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Corrigendum: Sea surface microlayer in a changing ocean — A perspective, with refocused context

Collections: **Knowledge Domain:** Ocean Science, **Special Feature:** The Sea Surface Microlayer - Linking the Ocean and Atmosphere

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In the published article, the opening paragraphs and portions of the final paragraph of the section entitled "Air-Sea momentum transfer and ocean waves" are identical to the opening paragraphs and parts of the Abstract of a paper by Mueller and Veron (2009). The text in question had been taken from research proposals that co-author Zappa wrote as PI with Veron and another colleague as co-PIs. Zappa did not realize that Veron had included the exact text from Mueller and Veron (2009) in these proposals. The authors apologize for the unintended error of reusing this text without attribution, and regret not having been more thorough in checking the final text of the *Elementa* article.

The following paragraph replaces the previous text from the opening paragraphs in question. It provides original and more focused wording for the opening context of the section in question, cites Mueller and Veron (2009) and other relevant work, and does not otherwise alter any aspects of the perspective presented on the sea surface microlayer.

"For decades, open-ocean investigations have sought to determine directly the magnitude of the wind stress—the downward transport of forward momentum—for given wind speeds. This endeavor is an important one; however, questions remain as to how turbulent fluctuations used to compute the Reynolds stress at 10 m above the sea surface will translate into momentum uptake by the near-surface layer of the ocean. The partitioning between viscous stress (tangential) and form drag (normal) components in the near-surface layer of the ocean is especially important if one seeks to describe air–sea interaction and wind–wave coupling accurately (Kudryavtsev and Makin, 2007; Mueller and Veron, 2009; Romero and Melville, 2010). This topic has been studied extensively in the laboratory (Veron et al., 2007; Grare et al., 2013; Buckley and Veron, 2017), and large-eddy simulation provides a numerical modeling framework for investigating this partition (Sullivan et al., 2018). Also important to recognize is that the surface wave field strongly influences the momentum flux (wind stress) and its direction (Grachev et al., 2003)."

Likewise, the following text replaces the previous portions of the final paragraph of the same section in question.

"Because these specific components of the total air–sea surface stress both directly impact and are impacted by ocean surface waves, the individual components of the stress balance vary as the sea surface is approached. For instance, Veron et al. (2007) demonstrated in laboratory measurements that the surface viscous stress was reduced in the presence of air-flow separation due to wave breaking. As a result, modeling of the air–sea surface fluxes by Mueller and Veron (2009, 2010) includes this effect of air-flow separation as well as wave effects on the other components of stress. The expression for the stress is inherently nonlinear with the combination of wave effects and replicates the behavior of the drag coefficient with increasing wind speed."

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