Dear Editor,

Once again, we would like to thank you for your decision and your time. We made the corrections required by the reviewer. All changes are highlighted in blue in the manuscript.

Dear Referee 3,

We would like to thank you for the time spent on our manuscript. We highly appreciate your constructive comments and suggestions. You also pointed out the clarifications required to improve the original manuscript. We modified the manuscript according to your recommendations. Please find our answers and corrections below (all changes are highlighted in blue in the manuscript).

- **Specific comments**

Reviewer comments	Our answers	Corrected manuscript
P1,L23, change "of both tsunamis" to "of these two tsunamis"	Corrected	Line 23: … the hydrodynamic force of these two tsunamis for the first time.
P1,L25, change "for each event" to "for both events"	Corrected	Line 25: …tsunami damage for both events.
P1,L41-42: the sentence "These tsunamis are likely to cause greater damage due to surrounding areas affected by prior damage due to ground shaking and/or liquefaction" requires rephrasing, please try: "These tsunamis are likely to cause greater destruction as they can follow prior damaging earthquake ground shaking and/or liquefaction"	We thank the reviewer for the suggestion and corrected it.	Line 41-42: These tsunamis are likely to cause greater destruction as they can follow prior damaging earthquake ground shaking and/or liquefaction (Sumer et al., 2007; Sutikno, 2016).
P2, L43: the sentence "The tsunamis also tend to have longer wave periods attacking the coast" is unclear as all tsunamis cause long waves.	Corrected	Line 43: Earthquake-generated tsunamis also tend to have longer wave periods attacking the coast than non-seismic ones.
P2, L46: add "a" before "strong".	Corrected	Line 46: … a strong ground shaking…
P2,L47: In the sentence "This megathrust earthquake was the second largest ever recorded (wave period ranging from 20 to 50 min) (Løvholt et al., 2006)" the authors recall that the Indian Ocean events was the 2nd largest recorded earthquake while they refer to the tsunami periods to support that. This sentence needs rephrasing because tsunami metrics cannot be used in such a way to infer the earthquake intensity.	We agreed with the reviewer and deleted the information related to the wave period.	Line 47: This megathrust earthquake was the second largest ever recorded ~~(wave period ranging from 20 to 50 min)~~ (Løvholt et al., 2006) and caused the deadliest tsunami in the world.
P2,L48: add "of" before "Asian"	Corrected	Line 48: …a dozen of Asian and African…
P2,L51: replace "one" by "tsunami waves"	Corrected	Line 51: …can also initiate tsunami waves…
P2,L53: change "a short" to "a relatively short"	Corrected	Line 53: …a relatively short wave period tsunami…
P2,L59: change "loss property" to "loss to property" and cite Omira et al. 2019 paper on the field Palu post-tsunami field survey.	Corrected	Line 59: …and considerable loss to property (Association of Southeast Asian Nations (ASEAN)-Coordinating Centre for Humanitarian Assistance on disaster, 2018; Omira et al., 2019).
P2,L60-61: the sentence "The Sulawesi earthquake (Mw= 7.5) occurred along the Palu-Koro strike-	We thank the reviewer for the clarification and corrected it.	Line 60-61: The Sulawesi earthquake (M_w= 7.5) occurred near the Palu-Koro strike-slip fault, 50 km northwest of

slip fault, 50 km northwest of Palu-Bay" needs revision as the earthquake was initiated outside the Palu-Koro fault and only partially ruptured it (see Socquet et al. 2019 papers among others).		Palu-Bay (Fig. 1d) (Socquet et al., 2019).
P2,L65-67: Also the sentence "So far, the main hypothesis is that the horizontal displacement of the fault triggered a massive submarine landslide inside Palu-Bay, responsible for the main tsunami." needs substantial revision as there are, in my opinion, more plausible hypotheses of the tsunami generation (coastal landslides, horizontal coseismic deformation, combination of coastal landslides and coseismic deformation …) than "a massive submarine landslide" that should be easily identifiable from the post-event bathymetric survey (Frederik et al., 2019)	We thank the reviewer for pointing this out and rephrased it.	Line 65: Some studies suggested that submarine landslides are responsible for the main tsunami. Moreover, a dozen of coastal landslides were reported during field surveys and likely contributed to amplify tsunami waves (Arikawa et al., 2018; Heidarzadeh et al., 2019; Muhari et al., 2018; Omira et al., 2019; Pakoksung et al., 2019). However, according to Ulrich et al. (2019), those subaerial/submarine landslides may not be the only tsunami source as the Sulawesi earthquake rupture may have also induced a large portion of the tsunami waves.
:P2,L68: the reference to Heidarzadeh et al. 2018 is not adequate here.	Corrected	Line 68: (Arikawa et al., 2018; ~~Heidarzadeh et al., 2019~~; Muhari et al., 2018; Omira et al., 2019; Pakoksung et al., 2019).
P2,L71: omit "new" before "measure", "recently developed/proposed" could fit better?	Corrected	Line 71: …is a measure recently proposed to estimate…
P3,L93: replace "…..poorly understood" by "…., remaining less understood".	Corrected	Line 93: …uncommon events remaining less understood…
P3,L97: change "with the curves of the 2004 IOT" to "to those derived for the 2004 IOT"	Corrected	Line 97: …tsunamis to those derived for the 2004 IOT…
P4,L108: start a new sentence after "events": These databases ….	Corrected	Line 108: …by these events. These databases…
P5,Section 2.1 and Table 1: It is not clear to me how two different damage states "Minor" and "Moderate" can be gathered in one unique "Ds1". According to Suppasri et al.'s 2019 classification the "Minor damage" corresponds to no significant structural or non-structural damage with possibility of building use after minor floor and wall clean up, while the "moderate damage" refers to non-structural damage with use after moderate repairs, which indicates the large difference between the two damage states. The authors must provide plausible justification of such a merging.	We agreed with the reviewer that there is a difference between minor and moderate damage states. In this study, we simply gather them to find the best harmonization with the two other damage scales used for each tsunami event. According to Suppasri et al. (2020), "minor damage" represents damages found on windows and doors, no damage on wall and on structural component, and "moderate damage" represents one side wall damages, no damage on column and beam. Considering minor damage equivalent to no damage is not consistent so we believe that minor and moderate damage states are equivalent to "partial damage repairable" mentioned by Paulik et al. (2019) and "damage to secondary members" proposed by Ruangrassamee et al. (2006).	/

P7, Equation 7: the authors presented the hydrodynamic (drag) force and stated that the terms u stands for the maximum current velocity, and D for the maximum inundation depth. However in the drag force the term to be considered is the maximum of the combination u^2*D representing the momentum flux per unit mass, which is different from (u(max))^2*D(max) used by the authors (See Yeh 2007-Design Tsunami Forces for Onshore Structures). This difference can lead to incorrect results and the authors must provide explanation on the way they used the tsunami hydrodynamic force.	We are very sorry for this mistake and corrected it.	Line 176-177: …u stands for the current velocity (m/s), and D is the inundation depth (m).
P13, Table 3: It is unclear how the volumes of the landslides are estimated.	We are sorry. We added more explanations. As we do not have the soil property, we used the trial and error method. Based on this method and the topography/bathymetry data provided by BIG after the tsunami, we identified the best landslides parameters (we recreated the landslides slopes with Eqs. 4, 5 and 6).	Line 240: …From the trial and error method and the topographic/bathymetric data provided by the Agency for Geo-spatial Information (BIG), Indonesia, we determined the soil property and achieved the volume of the landslides (Table 3). In Figure 7…
Results: For both Anak-Krakatau and Palu tsunamis, the authors are asked to present not only the inundation maps but also the results of tsunami generation depicting snapshots of landslide downslope dynamics and generated waves.	We added the results of tsunami generation depicting snapshots of landslide downslope dynamics and generated waves, as suggested by the reviewer.	Please, see the added Figs. B1-B2 and C1-C2 and the changes in Sections 3.2.2 and 3.2.3.
Figure 1: Add the geographical coordinates for all the maps. No need for numbers 1, 2 and 3 in Fig.a instead replace by (b), (c) and (d), respectively. Change the colour of "Sunda Trench" to be easily readable. The orange rectangle in Fig. c doesn't show "Anak Krakatau" but the 4 Islands formed after the 1883 Krakatau eruption. Add a reference to the 2018 Palu earthquake epicentral location.	We thank the reviewer for the suggestions and corrected it.	Please, see the revised Fig. 1.
Figure 2: The same as for Figure 1: Add the geographical coordinates for all the maps. No need for numbers 1, 2 and 3 as they refer to Figs. (b), (c) and (d), respectively.	Numbers 1-3 do not refer to Figs. b-d. We are sorry for the confusion. It refers to the 3 computational grids used for the simulation in Sunda Strait area.	Please, see the revised Fig. 2.
Figure 5: Add the geographical coordinates for all the maps.	Corrected	Please, see the revised Fig. 5.
Figure 6: The same as for Figure 5	Corrected	Please, see the revised Fig. 6.