

$$WCV_{t_{\text{var}}}(\mathbf{s}, s_z, \mathbf{v}, v_z) \equiv \text{Horizontal_WCV}_{t_{\text{var}}}(\mathbf{s}, \mathbf{v}) \text{ and} \\ \text{Vertical_WCV}(s_z, v_z),$$

$$\text{Horizontal_WCV}_{t_{\text{var}}}(\mathbf{s}, \mathbf{v}) \equiv \|\mathbf{s}\| \leq \text{DTHR} \text{ or} \\ (d_{\text{cpa}}(\mathbf{s}, \mathbf{v}) \leq \text{DTHR} \text{ and } 0 \leq t_{\text{var}}(\mathbf{s}, \mathbf{v}) \leq \text{TTHR}), \\ \text{Vertical_WCV}(s_z, v_z) \equiv |s_z| \leq \text{ZTHR} \text{ or } 0 \leq t_{\text{coa}}(s_z, v_z) \leq \text{TCOA}.$$