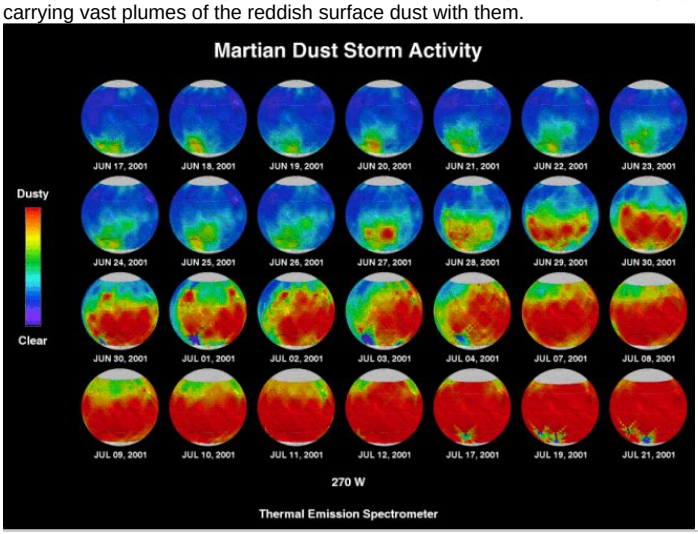
Martian weather - dusty with a chance of storms

Again, bear in mind the infancy of our knowledge of the martian surface. Recent expeditions have shown martian weather to not only be active, but in many cases to be far more violent and strange than anything we experience on Earth. Some of the most curious is the presence of dust devils, huge pillars of dust that stretch over 10km in height (that's 1/10 of the way to the edge of space on Earth) and whirl across the surface. These are caused, as they are on Earth, by convection currents (the mixing of hot and cold air) creating whirlwinds that then spin themselves upright carrying vast plumes of the reddish surface dust with them.



They are responsible for some of the most spectacular patterns we have seen on the martian surface as their shadows wriggle across the dust plains creating serpentine trails overlaid on the desolate surface. Dust features prominently in martian weather systems, due in large part to the lower martian gravity and the sheer amount of dust that abounds on mars' surface. Dust devils aren't the only method for spreading this around though - occasionally mars experiences planet-wide dust storms like those shown on the left. In 2001, a dust storm erupted that covered the entire planet in thick clouds of dust and debris in one of the most extreme displays of weathers power observed in our entire solar system. Imagine of something like that happened here on Earth? It would probably be similar to the aftermath of an impact like the one that is thought to have killed of most of the dinosaurs!