At temperatures below 2.176K, liquid He-4 enters into a superfluid state and flows without any friction. The onset of superfluidity is associated with Bose-Einstein condensation where the He-4 atoms, which are bosons, condensed into a single momentum state and acquire quantum mechanical coherence over macroscopic distances. Recent torsional oscillator measurements of solid helium confined in porous media [1,2] and in bulk form [3,4] found evidence of non-classical rotational inertia indicating superfluid behavior below 0.2K. Measurements of solid samples at different pressure (and hence different density) allow us to map out the boundary of this super-solid phase. This work is done in collaboration with Eunseong Kim, Tony Clark, Xi Lin and Josh West and it is supported by the (U.S.) National Science Foundation.