

Agenda item 11 – OTHER IALA GROUPS

Agenda item 11.3 – Risk Management Tool

11.3.1 Documents submitted to note

11.3.1-1 31st Steering Group meeting report



**MINUTES OF THE THIRTY FIRST MEETING
OF THE IALA RISK MANAGEMENT STEERING
GROUP**

**15th January, 2013
in St Germain-en-Laye**

General

As planned at the end of the last meeting, the thirty first meeting of the IALA Risk Management Steering Group was held the 15th of January 2013 at 13.00, at the IALA Headquarters in St Germain-en-Laye (France).

Participating to the meeting were:

1. Omar Frits Eriksson, DMA, Denmark (Chairman)
2. Per Christian Engberg, GateHouse A/S
3. Roger Barker, Trinity House, UK
4. Prof. Knud Benedict, Marine Simulation Centre, Warnemunde, Germany
5. Trond Langemyr, Norwegian Coastal Administration
6. Gary Prosser, IALA Secretary General
7. Stephen Bennett, IALA WWA
8. Jean-Charles Leclair, IALA WWA (Secretary).

Apologies were received from Markus Porthin, Finland.

Agenda item 1 – Opening

The Chairman, Omar Frits Eriksson, opened the meeting and welcomed all participants for this face-to-face meeting decided in Australia during the last Steering Group meeting.

Agenda item 2 – Approval of the agenda

The draft agenda proposed (annexe 1) was accepted without any change.

Agenda item 3 – Action items from the previous meeting

- 1. GateHouse is requested to add IALA in the disclaimer accompanying the free version and the commercial version of IWRAP Mk2: it should read: “IALA and GateHouse will accept no liability on the use and results...”**

The text proposed was introduced in the 4.1 version, and will be presented to the Legal Advisory Panel at its next session. It reads as follows: “*Although the product is recommended by and part of IALA's Risk Toolbox, IALA assumes no liability in connection with the performance of the Product or any services the Product performs. IALA assumes no responsibility for errors or omissions in the Product or the services and assumes no responsibility for any loss or damage in connection with the use of the Product, whether caused by errors or discrepancies in the Product or other reasons.*”

- 2. Omar Frits Eriksson to create a forum of IWRAP users to facilitate exchanges of experience.**

In progress.

- 3. Jean-Charles Leclair is requested to arrange for the IALA Members to be invited to inform the Steering Group when they plan any modifications of their AtoN and where AIS information can be gathered before and after the fact.**

The request was done at the last IALA Council. The Group suggested to also adding this request on the new IALA Website as well as on the Academy part.

Roger Barker said that UK has the data for the Channel before and after the recent modification of the TSS (1st December 2012) and can provide them. Omar Frits Eriksson said that Denmark also had data regarding changes made in the past.

Roger Barker proposed to make a presentation on the subject at the next Conference as well as at the seminar on Maritime Special Planning. He was invited to submit a proposal to the Conference Steering Group.

- 4. Jean-Charles Leclair is requested to enquire on the form of the Spain training seminar and the language used.**

He answered that the seminar will be conducted in English. No decision was taken yet on the possibility to implement interpretation in Spanish for the sessions dedicated to formal presentation. (See agenda item 5).

Agenda item 4 – Progress on the development of IWRAP Mk2

Just before the meeting, GateHouse had released an updated version of IWRAP Mk2: version 4.1.0. Per Christian Engberg provided the list of all the changes included in the new version, as well as the list of the changes introduces within the programme since the start of the commercial version, three years ago (see annexe 2). He explained that, for the next release, he will start to work on the way to make the use of the programme more friendly for the main users, eventually by introducing two different modes, one for the “normal” user, another one for advanced user looking for more research.

Regarding the function introduce in the previous version for calculating vessel exhaust emissions, the participants agreed on the interest of such a function, but consider necessary to have a better knowledge of the algorithms used to calculate the emissions, and to clearly separate the two functions of the tool, safety of navigation on one hand, and pollution assessment on the other hand.

The Secretary General also explained that from his experience of the Malacca Strait meetings and the implementation of the Electronic Marine Highway, there is a great demand for simulation. Therefore, he wondered if IWRAP Mk2 could also be used for such analysis of all sorts of hypothetical traffic situation and management.

5. Planning of Training Seminars on IALA Risk Management Tools

The next seminar will be held in Madrid, from 12 to 15 November 2013. It will be organised by the IALA WWA on the same basis as the previous seminars. The focal points are Stephen Bennett for IALA, and Juan Francisco Rebollo for Spain. Knud Benedict, Roger Barker and Omar Frits Eriksson informed the Group that they will make themselves available to participate.

During the Sydney Steering Group meeting, it was decided to formalize the training seminar curriculum by drafting a model-course as for the other training activities of IALA. Stephen Bennett explained that he had started to complete the syllabus for the 5 day IALA risk management toolbox seminar. It included 6 modules and it was agreed that the detailed teaching syllabus would be completed by Stephen Bennett for Modules 2 and 4, by Omar Frits Eriksson for Module 3, by Knud Benedict for Module 5 and by Roger Barker for Module 6.

The resulting draft document will be submitted to the EEP and the ANM Committees for adoption, then to the IALA WWA Board for approbation and finally to the Council for endorsement.

6. Work on Causation Factors, Report of the WG.

There was nothing new to report and no feed back was yet received on the use of the tool specially developped. The participants were again kindly requested to test the tool, which is resent in parallel with this report.

7. Analyse of feedbacks from Sydney Training Seminar

Stephen Bennett reminded the outcomes from the questionnaires and the remarks made. Two specific points were emphasised, one on the future of PAWSA, and the second one on the advantage for having formed two groups during the seminar, depending of the qualification of each participant. Regarding PAWSA, Jean-Charles Leclair recalled that the Academy was due to visit the US Coast Guards and discuss the best way to organise PAWSA, probably focusing more on the organisation than specifically on the facilitator function.

There were 41 participants at the Sydney Seminar and taking into account that experience and the previous ones, it was agreed that the critical mass is around 30 participants, if possible divided in two groups for the practical exercises. It should also be important to have a better attention on the qualification of the registered participants and to invite each of them to read carefully the Recommendation O.134 before the seminar.

8. Any other business

1 – Omar Frits Eriksson reminded the participants of the presence of a wish list on the wiki site dedicated to IWRAP Mk2 and invited them to use it. During the next SG meeting, it was proposed to go through that list.

2 – It was mentioned that Australia is preparing a new proposal to IMO on routeing measures, using IWRAP Mk2 for the risk assessment. Papua New Guinea was also preparing something similar with the assistance of Mahesh Alimchandani and Omar Frits Eriksson as experts nominated by IMO.

9 – Action List

1. Roger Barker to submit a proposal to the Conference Steering Group for a presentation at the next Conference on the interest to collect and provide AIS information to IALA before and after any modification of AtoN or routeing measures. Such presentation could also be made at the seminar on Maritime Special Planning.
2. GateHouse to work on the way to make the use of the programme more friendly for the main users, eventually by introducing two different modes, one for the “normal” user, another one for advanced user looking for more research.
3. GateHouse to provide information on the algorithms used to calculate the vessel exhaust emissions, and to consider making a clear separation between the two functions of the tool, safety of navigation on one hand, and pollution assessment on the other hand.
4. The Steering Group is invited to study the way IWRAP Mk2 can be used as a simulation tool.
5. Omar Frits Eriksson, Knud Benedict and Roger Barker are requested to provide to Stephen Bennett their respective contribution to the drafting of a model-course on training on the IALA Risk Management Toolbox.
6. The IALA WWA to meet with the USCG to discuss the best way to organise PAWSA training, and report back to the Steering Group.

7. The Steering Group is invited to go through the wishlist of the IWRAP wikisite at its next session.

10 – Date and Venue of the next Meeting

The next meeting will be a teleconference held on **Friday the 15th of March, 2013, starting at 14.00 ECT.** *A new date is now fixed on Tuesday 25th of June, starting at 14.00 ECT (12.00 TU).*

Before closing the meeting, Omar Frits Eriksson thanked everyone for their participation.

* * *

Annexe 1

SG 31 – Agenda

St Germain-en-Laye – 15th January, 2013

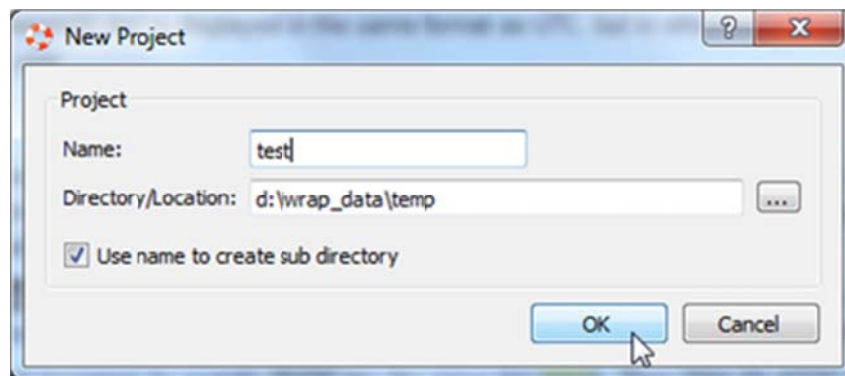
1. Opening of the meeting
2. Approval of the agenda
3. Action items from the previous meeting (SG 29 and SG 30)
4. Progress on the development of IWRAP Mk2
5. Planning of Training Seminars on IALA Risk Management Tools
6. Work on Causation Factors, Effect of Aids to Navigation etc., report of the WG.
7. Analyse of feedbacks from Sydney Training Seminar
8. Any other business
9. Outcomes of the meeting and action items
10. Date and venue of next meeting

* * *

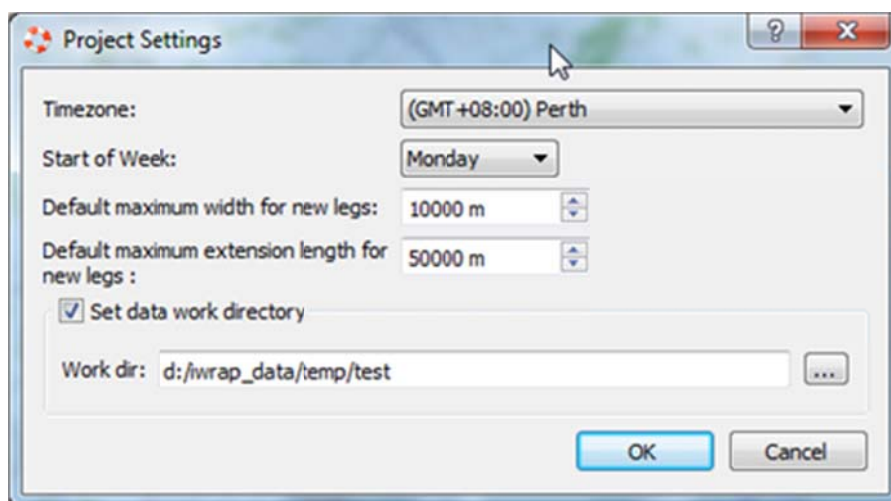
Annexe 2

IWRAP Mk2 - List of changes to the application:

- Version 4.1.0
 - A new “Use name to create sub directory” option has been added to the New Project” dialog. If this option is used in the example below the project data will be created and stored under d:\iwrap_data\temp\test”. This option makes it easier to create and manage several projects, see [Creating a New Model](#).



- The new directory is also used as the default location for working with AIS data, if the "Set data work directory" is used in the project settings, the directory will be stored in the model and used as reference point when working with AIS data. This will create the following structure at the selected work dir.



- \imported_ship_data : Used to store the imported IWRAP data from e.g. AIS.
- \model_extraction_temp : Used to store temporary data when generating models from imported data ship data.
- \density : Used to store generated density plot data.
- \emission : Used to store generated emission data.
- When comparing results, the change in percent relative to the first selected job is shown:

Incident v1.0	Incident v1.0	model2 v1.45	ma 24. mar 11:3
Completed	Incident v1.0	model2 v1.45	ma 12. mar 10:
	n3	n2	Unit
nding	0,14044000	(16,16%) 0,1631...	Incidents/Year
nding	0,13709000	(0,00%) 0,13709...	Incidents/Year
ndinas	0,27759000	(8,18%) 0,300...	Incidents/Year
	0,00253743	(0,00%) 0,002...	Incidents/Year
	0,03922570	(0,00%) 0,039...	Incidents/Year
	0,00005580	(0,00%) 0,000...	Incidents/Year
	---	---	Incidents/Year
	0,01190010	(0,00%) 0,01190...	Incidents/Year
	---	---	Incidents/Year
llisions	0,05371900	(0,00%) 0,05371...	Incidents/Year

- Set result format...
- Copy Selection Ctrl+C
- Copy All (incl. headers)

- When you right-click on the results, it is possible to select between “Years between incidents” and “Incidents per year”, and select the precision of the numbers:

Result Format

Unit:

Incidents per year

Years between incidents

Incidents per year

Precision:

3. Format as [-]9.9

Percent change precision:

2

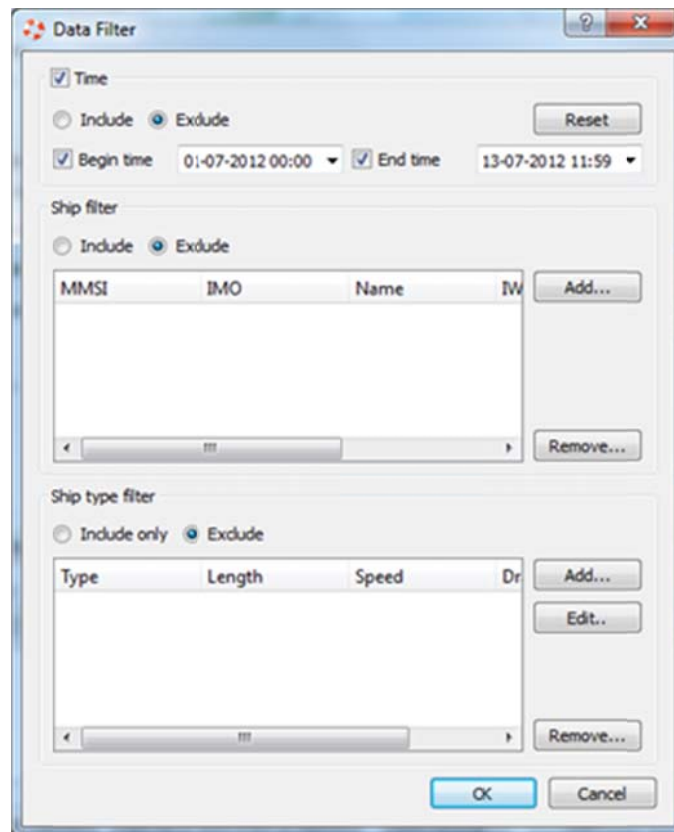
Percent change format:

3. Format as [-]9.9

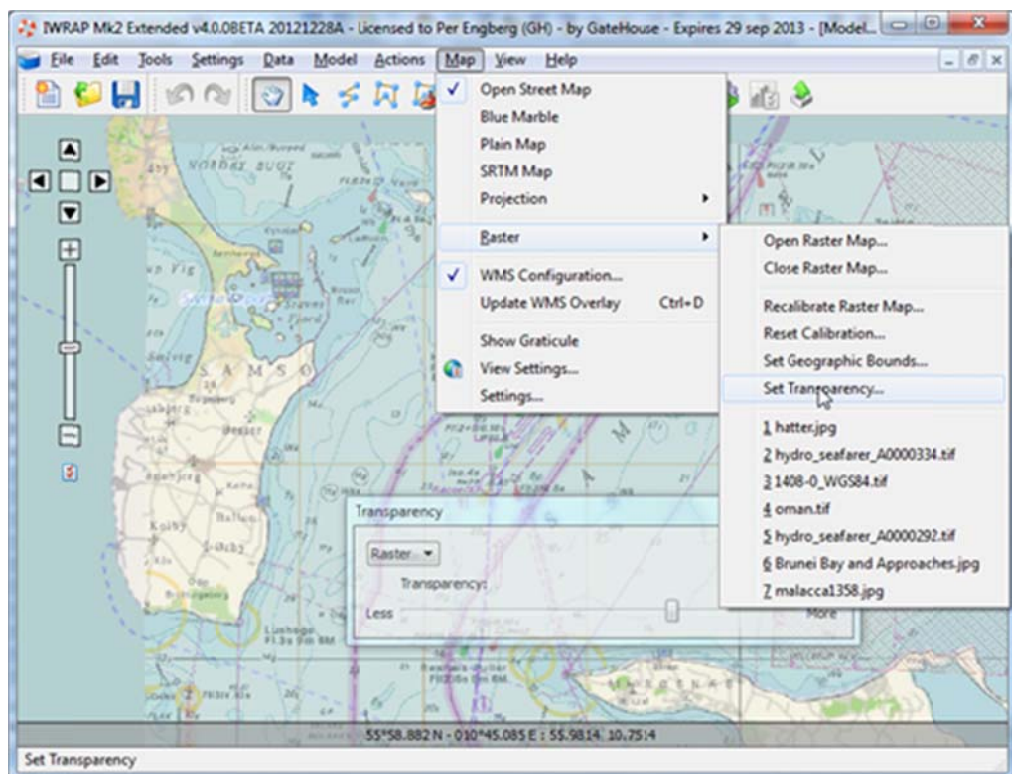
OK

Cancel

- It is now possible to add additional data to an already existing dataset, i.e. the existing dataset will be merged with the new data.
- You can now use Unix/Posix time stamps when importing data, i.e. seconds since 00:00:00 UTC 1. January 1970. The 64bit version includes milliseconds.
- When creating a [Density Plot](#) or using the new [Emissions calculation](#) feature it is now possible to a time filter as well as the regular ship and ship type filters. It is possible to exclude or include a certain period.



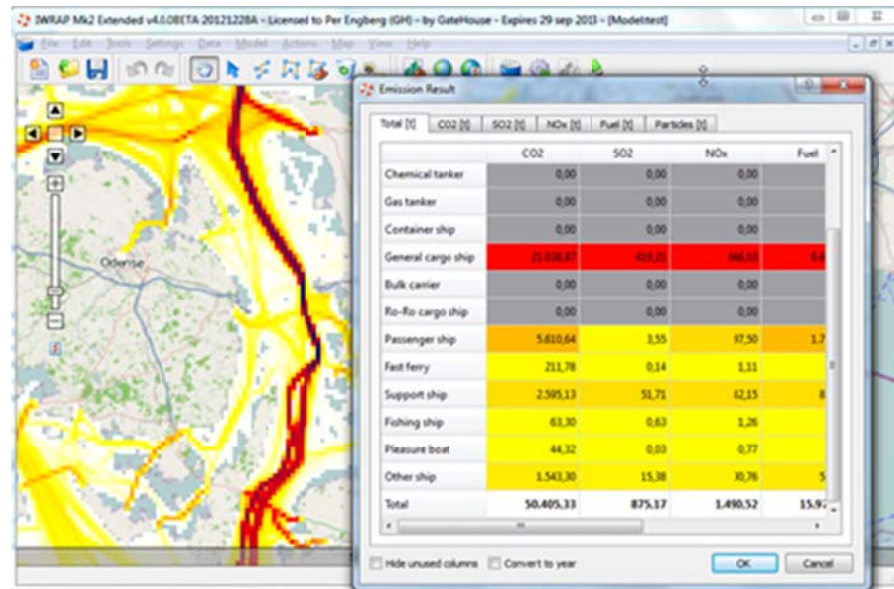
- When using Raster maps the maps are now projected on top of the background map instead of being shown in a separate window. It is possible to control the transparency of the Raster map.



- It is now possible to use regular WMS services that do not support tiling.
- GeoTIFF raster maps can now be imported without having to specify boundaries.

- A new Emission Analysis has been added to IWRAP. An emission density plot is created to show where the emissions occur. A result view shows how many ton CO₂, SO₂, NO_x are emitted and how many ton fuel is consumed, by ship type and ship length category.

Note!, this is first version of the algorithm, the results have been checked, and seem to be reasonable. Later a more advanced version of the algorithm will be released.



- Version 4.0.0
 - Web Map Service (WMS) support has been added, see an example in Section [Navigating the Map](#)
 - New [Traffic Area](#) algorithm, it is now possible to define areas/regions with different traffic compositions.
 - A [Time of day filter](#) option has been added to the density and data extraction algorithms. It is possible to define the filter manually or to use the sun position.
 - A [Passage Line Angle](#) analysis has been added to the data extraction algorithm.
 - Drifting groundings analysis has been improved with anchor handling, see [drifting](#).
 - Set default parameters when creating a new model, can be changed in 'Settings/Project Settings...'
 - It is possible to define the maximum 'Leg extension' length, and thereby limit Drifting groundings at the Leg ends. The maximum extension length is also used for the new area traffic algorithm.
 - Possibility to handle a NMEA format where a comma is used separate a timestamp and the NMEA string.
 - Milliseconds can now be parsed in timestamps.
 - A new join leg possibility has been added.
 - When a Leg is split or a waypoint is added in the middle of a leg, the old legs Traffic and Lateral distributions are now copied to the new Leg.
 - IWRAP now handles quoted strings correctly in CSV import.
 - Fitting error dialog now shows frequency/traffic per leg per shiptype and total.
 - A copy to clipboard is added to the Fitting error dialog.

- Indicate Leg traffic frequencies on tooltip/mouseover Legs on the maps.
- Map view settings has been extended with new options and added to the toolbar and menu.
- Control import stop on errors, i.e. it is possible to disregard errors or specify a maximum number of errors.
- Minimum density changed from 25m to 10m.
- Fixed bug in import data progress bar, wouldn't work properly if file(s) had too many lines, now uses 64 bits, instead of signed 32 bit.
- Problem regarding enabling/disabling density ship filter fixed.
- Extract optimization, check for overlapping legs.
- Copy Leg traffic distribution bug fixed, reduction factor was no correctly copied.
- When creating a new model, IWRAP tries to detect your geographical location from your internet connection and center and zoom to that location.
- Version 3.4.0
 - A Ship filter is added to the density plot, making it possible to specify which ships should be included or removed.
 - A red arrow on a leg is now used to indicate that there is something to be done i.e. adding traffic or adding distributions.
 - A red marker with a question mark is used to indicate if two legs cross without having a waypoint.
- Version 3.3.0
 - A density export feature is added to the Extended/Commercial version, see 'Data/Density/Export...', new density values will be converted to yearly numbers. Old density plots are not converted, you will need to generate the plot again, but this is only necessary if you want to export them.
 - Fixed problem when drawing polygons, now it is no longer possible to select leg/waypoint when drawing the polygon.
 - If the polygon tool is selected, polygons are always shown transparent.
 - The red color used for warning non-simple polygons is set to transparent.
 - A new toolbutton has been added to the 'Area List', shortcut for 'Settings/Depth Color Settings...' menu.
 - Help file could not always be activated, fixed, tested on Xp and Vista.
 - User profile too large problem, limit on map download size has been added, can be adjusted in the new 'Map/Settings...' menu item. The default is 100MB hard disk space and 30MB memory. It is also possible to clear the cache from this menu item.
 - Fixed problem when trying to store a model where you dont have write access (the Vista problem), you will now get a warning if you dont have write access.
 - 'Current path' was used as default in many places in IWRAP, this has been replaced with the users 'home path'.
 - IWRAP will generate a .dmp file in your home path if it crashes, please send them to me, I can use the information to fix the error.
 - Fixed issues when closing the project, it was not possible to cancel correctly.
 - Added check for model xml file consistency, will e.g. fail if .xml only contains polygons.
 - Added help file in pdf format, you can find it in the directory where you installed IWRAP. It is not perfect, but at least it is printable.

- Fixed problem when trying to quit while splash bitmaps were shown at startup.
- It is now possible to import, data where there is no timestamp on the second part of the message 5, e.g..

```
1-4-2008 14:06:38 < tab
> !AIVDM,1,1,,A,33u=Qm?qh20nEWbQ0IB3K87I0000,0*19
1-4-2008 14:06:58 < tab
> !AIVDM,2,1,2,A,53u?j?P1joL=<@HP000eDhhDp0000000000000000I1HA
4440HtP00000,0*6A
!AIVDM,2,2,2,A,0000000000000000,2*26
1-4-2008 14:07:01 < tab
> !AIVDM,1,1,,B,14QsDc04Qn19nJ`P1?;9F7II0800,0*52
```

- Density quantile calculation speed optimization
- Marble stars plugin has been added ;-), zoom out on the globe to see it in action
- Version 3.2.0
 - Improved visualisation of results on map, see [Running the Algorithm](#), results are normalized according to length of Legs and Polygon segments.
 - Added check for non-unique guides in polygons in the .xml, if they are not unique IWRAP will try to fix them.
 - Added features for adding a Waypoint in the middle of a Leg, splitting and joining a Leg, [Modifying Legs and Waypoints](#)
 - Changed the default depth color settings, i.e. the deeper the darker. If you are upgrading and earlier version of IWRAP you can go to 'Settings/Depth Color Settings...' menu item and use the Reset button to get the new default colors.
 - It is now possible to specify the depth values with one decimal precision.
 - The decimal precision has been increased in the storage of floating point numbers.
 - Fixed bug in kml import, imported polygons where not simple because start and end points where the same.
- Version 3.1.0
 - First time you run a new version, the release notes will be shown
 - Fixed bug when loading mixed distribution from xml, this error may affect models that use distributions other than normal and uniform
 - Proxy settings now handles port number with more than 2 digits
 - Added automatic check for and download of IWRAP Mk2 updates. A check is performed automatically when starting the application and can be invoked manually from the file menu.
 - Major change to the handling of bathymetry i.e. areas/polygons, see [Defining Bathymetry](#).
 - In order for IWRAP to work correctly it is important that all area polygons are Simple, a check for 'Simple' polygons is added, polygons are colored red if they are not Simple, the points that cause the problem are also indicated with red.
 - A polygon has to be selected from a list (or on the map) before it can be edited.
 - Google Earth like editing of points in the polygon, i.e. no more dragging points to add a new one, just select a point and start clicking to add new points.

- Possibility to delete complete polygon.
 - Points with identical coordinates are removed.
 - Empty polygons are removed when storing the model.
- Version 3.0.0
 - First release of extended functionality.
 - Marble based map engine.