Erosion occurs on very small scales. Scientists and engineers use beams of energetic particles in a controlled erosion process to create microscopic structures for smart phones, and other nano-technology devices.

On a larger scale, the effects of wind, rain and gravity combine to form the spectacular buttes and spires in southwestern deserts of the United States. The rock pillars in Pinnacles National Park in Australia are almost a billion times larger than the nano-pillars on microchips. They are thought to have been formed by erosion as water washed away the material not protected by erosion-resistant cap rocks.

Erosion also takes place on a cosmic scale in interstellar space, forming the “Pillars of Creation” in the Eagle Nebula and similar structures in the Carina Nebula. Ultraviolet radiation and winds from nearby stars blew away gas from interstellar clouds, leaving behind dense columns of gas and dust several light years long.

Because what happens here, happens there, happens everywhere.