



NASA Odyssey of the Mind Problem Showcases Adventures of The Eccentrics

Introduction by Charlotte Griner, NASA Earth Observing System Project Science Office, clgriner@earthlink.net

“Odyssey of the Mind is like the Olympics of the imagination. It’s a creative competition in which a team of up to seven students writes, produces, and performs an eight-minute skit, complete with costumes, scenery, and props, to solve one of the 5 OM problems written yearly by its founder, Sam Micklus, and his son Sammy—each year NASA sponsors one of the problems.”

It was my distinct pleasure to once again serve as a volunteer staging judge for the NASA-sponsored problem, *The Eccentrics*, at the Odyssey of the Mind World Finals held at the University of Maryland, College Park, May 30–June 3. In short, teams had to design a problem involving one of the Earth’s systems, and then develop a solution to solve that problem....using text they had written, costumes and props they had designed and developed....and perform the skit for the judges using not more than eight-minutes.

As a *staging judge*, I am the team’s first contact prior to heading in before the problem judges with all of their props and costumes. My job is to collect all the necessary paperwork, calm the nervous jitters and, the most fun of all, allay their fears by asking the teams what they learned about Earth Science in the process of coming up with their Earth system problem and the solution. When I ask questions, many of them totally forget about the judging coming up, and get so excited telling me all the things they learned.

My objective this year was to choose two teams to highlight in *The Earth Observer*. There were many, many outstanding teams from which to choose, including teams from numerous states as well as Singapore, Kazakhstan, Russia, Poland, and Hungary, to name a few, but I finally settled on two.

One is a college team sponsored by the Mt. Pleasant, NC Lions Club, Midland, NC, composed of students from the University of North Carolina, Greensboro; North Carolina State University; Appalachian State University; and University of North Carolina, Charlotte. I was totally amazed when one of the team members, Jamie Holt, brought me a 50-page handwritten booklet, with text and pictures that she had put together for her and her teammates on the research she had done on Earth Science. The other team was from Sherburne–Earlville High School, Sherburne, NY, that blew me away with their props, costumes, and reciting all the things they had learned about Earth Science. It was clearly obvious they had done a massive amount of research as well.

I asked a member of each team to share their team’s story. Following are those stories, along with pictures.

Conglomerate of College Students Save Earth Without Harming a Single Space Possum

Jamie Holt, University of North Carolina, Greensboro, jgholt@spartan.uncg.edu

As a 12-year veteran of OM, or Odyssey of the Mind, I have encountered many people who are completely unfamiliar with the program, and I have found it quite difficult to form an explanation of OM that is elaborate enough to explain this program that annually consumes my life from August through May, yet concise enough not to melt the brain

with the intricacies of an internationally recognized competition. I usually explain OM saying, “Odyssey of the Mind is like the Olympics of the imagination. It’s a creative competition in which a team of up to seven students writes, produces, and performs an eight-minute skit, complete with costumes, scenery, and props, to solve one of the 5 OM problems written yearly by its founder, Sam Micklus, and his son Sammy—each year NASA sponsors one of the problems. Participants range in age from third grade through college, and the problems we solve are organized into technical and performance categories, with each problem requiring teams to meet different requirements in their eight-minute skit.”

I’m pleased now to share with you the story of how our team came to participate in this year’s OM competition and our experience at the World Finals recently held in College Park, MD.

It was a cold, run-of-the-mill day in February, and I was driving back to my apartment from a rather uneventful history lecture when my phone rang; I looked at the screen, but didn’t recognize the number. “Hello?” I said in the uncertain way I do when I’m not sure just who is hearing my greeting. “Hi, Jamie! It’s Daniel Norris.” I thought to myself, “I know that name. Who is that?”

As I racked my memory for a Daniel Norris, the voice explained, “I was on the Mt. Pleasant Lion’s Club OM team.” Ah-hah! Daniel was the captain of the team against whom my OM team, Myers Park High School Platinum, competed year after year. In fact, his team was our biggest rival. While our teams were never unpleasant to one another, there was certainly an air of competition between us thick enough to make me wonder what Daniel Norris could possibly be calling me about. “I was wondering if you’d like to form a *Division 4* team with me.”

There it was, plain and simple. In only 14 short words, Daniel proposed an unprecedented OM powerhouse of creativity, forged from two of North Carolina’s top high school teams. We were the first and second place teams in our problems every year that we were in high school, and now he suggested we merge members of each team into a new one to compete in the college division. It would certainly be difficult, as Daniel and I didn’t even live in the same town, not to mention the fact that our six-member team would represent five different North Carolina universities. And yet, as difficult as it would be, I didn’t even need to think about my answer. “I would love to!” I shrieked into the phone.

OM holds a place near and dear to my heart, and to jump back into the game was an exciting prospect, but Daniel and I had a lot of decisions to make before we could begin. The first was which problem to solve. We eventually settled on the problem sponsored by NASA, entitled *The Eccentrics*. Our problem was to create a skit that included three eccentric characters who were to creatively solve a team-created problem within one of the five Earth systems, inspire a fad, and enjoy a celebration honoring their success in solving the problem with the Earth system. Sounds easy, right?

As we began to brainstorm our solution, however, we quickly realized that neither

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Back row, left to right: Daniel Deal, Whitney Chilton, Colin Lindberg, and Daniel Norris; front row: Jamie Holt and Spencer Wilkins. Credit: Lyn Holt.



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of us had retained more than a speck of what little Earth Science education we'd had in our 14 years of schooling, and if we were going to come up with anything remotely intelligent concerning the five Earth systems, there was research to be done. In fact, before I did this problem, I could not have named these systems. But, believe it or not, I jumped at the opportunity to assemble a booklet of information on this subject for my team to read. In fact, this is one of my favorite parts of the OM process: the research. **I find that I retain most of the information I learn in the process of doing OM—and it is never dull.** In years past, I've done extensive research on topics like the Lincoln Memorial in Washington, D.C.; the Door of the Gods, which adorns the elaborate burial tomb of Iput, the royal vizier to Teti, a 6th Dynasty Egyptian Pharaoh; and Pointillism, a French style of painting in which an entire image is created using only small dots. Certainly, learning about the planet on which I live would be anything but dull, and if it was anything like other years' topics, I had plenty to look forward to.

I began my research with the atmosphere, and as I read about the different levels that comprise it and the various roles they play in sustaining life on our planet, I decided this was my favorite Earth system. Of course, I couldn't deny the other four systems the attention they were due, but surely I would not find anything cooler than the final layer of the atmosphere I'd never even heard of! (I imagine that the magnetosphere is the stuff of water cooler talk at NASA, but for yours truly, Miss Joan Q. Public, this discovery was, to quote my peers, “super fly.”) I learned that the magnetosphere forms a protective, bullet-shaped sleeve around the Earth that shields it from the solar winds that blow past us at over a million miles per hour! I also learned that some scientists believe Venus and Mars used to have life-supporting atmospheres, but without magnetospheres, they lost their atmospheres to the universe at the hands of these unruly solar winds.

I moved on to the biosphere, and suddenly I had to reconsider my Earth system ranking system. Sure, the atmosphere was pretty nifty, but so were all the different biomes of the biosphere. I mean, not only is our planet the only one in our Solar System where life is known to exist, but it exists in so many rich and interesting forms that we have to divide them into the categories of the different biomes. Furthermore, the biomes are all completely different. I knew the world was a big place, but I had never considered that it was so large that it encompassed all these different habitats. As I continued on with my research, each Earth system presented itself in a fascinating way that forced me to consider the possibility that the research was not going to be the hardest part in choosing an Earth system on which to focus. Instead, I feared, the most difficult part would be choosing just one.

Eventually, our team decided to focus on the atmosphere as our Earth system of choice, but the decision was as difficult as I expected it to be. In the skit we took to World Finals competition, we presented the Sun as a giant, glowing apple from which grew a tree that sprouted nine fruits, called “planets.” (Although one was a tomato and no one was quite sure whether it was really a fruit or not.) But when a solar worm appeared from a wormhole, the orphans and the matron of the orphanage who were our main characters, had to find a way to stop the worm before he sucked up the Earth's atmosphere, rendering it completely inhospitable to life. As it turned out, the orphans discovered, using *Wikipedia*, that solar worms are allergic to space possums. So they built a giant apple out of junk they found on Saturn at a Space Junk Yard, and filled it full of space possums. As my character explained, it was a “Trojan Apple.” Then the orphans launched the Trojan Apple into space via a supersonic karate kick, and the solar worm took the bait hook, line, and sinker. I'm sure you will be pleased to learn that the Earth was saved from the vicious solar worm, and no space possums were harmed in the process.

While it is true that every skit I've ever been a part of is special to me, this year's most definitely ranks in my top three because I had so much fun learning about the Earth.

I am, by no means, a scientifically-inclined person, but the way that NASA and OM have merged creativity and science has given me an appreciation for science I never thought possible. I must, therefore, thank NASA from the bottom of my heart, both for supporting OM in general, and for offering a new twist on a problem every year that gives us OMers new ways to learn about the various fields associated with NASA.

Sherburne-Earville High School Students Make the Clouds Cry

Brittany Clark, Rebekah Riley, Bronwen Mahardy, Juliet Morin, Alexandra Riley, and Kaitlyn Briggs, Sherburne-Earville High School

Odyssey of the Mind (OM) is a creative problem solving competition. Teams are usually made up of seven members, who choose a long-term problem to solve over the span of a few months. Our team's members are: Kaitlyn Briggs, Brittany Clark, Stephanie Joyce, Bronwen Mahardy, Juliet Morin, Bekah Riley, and Lulu Riley. Five of us are entering our senior year in high school, one of us (Juliet) is entering her junior year, and one of us (Lulu) is entering her sophomore year. Many of us have been participating in OM for years.



Sherburne-Earville students attempt to help the atmosphere by creating a rainstorm by launching a "FADD" (Fast Acting Dry-ice Distributor) Rocket. From left to right - Brittany Clark, Rebekah Riley, Bronwen Mahardy, Juliet Morin, Alexandra Riley, and Kaitlyn Briggs. **Credit:** Jonathan Sherry.

Our school (Sherburne-Earville) is located in rural New York and students are given the chance to join an OM team beginning in the fourth grade. The competition fosters teamwork, creativity, diligence, active thinking, and learning. OM is a great experience for those who want to utilize their talents, whether they are found in the areas of carpentry, artistry, costume making, or performance. It is an incomparable learning experience.

Out of the five problems we were given this year, we chose the NASA problem, *The Eccentrics*. A few of us have solved the NASA-sponsored problems in previous years. The NASA problems always pose a challenge that we strive to conquer. For us, choosing the NASA problem means that the solution will include not only creativity in the performance but scientific accuracy as well.

The Eccentrics is a problem that requires the creation of three eccentric characters. The characters solve a problem pertaining to an Earth system. In solving the problem, the Eccentrics must launch a fad and have a celebration held in their honor. We chose to portray our Eccentrics as humans who represent forces that are present throughout the world: Change, Energy, and Desire. Their less-celebrated sister, Fate, narrates our skit. We could choose between five Earth systems: Biosphere, Cryosphere, Hydrosphere, Geosphere, and Atmosphere. While we chose Atmosphere as

Eccentric Characters Brittany Clark and Rebekah Riley overlook the handmade mountains and team sign. The larger mountain served as a pedestal stand for the three sphere characters while the sun proudly displayed the Sherburne–Earlville team name and division. **Credit:** Jonathan Sherry.



our main sphere, we took a different route, as we usually do, and included Cryosphere and Biosphere as well.

In our skit we chose to personify and personalize the spheres. The three aforementioned spheres arrive at the meeting and proceed to talk about their issues and their resolutions. Atmosphere has a problem that seems to have no resolution. She is engorged with water; she cries that she is “shutdown, quarantined” and that there is “no more admittance.” The Eccentrics are called in and decide they need to relieve poor

Atmosphere. From the start, we wanted our fad to be something other than a typical fashion trend. We also wanted to integrate proper scientific processes. The problem stated the need to “launch a fad” and tempted us to create a rocket that would induce a relieving rain. We began researching various forms of weather modification before settling on “Cloud Seeding.”

“Cloud Seeding” usually involves one of two materials: silver iodide or solid carbon dioxide, also known as dry ice. We chose dry ice and created the Fast Acting Dry-ice Distributor (FADD). The Eccentrics describe the process in their characteristic rhyme:

*In China, Russia, and the U.S.,
we've found a way, with quite a fuss,
to call out rain chemically
all with some dry ice you see. . .
. . . Dry ice creates precipitation
by inducing condensation.
We launch it into Atmosphere
and then the skies will soon be clear.
The rain will fall without a hitch
and we'll have scratched your weary itch.*

As the rhyme states, the rain falls without a hitch. Atmosphere is relieved of her puffy problem and the skies clear.

As a team, we are overjoyed with our learning experience. The NASA problem allowed us to further research a weather modification process that we previously knew only nominally. It is an opportunity that we were fortunate to have. We hope that NASA will continue to sponsor an OM problem in the years to come.

If you would like to know more, you can visit the *Odyssey of the Mind* website at www.odysseyofthemind.com. ■