

Orientation of the CSAT3 sonic anemometers at the TMT candidate sites.

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General information

Figure 1 shows the CSAT3 sonic anemometer and the orientation of the internal axes. Positive wind speeds indicate winds with components in the positive directions of the axes. The sonic anemometer is always attached at the left hand side and the sensors are orientated along either and north, south, east or west direction (see Table 1).

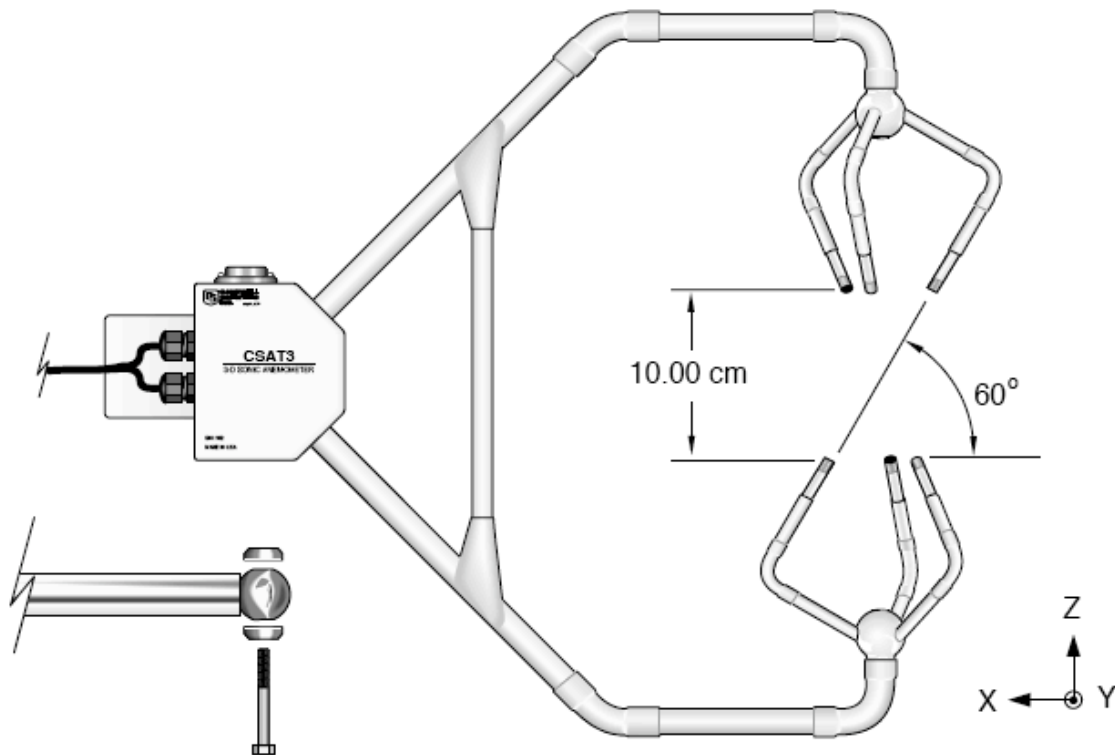


Figure 1: Physical orientation of the CSAT3 sonic anemometer and the internal axes corresponding to the V_x , V_y and V_z wind measurements. Wind speed is positive in the directions indicated. The telescope tower and 30m towers are always located to the left. the negative X axis pointing away from the tower.

7m telescope tower orientation

At the 5 test sites, the sonic anemometers were located at the 7m level on the telescope towers. The negative X direction always pointed away from the tower. The telescope towers had 4 sides at the top level where the sonic anemometers were

attached. The sides were oriented east-west, north-south. Table 1 lists the location on the tower sides where the sonic anemometers were located.

Table 1: The locations and orientations of the sonic anemometers located on the 7m high telescope towers.

Site	CSAT3 7m tower location
T1 Cerro Tolar	West side south end
T2 Cerro Armazones	North side east end
T3 Cerro Tolonchar	South side west end
T4 San Pedro Martir	South side west end
T6 Hawaii	South side east end

30m telescope tower orientation

At Cerro Tolonchar and Cerro Armazones the sonic anemometers on the 30m towers were oriented to point directly north, negative X pointed north, positive Y pointed east.