



D_1 is known from TA.

D_2 is known from map.

We measure T_{mi} & T_{bi} .

$$T_{mi} - T_{bi} = T_m + D_3 - T_b - D_2$$

$$T_{mi} - T_{bi} = T_b - D_1 + D_3 - T_b - D_2$$

$$T_{mi} - T_{bi} = D_3 - D_1 - D_2$$

$$\text{So } D_3 = (T_{mi} - T_{bi}) + D_1 + D_2.$$

And now we can estimate MS location on the map.

Caveat: This is accurate +/- 200 m.