

New comments on the revised version

Lines 83-87: How is the pollution problem related to this paper?

Figure 2: draw a rectangle around the study area.

Line 140: change horizontal extension to surface area

Fig. 3a legend: correct: burried > buried; profil > profile; residential > residential; Fig. 3d correct: estabilishments > establishments.

Line 156: and beginning of the 1990s

Table 1: correct impLOSion > implosion (or collapse)

Line 229: "...which can help to understand the mechanism of sinkhole collapse and the progress of underground processes." Where is that shown later?

Line 231: winter scenes with snow cover were excluded from the analysis: how does this affect time series?

Line 277: "15 m x 15 m pixel size in the slant range" – should be in range and azimuth (or simply 15 m x 15 m pixel size).

Line 310 and Figure 4: Again, the heading angle is ignored (or at least explained).

Line 339: "on the left bank of the Tisza river" – left or right depend on where you come from. Use east, west, north, south.

Figures 5 and 6 show 5 points each, and figures 7 and 8 show their deformation series. It would be useful and insightful if the authors show the same points (or at least the closest ones) from the ascending and descending tracks. The way shown here makes it difficult to follow and to judge how consistent and reliable the results are. Also, the order of the points in the legend is arbitrary and different in the two figures, adding to the difficulty in following the results. This adds to a related question I asked in the previous review about comparison between the ascending and descending results.

Line 344: "along a cross-section directed almost north-south (cross-section A-B)" – please add the cross section to figure 5 to let the reader judge between actual points and interpolation intervals. (same for the E-W cross section). I also suggest (as I suggested before) that the plots need different markings for actual and interpolated points.

My specific comments 3 and 5 did not get an appropriate reply. Most of the questions in these comments were ignored. The graph showing the expected horizontal components is incorrect for a case where the central part is a void towards which all the material collapses. Thus, the question of the counterintuitive direction of horizontal movements still requires explanation.

Lines 356-358: these lines talk about the landslide in the north and are not related to the sentence before or after them. I also asked a question about the difference between the ascending and descending results of this area and do not see an answer in the text.

Lines 360-363: The readers should have the ability to judge for themselves if the steps and gradual parts of the cross sections are real or are due to lack in data points. See previous comment (line 344).

Lines 455-456: “The observed gradual subsidence also supports the assumption of pure elastic deformation” – this should be explained, as longer periods and gradual deformation support plastic (or viscous), rather than elastic deformation. In lines 582-584 the authors cite a paper that “confirmed that the main driving mechanism of sinkhole formation in the area is much more like the mechanism of the perfect suffosion of non-cohesive soils, rather than the sudden dropout of cohesive soils”. Therefore, I think that elastic behaviour is highly questionable here. There are two recent papers that address this problem which the authors should look at: Atzori et al., 2015, *Geophys. Res. Lett.*, 42, and Baer et al., 2018, *J. Geophys. Res. Earth Surf.* 123, 678–693.

Lines 510-530: please show the location and traces of the 4 models and the actual mines on the maps of Figures 13 and 14 and on the cross sections (Fig. 15). It can be useful to show the actual mines also on the deformation maps (Figs 5, 6).