This map illustrates the potentially affected areas by Lahar and Pyroclastic density currents (PDCs) including geological information of Mount Semeru, Java province, Indonesia as detected by satellite images acquired after the eruption of the Mount Semeru on 4 Dec 2021. UNIAT-UNOSAT analysis used Pleiades images acquired on 10 & 11 Dec 2021 to estimate the affected area by Lahar and Pyroclastic density currents. Within the analyzed area, about 3,220 ha appear to be affected.

Based on Worldpop population data and affected area by Lahar and pyroclastic density currents, about 8,400 people are potentially exposed or living close to pyroclastic density area.

In addition, based on Esri 2020 Land Cover, potentially affected in tree area ~2,100ha, shrub/hub area ~400 ha, cropped ~165 ha, built area ~140 ha.

Important note: Pyroclastic density currents (PDCs) are perhaps the most hazardous events to local areas during explosive volcanic eruptions.

This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to the United Nations Satellite Centre (UNOSAT).

**Legend**
- Village
- City
- Primary road
- Secondary road
- Other road
- District boundary
- Potentially affected area by pyroclastic density currents
- Damaged houses
- Potentially affected built area

**Map scale for A3**: 1:65,000

**Data credits**
- Land cover: PAIOP S2A 2021
- Population: WorldPop 2020
- 4 Dec 2021, INSET 1 and 2 published 15/12/2021 V1.