

AUSPOS Checklist

Online GPS Processing Service

AUSPOS is a free online GPS data processing facility provided by Geoscience Australia. You can submit dual-frequency geodetic quality GPS RINEX data observed in a 'static' mode to the GPS data processing system.

An AUSPOS report will be emailed to you with the Geocentric Datum of Australia 2020 (GDA2020), Geocentric Datum of Australia 1994 (GDA94) and International Terrestrial Reference Frame (ITRF) coordinates.

Before submitting your GPS RINEX file/s, please ensure:

1. AUSPOS only provides a network solution (relative positioning) using a double-difference strategy. Dual-frequency (L1 and L2) measurements are necessary.
2. Please make sure all RINEX files submitted to the same job contain an overlapping period of more than one hour. Otherwise, submit them individually to different jobs.
3. DO NOT submit measurements for the current UTC day. Please wait until the next UTC day after 0300 (3 am) UTC time. This allows the RINEX files of reference stations to be downloaded for the current UTC day.
4. DO NOT submit receiver raw binary files (e.g. files with extension: M00, T01, T02, DAT, SBF, TPS...).
5. ONLY submit RINEX observation ".O" files.
DO NOT submit RINEX files with extensions: ".N", ".M", ".G", ".L", ".P", ".H".
6. RINEX filenames should NOT contain any special characters, symbols or spaces.
7. The station name will be read from the first 4 letters of the "MARKER NAME" line in the RINEX header.
8. Please make sure the interval (INTEGER only) of measurements is equal to or bigger than ONE second. It is better to have all RINEX files with the same interval.
9. DO NOT use special characters for "MARKER NAME" and "MARKER NUMBER" in the RINEX header. ONLY use numbers and/or letters from the modern English Alphabet.
10. After the "END OF HEADER" line in the RINEX header, only observation data should be present (Epoch time and Measurements). Please check before submission.

11. If BOTH C1 and P1 (C2 and P2) code measurements exist in a RINEX v2 file, P1 (P2) is given priority to be processed. Please make sure all GPS satellites contain P1 (P2) measurements.
12. If only C1 (C2) code measurements exists in RINEX v2 file, Please make sure all GPS satellites contain C1 (C2) measurements.
13. For RINEX v3 files, C2S (code measurement) and L2S (phase measurement) from L2 frequency will NOT be accepted.
14. For RINEX v3 files, currently, the accepted measurements from L1 frequency are C1P and L1P; C1W and L1W; C1C and L1C; and C1X and L1X.
15. For RINEX v3 files, currently, the accepted measurements from L2 frequency are C2P and L2P; C2W and L2W; C2C and L2C; C2D and L2D; and C2X and L2X.
16. If RINEX files are Hatanaka compressed, please use the lower case "d" for the filename extension.

AUSPOS File Submission

To submit your data to AUSPOS go to <https://gnss.ga.gov.au/auspos>

Checklist Material

This list is compiled from material © Commonwealth of Australia (Geoscience Australia) 2022.
This checklist is current as of 24/02/2022.

For the latest updates visit:

<https://www.ga.gov.au/scientific-topics/positioning-navigation/geodesy/auspos>