

GPS: (Global Positioning system): satellite navigation system for military and civil applications. Using a GPS-receiver combined with a GPS-antenna, positions on earth can be determined by distance measurements to satellites. These positions have no geodetic accuracy because of a lot of error sources (such as atmospheric distortions). By using several receivers one can apply relative positioning and then these error sources will mainly be eliminated and surveying accuracies become achievable. Relative positioning can take place both by processing obtained GPS data of several receivers afterwards (post processing), or by sending data directly from a base, a reference receiver or a reference network to a mobile receiver.

GLONASS: (GLObal NAVigation Satellite System): Russian equivalent of GPS.

RTK: (Real Time Kinematic): GPS (calculation) method using a GPS data link sending corrections from a base receiver to a mobile receiver. Because of this, the points to measure can be determined with high accuracy in real time.

RTCM: (Radio Technical Commission for Maritime Service): a organization advising on the standardization of data formats. RTCM has proclaimed several internationally accepted formats of GPS messages.

RTCM 18/19: Type of RTCM 2.3 message where raw GPS-data of a reference receiver will be sent to a mobile receiver. This is the oldest form of corrections for working with RTK.

RTCM 20/21: Type of RTCM 2.3 message where no original GPS observations (read: distances to satellites) but corrections on these are sent from reference to mobile receiver. This type is a little more modern and increasingly accepted as the general format message for GPS-measurement with the RTK-technique.

RTCM 59: Type of RTCM message where the FKP (see below) are sent to the user.

RINEX: (Receiver Independent Exchange format): This is a standard exchange format for raw GPS-data for post-processing applications (processing afterwards). This is mainly done for reference point determination at sub-centimeter level. The data of every type of receiver can be converted into RINEX format. Also the orbits of the satellites are included, next to the standard observations to all satellites.

NMEA: (National Marine Electronics Association): The NMEA has defined several messages for sending data for navigation applications. One of these messages (NMEA-GGA) contains coordinates which can be send by a GPS-receiver to the network, as an indication of its approximate position.

VRS (Virtually Reference Station): Method of correction sending where an imaginary reference station is simulated in the surroundings of the user. This technique can also be used for the delivery of Rinex-data.

FKP: (Flächen Korrektur Parameter): Spatial modulation of distance depended error sources, which influence the GPS signal. These can be calculated by combining several GPS base stations at various (permanent) locations. By individualizing these spatial correction parameters for the location of a mobile GPS-receiver, an excellent quality of GPS-positioning with RTK-technique is gained over a large area.

GEO++: A German, in GPS specialized, software company. GEO++ provides software for GNSS networks of base stations, which makes GNSS-RTK measurements possible by means of FKP calculations. Like many foreign companies and governments, 06-GPS uses Geo++ software as well.

SAPOS: German (governmental) counterpart of 06-GPS. The SAPOS representatives of the German states Lower Saxonie and Northrine Westfalia cooperate with 06-GPS.

FLEPOS: Flemish (governmental) provider of a GPS reference network, that cooperates with 06-GPS as well.

RDNAPTRANS2008: A coordinate transformation procedure defined by the Dutch Kadaster, that ensures an unique and high precision transformation of (European) ETRS89 coordinates to the Dutch NAP (height) and RD-system (plane). RDNAPTRANS2008 takes into account the Dutch geoid NLGEO2004 and the inhomogeneous distortions in the RD-system.

NTRIP: Networked Transport of RTCM via Internet Protocol.