

# Configuration 2 Dimensions

Reference height for Configuration 2 is 1.76m above ground level, measured at NE tower of horizontal array.

Top of sonic boom = 1.91m above reference; note sonic is 5.3 cm above top of boom, so actual sonic height is  $1.76+1.91+0.053 = 3.72\text{m}$  (and 4.72m).

Sonic 12b is 1.92m above reference.

Moved 5.5m sonic and SHT up to make way for raising 3m and 4m sonics. The heights are now 3.99m above reference for the sonic (= 5.80m actual) and 4.43 m for the SHT (=  $1.76+4.43-0.37 = 5.82\text{m}$  actual).

Moved 3m and 4m profile sensors up to match the horizontal array. The '3m' heights are 1.96m above reference for the sonic and 2.36m for the SHT. Actual heights are 3.77 for the sonic and 3.75 for the SHT. The '4m' heights are now 2.90m for the sonic and 3.33m above reference for the SHT. Actual heights are 4.71m for the sonic and 4.72m for the SHT.

| nominal height | sonic* | +1.76+0.053 | SHT*  | +1.76-0.37 |
|----------------|--------|-------------|-------|------------|
| 3m             | 1.96m  | 3.77m       | 2.36m | 3.75m      |
| 4m             | 2.90m  | 4.71m       | 3.33m | 4.72m      |
| 5.5m           | 3.99m  | 5.80m       | 4.43m | 5.82m      |

UPDATE: Distance to top of berm at bearing of 131deg from center of 7u mast is 26.70m.

TODO: Also need [spacings between sonics](#) on Roan towers and sonics on horizontal array. Tom placed the yokes on the horizontal array at intervals of 1.29m.

Spacings of upwind masts are:

|     | position (m) | difference (m) |
|-----|--------------|----------------|
| 3u  | 0.10         | -              |
| 4u  | 1.42         | 1.32           |
| 5u  | 2.71         | 1.29           |
| 6u  | 3.98         | 1.27           |
| 7u  | 5.30         | 1.32           |
| 8u  | 6.60         | 1.30           |
| 9u  | 7.87         | 1.27           |
| 10u | 9.19         | 1.32           |
| 11u | 10.43        | 1.24           |

(I'll double-check this last spacing later.)