Polar Vortex Shedding

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Planetary Rotation induces interesting dynamics to the atmosphere surrounding a planet. Recognizing the gyroscopic nature of massive rotating bodies, geo-climatologists customarily expect considerable stability in the atmospheric circulation around both poles of a rotating planet. This closed circulating atmospheric pattern at either pole of a planet is commonly called a Polar Vortex.

The existence of polar vortices fundamentally stems from the Coriolis effects of forces acting upon moving objects in rotating frames of reference, but other forces contribute to those vortices as well. For example, the hexagonal shape of the polar vortex over planet Jupiter’s north pole is not explainable by atmospheric rotation alone.

Being polar in nature, the air contained in planet Earth’s polar vortices is frigid by human standards, and human habitation in those polar geographic zones remains sparse. Life is indeed harsh in normal Arctic and Antarctic regions of Earth, where agriculture is almost impossible, and the dominant forms of life there have evolved toward modes of fierce predation. Think Polar Bears (Ursus Maritimus), Weddell Seals (Leptonychotes Weddellii), and Killer Whales (Orcinus Orca). Think of humankind’s plight if polar-style predators could expand their range over our world.

When instabilities develop within the structure of a polar vortex, portions of the cold, dense air mass often are ejected toward lower latitudes, bringing polar weather into climate zones accustomed to more temperate conditions. When these breakouts occur during summer months, a short respite from the high temperatures and stagnant air patterns of summer can be welcome. But when the polar outbreak occurs during local winter, its victims feel the exceptionally cruel effects of polar weather, and outdoor activity becomes extraordinarily difficult until more normal conditions return. Reports of excess deaths due to such extreme weather are commonplace during those weather-breakout events. Fortunately, excess predation has not yet become a primary contributor to those death counts.

Clearly, any circumstance likely to augment the occurrences of these dangerous polar breakouts deserves our attention. Global Slowing is implicated.

Familiarity with the behavior of that perennial toy of childhood, the gyroscopic spinning top, exposes a grave danger of global slowing. So long as the toy spins at high speed, its spin axis remains stable, or in simple motion responding to external forces. But as its rotation speed diminishes, the behavior of the toy becomes ever more chaotic and unpredictable.

So too, if we allow the rotation speed of our planetary atmosphere to decay, it will inexorably lose stability, and we will begin to experience the out-of-control chaos seen in the dying gyroscope. Our formerly well-behaved polar vortices will become free to wander malevolently over ever-widening reaches of our blue gem of a world, wreaking climatic havoc to mankind and to all of the lesser creatures wherever they go. The predators will follow.

Wanton energy extraction from the atmosphere can only result in reducing the atmospheric vorticity, destabilizing the atmospheric circulation around our polar regions, and exacerbating the marauding polar vortex systems ravaging Earth’s inhabitants.

Uncontrolled Polar Vortex Shedding threatens a desperate future!