

exNGT: summary of probabilities for the recent value to occur under the preindustrial distribution

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The following table lists probabilities for the recent NGT-2012 value to occur under the pre-industrial distribution depending on different parameter combinations underlying the analysis. The source code for computing the probabilities is hidden here due to its length and can be viewed in the R markdown file corresponding to this document. The first five analysis variations listed in the table correspond to the histograms shown in the figure “supplement-histograms.pdf”.

Table 1: Probability for the recent value to occur under the pre-industrial distribution for different parameter combinations of creating and analysing the NGT-2012 stack. The meaning of the settings named “default” are: Pre-industrial period = 1000 - 1800 CE, Recent period = 2001 - 2011 CE, Filter window = 11 yr.

Method	Variant	Pre-industrial period	Recent period	Filter window	Probability
main		default	default	default	3.18e-06
main	forward diffused	default	default	default	4.54e-06
main	frozen (N = 5)	default	default	default	2.99e-06
simple		default	default	default	3.84e-06
simple	forward diffused	default	default	default	5.38e-06
main		default	default	3	1.37e-08
main		default	default	7	1.38e-04
main		default	default	15	5.05e-07
main		default	default	21	8.73e-05
main		1000 - 1850	default	default	3.35e-06
main	merge at start	1000 - 1900	default	default	5.68e-06
main	merge at end	1000 - 1900	default	default	5.72e-06
main		default	2000 - 2010	default	4.45e-06
main		default	1999 - 2009	default	1.22e-05
main		default	1998 - 2008	default	3.73e-05
main		default	1997 - 2007	default	1.30e-04
main		default	1996 - 2006	default	1.76e-04