Momentum flux across breaking air-water interface

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It is important to measure the momentum flux across the air-water interface in the droplet- and bubble-laden turbulent flow at extremely high-wind speeds. Generally, the momentum flux is measured by a profile method, eddy correlation method, or momentum budget (balance) method at normal wind speeds. We assessed the usage of three measurement method at extremely high wind speeds in three wind-wave tanks, Kyoto, Kindai, and Kyushu Universities, JAPAN. Here, the Kyoto tank is 15 m long, 0.8 m wide, 0.8 m high and the maximum wind speed is 68 m/s. The Kyushu tank is 64 m long and the max. speed is 40 m/s. Moreover, we will show the preliminary results for the effects of the fetch on the momentum flux.