



FINDING AURORA'S IN NORTH AMERICA WITH CIMSS VIIRS IMAGERY VIEWER USING THE NOAA-20 SATELLITE

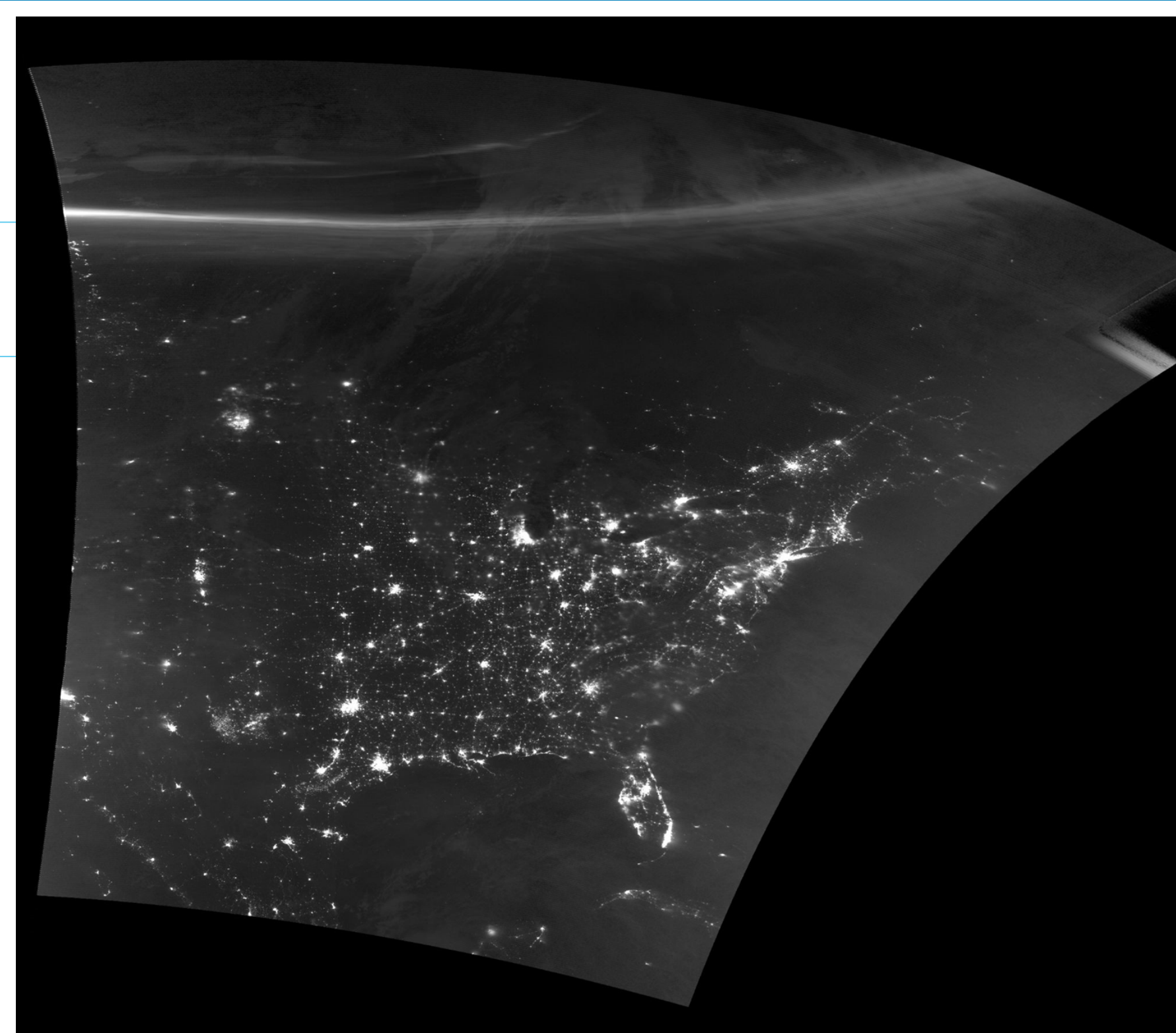
Desert Ridge Middle School, Albuquerque New Mexico



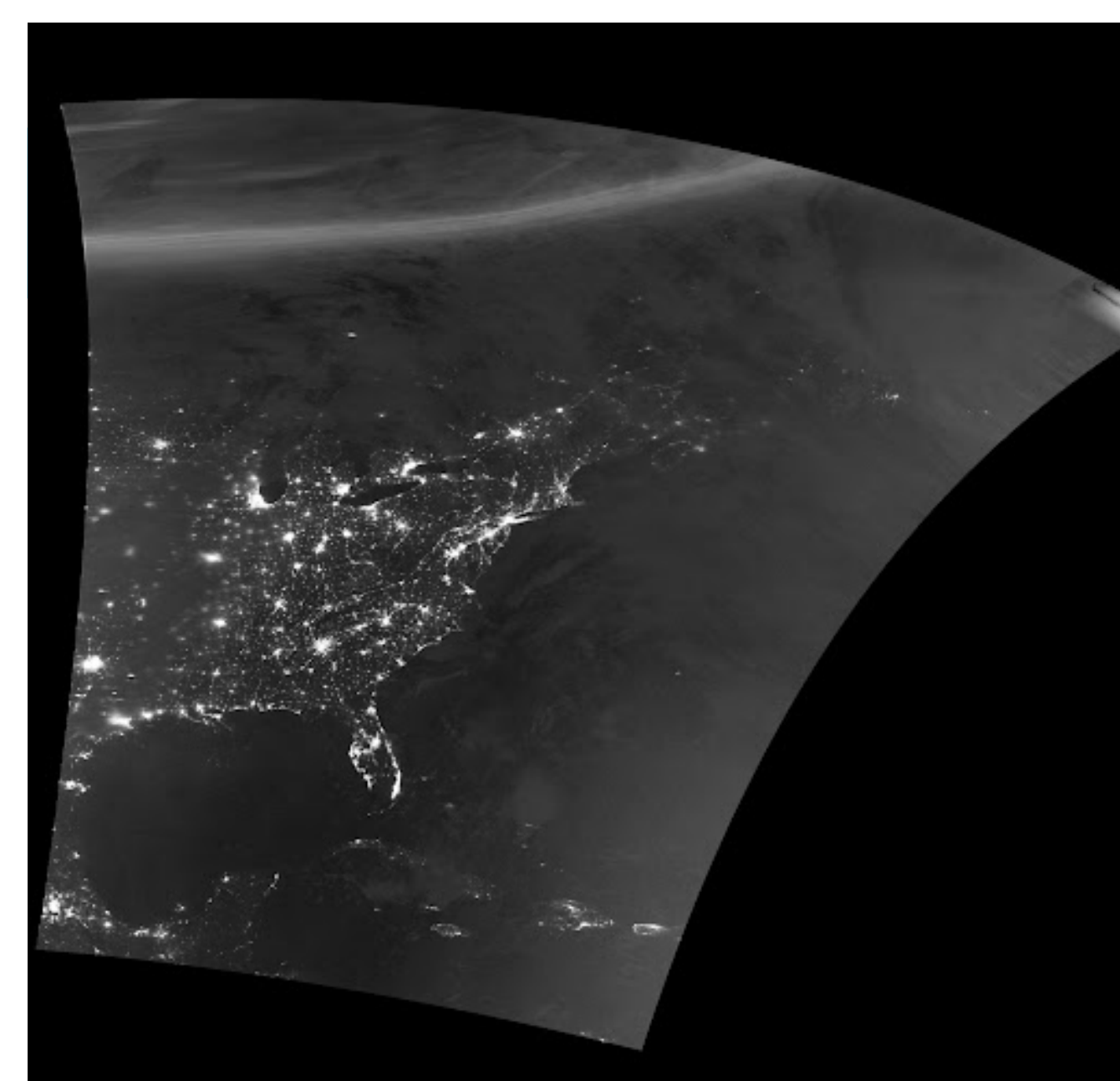
REFLECTION

We learned that aurora's occur in Idaho, Minnesota, Pennsylvania, Michigan, Alaska, and Maine. Through the night it varies how many auroras you can see, depending on the time of night. on different days they just change, like the ones on 10-8 there were a lot. We also learned that there are different varieties of them. We saw that they got bigger on each day that is why they where different o 10-11 than 10-8. Auroras can come in different shapes and sizes. They occur in the top of america and they occur near iowa, new york, and washington.

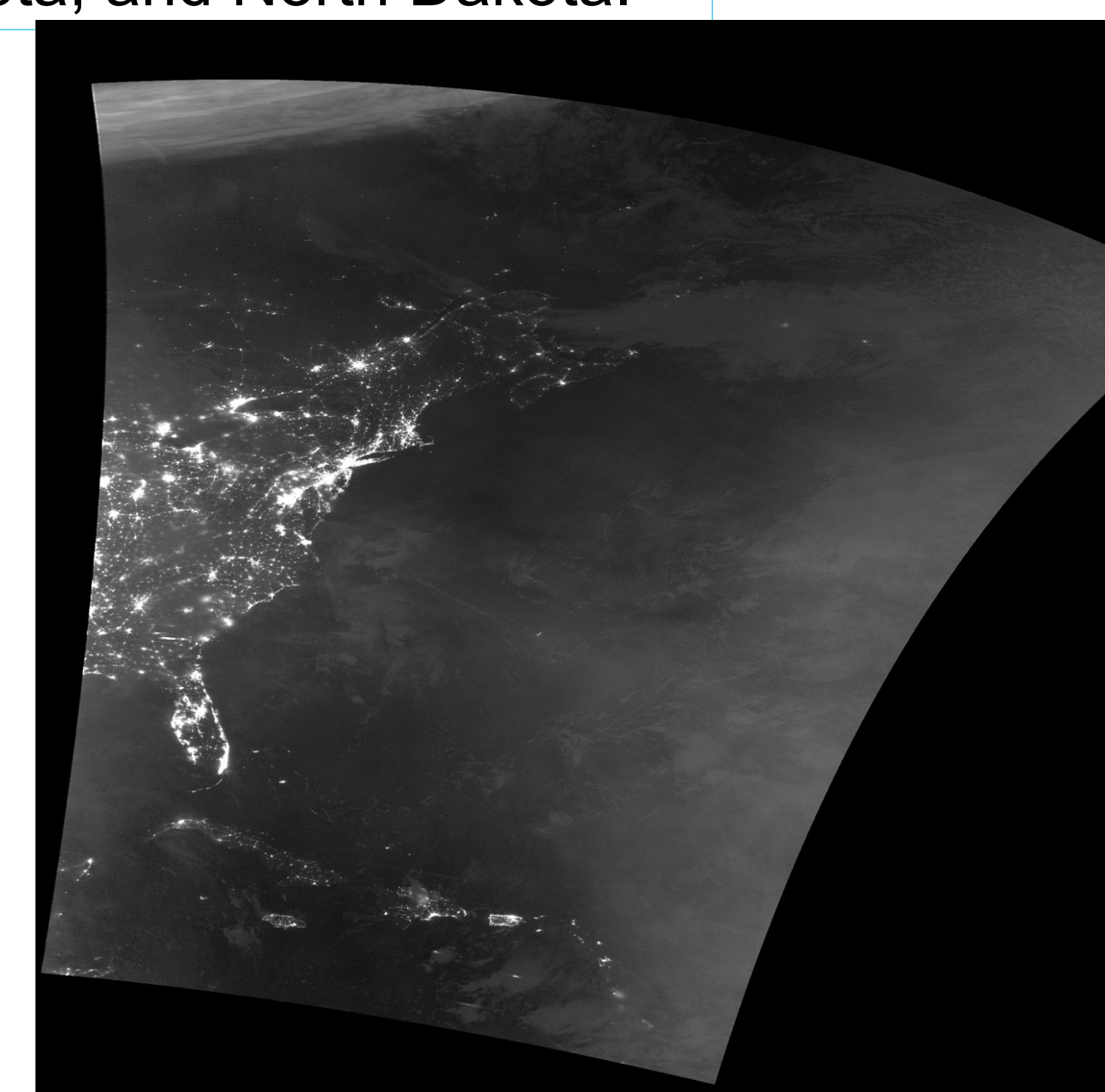
RESEARCH with supporting VIIRS Satellite Images



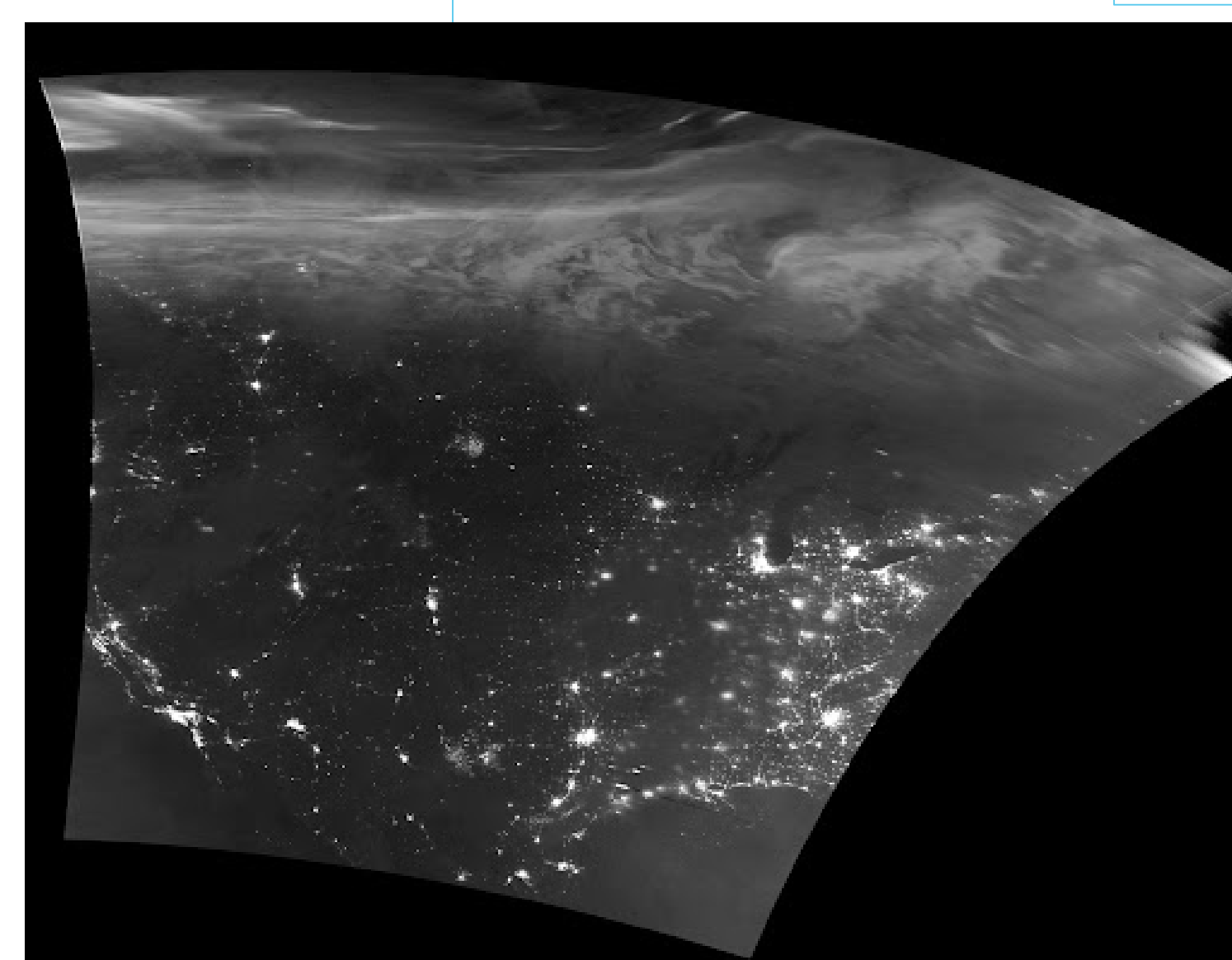
10-8-21 CIMSS VIIRS Imagery Viewer. We chose this photo because it is over Michigan, Minnesota, and North Dakota.



10-11-21 CIMSS VIIRS Imagery Viewer. We chose this one because it is near idaho and new york.



10-11-21 CIMSS VIIRS Imagery Viewer. We chose this because it shows that there are not many auroras in america at that moment. You can tell because it curves way



10-11-21 CIMSS VIIRS Imagery Viewer. We chose this one because it is near iowa, and Wisconsin.

RESULTS and CONCLUSIONS

We expect to find what time the auroras will occur. Also what countries that auroras happen in. We're interested in seeing what arurus look like from satellites. We are planning to investigate what time at night auroras happen in. satellite images of auroras that show the specific time the image was taken. We are studying auroras in America. We notice that the auroras occur towards the top of America by the states Idaho, Alaska, Minnesota, and Michigan. We can also see that the auroras move up and down throughout the night. We can also tell from the pictures that throughout the night the amount of auroras change. Sometimes we can see more auroras and sometimes we can see less. When looking at the after pictures we can see a lot more auroras than the before pictures. We can also see them in a lot more states. The VIIRS instrument was very important to us. We researched auroras and the satellites provided many images of them in America. We could also pick what days you want to see the auroras. It was awesome because you could pick what days you want to study auras and back and forth from different dates. We could see a birds eye view which gave you a better understanding on what auroras look like. Also we could see the amount of auroras that night.

RESEARCH QUESTIONS/BACKGROUND

We are studying auroras in America. We expect to find what time the auroras occur. We're interested in seeing what aurorus look like. We know that they happen at night. We know that they happen in places where there is a strong magnetic pull. They happen in the ionosphere and they occur near the North and South pole. We are planning to investigate what time at night auroras happen. Also something we are wondering is what countries can see auroras. Another thing we want to investigate is how long they last. The specific evidence we need to find is satellite images of auroras that show the specific time the image was taken. Also we can use satellite images that can show us where they are. We can control where we want the satellite to see. Another piece of specific evidence would maybe be close up images to get a better understanding of what they look like. Lastly auroras are also known as the northern lights. They are one of the 7 natural wonders of the world.

GROUP MEMBERS

- 7.
- Gormally, Courtney
- Sigmon, Kate