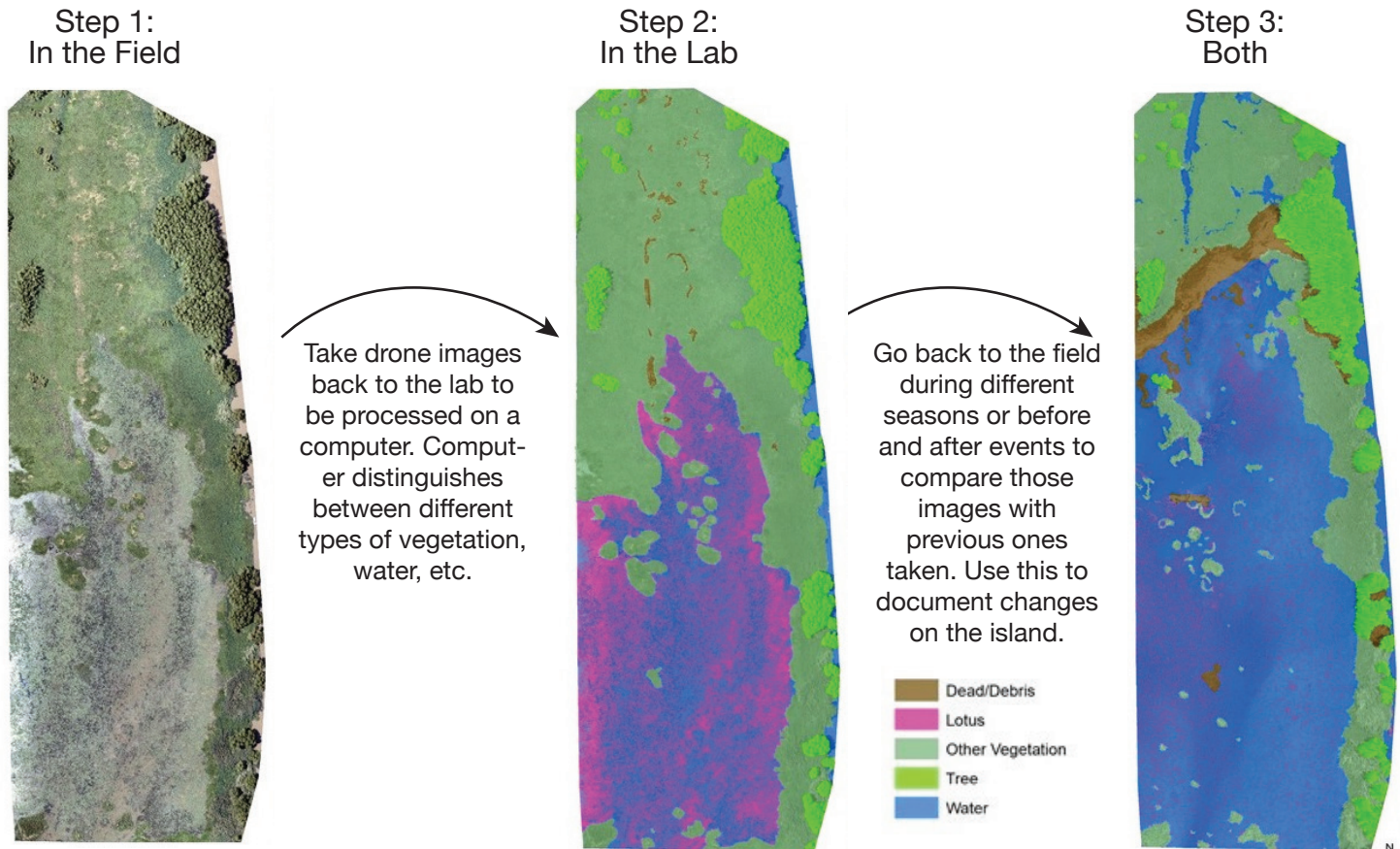


Aerial Footage of Wax Lake Delta: Using Elementary Math

Wax Lake Delta is a remote location that is only accessible via boat. Once there, it is equally hard to travel around since parts of the island are covered with water or squishy ground. To better study the islands, researchers have begun using Unmanned Autonomous Vehicles (UAVs or drones). The drone cameras capture images that then are processed in research labs. These tools represent a new way to think about coastal research.



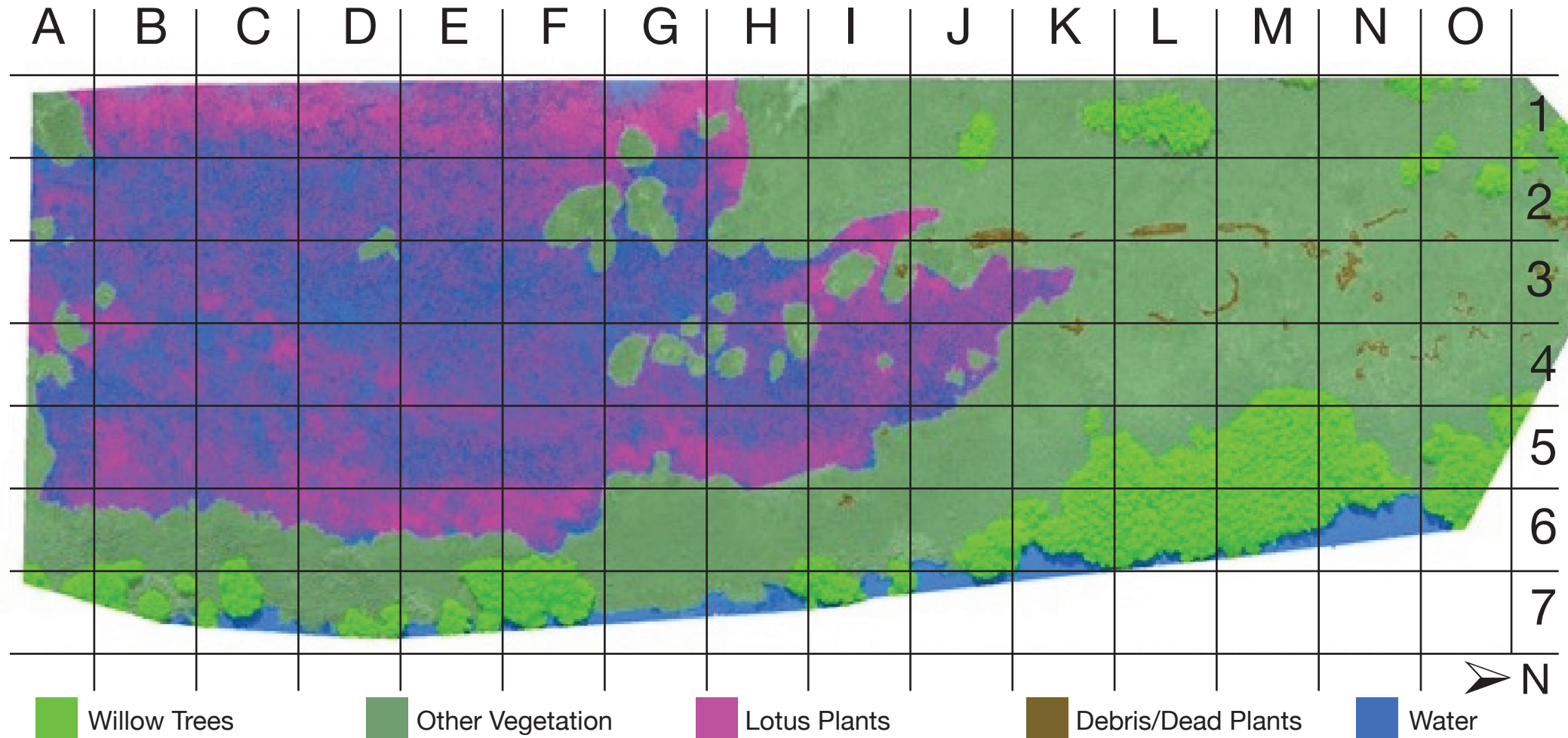
Things on Wax Lake Delta can change quickly. To demonstrate this students will use coordinate math to observe changes that have occurred to the island's composition from June 2019 to July 2019. Students should complete the assignments in the following order:

- 1) Elementary 1A: June 2019
- 2) Elementary 1B: July 2019
- 3) Summary Results

In addition to developing math skills, the goal is for students to observe the changes that have occurred on Mike Island over a month's time. Typically in July, the island has a lot of both lotus and other vegetation, but something happened during the month to change the normal course of events. Students should hypothesize and research what events could have happened to result in this change to Wax Lake Delta.

Portion of Mike Island - Wax Lake Delta

Elementary 1A: June 2019



Please identify the primary item in each of the following quadrants:

1) C1 _____

2) F1 _____

3) K2 _____

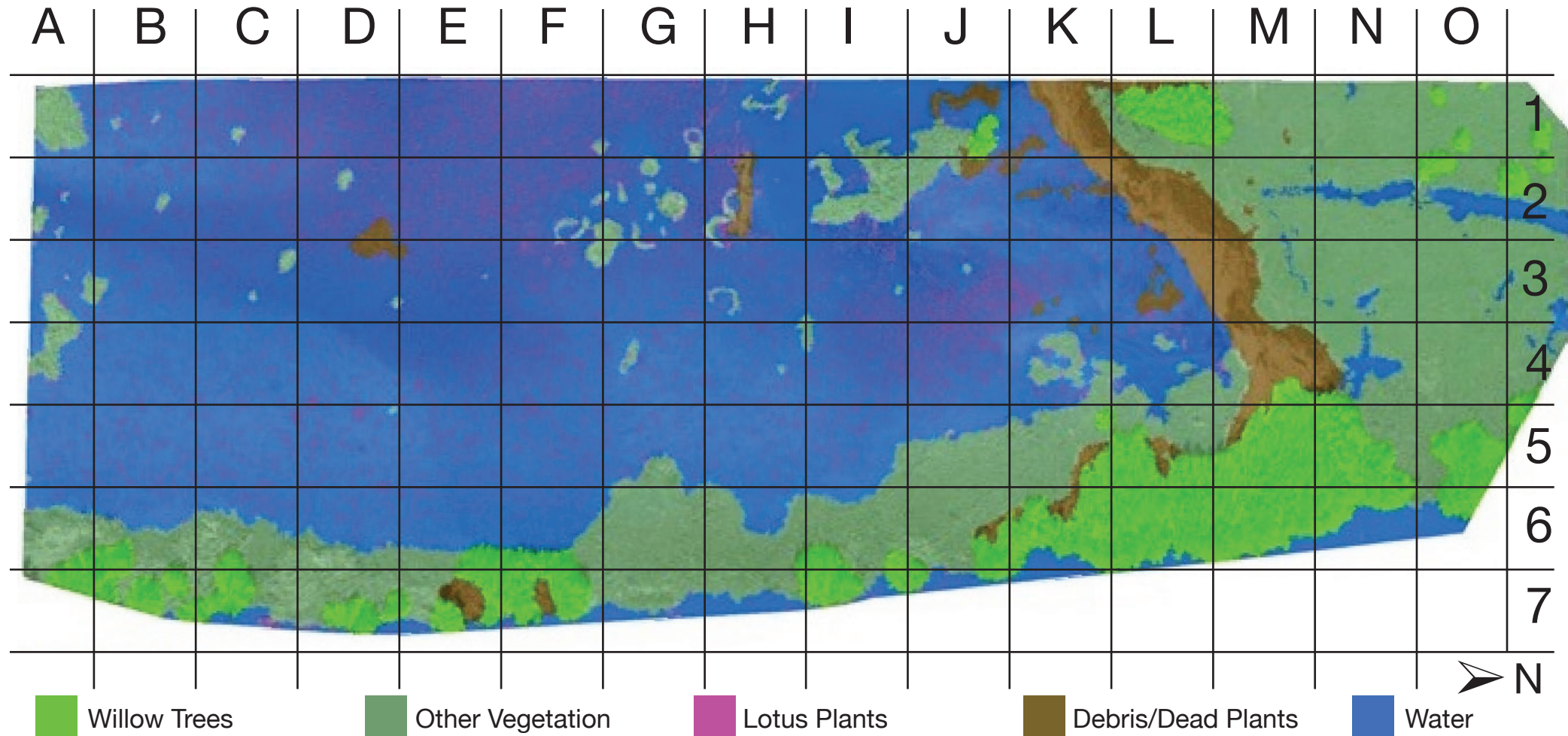
4) L2 _____

5) L4 _____

6) M5 _____

Portion of Mike Island - Wax Lake Delta

Elementary 1B: July 2019



Please identify the primary item in each of the following quadrants:

1) C1 _____

2) F1 _____

3) K2 _____

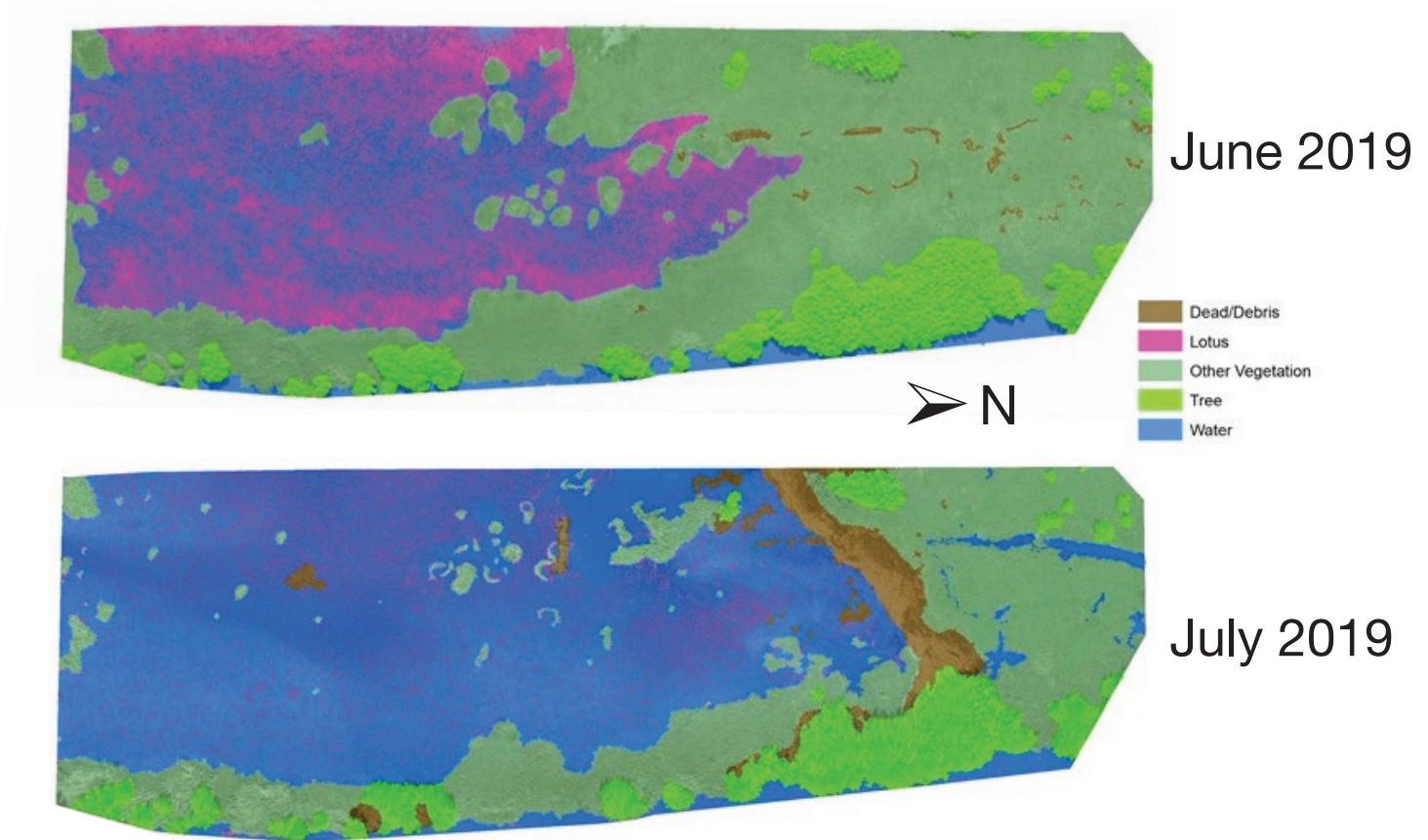
4) L2 _____

5) L4 _____

6) M5 _____

Summary Results:

Changes to Wax Lake Delta and Potential Causes



- 1) What general changes did you observe between the coordinates from June (1A) to July (1B)?
- 2) Looking at the above images side-by-side, what general trends do you see regarding the following:
 - Dead Plants/Debris -
 - Lotus -
 - Other Vegetation -
 - Trees -
 - Water -
- 3) What do you think could be responsible for such dramatic change in a short period of time?