

The Power of God

This hurricane season and the destruction that it caused have gotten a lot of people talking about the power of God. When you see an entire city destroyed and millions of people displaced from their homes and lives, you begin to feel weak and frail. We are powerless against such an awesome force as a hurricane. But think about how much more powerful the Lord is. He created both the hurricane and that which was destroyed.

When you think about it, there are much more powerful things going on in the universe than a hurricane. A hurricane has the power to change and destroy millions of lives, but compared to the size of the earth, it is really fairly small. If the earth were the size of a basketball, hurricane Katrina would be about the size of a quarter. The destructive inner “eye” wall of Katrina would be only about the size of a pea, but God will one day cause worldwide destruction (Acts 6:12-17). People living in those days will hide in caves and seal themselves in mountains to try to escape the wrath. Katrina was powerful, but the Lord is that much more powerful.

You actually don't have to look very far to see much more power than a hurricane. Take the sun for example. First of all, the sun is tremendously huge. If the sun were the size of a basketball, the entire Earth would be the size of a pea. Hurricane Katrina would be smaller than the head of a pin. The sun is 1.3 million times the volume of the earth and 300,000 times the mass. It is so massive that if you were standing on its surface (and somehow not instantly vaporized by its ~11,000 degree F surface temperature), you would weigh about 30 times what you weigh on earth. Now, on the same scale, the Earth (pea) would be about 100 feet from the Sun (basketball). If you were standing at the Sun, you would have a hard time even seeing the Earth with your naked eye because it is so small. Yet even so, the small fraction of the total energy radiating from the sun that falls on the surface of the Earth is about 6,000 times the energy consumed by all humans per day. Just 30 days worth of sunlight is equivalent to all of the fossil fuel energy ever consumed by mankind. The Lord is more powerful than that.

Someday, the sun, like any other star, will run out of fuel, collapse and explode. This explosion is called a supernova. Astrophysicists have observed 100s of supernovas in other galaxies. It has been calculated that the energy released in a supernova explosion is equivalent to the energy released by 100 trillion (that's 100,000,000,000) suns in 6 months. In other words, a supernova releases more energy in just a few seconds than an entire galaxy does in 6 months. To give you an idea of what a tremendous number this is; it would take 100 trillion grains of table salt to fill an Olympic sized pool. Using the same scale we used earlier where the Earth (pea) is ~100 feet from the Sun (basketball), Pluto would be about the size of the tip of a pencil and about a mile away. The next nearest star would be in China and the size of our entire galaxy (the Milky Way) would span from here to the sun. The destruction of a star is an awesomely powerful event, yet the Lord is still more powerful.

Our galaxy is truly tremendous. It has ~100 trillion stars in it, each containing an incredible amount of energy with the potential to one day supernova. Yet our galaxy is not alone in the universe. The Hubble Space Telescope made a series of observations on a tiny patch of sky in the constellation Ursa Major and found an inconceivable number of

other galaxies. In 1 square degree of sky ~300 million (300,000,000) other galaxies can be seen. That's 30 million million million (30,000,000,000,000,000) suns in a patch of sky approximately the size of your thumbnail held at arms length. At the centers of most galaxies (including our own), astrophysicists have found evidence for the presence of super-massive blackholes, each of them having a mass of 10s of millions of suns packed into a volume of space approximately equal to the size of our solar system. That's about 2 miles across on the scale where the sun is the size of a basketball and the earth a pea. They are so massive and dense that anything encountering them are removed from the universe forever. Not even light can escape from them. Many of them can be seen actively feeding on surrounding matter. When they swallow stars, they release a tremendous amount of energy in very high energy light (gamma-rays and x-rays). By measuring this light, astrophysicists have estimated that these super-massive blackholes are consuming approximately 1 sun per second on average. Remember how small and weak a hurricane was compared to the size and power of the sun? Now imagine how many of these super-massive blackholes there are, each of them eating suns for breakfast at a rate of 1 per second. Super-massive blackholes are immensely massive and violent objects, yet the Lord is still more powerful.

It is almost impossible to wrap our minds around such ludicrous numbers and scales, but the Lord created it all. His power is immense, but His love for us is even larger. We are very small, but the Lord works on all scales. Because no matter how small we are compared to what is out there, the very hairs on our heads are all numbered by the Lord (Matthew 10:28-31).