


Embedding iCOASST Into Practice: Model Evaluations

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|---|---|
| Model name | CESM |
| Evaluation date | January 2017 |
| Version of model and operating system used | CESMapper plugin for QGIS v2.12 on Windows 7 (requires QGIS version 2.8.0 (Wien) or later. This release has been tested up to QGIS version 2.14.3 (Essen)). |
| Model filename | CESMapper-master.zip (release 1.5.xx (September 2016)) |
| Manual filename and date | CESMapper User Manual Release 1.5.xx –rev2 |
| Version of windows used for the evaluation | Windows 7 Enterprise Version, 64 bit |

Scorings

- 0: No/ Not met / Unsatisfactory / Inappropriate
- 0.5: Partially met / appropriate in some aspects
- 1: Yes / met / Satisfactory / Appropriate
-  Evaluation not relevant for the user type

| iCOASST MODEL NAME: CESM | | | | | |
|--|--|---|---|---|--|
| | E valuation Question | Score (0 / 0.5 / 1) | | | Comment |
| | | For User Type 1: End User (Coastal Manager) | For User Type 2: Basic modeller (simple input changes only) | For User Type 3: Advanced modeller / model coder (application to entirely new systems / model development) | |
| A. WEBSITE MODEL INTRODUCTION http://www.channelcoast.org/iCOASST/introduction/ | 1. Is the model description on the website adequate to understand what the model is for? | 1 | 1 | 1 | A simple model description is within the first paragraph and outlines what the software can be used for. |
| | 2. Are relevant applications of the model explained? | 1 | 1 | 1 | Two applications of the model within iCOASST have been explained. |
| | 3. Are the key model assumptions and limits to the model use explained? | 1 | 1 | 1 | Yes they can be inferred from the text. |
| | 4. Is the level of expertise required to use the model and/or use the results specified? | 0 | 0 | 0 | It could be suggested that a reasonable level of coastal geomorphological knowledge is needed. |

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| B MODEL DOWNLOAD http://www.channelcoast.org/iCOASST/introduction/ | 1. Can you download the source code and/or executable/dll? | | 0 | 0 | The CESMapper plugin is located on GitHub – this needs to be explained on the download website along with a link. |
| | 2. Are there simple instructions to install, with images if needed? | 0.5 | 0.5 | 1 | The plugin can be installed easily to use with QGIS, which is open source. This does not need too much explanation only a few instructions. |
| | 4. Are the model boundary conditions explained? | N/A | N/A | N/A | |

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| C. MODEL USER MANUAL | 1. Is the user manual easy to read , user friendly and comprehensive? | 1 | 1 | 1 | The user manual is easy to read with headings in a logical order. It is comprehensive with a good overview of the software and how to use it. The plugin provides an easy to use interface and the user manual compliments this by describing how to use it so that the user can easily produce a map in another location for their own use. |
| | 2. Is there sufficient information provided on what the model is doing and how it works? | 1 | 1 | 1 | There is sufficient information provided to understand how the model works. To expand this further an explanation of the Suffolk example could be included (e.g. define the headings in the attributed table so it can be replicated). |
| D. MODEL INPUTS | 1. Is example model input data available to download and enough information provided to understand what they data represents? | | 1 | 1 | An example (Suffolk coast) is available to download from the website but this is an older version than the one included on GitHub. When evaluating this software Suffolk v5 from GitHub was used. The Liverpool example system map is not provided to download. |
| | 2. Are all input parameters expanded / explained? Are ranges of values to be used | | 0.5 | 0.5 | All parameters are listed in tables without definitions. |

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| | indicated? Are required units provided? | | | | |
| | 3. Are timescales and date stamp inputs explained? | N/A | N/A | N/A | |
| | 4. Are there any errors when you enter the compiled example data/input parameters? | | 1 | 1 | No errors. |
| E. MODEL RUNS | 1. Does the model run successfully with the data provided? | | 1 | 1 | An example system map of Suffolk coast is provided which loads into QGIS successfully. |
| | 2. Is information provided in the Manual on the operation system required and pre-requisites in terms of software? | | 1 | 1 | The plugin requires QGIS v2.6 to v2.14. The plugin does not work with QGIS v2.18. This software has been tested using QGIS v2.12 and it installs successfully. |

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| | 3. Is model calibration/validation discussed in the Manual? | N/A | N/A | N/A | |
| | 4. Have you been able to successfully run another example that is different to the one provided? | | 1 | 1 | The software and supporting documentation is sufficient to be able to create a new system map in another location. A background in coastal geomorphological mapping would be needed to define the landform complexes, landforms and interventions. |
| | 5. Are potential errors and bugs dealt with in the manual? | | N/A | N/A | |
| F. MODEL OUTPUTS | 1. Are the output file headings explained in the Manual? | 1 | 1 | 1 | The landform complexes, landforms etc. explained with a list of examples in the user manual. |
| | 2. Is the meaning of each of the output variables explained in the Manual? | 1 | 1 | 1 | It could be suggested that the Suffolk example attributes table is described. |

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| | 3. Is there a description of how to process (tabulate and display) the output data? | | 1 | 1 | This is done automatically by the software. |
| G. OTHER | 1. Does the Manual make further recommendations for reading and supply references? | 1 | 1 | 1 | Yes. |
| | 2. Is the Contact information completed? | 1 | 1 | 1 | Yes. |
| | 3. Is the email address valid ? | 1 | 1 | 1 | Yes. |



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Recommendations table for model developer

| Recommendation by HRW | Action response |
|---|-----------------|
| Could include an explanation of the Suffolk coast example along with a description of the attributes table (so that it can be easily replicated). | |