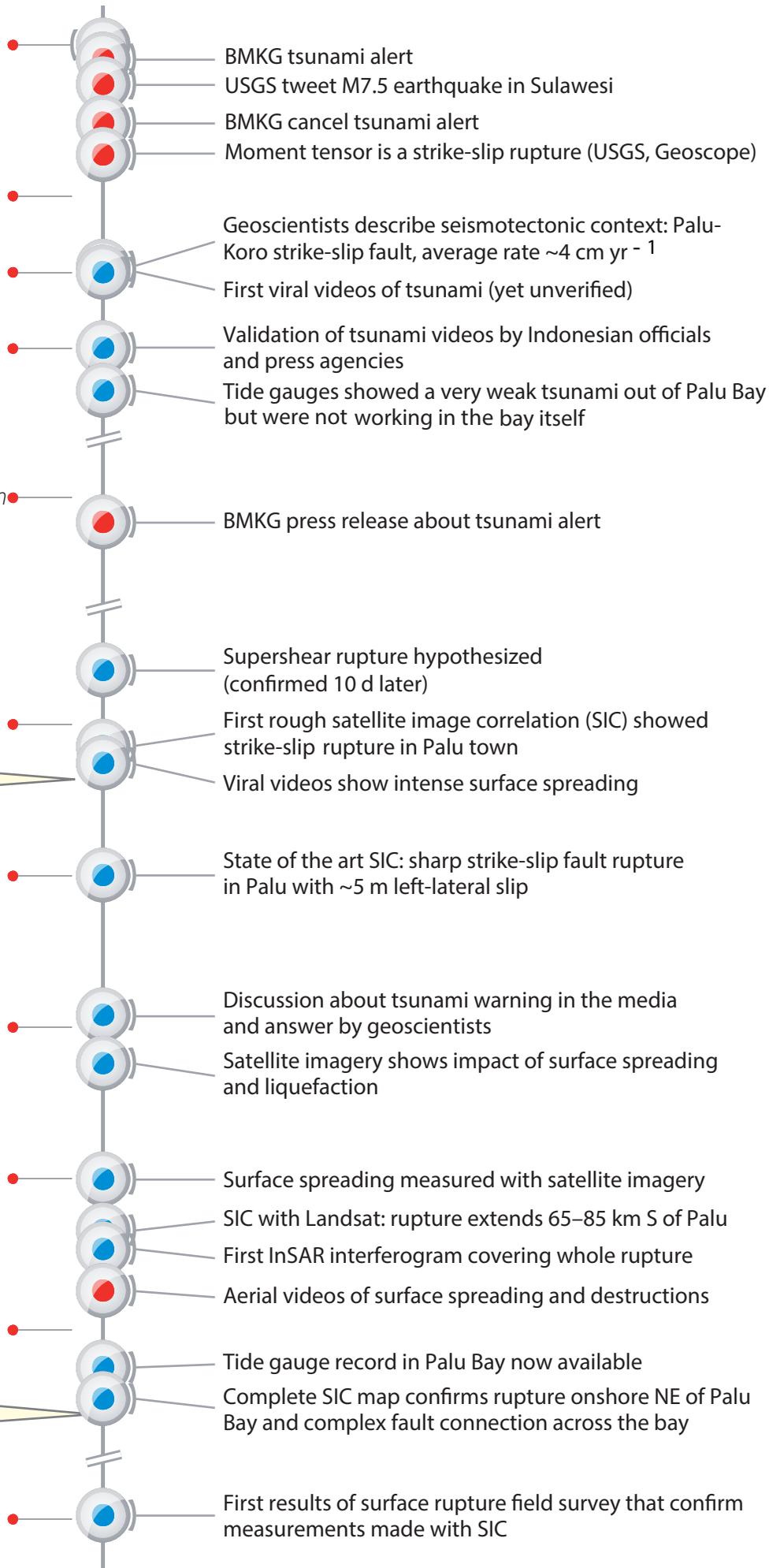


28 Sept 2018 - 10:02 UTC
Main Shock Mw7.5



What we know ~1 d after the earthquake

- Earthquake on Palu-Koro Fault system.
- Sharp strike-slip rupture in Palu town.
- Rupture enters bay N of Palu.
- Aftershocks zone $\sim 150 \text{ km}$ in N-S direction, main shock at its N tip.
- Tsunami run-up of several metres in Palu Bay (and not out of the bay).
- Intense surface spreading and liquefaction.

1 d ~24h

What we know ~5 d after the earthquake

- Earthquake ruptured two strands of Palu-Koro Fault system for total length of 150km. It started at the hypocentre and propagated unilaterally southward, likely at supershear rate.
- Sharp surface rupture S of Palu Bay with sinistral offsets of $\sim 5 \text{ m}$. Northward, it crosses Palu town, enters the bay to the N, and then steps eastward to continue inland.
- Massive surface spreading now well documented from satellite imagery.
- Tsunami waves hit Palu Bay coast a few minutes after earthquake. Source of the tsunami still unknown. Tsunami warning was very difficult in the case of the Palu earthquake.

5 d

15 d