

**Review of "Deposition of ionic species and black carbon to the Arctic snow pack (...)"
by H.W. Jacobi *et al.* (ACP manuscript acp-2019-215)**

Suggested wording changes:

L136: "The model is forced using meteorological data, ~~like including~~ air, temperature (...)"

L227-228: "Therefore, ~~a certain some~~ redistribution of the impurities probably occurred in the snow pack due to melting. This is ~~however~~ unlikely to have led to complete ~~removal~~ elution. ~~While the impact was stronger on the Austre-Lovenbreen glacier,~~ Hence, the overall impurity budgets of both snowpits ~~seemed not to be influenced~~ are assumed to have been mostly unaffected by melt.

L357: ~~Nevertheless,~~ The monthly averages (...)

L363: ~~Finally,~~ Noone and Clarke (1988) proposed...

L422-423: Most of the chloride-to-sodium ratios in the aerosols are close to ~~or less than~~ the standard sea water ratio (...)

L444:as well as in the precipitation, which ~~also causes results in~~ calcium-to-sodium ratios (...)

L451-453: On average, the highest ~~and lowest~~ ratios are found in ~~the aerosols and~~ the precipitation ~~and the lowest in the aerosols~~ (...)

L460-461: (...) atmospheric BC shows a ~~linear~~ positive relationship to nss-sulfate (...)

[note: the linearity is weak]

L519: (...) is further supported by the estimated ~~upper limit maximum of the~~ dry aerosol deposition.