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- 1) Title: Using myNASA Data to assist with Overreaching Concepts and Next Gen Standards Implementation
- 2) I chose option 1: to implement a professional development experience. I chose this because as the Next Generation Standards begin to be implemented it is important for us as teachers to slowly implement these best practices. Also as a science research teacher, I always get frustrated seeing students who should have signed up to do my three-year research course but don't try it because they see NASA or big data as this insurmountable obstacle they could never understand. I feel that especially the 9th and 10th graders need to experience this.
- 3) The proposed audience are high school science teachers, Living Environment, Environmental Science, Earth Science, Chemistry, Physics, and IB level Biology, IB Environmental, and IB Chemistry teachers. They teach approximately 130 high school students in a full time schedule. Ages will range from 14-18 years old.
- 4) This will assist them to see how a project based approach and use of the NASA data website can help substantiate a claim made. I feel students have misconceptions and when they have raw data they must then explain, it forces them to see a misconception for what it is and not try to warp the data to fit their claim. I will be showing them examples from the website <https://www.nasa.gov/stem-ed-resources/my-nasa-data-satellites.html> and then give them time to make up a lesson incorporating my NASA data into a lab using the exemplars from <https://mynasadata.larc.nasa.gov/all-atmosphere-lesson-plans> so it is not so overwhelming to develop these types of lessons and then use as exemplars for future studies.
- 5) I hope to see the teachers walk away with a lesson/lab that they can incorporate in the following months (climate change/weather patterns/cycles) depending on each teacher's concentration. I always appreciate when I can walk away from PD with something to use right away and not need tons of extra time to actually make it work for my classroom. I am hoping each teacher will take a lesson from myNASA data and then edit it to fit their lesson structure and classes.
- 6) I will follow up as the department chair in a future department meeting to see how the lessons went and if we can add a few of those types of STEM lessons to each unit.