

Formulas on page 5 and 6 are difficult to read. Would you please make corrections on page 5 and page 6 to have formulas more consistent with the definitions.

**page 5, line 25: change to**

$$MSESS(H, R, O) = 1 - \frac{MSE_{hind}}{MSE_{ref}}$$

**page 5, line 27: change to**

$$MSE_{hind} = \frac{1}{N} \sum_{i=1}^N (\bar{H}_i - O_i)^2 \text{ and } MSE_{ref} = \frac{1}{N} \sum_{i=1}^N (\bar{R}_i - O_i)^2$$

**page 5, line 29-30: change to**

... downscaled hindcasts ( $H_i$ ) and the verification data ( $O_i$ ), and  $MSE_{ref}$  is the mean squared error of a reference dataset ( $R_i$ ).

**page 6, line 1-2 add:** A MSESS could be between minus infinity and one with positive values meaning that hindcasts are close ...

**and remove (-infinity,1] on line 10 and line 12**

**page 6, line 3: change to** “..., the MSESS with the climatology as reference (i.e.  $R_i \equiv \bar{O}$ ) can be decomposed as follows”

**page 6, line 5: change to**

$$MSESS(H, \bar{O}, O) = r_{H,O}^2 - \left( r_{H,O} - \frac{S_H}{S_O} \right)^2$$

**page 6, line 6: give direct definition of correlation  $r_{H,O}$  between  $H_i$  and  $O_i$**

**page 6, line 6-8: change X → H**

**page 6, line 10: change indices – HO to H,O; RO to R,O; H,R.O to H,R,O**

**page 6, line 12: change to**

$$MSESS(H, R, O) = \frac{MSESS(H, \bar{O}, O) - MSESS(R, \bar{O}, O)}{1 - MSESS(R, \bar{O}, O)}$$

**page 6, line 24: change  $\sigma_H, \sigma_O$  to  $S_H, S_O$**