

Can we tell if Charleston's water is sick from outer space?

Do you like to go to the beach? What about eating seafood? We all enjoy the water in Charleston, but did you know it can get sick just like people? You learned in class about how energy from the sun helps plants grow, well, in the ocean there are super small plants called phytoplankton and they grow in the sunlight too. Normally these microscopic plants grow and are eaten by the fish we like to eat, but sometimes these tiny plants grow out of control! After floods, rainstorms, or hurricanes, pollution from our backyards can flow into the water and cause big blooms of phytoplankton! These blooms can make our water sick because as the microscopic plants grow and grow, so do the bacteria and germs that feed on them! Lots of those bacteria can make both the water sick, and the people who swim and fish in the water. My research is special because I am using pictures from satellites in space to look at the color of our water here in Charleston. Every five days I can use a very sensitive camera to capture the color of the water in our harbor. Can you imagine how far the satellite can see to observe the color of our water from outer space? Based on how green the water is, I can tell if the water is safe to swim or fish! My research can help everybody enjoy the water here in Charleston and know when the water is sick.