

Blue Pipit's Melodic Cry!

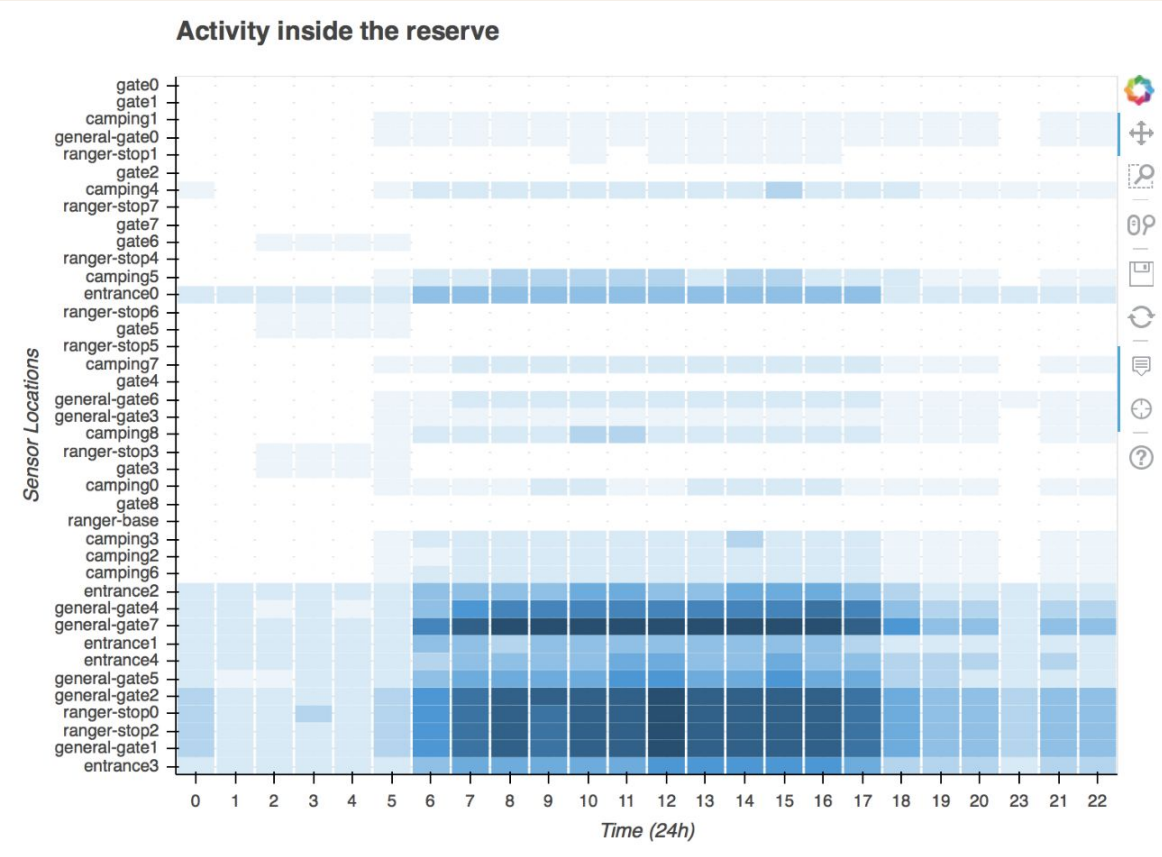
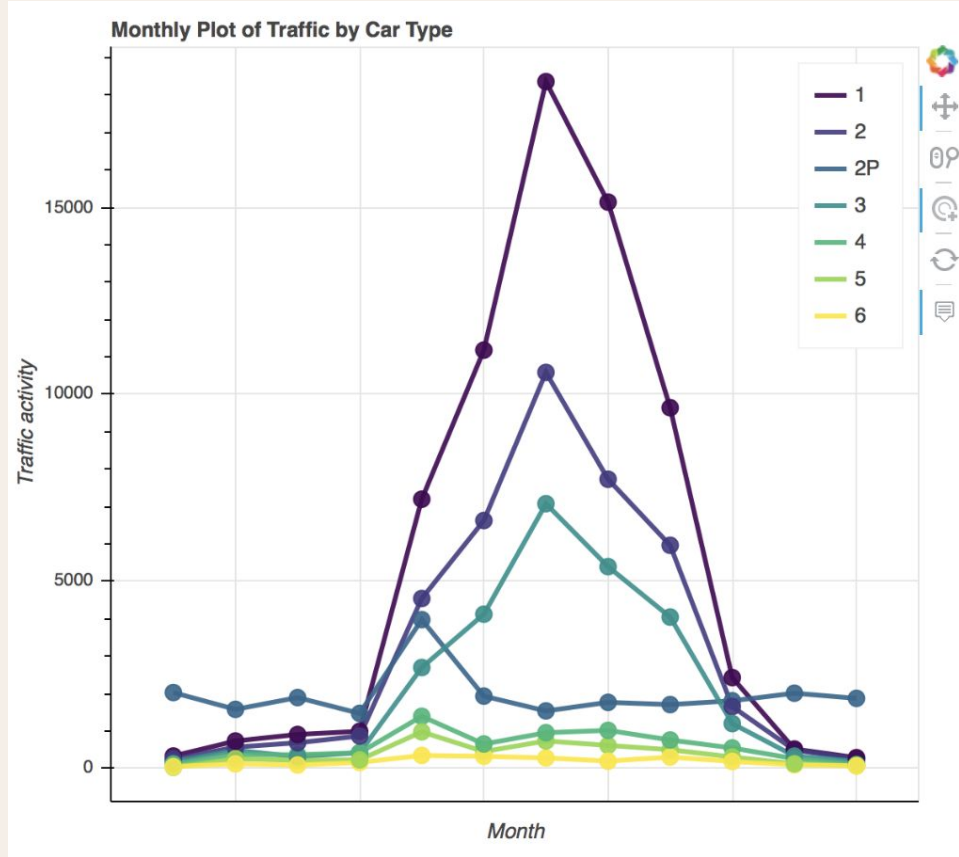
Analysis of declining population of Mistford's Blue Pipit Bird

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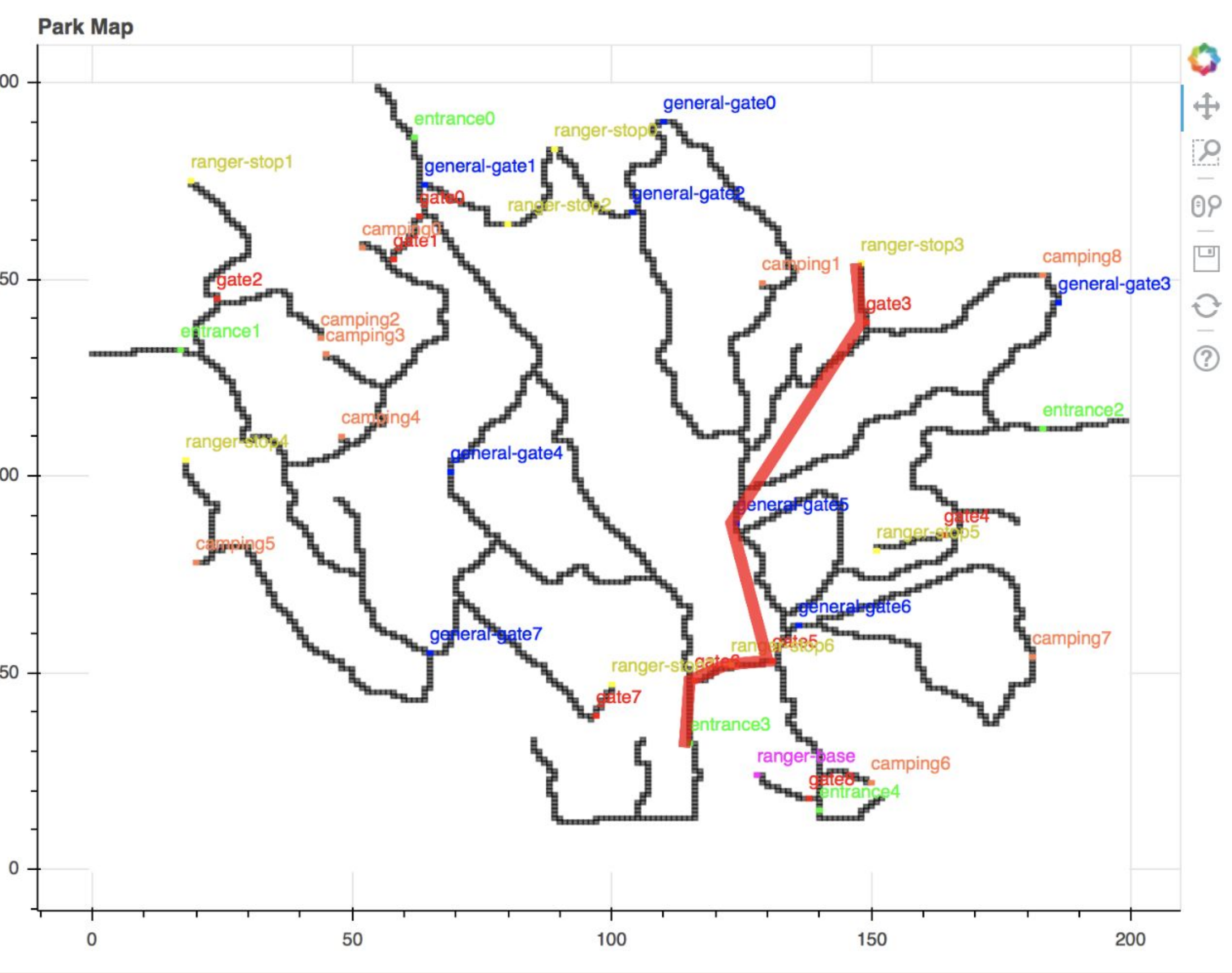
Traffic Activity

- Preserve open for day trips and camping
- RFID data from sensors located across the Preserve

Timestamp	car-id	car-type	gate-name
2015-05-01 00:43:28	20154301124328-262	4	entrance3
2015-05-01 01:03:48	20154301124328-262	4	general-gate1
2015-05-01 01:06:24	20154301124328-262	4	ranger-stop2
2015-05-01 01:09:25	20154301124328-262	4	ranger-stop0
2015-05-01 01:12:36	20154301124328-262	4	general-gate2
2015-05-01 01:24:02	20154301124328-262	4	general-gate5
2015-05-01 01:31:41	20153101013141-937	1	entrance3
2015-05-01 01:33:57	20154301124328-262	4	entrance4
2015-05-01 01:53:34	20153101013141-937	1	general-gate1
2015-05-01 01:56:20	20153101013141-937	1	ranger-stop2
2015-05-01 01:59:36	20153101013141-937	1	ranger-stop0



- Trucks enter the reserve in the middle of the night (2am to 5am)
- They spend around 1hr in the reserve and always follow the same route



Industrialization

- Four factories around the reserve possibly releasing chemicals like **Methylosmolene**, **Chlorodinine**, **Appluimonia** and **AGOC-3A**

Sensor Data

Date	Wind Direction	Wind Speed (m/s)
4/1/16 0:00	190.5	4
4/1/16 3:00	203.3	5
4/1/16 6:00	201.1	5.2
4/1/16 9:00	204.9	4.1
4/1/16 12:00	207	3.6

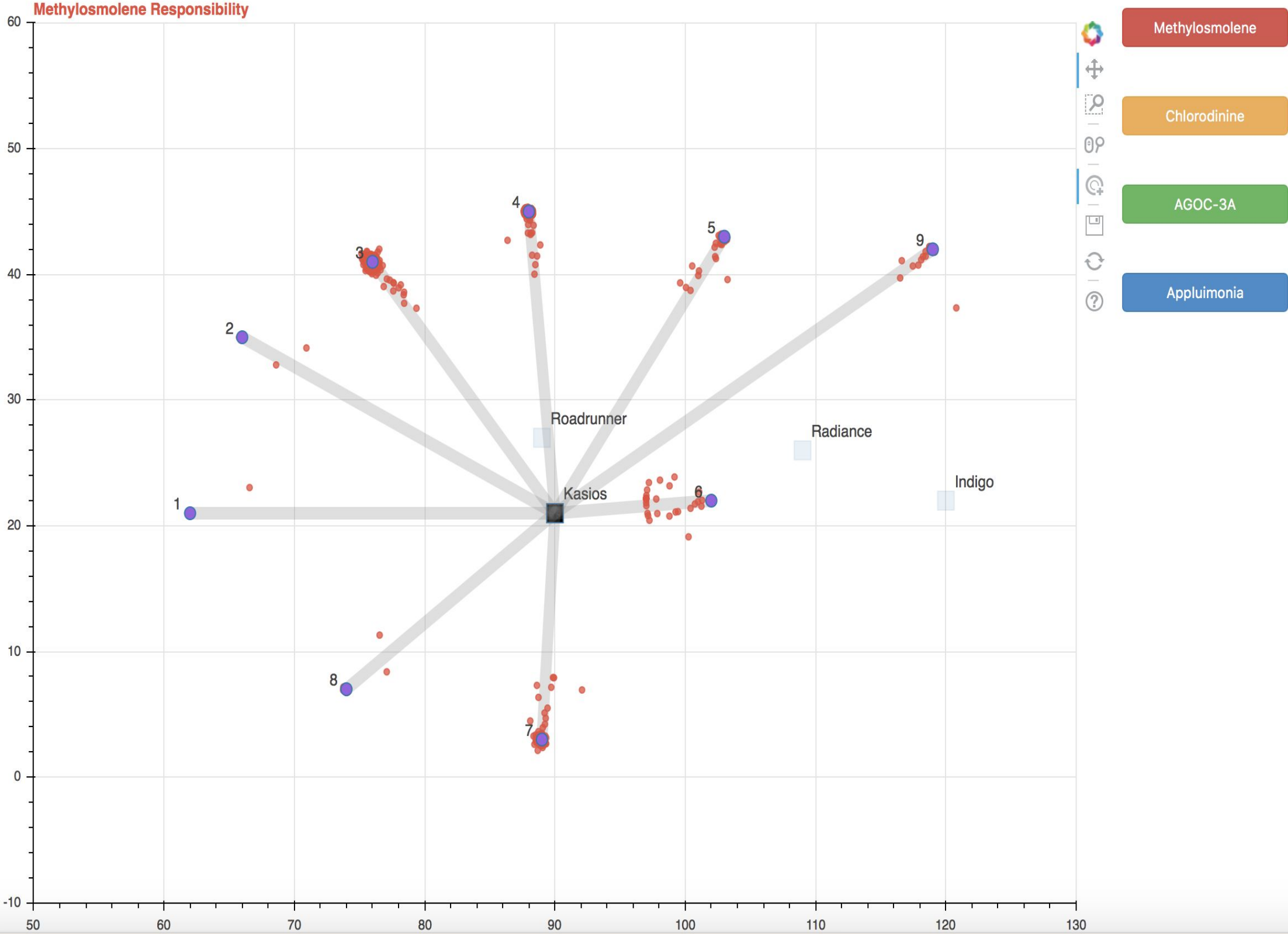
Meteorological Data

Chemical	Monitor	Date Time	Reading
Methylosmolene	3	4/1/16 0:00	2.68382
Methylosmolene	7	4/1/16 0:00	2.63064
Chlorodinine	3	4/1/16 0:00	1.25917
Chlorodinine	7	4/1/16 0:00	0.943983
AGOC-3A	3	4/1/16 0:00	0.722303

A chemical release at midnight?



Who is Responsible?



Findings

Its strange that Methylosmolene, a chemical that requires waste disposal, is mostly released in the middle of the night. The release patterns coincide with the strange truck activity happening inside the reserve. Is it possible that the trucks are dumping toxic wastes in the reserve?