

**Proposed technical corrections for hess-2016-415 by Kochendorfer et al.**

Page 1, line 15: replace comma after 'most important input' with semi-colon

Page 1, line 19: delete 'used' after 'Functions'

Page 1, line 21: add comma after 'In general'

Page 1, lines 21-22: remove 'corrections described as a function of air temperature and wind speed' and replace with 'the functions'

Page 1, line 25: add 'as inputs' after 'and air temperature' (and keep the comma)

Page 2, line 12: add 'in' before 'different measurement networks'

Page 3, line 19: change 'decreased with increasing wind speed' to 'decreased to varying extent with increasing wind speed'

Page 3, line 30: change 'weighing snow gauges' to 'weighing gauges'

Page 4, line 3: add comma after 'its uncertainty'

Page 4, line 3: change to 'the functional form of'

Page 4, line 4: you've already introduced transfer functions (great addition, by the way), so I think you can change '(referred to as a "transfer function")' to '(transfer function)'

Page 4, line 13: change to 'a total of ~ 200 cm snowfall'

Page 4, line 15: change 'allow' to 'allows'

Page 4, line 17: change to '...within the DFIR was used as the reference configuration for this study'

Page 4, line 23: change 'confirmed the fact' to 'indicated'

Page 5, line 16: change 'both the outer and inner tubes of the Geonor heated' to 'both the upper (exterior) and lower (interior) sections of the inlet heated'

Page 5, line 16: change 'while it drips' to 'when it drips'

Page 6, line 22: add a comma after 'NOR site'

Page 7, line 12: change 'Due to' to 'To mitigate'

Page 7, line 20: add a comma after 'At the Norwegian site'

Page 7, lines 28-29: the details regarding the relationship between the gauge height and 10 m wind speeds are condensed quickly in a list, which seems abrupt, and provides minimal context. Can the description of these details please be expanded (even slightly) for clarity?

Page 8, line 24: strange floating comma; perhaps a space after PWD21 that needs to be deleted

Page 8, line 27: change 'define' to 'describe'

Page 9, line 2: change 'aides in' to 'facilitates'

Page 9, line 4: change 'for the transfer functions developed here we use' to 'the transfer functions develop here use' (in other words, delete, 'for' and 'we')

Page 9, line 11: change to 'all of the 3-wire Geonor gauges'

Page 9, line 29: change 'following the following criteria' to 'using the following criteria'

Page 10, lines 15-17: change 'Because catch errors are best described' to 'Catch errors are described well' (line 15) and add a semi-colon after '... as the standard)' (end of line 17)

Page 10, line 18: change to 'Using all of the 30-minute periods...'

Page 11, line 3: change to 'precipitation. In other words, the DFIR gauge...'

Page 11, line 6: change to 'biased erroneously low'

Page 11, line 24: change 'which responds with an exponential decrease in CE to wind' to 'with an exponential response to wind'

Page 11, line 31: add comma after 'However'

Page 12, line 5: delete 'type of'

Page 12, line 8: add comma after 'At the US site'

Page 12, line 23: add 'measurements' after 'DFIR precipitation'

Page 13, line 15: add comma after 'At the US site'

Page 14, lines 9-10: remove comma after 'SA gauges' and add comma after 'US site'

Page 14, line 11: add comma after 'Likewise'

Page 14, line 23: change to 'in a given half hour period,'

Page 14, line 25: add comma after 'random causes'

Page 15, line 9: add comma after 'because of this'

Page 15, line 10: add comma after 'In addition'

Page 15, line 32: add 'measurements' after 'DFIR precipitation'

Page 16, line 2: add comma after 'at a given temperature'

Page 16, line 28: delete 'actually'

Page 17, line 20: add comma after 'Based on this'

Page 17, line 33: delete 'soon-to-be released' and change 'results of' to 'results from'

Page 18, line 1: remove hyphen between 'climate' and 'biases'

Page 18, line 2: change 'sites from this study' to 'sites in this study'; delete 'many'

Page 18, line 6: add 'shield' after DFIR (could be an auto gauge in a DFIR shield, not necessarily the standard DFIR)

Page 18, line 21: add 'periods' after '60-min'

Page 18, line 26: add comma after 'Likewise'

Page 19, line 14: Add 'Precipitation measurements from' before 'two sites'

Page 19, line 19: change to 'less than 50% for all wind shields examined'

Page 19, line 25: remove extra period

Page 20, line 28: change to 'precipitation data' (spelling error)

Page 20, lines 34-37: same reference repeated; please remove one

Page 21, line 17: remove repeated year

Page 21, line 31: fix 'Belgium2012, 25.'

Captions for Table 2 and Table 3:

- Add comma after '(Exp, Eq. 4)'
- Change 'double Altar (DA)' to 'double-Altar (DA)'
- Change 'small DIFR' to 'small DFIR'
- Change last line to: 'At wind speeds greater than Max  $U$ , the transfer function should be applied by replacing the measured wind speed with the appropriate Max  $U$  value.'

Captions for Table 4 and Table 5:

- Change 'double Altar (DA)' to 'double-Altar (DA)'
- Change 'small DIFR' to 'small DFIR'

Caption for Figure 3 (first line): change to 'minimum precipitation threshold'

Caption for Figure 5 (first line): change from 'measured from' to 'measured by'

Captions for Figure 5, 6, 7: the identifiers (a, b, c, etc.) follow the descriptions, whereas the identifiers for earlier plots precede the description.

For example: (a) description vs. description (a)