



Section : 4. Volcanic Ash

Module : 4.3. Volcanic Ash Reports

i Understanding reports generated by InaSAFE Volcanic Ash Realtime

“In this module we will explore the reports produced by ash realtime.”

InaSAFE Ash Realtime will generate a report for each ash model uploaded to InaSAFE realtime. The report is a PDF file that can be downloaded and printed / shared easily. The report is generated using QGIS and InaSAFE logic to calculate things like estimates of the number of affected population, landcover and places and of course a map illustrating the event. The platform also generates some GIS datasets that you can download and use on your own computer.

Volcanic Ash Impact

Volcano: Tangkubanparahu, 12-May-2017 13:22:00
 Position: 107°35' 0.00" E, 6°46' 12.00" S; Eruption Column Height (a.s.l.) - 10000 m
 Province: Jawa Barat
 Alert Level: Normal

Elapsed time since event: 0 hour(s) and 4 minute(s)

Fallout Level	Very Low	Low	Moderate	High	Very High
People Affected (x1000)	1,300	140	10	10	10
Potential Impact	Impact on health (respiratory, livestock, and contamination of water supply)	Damage to transportation routes (e.g. airports, roads, railways); damage to critical infrastructure (e.g. electricity supply); damage to more vulnerable agricultural crops (e.g. rice fields)	Damage to less vulnerable agricultural crops (e.g. tea plantations) and destruction of more vulnerable crops; destruction of critical infrastructure; cosmetic (aesthetic) damage to buildings	Dry loading on buildings causing structural damage but not collapse; wet loading on buildings (e.g. ash loading = heavy rainfalls) causing structural collapse	Dry loading on buildings causing structural collapse
Ash Thickness Range (cm)	>0.01 - 0.1	>0.1 - 2	>2 - 5	>5 - 10	>10

Nearby places

Name	People (x1000)/ Fallout Airport affected	Level
Purwokerto	400	Very Low

Land Cover Impact

Land Cover Type	Area affected (km ²)
Plantation	631
Forest	476
Rice Field	381
Water Supply	38
Settlement	127

Disclaimer

The impact estimation is automatically generated and only takes into account the population, cities and land cover affected by different levels of volcanic ash fallout at surface level. The estimate is based on volcanic ash fallout data from Badan Geologi, population count data derived by Dimonevolution from worldpop.org.uk, place information and land cover classification data provided by Indonesian Geospatial Portal at <http://portal.ina-sf.or.id> and software developed by INaSAFE. Limitation in the estimates of surface fallout, population and place names (errors may result in a significant misrepresentation of the on-the-ground situation in the figures shown here. Consequently, decisions should not be made solely on the information presented here and should always be verified by ground truthing and other reliable information sources.

This report was created using InaSAFE version 3.5.4. Visit <http://inasafe.org> for more information.

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You try:

Goal: To review a flood event report.

Look at the provided report “15-ash-example-report.pdf” and answer the questions in the table, right.

Check your results:

Swap your list with a neighbouring group and see if they had the same results as you.

Name	Expectation
Why is Bandung not listed in the nearby places table?	
What is the minimum ash thickness for fallout level ‘very high’?	

What is the unit of measurement for land cover impact?	
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More about

As well as producing a PDF report, InaSAFE realtime also publishes the hazard and impact layers produced in the analysis as GIS datasets. In a later session, we will explore these data sets in more detail – and look at how you can produce your own reports using them.

Because there is no standardised identifier for ash events, these reports are not yet pushed to InaWARE. When this issue has been resolved we would like to update the platform to automatically publish these reports to InaWARE.

Check your knowledge:

1. Please comment (in the space below) on the report in terms of clarity, usefulness and consistency with other reports produced by realtime::

Further reading:

- Main repository for InaSAFE Realtime Source Code: <https://github.com/inasafe/inasafe-django>
- InaSAFE Issue tracker containing detailed design notes during creation of the ash reporting functionality: <https://github.com/inasafe/inasafe/issues/2491>

Download the sample data for the lesson from http://changelog.kartoza.com/media/images/lesson/worksheet/external_data/d38eff34b4586f9e018b8c083bc45d22921d4820.pdf.