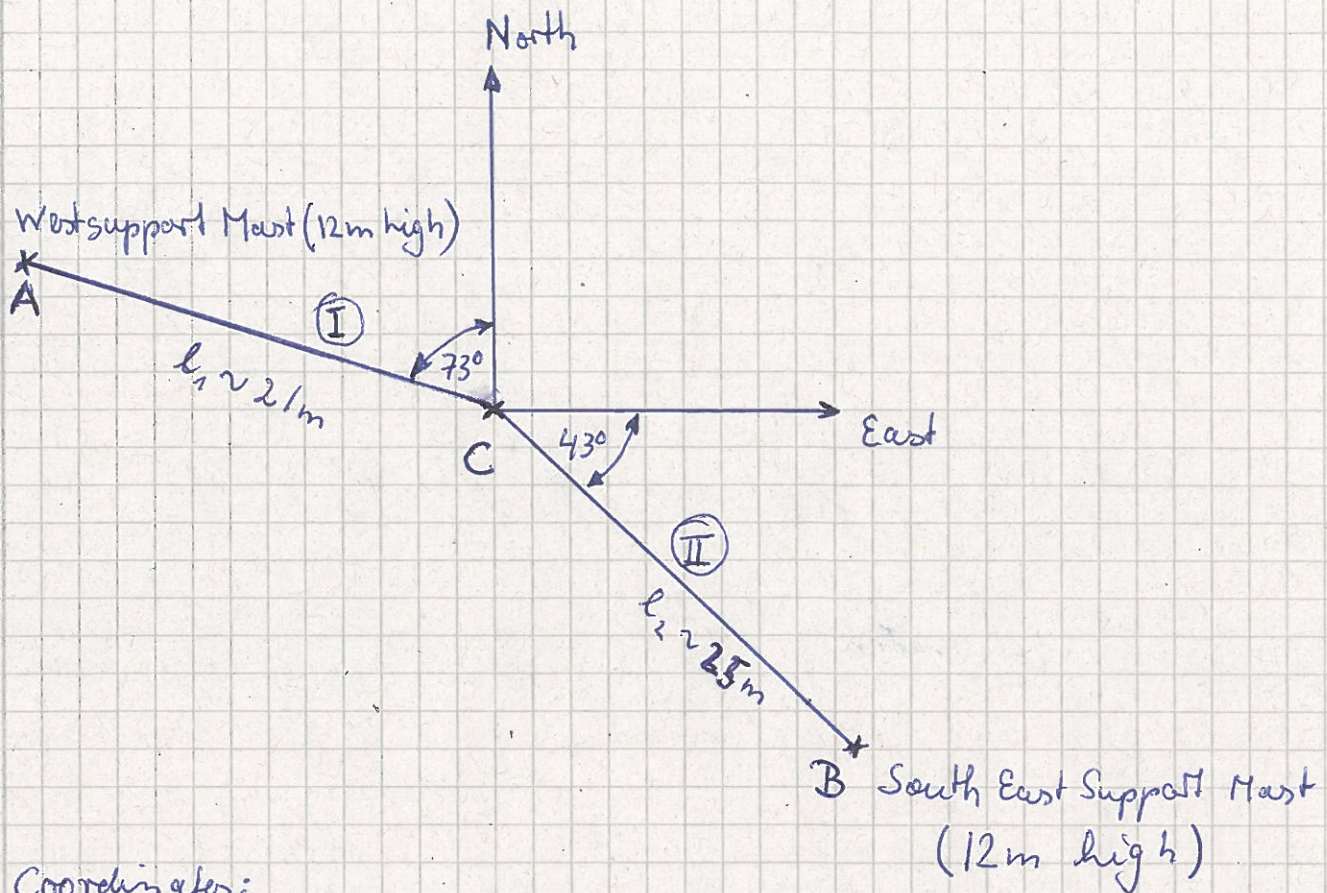


Inverted V-Dipole @ DL2LSM



$$C \begin{pmatrix} 0 \\ 0 \\ h \end{pmatrix} \quad h \rightarrow \text{antenna height}$$

$$A \begin{pmatrix} -21\text{m} \times \sin 73^\circ \\ 21\text{m} \times \cos 73^\circ \\ 12\text{m} \end{pmatrix} = \underline{\underline{\begin{pmatrix} -20.08 \\ 6.14 \\ 12 \end{pmatrix}}}$$

$$B \begin{pmatrix} 25\text{m} \times \cos 43^\circ \\ -25\text{m} \times \sin 43^\circ \\ 12\text{m} \end{pmatrix} = \underline{\underline{\begin{pmatrix} 18.28 \\ -17.05 \\ 12 \end{pmatrix}}}$$

Antenna Wire Vectors

$$\text{Wire (I): Direction: } \begin{pmatrix} -20.08 \\ 6.14 \\ 12-h \end{pmatrix} = \vec{w}_1$$

$$\text{Magnitude: } \sqrt{20.08^2 + 6.14^2 + (12-h)^2} = |\vec{w}_1|$$

$$\text{Wire (II): Direction: } \begin{pmatrix} 18.28 \\ -17.05 \\ 12-h \end{pmatrix} = \vec{w}_2$$

$$\text{Magnitude: } \sqrt{18.28^2 + \frac{6.14^2}{17.05^2} + (12-h)^2} = |\vec{w}_2|$$

Antenna Wire Endpoints for Simulation:

$$\text{Wire (I)} = C + l \cdot \frac{\vec{w}_1}{|\vec{w}_1|}$$

$$\text{Wire (II)} = C + l \cdot \frac{\vec{w}_2}{|\vec{w}_2|}$$