

Introduction to Exposure Analysis in IFTDSS

28 May 2020 Webinar Q & A

Question: Hi, how can the exposure analysis apply to home-hardening efforts occurring in the WUI, for example, possibly with Home Ignition Zone assessment, or other mitigation and vulnerability assessments used across the country? Thanks

Answer: Exposure Analysis quantifies the Landscape Burn Probability (LBP) model outputs where they overlap with Highly Valued Resources or Assets (HVRAs). For WUI and homes, those could be added as a HVRA. The resulting outputs could aid in HVRA evaluation by enabling the comparison of burn probability, conditional flame length, and hazard across your analysis area.

Question: Hello, is it possible to use weather data from NOAA instead of Raw data from local weather stations? Thank you

Answer: Hi Souad, you can use any data source you would like for the fuel moisture/weather inputs. Those are something you input to the application.

Question: Hi, on your webpage you describe that burn probability is calculated as the ratio of ignited over burned. This would give you a real burn probability value that is always higher than or equal to zero. However, the result files show a lot of negative values for burn probability that only make sense if they are rescaled to percent of maximum which is done in the map viewer or in GIS. What do the original burn probability values as provided by the model really represent. It cannot just be the ratio as described on the IFTDSS webpage because that would never be negative, right?

Answer: Hi Andres, I am assuming you are referring to data that you have downloaded from IFTDSS. The -1 values indicate it was a non-burnable fuel model. Any cell that is burnable will have a BP value between 0 and 1. *[Note: There was some follow up on this topic, with a member of the IFTDSS Team contacting the attendee]*

Question: What chance is there to get the scale smaller than unit?

Answer: Hi Tim, IFTDSS is designed to work with any landscape you can generate in IFTDSS. There is no small end limit, there is a large end limit of 3.5 million acres (plus the buffer that is automatically added).

Question: Thank you it was very interesting. I wonder If it is possible to have another webinar or a step by step workshop about wildfire simulation using the various available programs?

Answer: *[added post-webinar]* Thank you! Once Quantitative Wildfire Risk Assessment is released the Team will be scheduling another IFTDSS webinar. For other IFTDSS features, such as the Landscape Burn Probability or Mapping Values, you may find the following useful:

- Recorded webinars: https://iftdss.firenet.gov/landing_page/webinars.html
- IFTDSS Help Center: <https://iftdss.firenet.gov/firenetHelp/help/pageHelp/content/home.htm>