

In PBL schemes, the mixing length l is often formulated as:

$$\frac{1}{l} = \frac{1}{l_s} + \frac{1}{l_o}$$

$l_s = \kappa z$ is the surface layer length scale, z is height, and κ is the von Karmon constant (usually between 0.35 and 0.4)

l_o is a length scale valid above the surface layer. Sometimes it is a single empirical equation, and in some schemes its partitioned into two or more additional length scales as discussed in: <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2018MS001580> .