



Sol-Geo Learn More

The Sol-Geo concept was developed as an educational interactive solar body exploration experience using handheld GPS devices. A proprietary Calculator loads into the Layout window on this website. The Calculator is best suited for temporary re-locatable exhibits of a more compact nature and will lay out a two dimensional ten body solar array (yes, we included Pluto) based on relative planetary locations as of a Base Year of January 1, 2014. It assumes circular co-planar orbits viewed from "below" the ecliptic plane with the planets moving in a clockwise direction. Average orbital velocities were used to calculate planetary positions in any selected Target Year which may be earlier or later than the Base Year. The User then selects a Unit of Measure for the array (feet, yards, miles, meters or kilometers) to facilitate a more compact array over a few hundred feet or meters or a larger expanded array of miles or kilometers. Selection of Orbital Spacing allows the User to designate Relative spacing based on astronomical units of the solar bodies from Sol or Equal orbital spacing which facilitates a more compact array. The Base Year Azimuth is the compass heading of the Sol-Planet azimuths measured from an arbitrary Sol-Earth azimuth of zero degrees (due North). In order to facilitate the layout of the array design, the User may select a new Relative Azimuth which is a compass heading of a new Sol-Earth vector. New Sol-Planet azimuths are then calculated. The array may be laid out using a GPS device or alternately for more compact layouts a compass and measuring device or wheel. Longitudinal distances are calculated using an average conversion of 53 miles (85 km) per degree and latitudinal conversion of 69 miles (111 km) per degree. Once all calculations are complete the page may be printed out for use in the field. Solar body image markers are usually some sort of easily identifiable object with relevance to the solar body it is supposed to represent. We sell image marker signs printed on 24" x 24" durable weatherproof corrugated plastic yard sign medium with wire frames for easy placement, identification, removal, and storage. Then let the fun begin! A Game Master may design an array in say the year 1066 or Christmas in the year 1 or design a Voyager Mission, Cassini Solstice Mission or a Huygens Titan Probe rendezvous or follow the path of the Holmes Comet. The imagination is the only limiting factor.