



#003 Lightning Location Control. A lightning bolt is like a wire carrying current. Each strike creates a strong circular magnetic field, inducing and interacting with telluric currents in the subsurface of the earth. Like a dynamite seismic source, a lightning strike consist of a spectrum of all frequencies. Therefore this induction and interaction occurs with telluric currents at all depths, and is not limited to the skin depth of the lightning strike. And lightning occurs everywhere.

The top of the composite image above shows four lightning strokes, outlined in yellow, captured with my iPhone looking west from Cedar City, Utah. The bottom panorama shows a typical storm settling in over the iron mine. There are two GoogleEarth™ inserts. The orange insert shows Cedar Valley, the location of the other insert, and the viewpoint for the panorama and lightning photos. The dark red insert shows the location of Iron Mountain and the iron mines. I first learned about the wonderful lightning storms at Iron Mountain from a cousin. This was at the same time Dynamic Measurement was writing our first patent application. It was immediately obvious how magnetite at Iron Mountain controls the location of lightning strikes. At Southern Utah Rock Club meetings it has been interesting to learn about Lodestones, magnetite which has become magnetized by a lightning strike. It is common to find these rather rare rocks at Iron Mountain, presumably because of the large number of lightning strikes. At about this same time, Dr. Sam LeRoy, a co-inventor of Dynamic's first U.S. Patent, recognized Dynamic's work with lightning is a most innovative implementations of remote imaging.

The D.NSEMSM (Dynamic Natural Sourced Electromagnetic Method) lightning analysis is quicker, less expensive, and safer than any other available geophysical technique. Call 713.281.579.0172, describe your exploration needs, and our team will propose how D.NSEMSM lightning analysis will help your exploration projects. For 1% of the cost of 3D seismic, we create maps and volumes of anyplace in the world, with less than two month project turn-around.