

## Modification history Pymagra

### Version 25.5.1

- 27/05/2025 Modify inversion of analytic signal, make half-width for search of maximum user defined, change size of measurement point markers
- 01/05/2025 When changing data file don't ask if only two files exist. Correct file names in Spector1D. Correct heights in synthetic model.
- 30/04/2025 Correct error when interpolating after having joined two data blocks

### Version 25.4.1

- 23/04/2025 Correction sign error in 2.5D inversion, add plotting of data point positions, change color scale for synthetic data.
- 22/04/2025 Correction of parameter variability vs depth calculation, save synthetic model results into folder "direct..."
- 21/04/2025 Correction for reading single-sensor Geometrics \*.stn data.
- 19/04/2025 Solved issue with closing floating windows
- 16/04/2025 After every iteration, the average parameters of the initial layers are set to zero or the minimum is set to near zero if positivity constraint is activated.

### Version 25.3.2

- 10/03/2025 Corrections gravity inversion

### Version 25.3.1

- 09/03/2025 Corrections 2.5D inversion with and without topography.
- 21/02/2025 Correction of mistake in interpolation if less than 3 points exist
- 19/02/2025 Corrections for aeromagnetic data format
- 15/02/2025 Integration of topography in inversion
- 03/02/2025 Plot misfit evolution for 2.5D inversion; corrections in 2.5D inversion if nans are present; choice to fill holes or not during interpolation.
- 16/01/2025 Correction of line choice when coordinate system in km: correction of apparent field declination when choosing E-W lines.
- 09/12/2024 Integration of positivity constraint for inversion
- 02/12/2024 Close windows when single lines were modified; correct error in diurnal corrections when data contain Nones;
- 20/11/2024 Restructure files for relative package import and for installation with pip, upload wheel to PyPi; Modify manual correspondingly. Change version numbering to yy.mm.version\_of\_month (yy = year, mm=month)