

Resources for assignments can be found at:

<http://propagator.adriaholistic.eu/resources.zip>

Assignment 1

Step 1: Within AdriaFirePropagator, use current wind conditions as custom

Step 2: Set the following „Simulation properties“:

- Time (min): 200
- Timestep (min): 60
- Speed/Quality: 50%
- Ignition type: Point
- Chosen fuel model: Albini-Anderson (default)

Step 3: Also, use current moisture conditions as current

Step 4: Start several simulations (**current and custom**) and check if they provide similar results

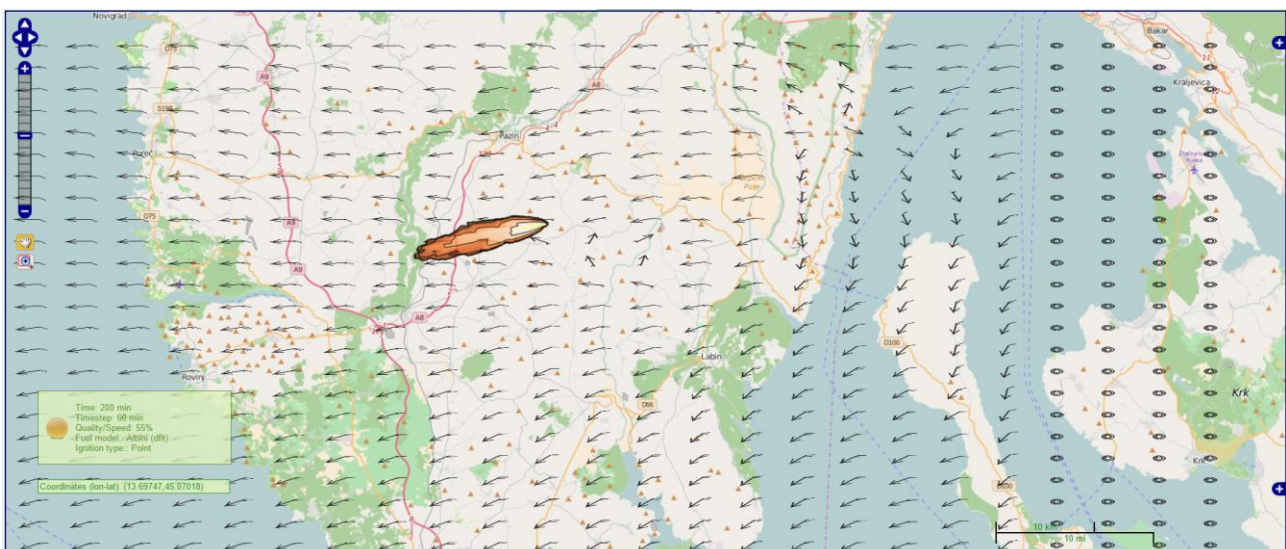
Assignment 2

Step 1: Within AdriaFirePropagator, for wind parameters use the provided meteo file (wind.06).

Step 2: Use 12 UTC hour for forecast.

Step 3: Locate where wind data values exist on the map.

Step 4: Start simulation (custom) at coordinates (13.97, 45.18)



Assignment 3

Step 1: Within AdriaFirePropagator, use the same meteo file (wind.06).

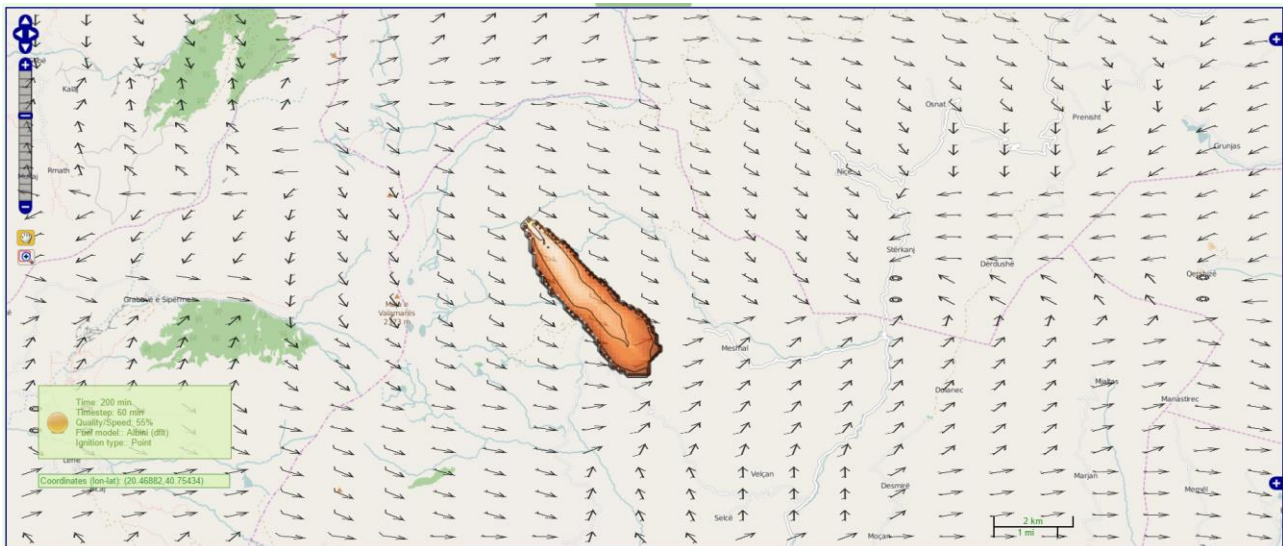
Step 2: Check wind changes throughout the day. Use “Refresh” button to refresh results after upload or move map

Assignment 4

Step 1: Within AdriaFirePropagator, for wind parameters use provided ASC files (wind_dir.asc and wind_speed.asc)

Step 2: Locate where wind data values exist on the map.

Step 3: Start simulation (custom) at coordinates



Assignment 5

Step 1: Within AdriaFirePropagator, for wind parameters use:

- Direction: 45 °
- Speed: 50 km/h

Step 2: Locate where wind data values exist on the map.

Step 3: Start simulation (custom) at coordinates (13.08, 43.36.8)

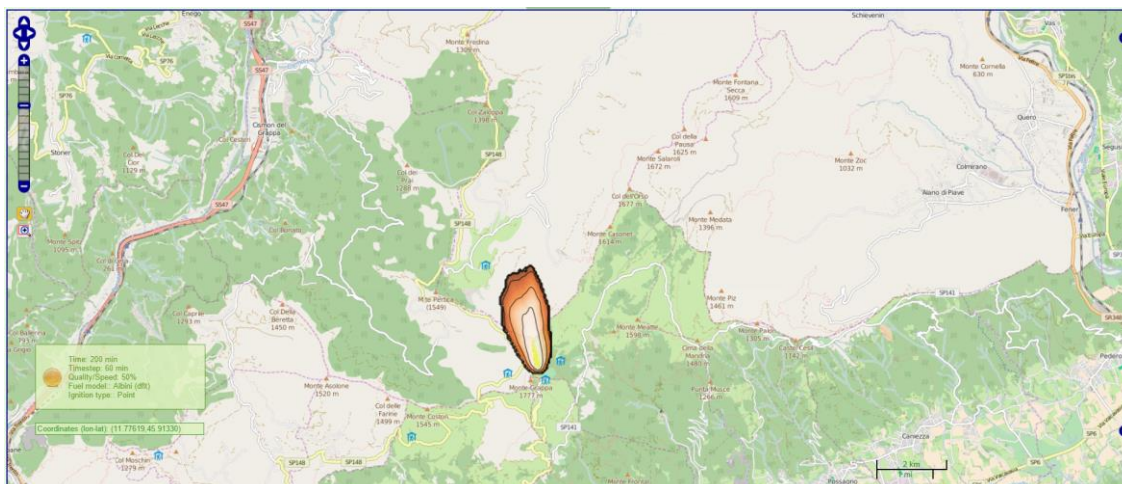


Assignment 6

Step 1: Within AdriaFirePropagator, for wind parameters use wind from meteo database for date 22.02.2016. 12 UTC.

Step 2: Locate where wind data values exist on the map.

Step 3: Start simulation (custom) at coordinates (11.81, 45.87)

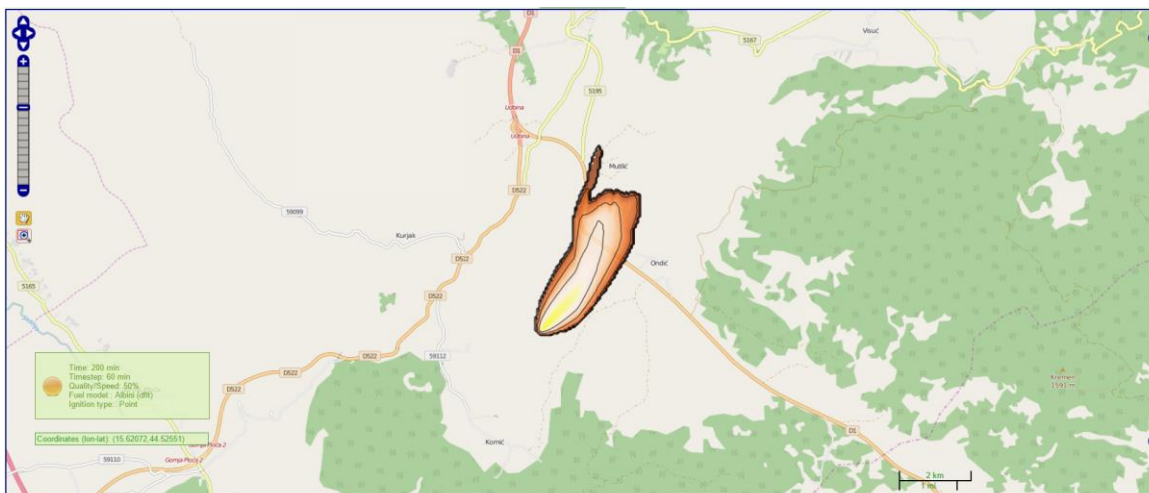


Assignment 7

Step 1: Within AdriaFirePropagator, for moisture parameters use following data:

- mois live: 120
- mois 1h: 8
- mois 10h: 9
- mois 100h: 10

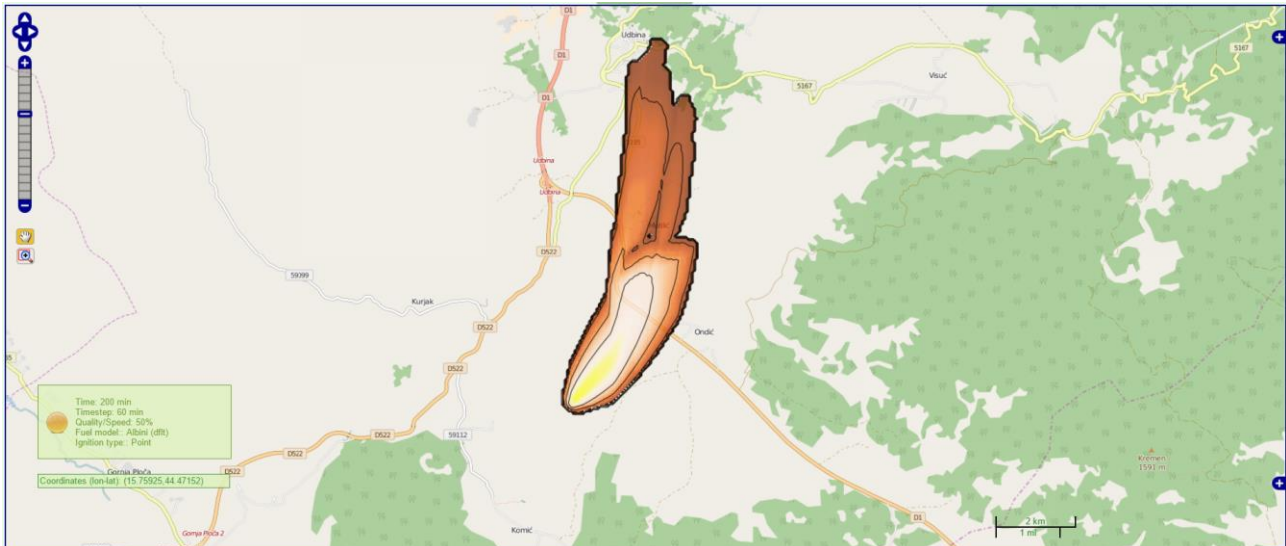
Step 2: Start simulation (custom) at coordinates (15.75, 44.47)



Step 3: Now, for moisture parameters use following data:

- mois live: 22
- mois 1h: 4
- mois 10h: 5
- mois 100h: 6

Step 4: Start simulation (custom) at same coordinates



Assignment 8

Step 1: Within AdriaFirePropagator, select Albini-Anderson (**custom**) fuel model

Step 2: Run a successful simulation (custom)

Step 3: Run a successful simulation (current)

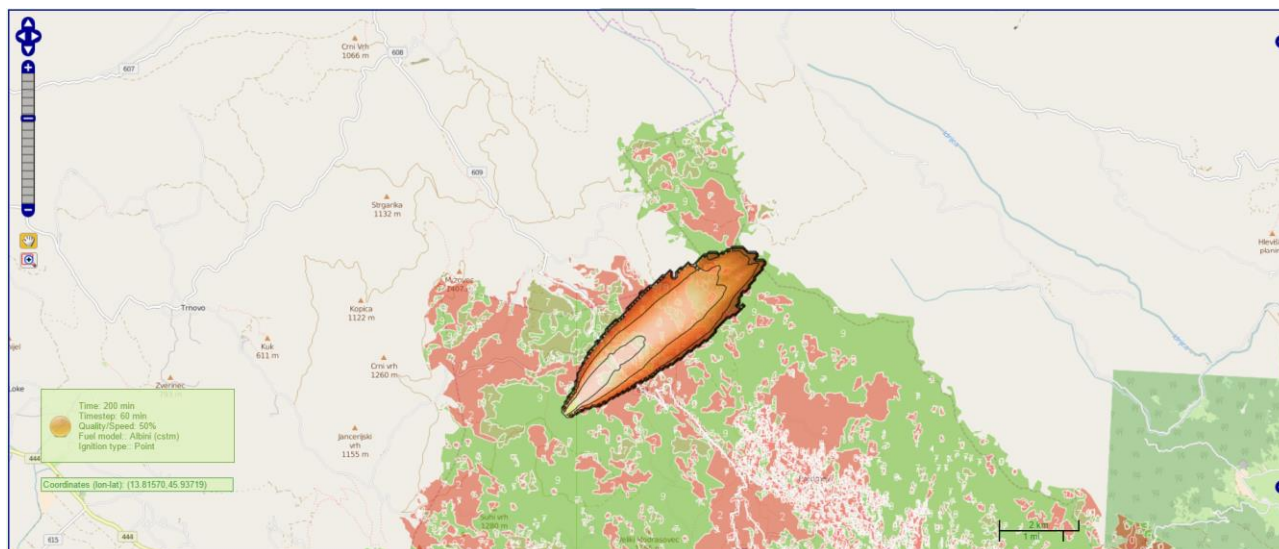
Assignment 9

Step 1: Compare Albini-Anderson (default) and Albini-Anderson (custom) layers

Assignment 10

Step 1: Within AdriaFirePropagator, select Albini-Anderson (**custom**) fuel model

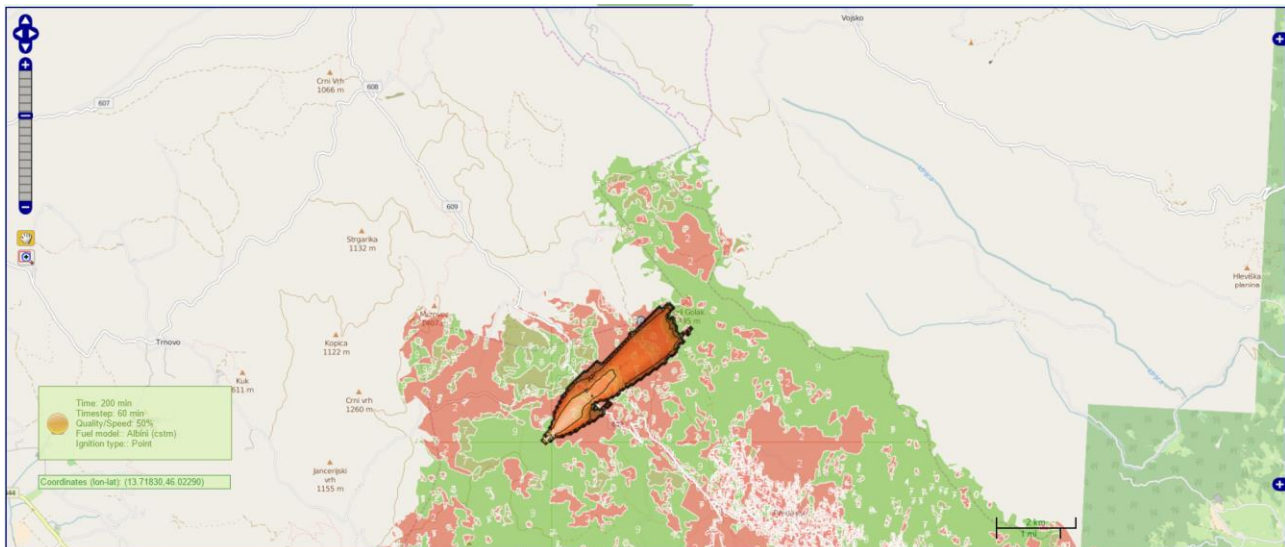
Step 2: Run simulation (custom) at coordinates (13.830, 45.955)



Step 3: Change category 3 of Albini-Anderson (custom) fuel parameters to:

9. Long needle or hardwood litter		
Fuel Model Type	Static	
1-h Fuel Load	7	tons/ac
10-h Fuel Load	23	tons/ac
100-h Fuel Load	28	tons/ac
Live Herbaceous Fuel Load	0.0000	tons/ac
Live Woody Fuel Load	0.0000	tons/ac
1-h Surface Area/Vol Ratio	2500	ft ² /ft ³
Live Herbaceous Surface Area/Vol Ratio	1500	ft ² /ft ³
Live Woody Surface Area/Vol Ratio	1500	ft ² /ft ³
Fuel Bed Depth	1	ft
Dead Fuel Moisture of Extinction	25	percent
Dead Fuel Heat Content	8000	Btu/lb
Live Fuel Heat Content	8000	Btu/lb

Step 4: Run the simulation again:



Step 5: Reset Albini-Anderson (custom) fuel parameters to default.

Assignment 11

Step 1: Within AdriaFirePropagator, start simulation (custom) around (18.2, 42.9)

Step 2: Start simulation (current) at same coordinates.

Step 3: Why are there no results

Assignment 13

Step 1: Set the following „Simulation properties“:

- Time (min): 200
- Timestep (min): 60
- Speed/Quality: 50%
- Ignition type: Point
- Chosen fuel model: Scott-Burgan (default)

Step 2: Choose any desirable wind data

Step 3: Choose any desirable moisture data

Step 4: Start any simulation using fire fronts

Assignment 14

Step 1: Choose any desirable wind, moisture, fuel model data and any desirable simulation properties.

Step 2: Start any simulation using fire barriers

Assignment 15

Step 1: Choose any desirable wind, moisture, fuel model data and any desirable simulation properties.

Step 2: Start any simulation using both fire fronts and fire barriers

Assignment 16

Step 1: Choose any desirable wind, moisture, fuel model data and any desirable simulation properties.

Step 2: Draw any desirable fire front

Step 3: Start simulation, but choose point as ignition (ignoring the fire fronts)

Assignment 17

Step 1: Use moisture data from resources for custom moisture parameters.

Step 2: Use wind data (ASC) from resources for custom wind parameters.

Step 3: Start several successful simulations