## **The Painted Balloon Experiment**

by James Carter

The observation of cloud segmentation dynamics is the definitive measurement for the gravitational expansion of mass, space and time. If clouds didn't segment the way they do, then it would be a decisive proof of either General Relativity's curved gravitational spacetime or Newton's flat gravitational attraction field. In this experiment, the common gravitational expansion phenomenon of cloud segmentation is demonstrated with the expansion of a painted balloon.

Real definitive experiments that show a decisive difference between gravitational expansion and the curved space and attraction theories are being performed in the sky every day without hardly anyone ever noticing them. The active segmentation of atmospheric clouds can usually be observed, but at certain times and locations where conditions are just right, this segmentation process can dramatically fill the whole sky. This separation of very massive and stationary water droplets from the rapidly moving individual molecules of air is a natural inertial conclusion of the principle of gravitational expansion but cannot be described or calculated with the theories of spacetime curvature, attraction or space generation.

The segmenting of atmospheric clouds is the most common and easily observed example of an inertial scaling phenomenon caused by Earth's gravitational expansion. The painted balloon experiment is an excellent way to demonstrate this cloud segmentation phenomenon in which gravity plays no part in the demonstration. A partially inflated balloon is spray painted and allowed to dry. Then, the balloon is inflated to its full size. As the balloon expands, the paint begins to crack into similar sized segments on different levels of scale. When photos of atmospheric cloud stretching are compared with the painted balloon, there is a remarkable correlation between the segmenting patterns of each.

As the surface of Earth expands sideways from the effect of gravitational expansion, it stretches out uniform layers of clouds into many individual segments that are themselves divided into still smaller segments. Every casual observer has observed this segmenting of clouds on many occasions. Segmenting of clouds is usually apparent whenever clouds are observed for any length of time. Even though such segmentation is a universally observed characteristic of clouds, to my knowledge, this phenomenon does not even have a name. These stretch marks in the sky offer dramatic proof that the



Clouds over Texas

Painted balloon

© 2017 by James Carter 1

surface of Earth is constantly expanding in all directions beneath the cloud layer. The fast moving masses of the air molecules spread out evenly but the stationary masses of the water droplets are held by their inertia from moving out onto the expanding surface of Earth. Their individual motions clusters them in groups that appear grow smaller as their inertial mass resists the expansion of the atmosphere.

Cloud segmentation is caused by the different effects that the Newtonian laws of force and motion have on the water droplets in atmospheric clouds and the molecules of air surrounding them. In the first case, the water droplets have millions of times more mass than that the individual air molecules. Secondly, the air molecules are all moving at the speed of sound (approx 1100 ft/sec) while the water droplets are basically stationary with maximum velocities of just a few feet per second. With their much greater velocities, the air molecules quickly and evenly fill the increasing space of Earth's expanding two dimensional surface. As the expanding air molecules move out from the non-expanding inertial cloud, they are unable to move the far more massive and stationary water droplets with them. The small individual random motions of the water droplets tend to divide them into individual groups that become more and more compact as the air continually moves out from between the droplets of each cloud. As the number of air molecules within a cloud continually decreases, it causes the cloud to appear to contract relative to the expanding atmosphere around it. Air molecules continue to impact the droplets on all sides and do not change the magnitude or directions of their average velocities.

While the cloud segmenting phenomenon is a naturally occurring physical consequence of the gravitational expansion of mass, space and time, there seems to be no reason for this effect to occur within the dynamics of either Newtonian gravity or General Relativity or any other aether or field theories of gravity. Newton's gravitational attraction of water droplets is not nearly strong enough to compress individual clouds. Einstein's curving non-inertial space of would also be unable to segment clouds because both the air molecules and the individual water droplets would remain imbedded together within the curving non-inertial spacetime. General relativity would cause both droplets and air molecules to evenly move away from one other within a non-inertial curving gravitational space/field.

Einstein's curved spacetime theory of gravity is clearly unable to create segmented clouds. In most cases, the mathematical equations that describe curved spacetime are identical to those that describe the "curved matter-time" of gravitational expansion. However, in this case, the predicted dynamics of the two theories is quite different. In general relativity, it is the space within the cloud that is curving and moving and there is no requirement for any of the droplets to detect any inertial movement. According to the principle of gravitational expansion, matter is curving and moving through inertial space. With the surface of the Earth moving sideways with inertial motion beneath the cloud, the stationary cloud droplets are not moved one way or another in the process and are segmented into smaller and denser groups.

Gravitational expansion inflates the balloon's inertial space and the inertia of the paint resists this change in motion. Under the theory of General Relativity, the paint particles would move evenly apart with the non-inertial acceleration of the balloon's curving spacetime.