

Proposed Checklists for use as one develops the model and the data analysis

These are the in-house checklists used for the UW Model Repository at www.physiome.org

The pages are: 1.Summary 2.Project file, 3. CODE, 4.Verif, 5. Valid, 6. Uncertainty, 7. Publication

The check list is to be used by the author and two reviewers, before approval for website.

	STANDARDS.1.SUMMARY: Summary of Expectations	Auth	Check 1	Ch 2
Group 1: Identification and Description		x		
	1. Model Name and No: short and long descriptions complete		xy	
	2. Code completed, checked .mod file, Model runs correctly			xyz
	3. Diagrams correct			
	4. Reference to Publication describing the model			
	5. Context and Purpose of model defined			
Group 2. Project File: Basic Content: FIGURES and NOTES				
	1. The chosen model solutions tell some story			
	2. The story is around data, figures and parameter sets (All matched)			
	3. The figures and their titles fit story			
	4. Every figure has axes labeled with symbol, name and units			
	5. Figures use Very short tab labels fitting the topic.			
	6. Graphs use same colors and line types for same variable in every figure.			
	7. Sensitivity functions. How to plot. Why useful. Notes. Use same colors.			
	8. Ontology consistent in notation of .mod, Figures and Notes and Par sets			
	9. Notation consistent with diagrams in .mod text and on the Website			
	10. Parameters sets: Description and rationale for each explained in Notes			
	11. Loops: Purposes and settings; parameter set, plus explanation in Notes			
	12. Optimization re data or other model: description, par set, Notes			
Group 3. Verification methods: See STANDARDS-VERIF for detail				
	1. Under Notes: Check off list for the model file verification			
	2. List variables computed in the MML code that are serving as checks			
	3. Commentary on checks or missing checks			
	4. Numerical Methods chosen and why. In notes.			
	5. Solution times chosen; delta t chosen; comments			
Group 4. Validation methods: See STANDARDS-VALID for detail				
	1. Justify initial and boundary conditions in accord with physiology			
	2. List Data provided and fitted by model, and sources.			
	3. Show fits of data in Figures, and optimization results			
	4. Notes defining contents of each situation, figure or par set			
	5. Parameters estimated and evaluated against literature or other			
Group 5. Uncertainty Quantification: See STANDARDS-UQ for detail				
	1. Parameters and Variables chosen			
	2. Define Measures of uncertainty			
	3. Plots or contour maps of projected results			
Group 6: Scientific Publication: See STANDARDS-PUB for detail				
	1. Summary of the science			
	2. References to subsequent publications or alternative models			
	3. Website for public dissemination, commentary and responses			

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