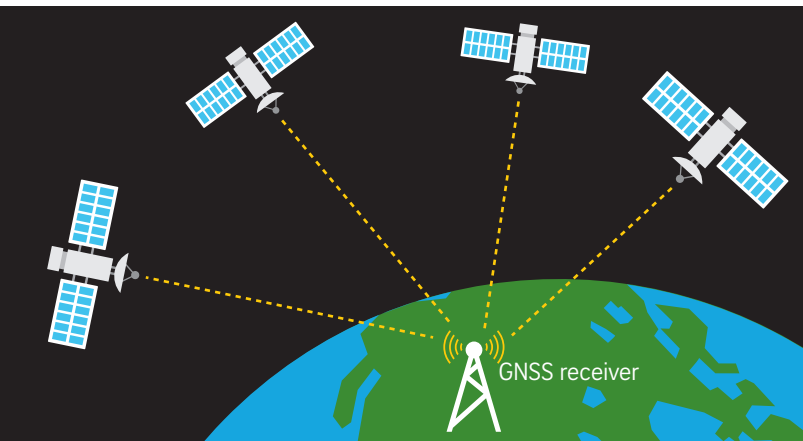
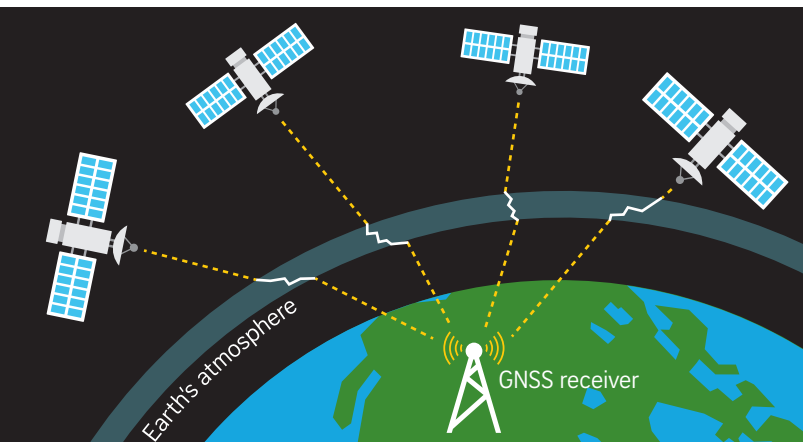


Sharper positioning

For greater precision, the Singapore Satellite Positioning Reference Network (Sirent) uses eight powerful local antennae to correct data from international satellites.



- 1 In global navigation satellite systems (GNSS), satellites broadcast signals. A GNSS receiver on the ground detects several signals. Using the satellites' known positions and their distance, the receiver's position can be calculated.



- 2 This is if signals travel in a straight line. In practice, the Earth's atmosphere causes "delays", limiting accuracy.



- 3 Sirent consists of eight "reference stations" around the island at fixed positions, such as this one (left) at Sultan Shoal. Advanced GNSS receivers at these stations receive GNSS data.

- 4 Sirent's servers compare the reference station's position calculated from GNSS data, versus its actual known position. Based on this difference, Sirent's servers can then process and correct the received GNSS data, for greater accuracy.