

Dear Hilary McMillan:

You are correct that section 2.6 was not well described. Aside from the difference in time periods used, the two methods (options 1 and 2) use different mathematical processes and result in different wet and dry periods. I reworded the text as shown below to clarify. Thank you for your close attention to this matter.

## 2.6 Determining wet and dry periods

RRAWFLOW includes two options to determine wet and dry periods on the basis of the precipitation input record when using TV option 2. The first option assigns each calendar year to a wet period if the annual mean precipitation is greater than the overall mean  $P_{mean}$  for the entire input record, and other years are set to dry years (wet-switch option 1, Table 1). The second option sets wet and dry periods according to the slopes of a cumulative precipitation function in which upward or downward slopes indicate wet or dry periods, respectively (wet-switch option 2, Table 1). This option (1) calculates a record, at the model time step, of the cumulative departure from  $P_{mean}$ , (2) calculates the annual mean cumulative departure ( $CD_{mean}$ ) from this record, (3) sets each time step within a year to wet if an increase in  $CD_{mean}$  from the previous year occurred, and (4) sets all other periods to dry. Finally, this record of wet and dry time steps is shifted backward in time by 6 months. The reason for this shift is that the wet periods for option 2 tend to lag behind those of option 1 if no shift is applied. However, because the two methods are calculated differently, wet periods from option 2 can begin either before or after those of option 1, depending on the year; the same is true for the beginning of dry periods. The shift can be changed in the RRAWFLOW code if desired by editing the parameter “shift.” A third option allows the user to provide a record of wet and dry periods in the model input (wet-switch option 0, Table 1).

**Deleted:** sets the time period starting at every July 1 and ending following June 30 to a wet period if  $CD_{mean}$  has a net increase during this interval, and (4) sets all other periods to dry.