

Interactive comment on “Developing open geographic data model and analysis tools for disaster management: landslide case” by A. C. Aydinoglu and M. S. Bilgin

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Anonymous Referee #2 (RC C2484) evaluated the content and originality of this paper in detail. Her technical comments, my response, and changes in the manuscript are explained below;

1. Abstract should give information about general result.

- A sentence was added to explain general result without exceeding abstract word limit.

Page 1 / Line 22: ... Open data models and analysis tools make effective activity management and data sharing possible. However, transforming data sets to the data

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exchange formats is laborious.

2. This article should give concise information about current situation of disaster management in Turkey.

- Section 2.4 was reorganized. And, section title is named as “Designing interoperable geographic data model of Turkey with landslide case” to increase the emphasis on the disaster management of Turkey. Current situation about disaster management was explained at the beginning of this section.

Page 7 / Line 8: Disaster management projects of Turkey have been initiated after devastating Marmara earthquake in 1999. Turkey Disaster Information System (TABİRS) project developed a database structure and GIS standards for disaster management. These standards were implemented for Istanbul in a project (Bilgi et al., 2008). Hazturk project based on Hazus developed an earthquake loss estimation for Turkey. Various projects more have been triggered, such as meteorological early warning system, seismic risk mitigation, emergency transportation network planning, and disaster information system projects especially focused on earthquake (Korkmaz, 2009). In 2009, the Prime Ministry of Turkey established Disaster and Emergency Management Presidency according to the law N.5902. It aims to coordinate all disaster events under a central administration structure and provincial administrations are responsible for managing disaster events (Gazette of Republic of Turkey, 2009). However, data management and coordination approach have not been determined yet to manage disaster types, actors, and disaster activities (Aydinoglu, et al., 2011; Erden 2012)...

3. The article should emphasize what is novel in this study and what is the article's contribution.

- Then, some explanations were added to different parts of this paper to emphasize why is this study and what is difference. Original conceptual model for integrated disaster management and the method to develop open data model and software tools were explained in detail. And it is the first case of Turkey National GIS (TUCBS) towards

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GDI vision.

Page 1/ Line 12 (Abstract): . . . This study with an original conceptual approach aims to develop interoperable geographic data model. . .

Page 3 / Line 15: . . . aims to determine an original conceptual model for harmonized and integrated disaster management. According to the conceptual model of disaster type-activity-task-data relations with landslide case, this paper offers a method to develop open/general data specifications based on the requirements of all disaster management activities at different phases and to understand how open data sets can be analysed with open software tools. As the first case of Turkey National GIS (TUCBS) infrastructure following GDI vision, the interoperable data model for disaster management (ADYS) that makes up-to-date exchange of geographic data sets from different sources possible was designed. . . .

Page 5 / Line 7: . . . actors and examining academic research, for landslide, 39 sub-activities of 15 activity group were defined at all disaster management phases (Aydinoglu, et al., 2012). As well as landslide hazard and vulnerability analysis studied often at mitigation phase, the activities at preparedness, response, and recovery phases were analysed.

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