

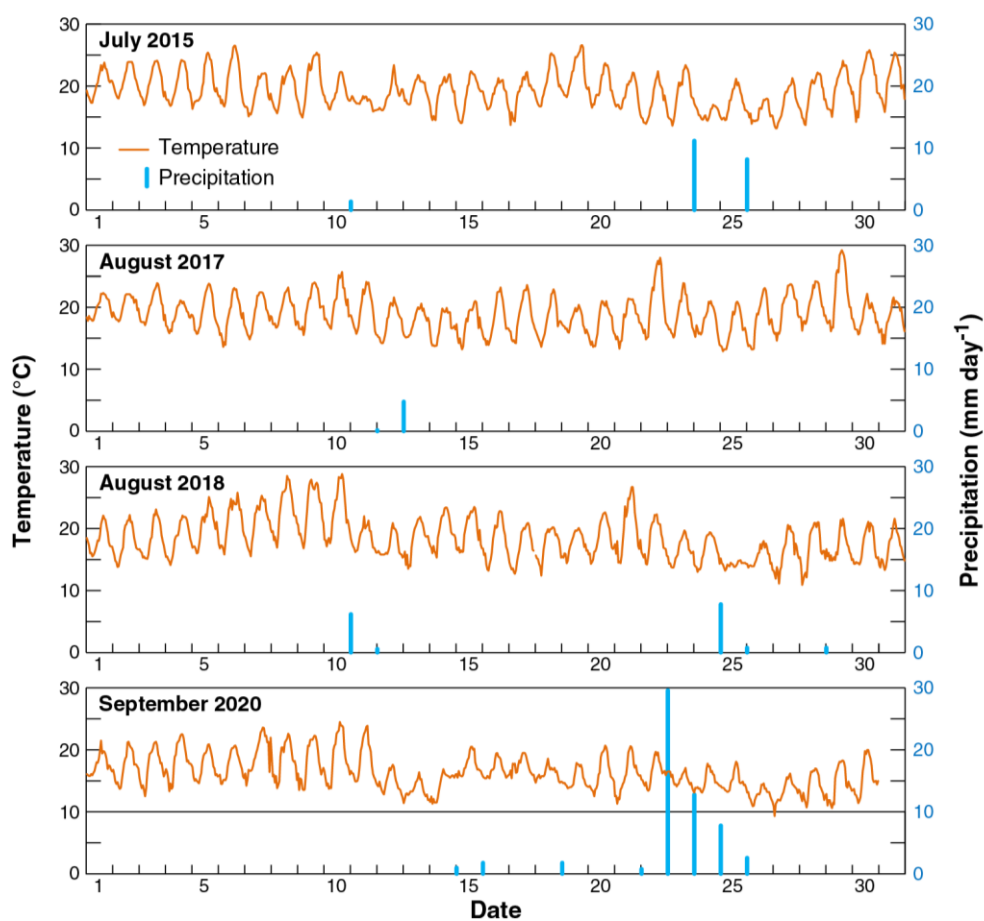
Supplement of

## Biogeochemical and biophysical responses to episodes of wildfire smoke from natural ecosystems in southwestern British Columbia, Canada

Sung-Ching Lee et al.

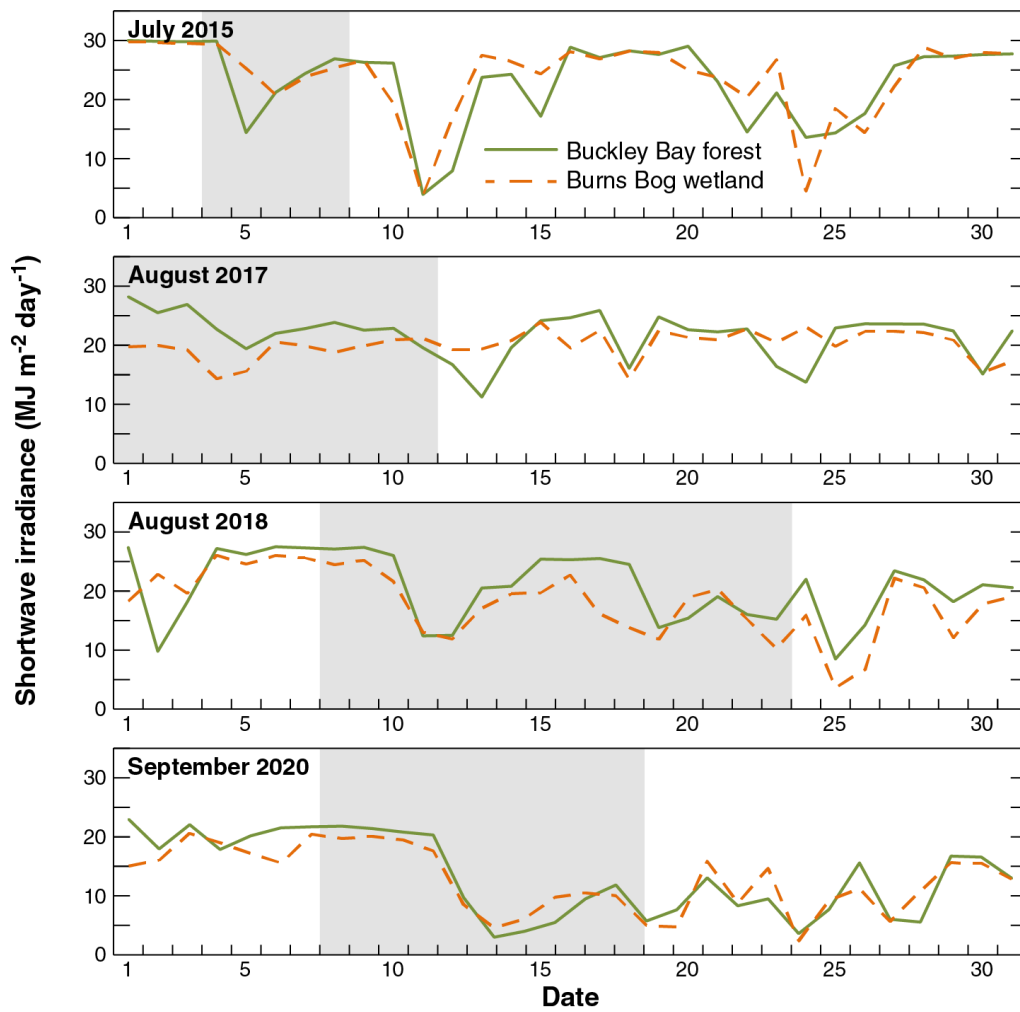
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### 1 Weather

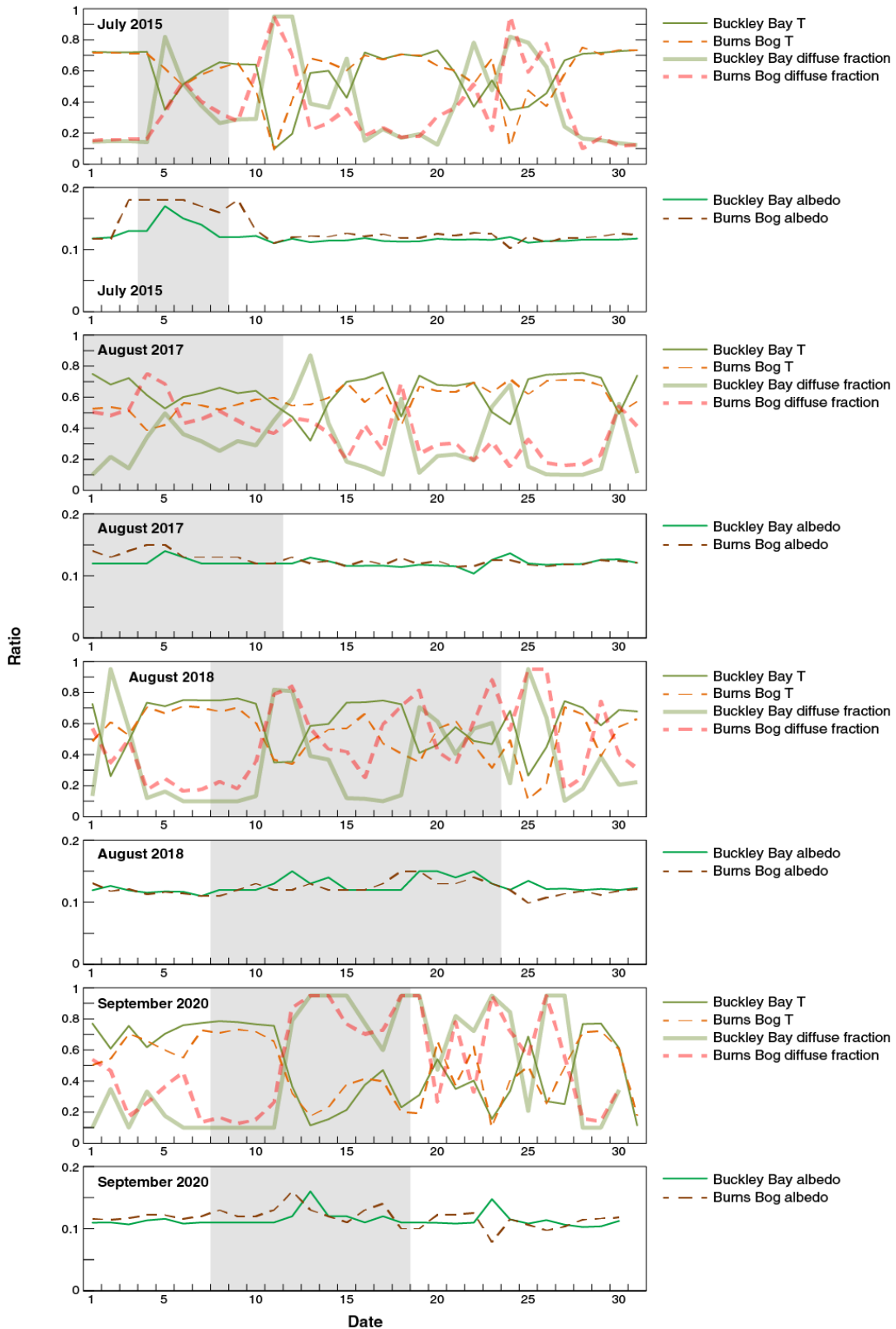


**Figure S1.** Hourly air temperature and daily precipitation over the wildfire smoke episodes in 2015, 2017, 2018, and 2020 at Buckley Bay (the forest site) and at Burns Bog (the peatland site).

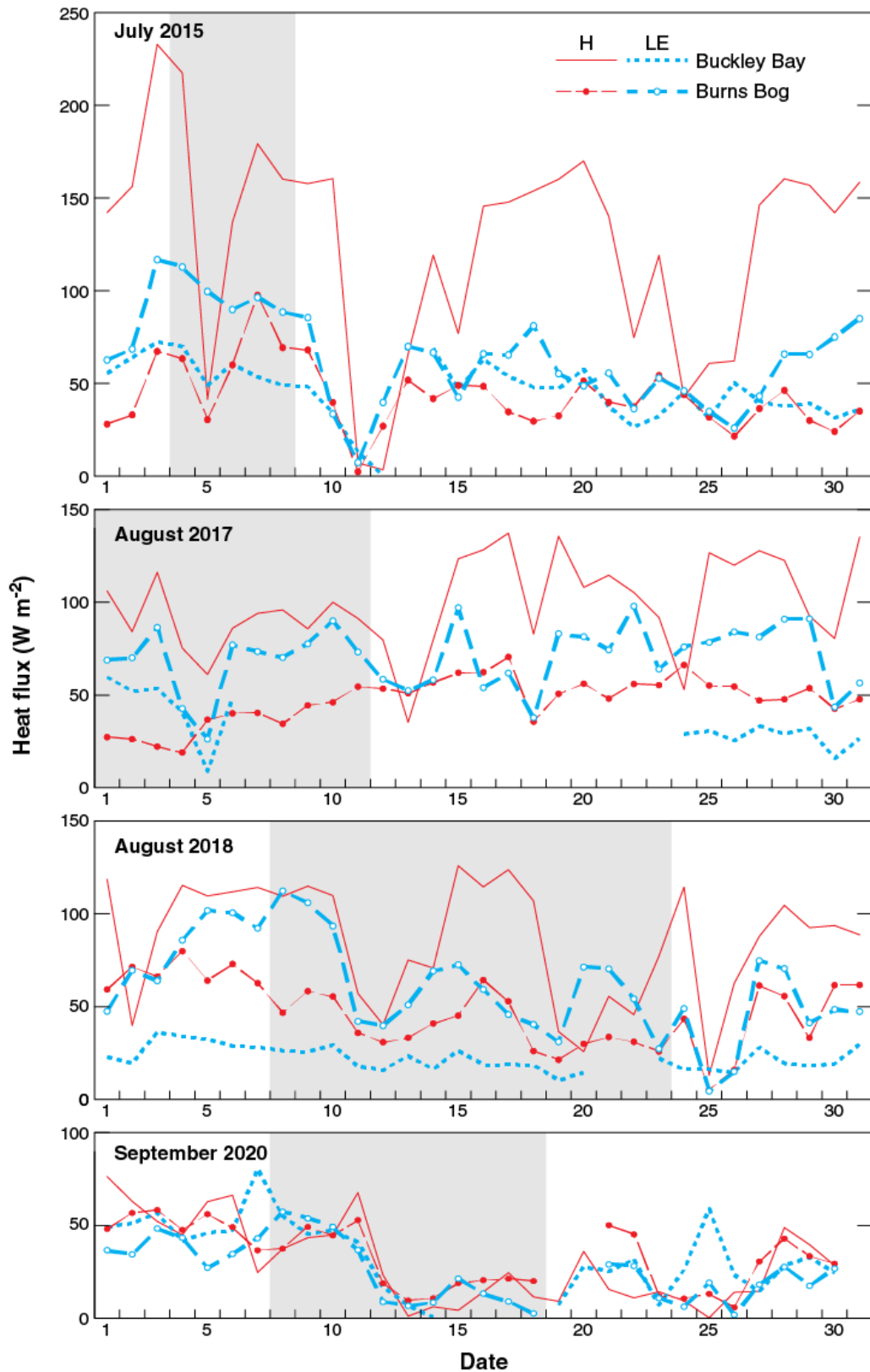
## 2 Monthly course of measured variables



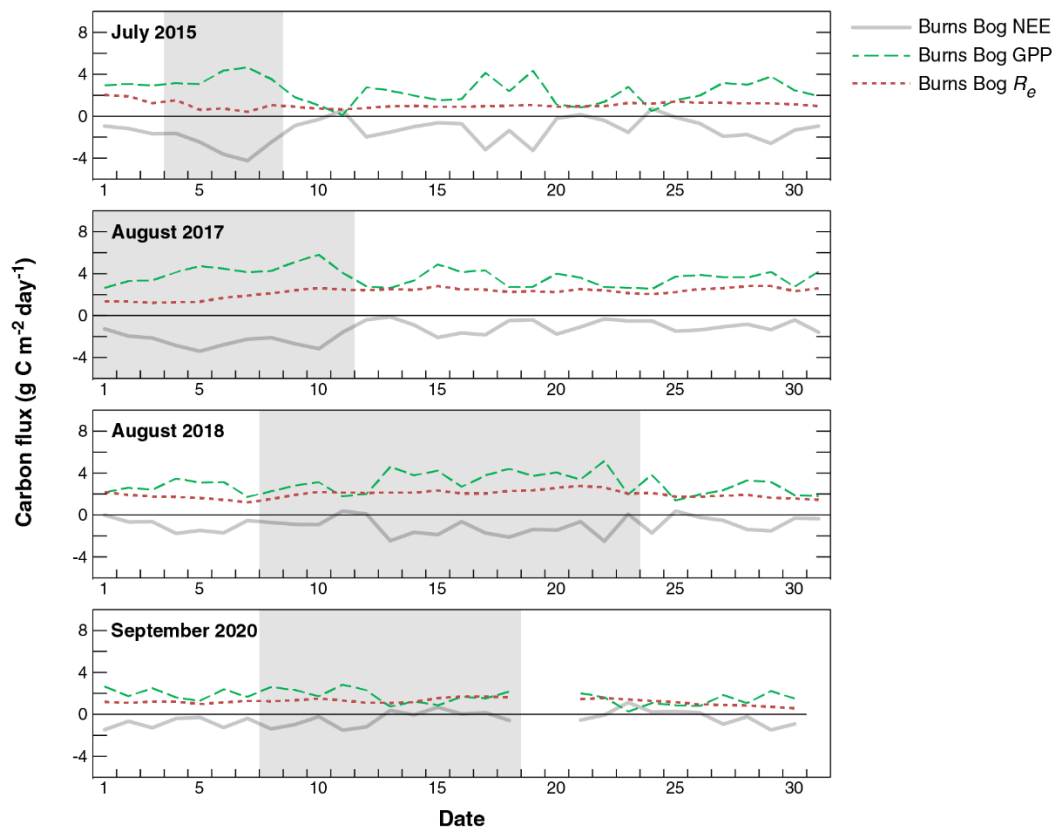
**Figure S2.** Daily shortwave irradiance over the wildfire smoke episodes (shaded) in 2015, 2017, 2018, and 2020 at Buckley Bay (the forest site) and at Burns Bog (the peatland site).



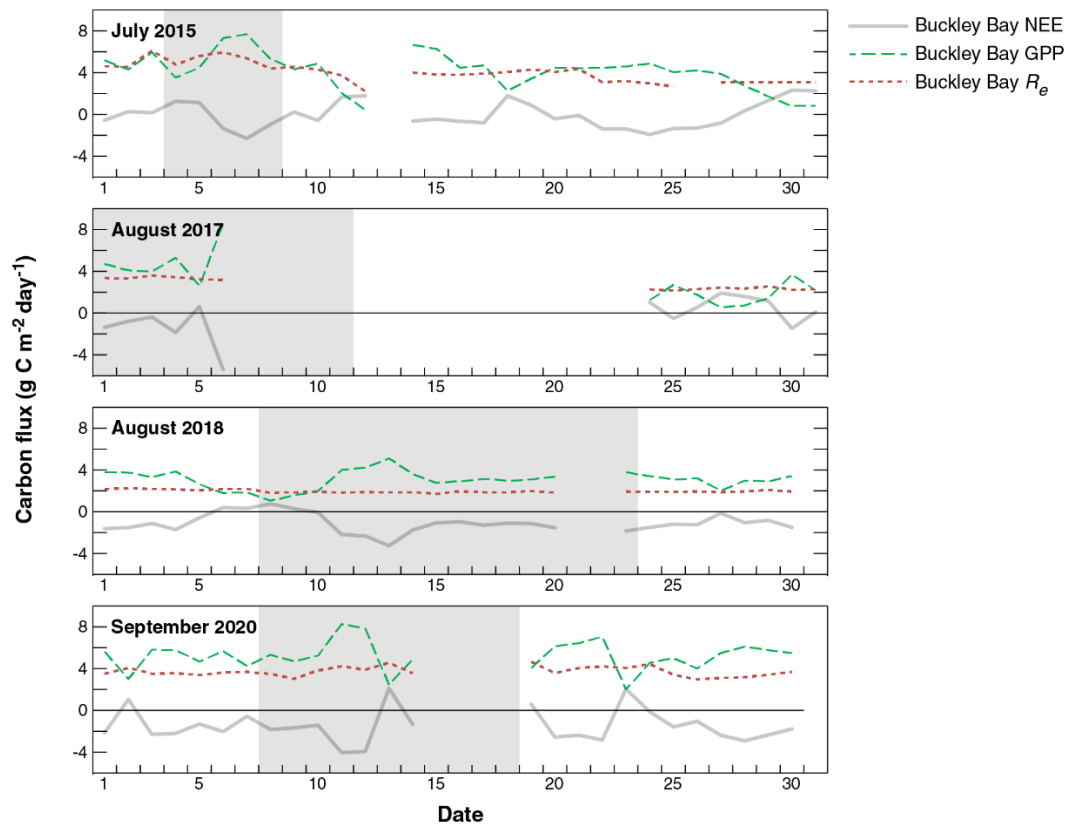
**Figure S3.** Daily averages of transmissivity ( $T$ ), albedo, and diffuse fraction of photosynthetically active radiation (PAR) at the forest and wetland sites during the smoke events (shaded) in 2015, 2017, 2018, and 2020.



**Figure S4.** Daily (24-h) averages of sensible heat flux ( $H$ ) and latent heat flux ( $LE$ ) at the forest and wetland sites during the smoke events (shaded) in 2015, 2017, 2018, and 2020.



**Figure S5.** Daily totals of net ecosystem exchange (NEE), gross primary production (GPP), and ecosystem respiration ( $R_e$ ) at the wetland site during the smoke events (shaded) in 2015, 2017, 2018, and 2020.



**Figure S6.** Daily totals of net ecosystem exchange (NEE), gross primary production (GPP), and ecosystem respiration ( $R_e$ ) at the forest site during the smoke events (shaded) in 2015, 2017, 2018, and 2020.