



$$\frac{\cos(\beta)}{\sin(\alpha_{diff})} = \frac{Gr}{\cos(\alpha_{diff})}$$

$$\boxed{\alpha_{diff} = \arctan\left(\frac{\cos(\beta)}{Gr}\right)}$$

$\beta=0 \rightarrow \alpha_{diff} = \alpha_0 \checkmark$
 $\beta=90^\circ \rightarrow \alpha_{diff} = 0 \checkmark$

$$\boxed{\alpha_{rel} = \alpha_{abs} + \alpha_{diff}}$$

rel... relative to v_{inf}

