

## CO2Sys Excel Version History

Previous versions (2007): CO2sys\_macro\_PC.xls and CO2sys\_macro\_MAC.xls

- . Two separate files for PC and MAC versions.

Version 1.0 (10 October 2011): CO2Sys\_2011.xls  
. Combined PC and MAC versions of previous macro into one file working on both platforms.

Version 2.0 (19 July 2012): CO2Sys\_2011.xls  
. New R formulation from NIST Physical Reference Data (<http://physics.nist.gov/cgi-bin/cuu/Value?r>)  
Difference with old formulation is not numerically significant.  
. Matched formulation of Uppstrom's Total Boron with Matlab program (same numerical results).  
. Added option of Total Boron from Lee et al., 2010  
. Added a few formulations for K1, K2:

- Cai and Wang, 1998
- Lueker et al., 2000
- Mojica Prieto et al., 2002
- Millero et al., 2002
- Millero et al., 2006
- Millero, 2010

  
. Updated the INFO section  
. Added the Macro Version History option in INFO Sheet.  
. Version number is displayed in cell B2 when the About this Macro option in INFO Sheet is selected.

Version 2.1 (18 September 2012): CO2Sys\_v2.1.xls  
. Corrected an error in the code which affected the results when the constants of 'Millero et. al., 2002' and 'Millero, 2010' were selected.  
. References to 'Cai and Wang, 2008' have been corrected to 'Cai and Wang, 1998'  
. Incorporated version number in the name of the file and removed it from the "INFO" sheet (see v.2.0)