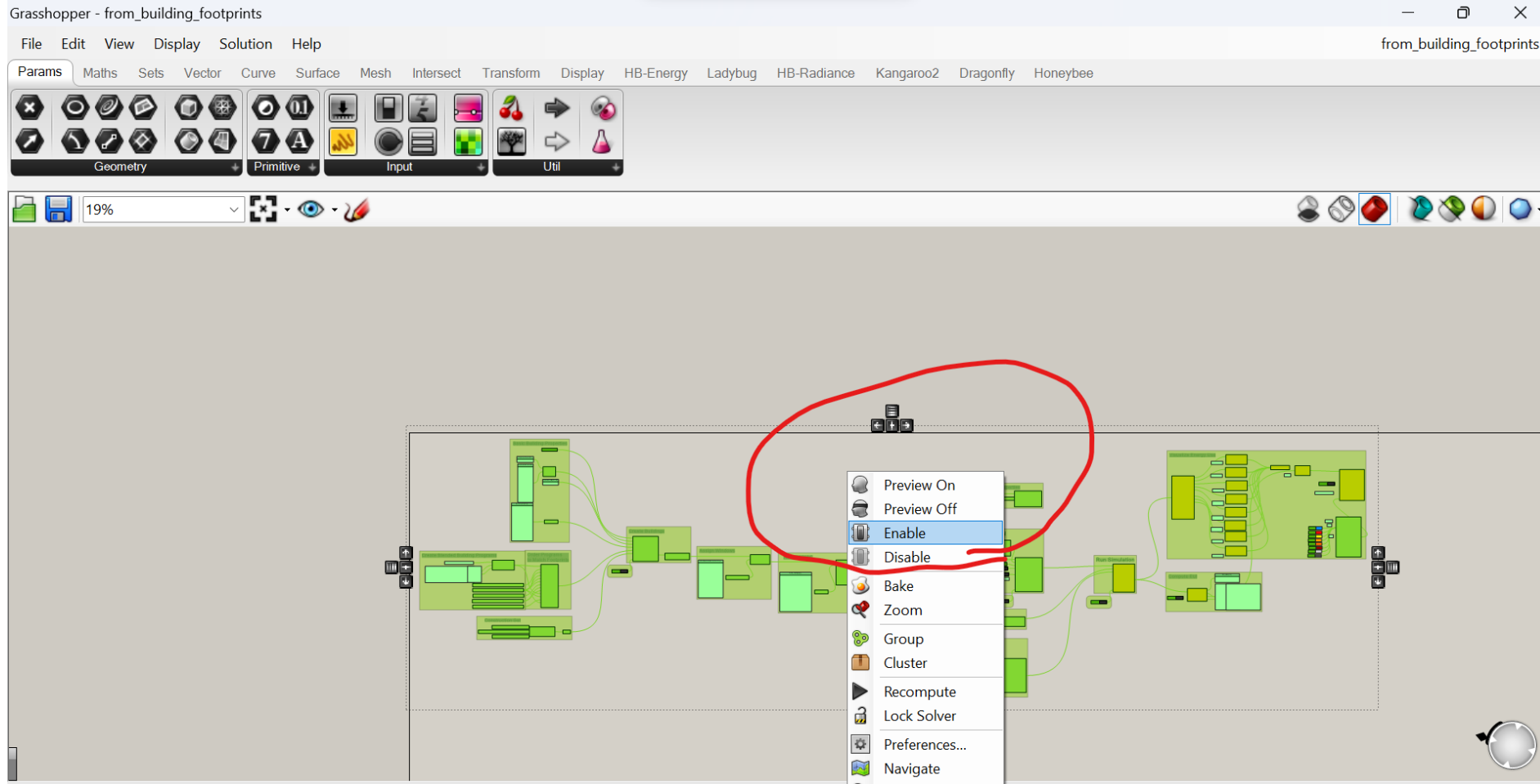


2-This step will reproduce some files and have some delays.

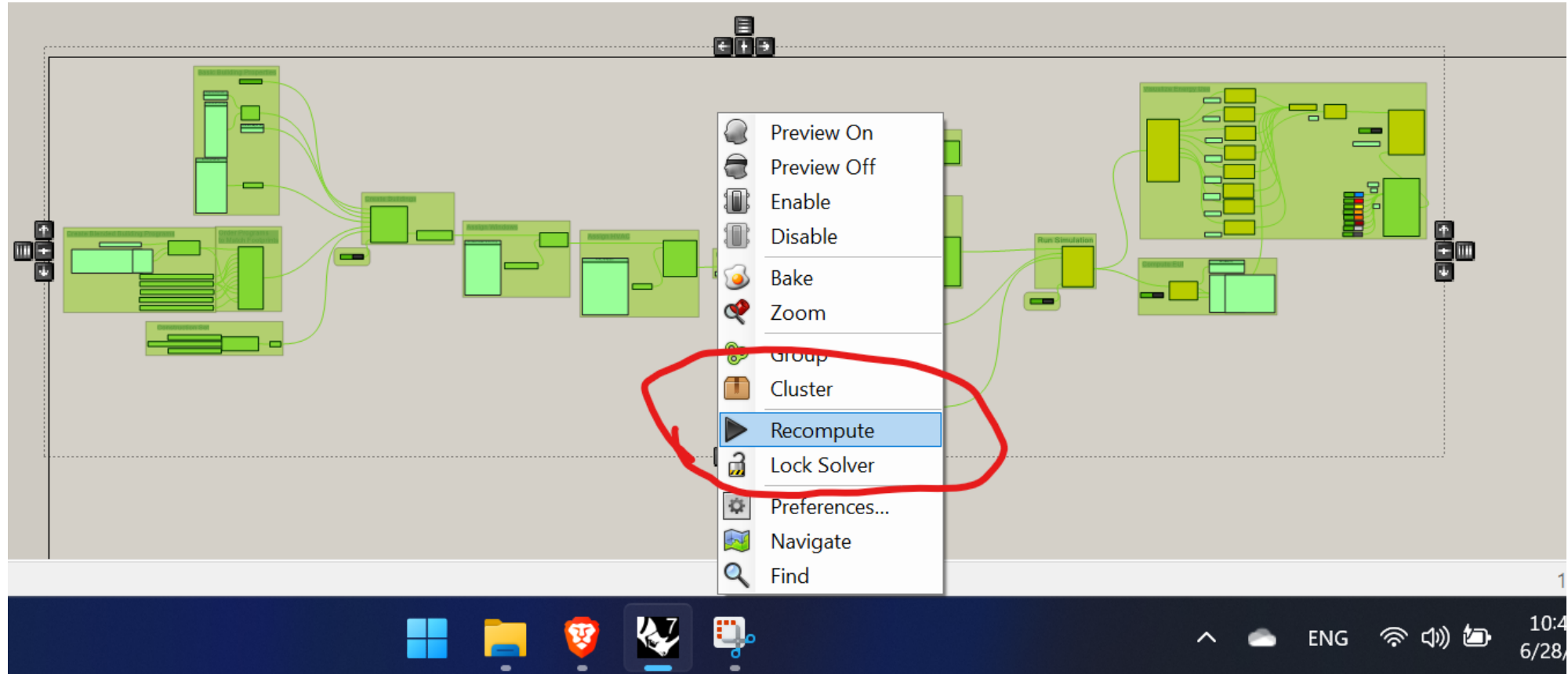
3-In Grasshopper, press Ctrl+A. You should zoom out to make sure all the components are selected. In Grasshopper, there is a feature named grouping. When you Internalise data, sometimes, grouped Internalised data are not selected.



4-Then right click on the selected components, turns green when selected, and choose 'Enable'.



5-Then right click on the selected components, and choose 'Recompute'.



Now the simulation is ready to be run by
URBANopt engine in Dragonfly atmosphere.