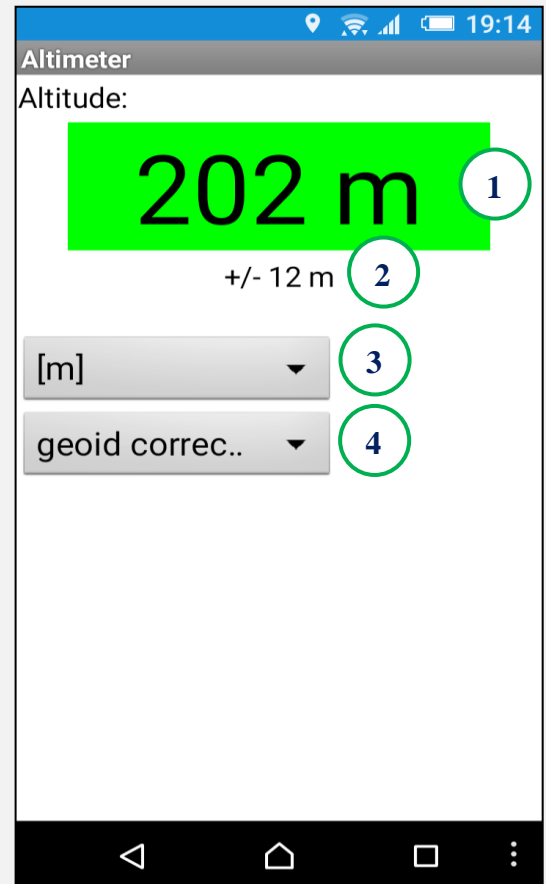


Altimeter

Altimeter is program for Android devices like smart phones or tablets having GPS sensor showing over the sea altitude in large green box on top of the **screen (1)**. Estimated precision is calculated from GPS signal and indicated under the green box with **altitude (2)**.

Program works either in meters [m] or feet [ft]. Units are selectable under the precision **box (3)**.

Altimeter includes also geoid correction. Earth does not have unique density, so the sea level (marked light blue on picture below) is not exact ellipsoid (marked orange) which is used as reference surface for GPS system. GPS gives altitude based on ellipsoid reference (marked “h”) but for our purpose we need sea level altitude from geoid reference (marked “H”, means with geoid correction marked “N”), because the air acts just like a liquid. Differences are up to 100m. Program has function compensating those differences. However some GPS sensors in Android devices have already geoid correction, so program can show either corrected altitude or data from sensor without correction. Geoid correction can be switched on or off in last **control (4)** by selecting value “geoid correction” or “raw GPS”.



It is sometimes hard to tell if your device has correction or not. I recommend to test Altimeter on place with known altitude and very good GPS signal (so that the precision shows small number) and to try both setting. Usually the simpler or cheaper the device is, the lower is the probability of geoid correction included in GPS sensor.

