



Highest Resolution Available

1000 x better

Unlike any global hazard exposure model available today

Accurately estimates population, capital, and key infrastructure exposure for multiple hazards, as well as specific humanitarian needs down to a scale of 30 x 30 meters.



WHAT'S NEW IN AIM 3.0



Finest Resolution Exposure estimates

Estimates population and capital exposure with precision down to a 30 x 30 meter area. Uses multiple data sources to perform estimates including Facebook, WorldPop, Global Exposure (GAR), and more.



Estimates by sector / age demographic

Provides exposure estimates with breakdowns by sector and age group. Includes estimates for schools and hospitals. Also offers age breakdowns in 5-year increments (0-5, 6-10, 11-15...) and for vulnerable populations.



Global coverage for any type of hazard

Allows for the estimation of any hazard, anywhere in the world that has an associated polygon (e.g. hazard zones such as landslide susceptibility, flood inundation, etc.)

Earthquake M7.5 - 70km N of Sulawesi, Indonesia
09SEP2018 1002UTC



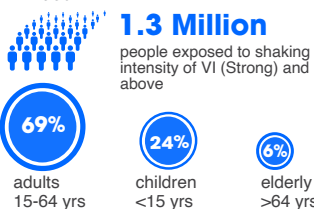
I (Not Felt)	V (Moderate)	VIII (Severe)
II-III (Weak)	VI (Strong)	IX (Violent)
IV (Light)	VII (Very Strong)	X+ (Extreme)

Sulawesi Tengah

Sulawesi Barat

Indonesia

MAXIMUM POTENTIAL POPULATION EXPOSURE



TOTAL CAPITAL EXPOSURE



BREAKDOWN OF POTENTIAL NEEDS



Can be easily combined with other data such as SPHERE guidelines to estimate key humanitarian assistance needs and other information.



Can be used in data-poor environments anywhere in the world where access to information is very limited.

PDC's All-hazard Impact Model (AIM) is a tool that helps decision makers improve disaster planning, preparedness, and response. Using advanced algorithms and superior scientific data sources, AIM helps estimate the exposure of populations, assets, and infrastructure to natural hazards. AIM's capital exposure capabilities also help determine the replacement value of buildings and infrastructure exposed.

QUESTIONS AIM CAN HELP YOU ANSWER:

- + How many people might be impacted by a disaster?
- + What is the demographic makeup of the exposed population (e.g. children, elderly, adults)?
- + What is the value, or replacement cost, of exposed capital (e.g. cost to replace all buildings and infrastructure)?
- + Which sectors of society are most exposed?



How does the AIM model work?

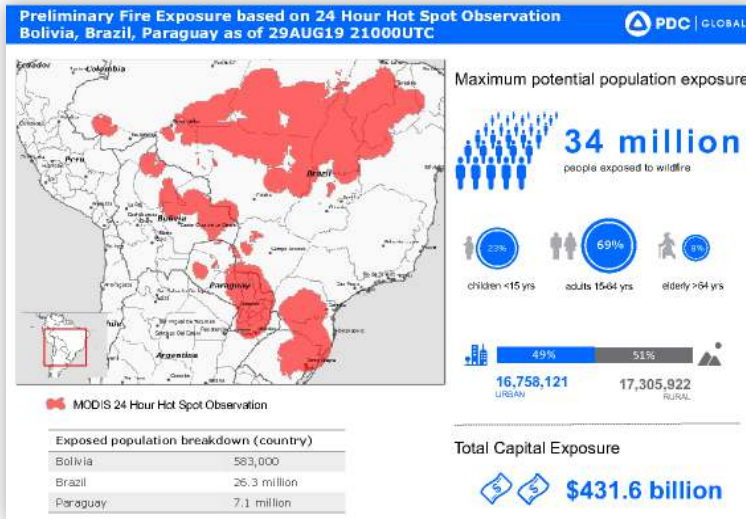
Using scientifically verified global data sources, AIM analyzes population distribution across residential, commercial, industrial, and other sectors. AIM provides more than 20 attributes that breakdown exposure by demographics and sector for any location around the globe. Demographic breakdowns include the number of vulnerable people and household exposure.

It offers fine resolution exposure information at a global scale of 30 x 30 meters supporting national and subnational estimates. AIM is a multi-hazard model, allowing for the estimation of any hazard.

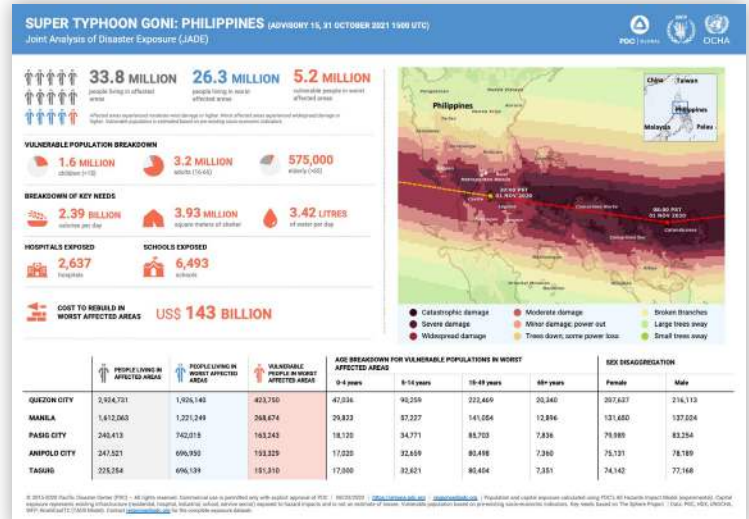


EXAMPLE USE CASES FOR AIM

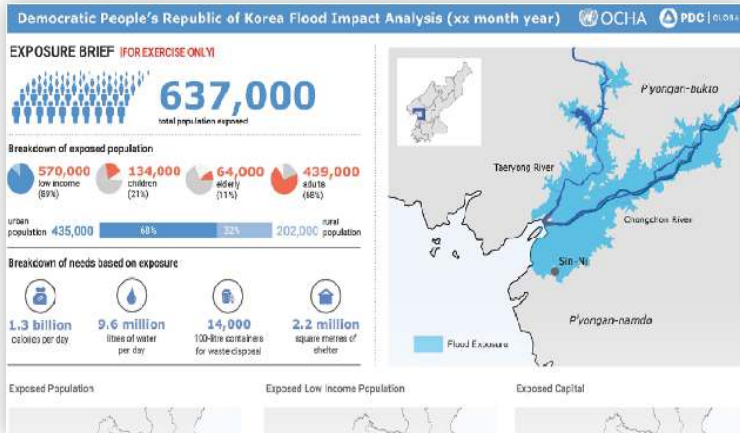
Bolivia, Brazil, Paraguay Wildfires



Philippines: Super Typhoon Goni



Democratic People's Republic of Korea: Flood Exercise



PDC developed a situational awareness product that was derived by combining its AIM exposure model with vulnerability data provided by United Nations OCHA and World Food Programme (WFP) to help better estimate exposure, impacts, and needs and to aid OCHA's response operations on the ground.

Working together with United Nations Office for the Coordination of Humanitarian Affairs (OCHA), PDC used its AIM model to assist with a flood exercise scenario concentrated on the Democratic People's Republic of Korea—a traditionally data-poor environment.