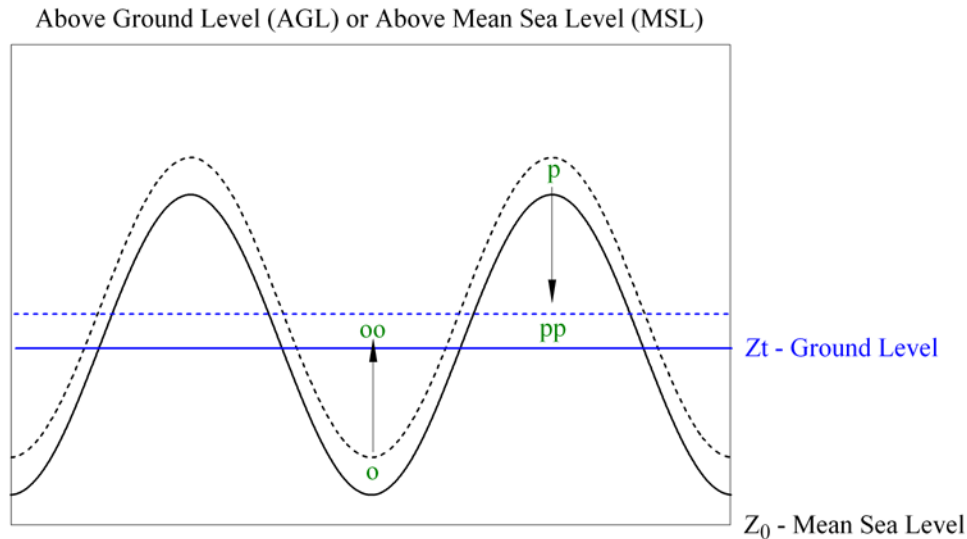


# Terrain Height Issues



- Average terrain value is shown by the solid blue line represents model ground level
- The sinusoidal solid black line shows the real terrain within that grid cell
- The dashed lines represent the top of the planetary boundary layer, the height to which the surface characteristics influence the meteorological profile
- Starting point “o” is within the valley, regardless of whether the height is specified as AGL or MSL, the starting point will be at “oo”
- Although “oo” may have a much higher absolute height (MSL) than “o”, it is correctly represented to be within the model’s PBL
- The starting point “p” is at the highest elevation, specifying the starting height as AGL will start the calculation at “pp” and correctly represent the position within the PBL.
- However, if the height is specified as MSL, the computation starts at “p” which is p-Z<sub>t</sub> above the model’s ground level and well above the PBL. This may result in unrepresentative initial transport winds.