

## Request for additional changes to proof esurf-2021-33

### Equation 13

Unfortunately I have discovered a typo in eq. 13. The first term should include a 2 in the denominator. The correct form of the equation should be:

$$\Delta h = \frac{\overline{R_e}}{2T}x(L - x) + \Delta Hx/L \quad (1)$$

Note that this is purely a typo and does not affect any of the results presented in the manuscript, because the equations used by the model code was correct (see the function `analytical_solution_h` in [https://github.com/ElcoLuijendijk/goemod/blob/master/lib/gw\\_erosion\\_lib.py](https://github.com/ElcoLuijendijk/goemod/blob/master/lib/gw_erosion_lib.py))

### Equation 14

There is another mistake in equation 14. There should be 0.5 in front of the last x. The correct version of the equation is:

$$\Delta h = \frac{\overline{R_e}}{T}x(L_b - 0.5x) \quad (2)$$

Similar to the previous mistake, this does not affect any results because the equation used by the model code was correct, see the function `analytical_solution_h_one_side` in [https://github.com/ElcoLuijendijk/goemod/blob/master/lib/gw\\_erosion\\_lib.py](https://github.com/ElcoLuijendijk/goemod/blob/master/lib/gw_erosion_lib.py).

I would also like to change the units for the frequency of precipitation event  $i$  in the text following Eq. 8 from per annum to per second so that the time unit is seconds throughout the equation. (There are currently two different time units used, and I would like this to be standardized.)