

Flood Cloud v1.2 release notes

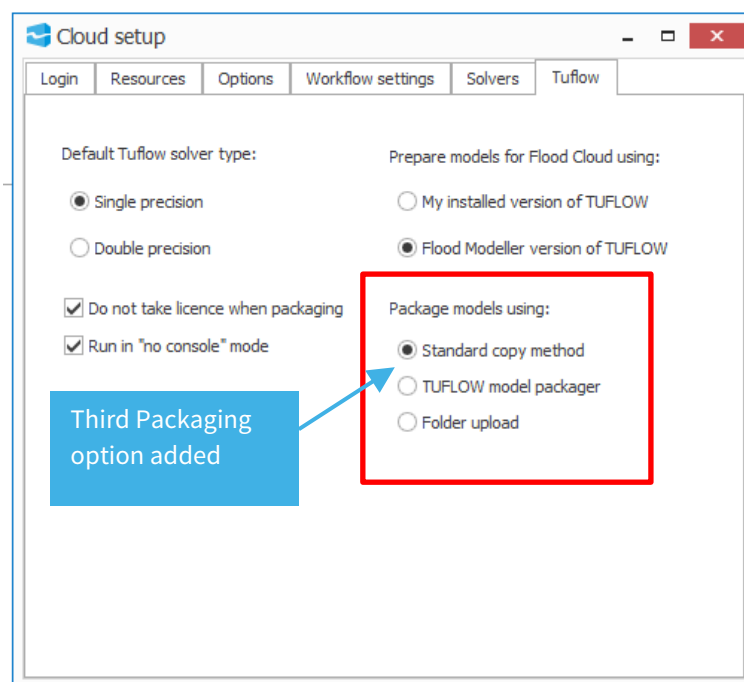
This document contains the following sections:

1. Flood Cloud user interface v1.2
2. Flood Cloud user interface v1.1
3. Flood Cloud user interface v1.0
4. Flood Cloud requirements

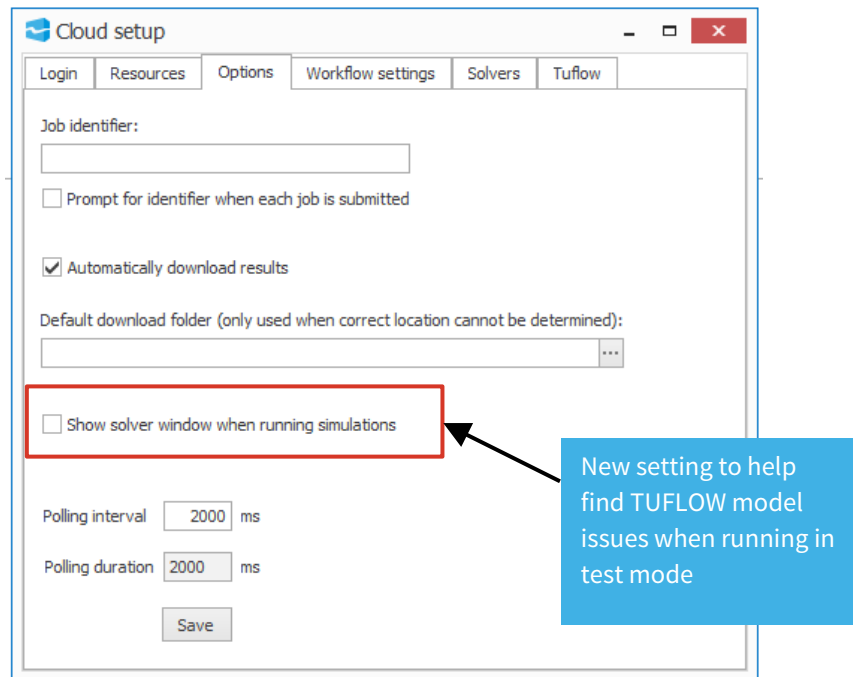
1.0. Flood Cloud user interface v1.2

The following features and changes are implemented in Flood Cloud standalone interface v1.2;

- 1.1. Flood Cloud has been updated to be compatible with TUFLOW 2018-03-AE and Flood Modeller v4.6 (and HEC-RAS is v5.07 – unchanged from v1.0).
- 1.2. A third option is added for packaging TUFLOW models (i.e. TUFLOW only models and TUFLOW linked models; to Flood Modeller 1D and/or ESTRY). This option is independent from TUFLOW in-built packaging functions. It should provide greater reliability (and in some cases work faster) than these. However, note that it requires a particular model file/folder structure to be setup prior to starting your simulations (see user guide for details). This new option is not set as the default option but can be selected in the Flood Cloud settings (TUFLOW tab).



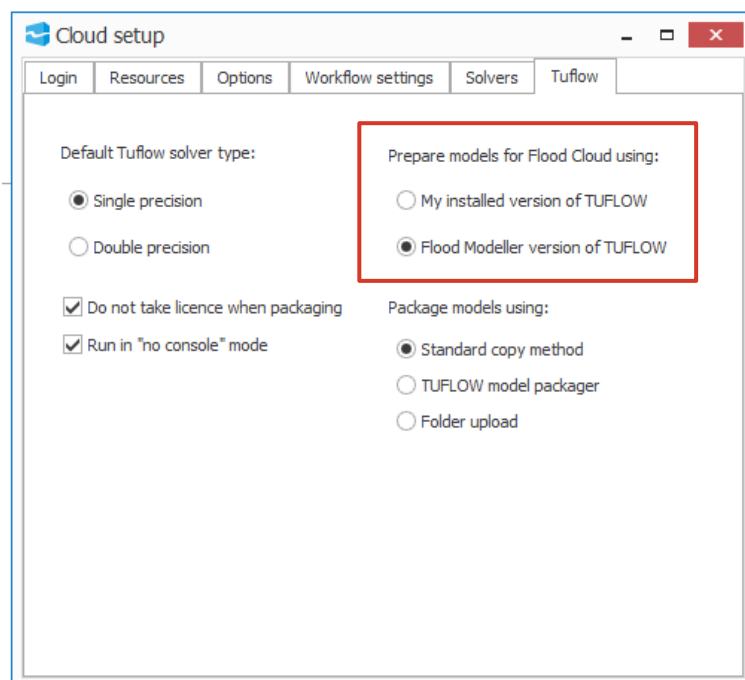
- 1.3. An option has been added to allow TUFLOW models to run displaying the TUFLOW native progress window. Note this option only applies when running models locally in test mode. TUFLOW models have been known to “hang” waiting for a user interaction, the prompt for which is only displayed in the TUFLOW native progress window and not in the Flood Modeller general simulation progress window. Thus, the option to display this window in test mode enables users to identify more issues prior to uploading to the Flood Cloud (and wasting credits).



The default setting in Flood Cloud is to not display the TUFLOW progress window. This setting can be changed either in the Flood Cloud settings window (Options tab) or in the Flood Modeller main interface, in General Settings.

Note that activating this setting will also configure your linked test mode simulations to display a separate progress window for the Flood Modeller 1D component of your model.

- 1.4. Packaging TUFLOW models, ready for cloud upload, can utilise the included TUFLOW packager or can be set to use your local TUFLOW installation (if required and if this is a different version). The latter will require the appropriate TUFLOW software to be present locally. The setting for this is accessed on the Flood Cloud settings window (TUFLOW tab).



Note that this setting does not apply if you choose to package your TUFLOW models using the Folder upload method.

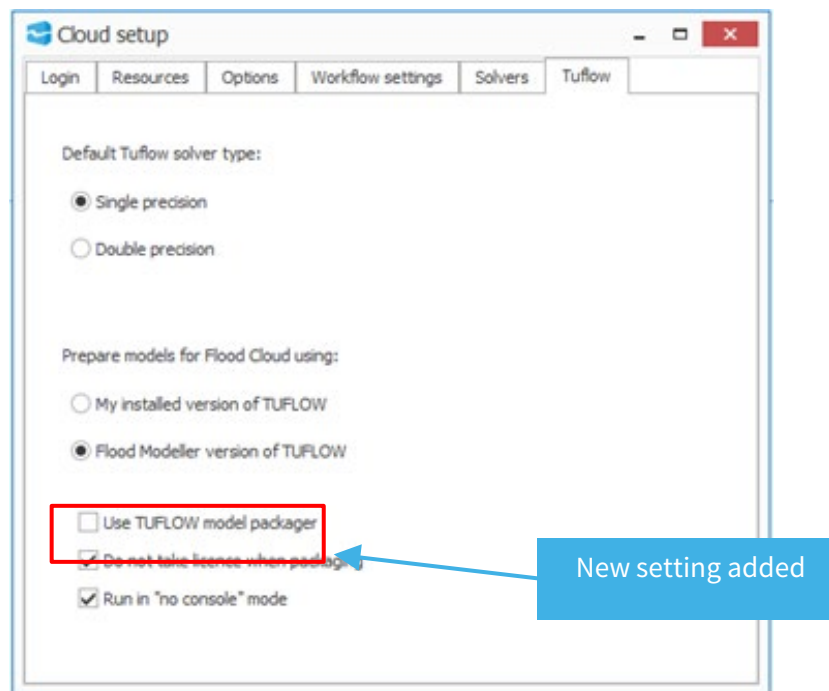
Release notes

- 1.5. The TUFLOW packager included in the Flood Cloud installation has also been updated (to TUFLOW 2018-03-AE).
- 1.6. Flood Cloud has been enhanced to make it compatible with a wider range of TUFLOW (and HEC-RAS and Flood Modeller) model scenarios, e.g. capturing additional input files referenced by the model.

2.0. Flood Cloud user interface v1.1

The following features are included in the Flood Cloud standalone interface v1.1:

- 2.1. Flood Cloud has been updated to be compatible with TUFLOW 2018-03-AD and Flood Modeller v4.5 (and HEC-RAS is v5.03 – unchanged from v1.0).
- 2.2. The TUFLOW packager included in the Flood Cloud installation has also been updated (to TUFLOW 2018-03-AD).
- 2.3. Flood Cloud has been enhanced to make it compatible with a wider range of TUFLOW (and HEC-RAS and Flood Modeller) model scenarios, e.g. capturing additional input files referenced by the model.
- 2.4. Settings interface modified with addition of a “Run in ‘no console’ mode” (see screenshot below – TUFLOW tab of settings window). Check this option to make sure that any simulations on the cloud do not “hang” waiting for input from the “user”.



3.0. Flood Cloud user interface v1.0

The following features are included in the Flood Cloud standalone interface v1.0:

- 3.1. Run models in the cloud via a standalone interface (separate and independent from the main Flood Modeller user interface). Allows users to run Flood Modeller 1D, 2D, HEC-RAS and TUFLOW-only models, within Flood Cloud. This can provide the following advantages:
 - Allows many simulations to be run concurrently.
 - Allows multiple (cloud) servers to be used to complete large batches of simulations. Running simulations in parallel can deliver significant time savings compared to running simulations locally sequentially.
 - Frees up local computer resources for other tasks.

Release notes

- 3.2. Run HEC-RAS models in Flood Cloud (compatible with HEC-RAS 1D, 1D-2D linked and 2D models). Note that users are required to have HEC-RAS software installed locally as this will be used by Flood Cloud for the batching process prior to uploading to the cloud space.

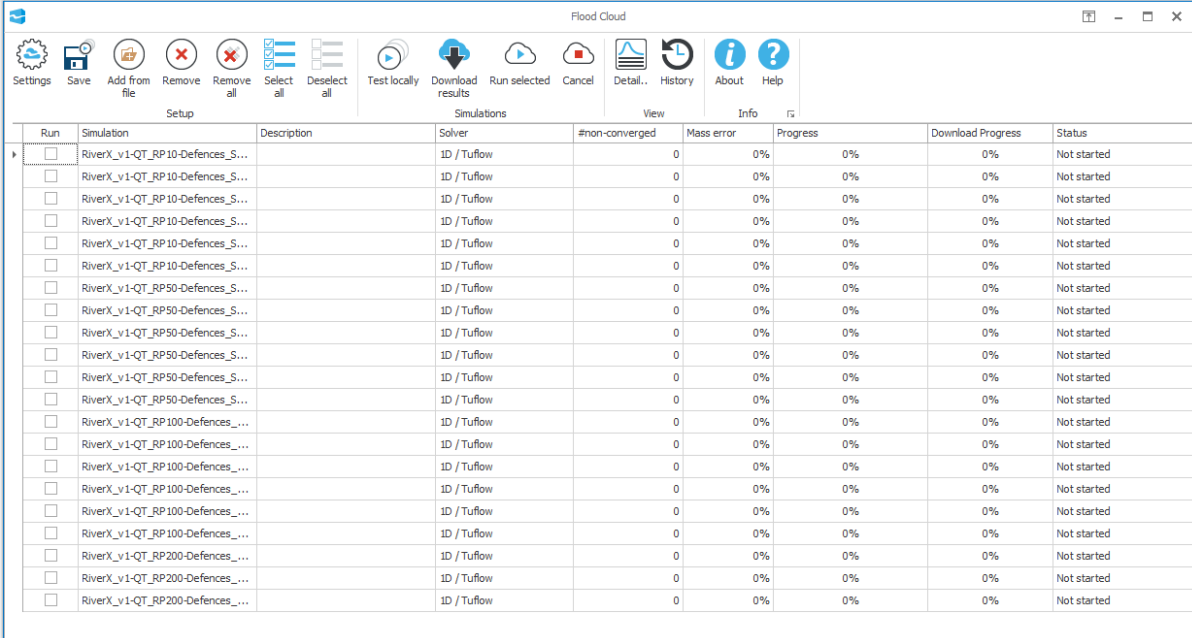
The compatible version of HEC-RAS is v5.03.

- 3.3. Run TUFLOW models in Flood Cloud. TUFLOW standalone simulations (2D only or 2D linked to 1D ESTRY) or simulations linked to Flood Modeller 1D can be uploaded to Flood Cloud.

A TUFLOW packager (TUFLOW 2018-03-AB) is included in the Flood Cloud installation which means you can package up and run TUFLOW models in the cloud without needing a local installation of TUFLOW. However, you will require a licenced version of TUFLOW to be installed locally if you want to use the optional Flood Cloud test functionality (detailed in point 7 below).

- 3.4. Flood Cloud simulations are set-up via a standalone interface accessed from your Programs list (or by browsing to “C:\Program Files\Flood Modeller\Flood Cloud”).

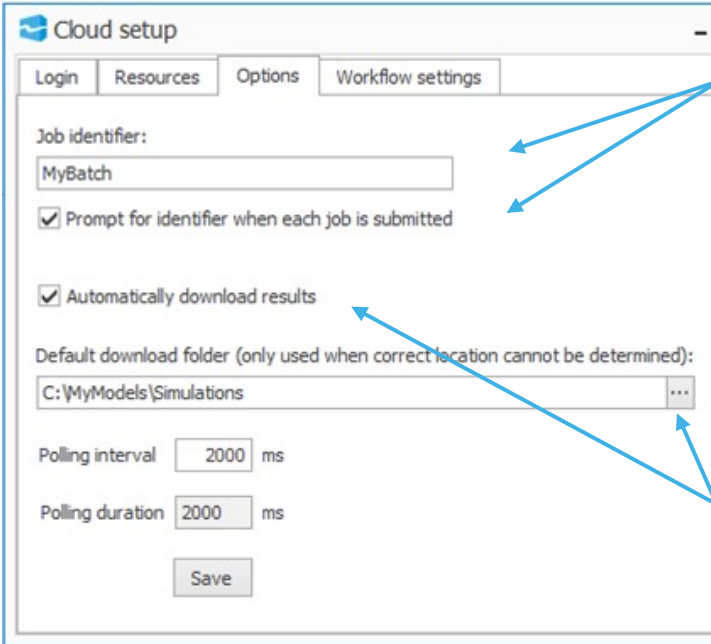
This will display a new window in which you can specify a batch of models (note that each individual batch must all be the same type of model).



The screenshot shows the Flood Cloud application window. It features a toolbar with icons for Settings, Save, Add from file, Remove, Remove all, Select all, Deselect all, Test locally, Download results, Run selected, Cancel, Detail, History, About, and Help. Below the toolbar is a table with columns: Run, Simulation, Description, Solver, #non-converged, Mass error, Progress, Download Progress, and Status. The table lists 20 simulation jobs, all of which are 'Not started' and have 0% progress.

Run	Simulation	Description	Solver	#non-converged	Mass error	Progress	Download Progress	Status
<input type="checkbox"/>	RiverX_v1-QT_RP10-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP10-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP10-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP10-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP10-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP10-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP50-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP50-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP50-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP50-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP50-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP50-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP50-Defences_S...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP100-Defences_...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP100-Defences_...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP100-Defences_...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP100-Defences_...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP100-Defences_...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP100-Defences_...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP200-Defences_...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP200-Defences_...		1D / TufLOW	0	0%	0%	0%	Not started
<input type="checkbox"/>	RiverX_v1-QT_RP200-Defences_...		1D / TufLOW	0	0%	0%	0%	Not started

The Flood Cloud interface also allows you to interact with your cloud account. Settings to change include turning on your cloud service (before a batch run), specifying the number of machines to use and reviewing your account details.



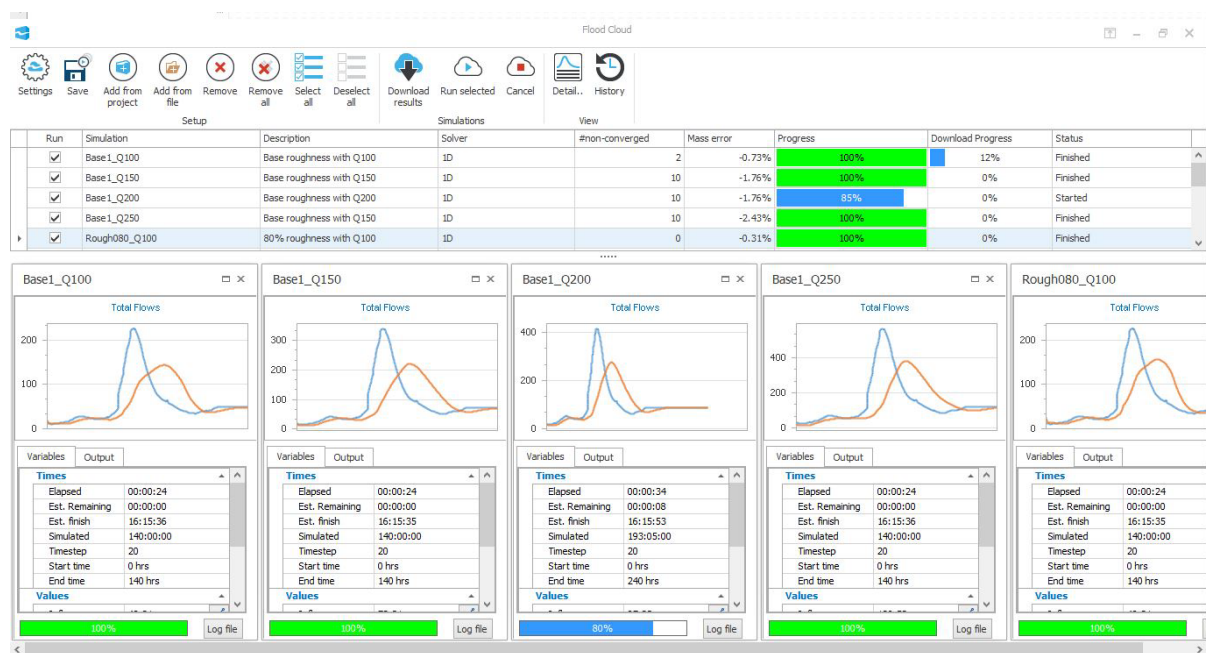
Give each batch a unique name – so it is easy to identify within the Cloud run history.

You can tick the box to get Flood Cloud to prompt for a new name for each subsequent new batch.

You can instruct Flood Cloud to automatically download your results.

If no valid results folder can be identified for a simulation, then results will go to your specified default folder.

3.5. After starting a cloud simulation, the progress of each simulation in a batch can be monitored, with the interface displaying details of each simulation as shown below:



3.6. A feature of Flood Cloud is that you can close the Flood Cloud interface while you have an active batch of cloud simulations running. When you return to the software, you can reload the current batch, or “job”, by clicking the History button on the Flood Cloud toolbar. This will display a new window listing all recent jobs run under the currently logged in account.

Release notes

Flood Cloud Job History											
Drag a column header here to group by that column											
Id	Identifier	Job type	No of Simulations	Min Cores	Max Cores	Jobs Per Node	Start time	End time	Duration	User Name	Status
13566		Simulation batch	10	0	5	1	2017-03-08 17:06:18	2017-03-08 17:06:20	00:00:00:02	WicksJM	running
13564		Simulation batch	15	0	5	1	2017-03-08 15:45:47	2017-03-08 15:53:39	00:00:07:51	WicksJM	ok
13562		Simulation batch	5	0	5	1	2017-03-08 15:27:08	2017-03-08 15:32:46	00:00:05:37	GriceDB	ok
13560		Simulation batch	0	0	5	1	2017-03-08 14:45:55	2017-03-08 14:45:59	00:00:00:04	HoneywillRS	error
13556		Simulation batch	1	0	5	1	2017-03-08 14:34:33	2017-03-08 14:39:42	00:00:05:09	HoneywillRS	ok
13550		Simulation batch	15	0	5	1	2017-03-08 14:11:52	2017-03-08 14:15:30	00:00:03:37	HoneywillRS	ok
13548		Simulation batch	15	0	5	1	2017-03-08 14:00:41	2017-03-08 14:10:38	00:00:09:56	HoneywillRS	ok
13546		Simulation batch	15	0	5	1	2017-03-08 13:41:12	2017-03-08 13:49:44	00:00:08:31	HoneywillRS	ok
13544		Simulation batch	6	0	5	1	2017-03-08 13:26:24	2017-03-08 13:35:08	00:00:08:44	GriceDB	ok
13540		Simulation batch	15	0	5	1	2017-03-08 13:08:24	2017-03-08 13:14:21	00:00:05:56	HoneywillRS	ok
13538		Simulation batch	15	0	0	1	2017-03-08 13:05:31	2017-03-08 13:07:21	00:00:01:50	HoneywillRS	deleted
13536		Simulation batch	6	0	0	1	2017-03-08 11:32:36	2017-03-08 11:34:11	00:00:01:35	GriceDB	ok
13534		Simulation batch	6	0	6	1	2017-03-08 11:14:26	2017-03-08 11:21:04	00:00:06:38	GriceDB	ok
13532		Simulation batch	15	0	5	1	2017-03-08 10:46:15	2017-03-08 10:49:56	00:00:03:41	HoneywillRS	ok
13530		Simulation batch	15	0	5	1	2017-03-08 10:32:12	2017-03-08 10:44:10	00:00:11:57	HoneywillRS	ok
13524		Simulation batch	25	0	5	1	2017-03-08 09:44:05	2017-03-08 09:53:15	00:00:09:09	WicksJM	ok
13478		Simulation batch	1	0	4	1	2017-03-07 13:11:15	2017-03-07 13:17:53	00:00:06:38	HoneywillRS	ok
13460		Simulation batch	6	0	4	1	2017-03-07 11:35:41	2017-03-07 11:42:07	00:00:06:25	CrowderR	ok
13456		Simulation batch	6	0	4	1	2017-03-07 11:25:42	2017-03-07 11:32:20	00:00:06:37	CrowderR	ok
13452		Simulation batch	6	0	4	1	2017-03-07 11:00:47	2017-03-07 11:09:29	00:00:08:42	CrowderR	ok
13450		Simulation batch	1	0	1	1	2017-03-07 08:51:38	2017-03-07 09:08:31	00:00:16:53	J5042100	ok
13448		Simulation batch	1	0	1	1	2017-03-07 08:32:17	2017-03-07 08:40:04	00:00:07:47	J5042100	ok

☒ [Job type] = 'Simulation batch'

Show jobs from...
☐ All time ☐ Last month ☒ Last week ☐ Last 24 hours

Edit Filter

Close

3.7. Flood Cloud includes a test functionality, enabling you to test your specified simulations are configured correctly and will be able to start running in the cloud. Running a test will save you from wasting Flood Cloud credits on simulations that are configured incorrectly.

Note this test will not ascertain whether simulations will remain stable and run to completion – it is checking whether all the model files are available.

To use the test functionality, you must have the relevant modelling software installed locally (as this is where the tests will be run, i.e. not in the cloud):

- For HEC-RAS simulations HEC-RAS v5.03 must be installed locally
- Any version of TUFLOW should enable the test functionality in Flood Cloud, provided an appropriate TUFLOW licence is also present.
- For testing of Flood Modeller simulations (1D only, 2D only or 1D - TUFLOW linked) Flood Modeller v4.4 or v4.3 must be installed. If your simulations exceed the restrictions for Free mode you will also need a Flood Modeller Pro licence. Earlier versions of Flood Modeller will not work with Flood Cloud.

4.0. Flood Cloud requirements

The following are required on your system in order to run Flood Cloud v1.2:

- .Net Framework v4.6 or later (note this is included within the Flood Cloud installer and so should be added to your system automatically if not already there)
- An internet connection is required, preferably high-speed, as data will be uploaded and downloaded.
- HEC-RAS v5.07 installed locally (for running HEC-RAS only, either running in the cloud or locally in test mode)
- Test mode in Flood Cloud will require Flood Modeller to be installed locally, preferably v4.6 (as this works irrespective of any licence being present).

Versions of Flood Modeller earlier than v4.3 will not work with Flood Cloud (versions 4.3 to 4.5 work with Flood Cloud test mode, but with differing licence requirements – contact Flood Modeller Support for details).