

Common QUESTIONS and ANSWERS for the LANDSLIDE WEBBASED TOOL

1. How can the developed LANDSLIDE model and software be transmitted into other areas?

The physical models used in the LANDSLIDE project does not depend on the particular test areas taken into account, therefore, the LANDSLIDE model and software can also be applied to other geographical zones when the adaptation procedure is performed, see Training Platform, Training Module 1, LANDSLIDE Model presentation, section 1.4 Model adaptation.

<http://elearning-landslides.net/course/view.php?id=2>

2. How can various types of maps be seen and printed?

From the User guide you can understand how to see different types of maps and from the „Print” button you can print the desired maps. See Training Platform, Training Module 2, LANDSLIDE user guide.

<http://elearning-landslides.net/course/view.php?id=2>

3. In what resolution can the daily situation be seen?

The best scale to see the hazard map for the daily situation is 1:25,000

4. What type of weather data are needed for the evaluation of landslide hazards?

The weather forecasts necessary for LANDSLIDE software are:

- the precipitation rate expressed in [mm]
- the net solar radiation expressed in [W/m^2]
- the average temperature expressed in [C°]
- the wind velocity expressed in [m/s]
- the rate of humidity expressed in %.

5. What are the GIS applications in the software?

Maybe you mean what are the GIS functions in the software, because the whole software is one GIS application. The GIS functions are:

- zoom in on the map;
- zoom out on the map;
- zoom to all features on the map;
- zoom the specific layer, selected from the legend;
- pan on the map;
- identify features on the map;
- measure distance/area on the map;
- select features on the map;
- zoom to selected features on the map;
- Clear selected features on the map;
- Print from the map;
- Export from the map;
- See defferent weather sensors on the map.

All of the features and how to use them are described in the LANDSLIDE user guide.

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6. How many layers in a GIS application can be examined?

Total number of layers in the Landslide GIS application is 13.

7. Can only registered users use the data?

Hazard map data is visible for all users but only registered users can download this data.

8. What is the percentage of accurate predictions for alleged landslide events?

The exact percentage of accurate prediction cannot be computed: in order to estimate the predictive efficiency of LANDSLIDE, we must continue to test the software. The LANDSLIDE software is based on physical models allowing a rigorous treatment of the weather conditions and of the geomorphological features of the territory; this is a fundamental prerequisite for accurate hazard mapping, however we must take into account a margin of error due to the approximation of the geological and geomorphological parameters of the studied areas.

9. After completion of the project, will the use of data be free of charge?

Yes.

10. How can one access different sections and formats of the database with historical information for each user?

Users can access all of the historical data information from the GIS application. From the LANDSLIDE user guide you can understand how to use it.

<http://elearning-landslides.net/course/view.php?id=2>

11. Where can we find some information about the model?

About the GIS application you can find all of the information in the LANDSLIDE user guide, see Training Module 2. Training Module 1 contains material about the LANDSLIDE model and the development process: in particular, it describes the dynamics of the soil moisture (defined by Richard's equation) and the evaluation of Safety Factor (defined by the infinity slope model).

<http://elearning-landslides.net/course/view.php?id=2>

12. Who can get the full access to the software?

For the moment only the project partners have full access because for the time being the software has been adapted to these territories.

13. How can one get the full access to the software?

At the moment it is not possible, as the software gives full access only to the territories for which the software is adapted and applied.

14. How frequently is the meteorological data updated?

Meteorological data is updated every three hours.

15. How frequently are the risk map and the depth map updated?

Risk map and hazard map are updated every 6 hours so you have 4 maps every 24 hours.

16. How can one open the risk map going back to more than 4 days?

All of this information is described in the LANDSLIDE user guide.

<http://elearning-landslides.net/course/view.php?id=2>

17. How can one open the depth map going back to more than 4 days?

All of this information is described in the LANDSLIDE user guide.

<http://elearning-landslides.net/course/view.php?id=2>

18. Is there a possibility to remove one of the selected points, rather than the whole thing, when using *the Distance Measurement* function?

No.

19. Where does the identity data derive from?

It depends on the data that you are identifying. If you identify data from roads, railway rivers, this data comes from open source GIS data. If you identify data from landslide risk zones and weather stations this data is computed from us for the Landslide GIS application.

20. Is the identified data being updated?

No.

21. Can you save the meteorological data from a selected period of time on a computer in an editable form?

No.

22. What is the coordinate system used in the LANDSLIDE web application?

The coordinate system used in the LANDSLIDE web application is WGS 84.

23. Is it possible to see a topographic layer with the hazard and depth map?

Yes, but now a topographic layer is not present.

24. Which is the best way to use the .asc? File downloaded?

The best way to use the .asc file is with another personal layers in Quantum GIS software for example.

25. How large is the bi-dimensional grid used for the calculation of the safety factor?

It depends on the zone:

- For Smolyan is 0.000056592709 (in wgs84);
- For Panagopoula is 0.000053166266 (in WGS84);
- For Kozy is 0.000278072213 (in WGS84);
- For Ancona is 0.000115650000 (in WGS84).

27. Is the data from the weather stations updated every day? Therefore, is it true that when I use the software, the last meteorological data is referred to yesterday?

Yes, you are right.

28. I'd like to sign up for download maps: how can I do this?

You must send an email to landslide.info@gmail.com with the reason of the sign up request.

29. Is it possible to download the charts of meteorological data trend?

No.

30. What does the layer "Landslide risk zone" represent?

Landslide risk zone layer represent vector of the concrete landslide zone weather it would be Kozy, Ancona, Smolyan or Panagopoula.

31. With the „statistics" command the use of the data of the hazard map for different intervals of time (seasonal, weekly) would be interesting, would it be possible?

At this stage it is not possible. If you want to do this, we need to further develop the GIS application.

32. Will the e-platform remain active after the end of the LANDSLIDE project? What is the life period of the web-platform?

Yes, after the end of Landslide project the e-platform will remain active for 3 years (at least until end December 2019).

33. Could the platform be adapted in other mathematical algorithms in order to predict different potential ground movements?

Yes, it could. In particular, the physical model used in LANDSLIDE for the estimation of the water infiltration can be used also for the study of the water flux in saturated soil. Moreover, this model is at the base of the study of the transmission and transport of pollutants into groundwater.

34. Could more weather stations (real time or not), located around a case study area, be added in order to get a more detailed rainfall distribution?

Yes, the addition of weather stations around the case study area is relevant for the right estimate of the rainfall distribution.

35. Are there some specific weights for each parameter (depth, soil type etc.) that were used by the model?

No because the LANDSLIDE software is a physical model, so the depth, the soil, the type, etc. are themselves parameters.

36. In which way is the rainfall intensity computed? Does it refer to mm per day? It could be useful to express it in mm per hour in order to have more detailed real time information.

Rainfall intensity is estimated in mm per day but it could be very useful to estimate it in hours for a better accuracy.

For further advice please consult the website sections were the LANDSLIDE tools are available: <http://landslideproject.eu/index.php/tools>