

Calculating inter band time delay

$$d_{\text{b1-b2}}^{\text{satellite}} = w_{\text{b1-b2}}^{\text{sensor-array}} \cdot \text{GSD}$$

As the satellite moves forward, it must capture ground continuously without breaks

Calculating inter band time delay

$$\Delta t_{\text{blue-red}} = \frac{w_{\text{blue-red}}^{\text{sensor-array}} \cdot \text{GSD}}{V_{\text{satellite}}}$$