

Interactive comment on “The abandoned surface mining sites in Czech Republic: Mapping and creating the database with GIS web application” by R. Pokorný and M. T. Peterková

Anonymous Referee #2

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The paper describes the creation of WMS database of abandoned quarries in Czech lands, based on digitization and GIS processing of so called Quarry inventories published between 1930s and 1950s. The overall focus and results of this work are extremely helpful for geoscientific and landscape ecological community as well as for practitioners in landscape and nature conservation. As far as I know there have been for a long time demand for such database and therefore I believe the paper deserves to be published. Before that, however, I have several suggestions that - according to my opinion - may help to make the paper more comprehensive to international readership. Most of these suggestions may be considered as minor, however:

Comments to theoretical setting and structure: Page 1 l. 16 - I would suggest to add

C1

few references to concepts of Geoheritage, Geomorphosites and the use of outcrops and quarries for geoscientific education as this is the major rationale for the research. Here are some of possible references: – López-García, J.A., Oyarzun, R., López Andrés, S., Manteca Martínez, J. I. (2011) Scientific, Educational, and Environmental Considerations Regarding Mine Sites and Geoheritage: A Perspective from SE Spain. Geoheritage – Panizza M. (2001) – Geomorphosites: concepts, methods and example of geomorphological survey. Chinese Science Bulletin 46, Suppl. Bd, 4-6 – Petersen, J. (2002) The role of roadcuts, quarries, and other artificial exposures in geomorphology education. Geomorphology 47: 289-301. – Reynard, E., Fontana, G., Kozlik, L., Scapozza, C. (2007) A method for assessing "scientific" and "additional" values of geomorphosites. Geographica Helvetica 62: 148-158

Page 2 l. 7 an - I would suggest to put the list of individual volumes of Quarry inventories in a table showing region, year and reference to the publication. In references, list of inventories can be separated from other literature.

Page 3 l. 9-15 - simplify. Much of the process is standard when working in GIS (e.g., it is not necessary to mention that you used Update referencing or other tools; same holds for “punctual layer”, “table containing columns” etc.). Rather draw a clear sketch of the process in several steps and point out to the problems that you faced during the database creation.

Page 4 Section 5 included important remarks of a discussion style, thus try to rename the section to Discussion and conclusions.

Last but not least, English needs revision as there are typos and inappropriate words at several places: Page 1 l. 13 (and again in Conclusion) - “wining” should be “mining” l. 17 - “...refuges of biological diversity” - should be “refugia increasing the biological diversity” l. 19 - “ranging” - should be “dating back” l. 23 and here after - “Republic of Czechoslovakia” - The correct name is “Czechoslovak Republic” as far as I know. l. 27 - Delete “cumulative” l. 28 - “still going on” - Better use “running”

C2

Page 2 l. 1 - "approximated quality, presumption of the deposit thickness...". Should read "estimated quality and prediction of thickness..." l. 13 and here after - Did you mean "framework" instead of "frame"? l. 14 - Use "was performed" instead of happened l. 26 and here after - Better use "Lists" instead of "Listings" (same in singular) l. 30 - "annual cut". Perhaps it would be better "annual volume"

Page 3 l. 2 - use "assume" instead of "presume" l. 3 - delete "the statism of" l. 19 - for localization and vectorization l. 19 - what are auctorial maps? l. 24 - "was generated" instead of "was being generated"

Page 4 l. 5 - what is "stand of objects"? Did you mean "state" or "condition"? l. 16 - "Most frequent" instead of "most occurred"; perhaps use present tense instead of past tense (are/were) as you refer to analysis of the resulting database l. 27 - "focused on" instead of "focused at"

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