

iMOD

DRAFT

Release Notes



iMOD

Release Notes

P. T. M. Vermeulen
J. Verkaik
L.M.T. Burgering
B. Minnema

Version: 3.3
SVN Revision: 53347

June 17, 2018

iMOD, Release Notes

Published and printed by:

Deltares
Boussinesqweg 1
2629 HV Delft
P.O. 177
2600 MH Delft
The Netherlands

telephone: +31 88 335 82 73
fax: +31 88 335 85 82
e-mail: info@deltares.nl
www: <https://www.deltares.nl>

For sales contact:

telephone: +31 88 335 81 88
fax: +31 88 335 81 11
e-mail: sales@deltares.nl
www: <http://oss.deltares.nl>

For support contact:

telephone: +31 88 335 81 00
fax: +31 88 335 81 11
e-mail: imod.support@deltares.nl
www: <http://oss.deltares.nl>

Copyright © 2018 Deltares

All rights reserved. No part of this document may be reproduced in any form by print, photo print, photo copy, microfilm or any other means, without written permission from the publisher: Deltares.

Contents

List of Tables	v
Release Notes iMOD-GUI	1
Release Notes iMODFLOW	11

DRAFT



DRAFT

List of Tables

DRAFT



DRAFT

Release Notes iMOD-GUI

Version	3.01.00	iMOD_V3_01_00_X32R.exe (for 32-bit systems) iMOD_V3_01_00_X64R.exe (for 64-bit systems)
Date	18-9-2015	
Based On	3.00.00	
Changed Functionality	SVN 32	- Displays Bitmaps in the SOLID TOOL, in cross-sections and 3D displays.
	SVN 33	- MODFLOW2000 does not have the capability as MODFLOW2005 does, to use LENUNI and ITMUNI; when importing a MODFLOW2000 model LENUNI and ITMUNI are set separately.
	SVN 46	- Keywords MONTHLY and YEARLY added to the functionality of the iMODBATCH function XYZ2IDF. In combination with a transient IPF (including a TXT file), it is possible to grid the IPF for mean values for selected years or months.
	SVN 46	- Changed ACCURACY from EPSILON(1.0) to 0.0 in the IMOD-PATH. This influences the minimal velocity that determines whether a particles does not move anymore, by changing it into 0.0 m/day, particles will continue until they truly stop. The value EPSILON(1.0) yielded the value 1.1920929E-07 m/day.
	SVN 48	- Changed the method to write the borehole information in TXT file for IPF files created by the iMODBATCH function DINO2IPF, in situation whereby no values are read, the value becomes "None".
	SVN 70	- The iMODBatch function IMPORTMODFLOW has been modified such that it can read external files with a MODFLOW-88 format. - The iMODBatch function ISGGRID has been extended to export the gridded data to a MODFLOW river file (SCD format).
	SVN 79	- The keywords for the SOLIDTOOL are changed from TOP and BOT into INT to make it possible to construct subsoils with an uneven number of interfaces.
	SVN 91	- The Darcian upscaling method reviewed and updated. - The iMODBATCH function ISGGRID extended to support the export to svatswnr_drng.inp used by MetaSWAP.
	SVN 165	- Problems with rendering on a Remote Desktop Server(s) related to Winteracter 10. Included an iMOD version based on Winteracter 8 that does not have these problems. In this Winteracter 8 - Remote Desktop Server-version some (minor) functionalities of iMOD are not supported on the RDP-server(s).
	SVN 166	- SOLIDTOOL corrects layers that crosses the lowest layer.
	SVN 299	- IMODBATCH the function IPFSAMPLE includes the parameter IACOL to specify the column to start inserting the sampled data. - Enlarged fields (20/50) to (52) in *.dlf files.
New Functionality	SVN 39	- Added the iMODBATCH functionality UTM2LATLONG to transform IDF UTM coordinates to a Lat-Long IPF with data, e.g. to be gridded by the IMODBATCH functionality XYZ2IDF.
	SVN 43	- Added functionality to the WATERBALANCE TOOL to use hours, minutes and seconds as time scales, so IDF files with date and time identifications become processed, e.g. HEAD_20141231063000 as the head on the 31 st of December 2014 at 6hours, 30 minutes and 0 seconds. - Added functionality to the TIMESERIES TOOL to plot time series using hours, minutes and seconds as time scale.
	SVN 48	- Increase the size for the grid fields automatically in IPFANALYSE whenever borelogs/time series are identified.
	SVN 51	- Reading IPF files with associated TXT files with long dates (yyyymmddhhmmss).
	SVN 70	- Added the iMOD Batch functionality ISGADDSTAGE to add and/or modify existing waterlevels in an ISG file from a given IPF file with timeseries.

	SVN 71	- Added the functionalities <i>Go Back to Previous Extent</i> and <i>Go to Next Extent</i> on the main icon bar and the <i>Cross-Section</i> window.
	SVN 163	- Export possible from the SOLID tool to the GEO format as used by GeoSoftware of Deltares. - The SOLID tool supports the dynamic use of different cell size for each interface. - In IMPORTMODFLOW function the Modflow scheme 1996 is supported. - Size of the profile tool increased and gave it a red colour.
	SVN 236	- Reading of *.MAP files from PCRaster.
	SVN 269	- Context-sensitive HELP-functionality: adding section-bookmarks to the iMOD User Manual and synchronize the list of bookmarks in iMOD.
	SVN 283	- The IDF-function for exportation of IDF-files to ascii-files is extended with the "Export given extent"-functionality.
	SVN 290	Reading of GEF files, as addition to iMODBATch function GEF2IPF.
Fixed Bugs	SVN 34	- Bug in IPFSAMPLING in combination with CSV-file format.
	SVN 46	- SAVE button didn't work for steady-state configuration, also the selection of a different model layer didn't responded accordingly.
	SVN 47	- Bug in iMODPATH using NCON=0 should be NCON=1.
	SVN 51	- Bug in IDFCALC whenever the function MIN,MAX,MEAN or SUM is selected; the variable LEX was not initiated. - Bug in X64 versions only: in displaying the license agreement, the variable IU was not initiated.
	SVN 60	- Bug in WATERBALANCE as a result of implementation of SVN 43, dates with 8 digits didn't work anymore.
	SVN 70	- Bug in default legends that could not be saved temporarily whenever a relative pathname was specified by the USER keyword in the preference file.
	SVN 72	- Bug on the <i>Add Topography</i> window as the coordinates could not be manipulated appropriately.
	SVN 76	- Bug in memory allocation for the Quick-Response Tool.
	SVN 77	- Bug in reading IPF files as CSV using the double quotes.
	SVN 88	- Bug in display of IFF lines in the 3D Tool that are vertically.
		- Export format for the output files for iMODPATH (IFF and IPF) synchronized. - Identical algorithm used in the postprocessing of pathlines in the iMODBATch function iMODPATH, to determine appropriate cell indices for points as used in iMODFLOW. This means that points that are exactly on the boundary of model cell will be assigned to the i+1 cell instead of i.
	SVN 163	- Bug in creation of legend where the difference exceeds the range of a single precision real, namely >10.0+e37. For those cases the legend will be inaccurate but iMOD will not hang. - The display of the <i>Nodata Value</i> of an IDF is displayed correctly in MapInfo and IDF Edit displays.
	SVN 213	- Bug in <i>Compute Mean Values...</i> , after measuring the mean the specific dialog window cannot be closed neither it is possible to proceed with the iMOD session.
	SVN 216	- Bug in positioning of labels in 3D-tool. Labels did disappeared when turning the 3D-schematisation under certain angles.
	SVN 218	- Update of keywords vor iMOD Batch in code.
	SVN 226	- Fix coordinates in CreateIDF whenever changes are made in the dialog.
	SVN 240	- Correct reading of run-files in the ModelTool without bounding coordinates in submodels.
	SVN 254	- iMOD Batch reading of keuword with an extra space after the "="-signs raised a problem. This has been fixed, as it was noticed by the GxG-function in iMOD Batch using the keyword IPERIOD=.

	SVN 267	- Changed the keyword CROSS-SECTION_IN to CROSSECTION_IN
	SVN 287	- Fixed bug in reading *prf having a last empty line.
	SVN 298	- No capitalizing input from *.ini file.
	SVN 299	- Colouring of the correct field using DLF legends.
Version	3.2.00	iMOD_V3_2_X32R.exe (for 32-bit systems) iMOD_V3_2_X64R.exe (for 64-bit systems)
Date	11-11-2015	
Based On	3.01.00	
Changed Functionality	SVN 305	- Reading/assignment of DLF files (maximal 10) for usage within Profile Tool, 3D Tool and IPF Analyse.
	SVN 309	- Usage of the DLF field colourwidth to display boreholes with variable widths. - include the keyword STOPERROR in BAS file for convergence issues in Modflow2005.
	SVN 312	- Labeling of IPF files in the 3D tool can be specific selected for each IPF separately.
	SVN 320	- ISGGRID create nodatavalues (-9999.00) for cells not intersected by lines.
	SVN 325	- IMPORTSOBEK stopped whenever actual length weren't equal to the lengths based on the nodes of the segment. The import now is not stopped but a warning is issued to the file importsobek.log and the process continues. - Enlarged fields (20/50) to (52) in *.dlf files.
New Functionality	SVN 305	- Add screen number for IPF and IFF in the profile tool. - Use different legends for IPF files (*DLF).
	SVN 309	- Save DLF legends in IMF-files. - Manually activate display of IPF/IFF files during moving/drawing the cross-section. - Mousemove coupled to location in identification window in IPF Analyse via Profile Tool.
	SVN 320	- Saving of solid files during editing without leaving the cross-section tool. - Extended the IMODBatch functionality ISGEXPORT with keyword IEXPORT to denote export of calculation points or cross-sections.
	SVN 326	- Remove and/or modify more nodes in SOLIDTOOL simultaneously
	SVN 341	- Added Inf and NaN in IDF Edit to search on those values in the IDF files.
	SVN 343	- Added an active/deactive code per line in the SolidTool. Now per line it can be specified whether or not it need to be included in the solid.
	SVN 351	- Added functionality in the 3D Tool to zoom to predefined zoom scales. - Display the lines in the cross-sections as true splines or straight lines.
	SVN 364	- Change timesteps in the projectmanager. - Save cross-sections and 3D Tool configurations in a iMOD Demo-mode.
	SVN 370	- Include the option sign() as a function in IDF Calc, subtract only whenever the sign of the two are equal and use pointer values to note the type of difference. - the iMODFLOW-executable present in the {installfolder} will be invoked instead of the iMODFLOW-executable copied to {installfolder}\MODELS\{Result Folder}.
	SVN 375	- Usage of preference colours for the default legend. - Apply a value in IDFCalc to "trim" outcome of calculation whenever the outcome is less than a specified absolute value

	SVN 401	- Export to Modflow2005, give explicitly if the model is 3D or Quasi 3D.
Fixed Bugs	SVN 306	- iMODBatch ISGSIMPLIFY removal of first and last calculation point in case stage were completely flat. - iMODBatch CREATSOF correct usage of given OUTLET points to stop tracing the drainage level.
	SVN 309	- Screen number were outgreyed in Profile Tool. - Export of BND to Modflow2005 created constant head along submodel as it was filled with nodata from IDF.
	SVN 312	- Display of bitmaps in 3D Tool in combination with bitmaps attached to solid cross-sections.
	SVN 343	- Total length of line in SolidTool didn't match true length, only visible in cross-sections with many points.
	SVN 351	- Delete of spf will not shift attached bitmaps appropriately.
	SVN 376 SVN 378	- Use of small-caps for FUNC in IDFCALC gave errors. - Bug in smoothing the IDF files whenever the file to be used for the smoothing exceeds the size of the IDF to be smoothed upon.

Version	3.2.1	iMOD_V3_2_1_X32R.exe (for 32-bit systems) iMOD_V3_2_1_X64R.exe (for 64-bit systems)
Date	24-11-2015	
Based On	3.2	
New Functionality	SVN 440	iMOD-GUI can now invoke iMODFLOW using folder names containing spaces.
Changed Functionality		
Fixed Bugs		

Version	3.3	iMOD_V3_3_X32R.exe (for 32-bit systems) iMOD_V3_3_X64R.exe (for 64-bit systems)
Date	25-03-2016	
Based On	3.2.1	
New Functionality	SVN 439	- Specify the option to reduce sizes of boreholes if they do not fit next to each other and thus may overlap.
	SVN 466	- Added iMODBatch function RUNFILE, to create *.PRF from *.RUN files and/or create *.RUN files out of *.PRJ files.
	SVN 471	- Project Manager supports now the creation of RUNFILES. - PlugIn Tool is added as an additional tool to support external programs or scripts to be invoked by iMOD and exchange input and output. - Added an extra MetaSWAP output component to the waterbalance tool (BDGPSSW).
	SVN 471	- The Interactive Pathline Simulator tool for animating ground-water flow.
	SVN 487	- Added units to waterbalance items.
	SVN 502	- Added an option to change the transparency of individual IDF files in the 3D Tool.
	SVN 512	- The IPS functionality can now be started from the Pathline Tool.
	SVN 520	- The usage of breaklines in the SOLID Tool is made available in the GUI. - Coordinates in the Profile Tool can be decreased in number by specifying a minimal distance between coordinates. - Compute differences in IDFTIMESERIES can handle IDF files with hours, minutes and seconds.

	SVN 528	<ul style="list-style-type: none"> - Automatic spinner in 3-D. - Entry of scale ratio in the Profile Tool. - Display label and size on the cross-section for the SOLID Tool on 2D 	
	SVN 541	<ul style="list-style-type: none"> - Kriging settings can be defined per interface. 	
	SVN 544	<ul style="list-style-type: none"> - Automatic rendering of the image in a circular movement in 3D by pressing the spacebar. 	
	SVN 546	<ul style="list-style-type: none"> - Bitmap in the background of cross-sections in the SOLID Tool can be temporarily hidden and fixed so that it cannot be moved while adjusting the lines of the cross-section. 	
Changed Functionality	SVN 422	<ul style="list-style-type: none"> - Solid Tool; Compute Interfaces window. Export to *.geo is with the "version" name attached to the keyword VERSION. 	
	SVN 439	<ul style="list-style-type: none"> - Spline mode in Solid Tool is "off" by default, for export to IPF or GEO. 	
	SVN 489	<ul style="list-style-type: none"> - The IPS module can create a temporary submodel for particle tracking purposes. - The reading module or the imodpath entries has been made similar to other scaling modules. 	
	SVN 504	<ul style="list-style-type: none"> - PNG, PCX and JPG file can now be used as background images, and can be resized and flipped horizontally and vertically. - iMODBatch function CREATEIDF will NOT ask to overwrite existing IDF-files while importing ASC-files, GUI still does. - Read in GEN file in Profile Tool are corrected for duplicated points. 	
	SVN 507	<ul style="list-style-type: none"> - Previous folder names are saved to be re-used in next search in folders. 	
	SVN 512	<ul style="list-style-type: none"> - Pathline Tool creates its runfile in the RUNFILE folder instead of the TMP folder, it also creates a stamp of the chosen model result folder in the filename. - Adjustment of the NODATA value in the IDF file, causes that the content of the IDF file itself will be changed accordingly. So values that are equal to the previous NODATA value, will become adapted to the new NODATA value. - Bitmaps that can be positioned behind the cross section in the solid tool, can be stretched and moved interactively whenever the corresponding bitmap is selected from the Add Background Image dialog. - Background Images may be BMP, PNG, PCX and JPG files. 	
	SVN 516	<ul style="list-style-type: none"> - IFF attributes can be plotted all, also whenever the number of columns are enlarged above 7. 	
	SVN 581	<ul style="list-style-type: none"> - In the waterbalance tool: extra comment line that explains the possible causes for disclosure of the balance, e.g. differences in used units (m³/day or mm/day) for specific fluxes. 	
	Fixed Bugs	SVN 418	<ul style="list-style-type: none"> - Translate x,y coordinates from shape files into GEN files using the double-precision format. - Non-existing background files are turned off and properly reset.
		SVN 427	<ul style="list-style-type: none"> - Bug in reading the CLR files and display them in the preference tab.
SVN 429		<ul style="list-style-type: none"> - Bug in collecting correct dates in the waterbalance tool. 	
SVN 432		<ul style="list-style-type: none"> - When defining a new function using iMODBatch, now the correct function is presented (instead of the next function from the list of available functions). 	
SVN 443		<ul style="list-style-type: none"> - Whenever IPF files are not active in profile tool setting the snapping option was not available. 	
SVN 466		<ul style="list-style-type: none"> - Bug in ISG grid in combination with 2d and 1d cross-sections. 	
SVN 467		<ul style="list-style-type: none"> - iMODBATCH function MKWELLIPF ignored ICLAY variable. 	
SVN 471		<ul style="list-style-type: none"> - Bugfix in Compute GXG. Selecting correct surface level. 	
SVN 472		<ul style="list-style-type: none"> - Bugfix in iMODBatch PLOT function - usage of IPF files for timeseries plotting. 	

- SVN 482 - Usage of particles pass through all weak sinks gave problems whenever the weak sinks approaches a strong cell as an internal value of FRAC=0.99 was used to denote a strong cell, FRAC is now 1.0 and maximized to be 1.0 numerically.
- Applying a fraction for iMODPATH (ISNK=3) didn't work from iMODBatch.
- SVN 486 - Computation of SUMC in IDFSCALE option 14, went wrong.
- Applying lower-left coordinates in IDFSCALE went wrong.
- SVN 489 - Default colouring of IDF files was maximized to 50, following files got colour number 1, now the colour numbering continues.
- SVN 502 - Bug reading GEN files for overlays.
- Intersect for non-equidistantial cell went wrong, created a killing bug for the profile-tool.
- 3D tool with non-equidistantial IDF gave bug.
- In profiletool, whenever a knickpoint was positioned outside the selected IDF, the profile length didn't take into account the extra space of the cross-section outside the IDF file.
- SVN 509 - Import of Modflow2005 the LENUNI variabel didn't applied correctly to EVT package and the elevation in the DIS whenever LAYCON=0.
- SVN 515 - Bug in timeseries export.
- SVN 528 - Load SHP file in CreateIDF from Polygons/lines.
- SVN 544 - Rasterizing ISG didn't take into account stages with nodata values for transient mean values.
- SVN 616 - Bug in Solid Tool by using the "pan" function in Zoom-in modus.

Version	3.4	iMOD_V3_4_X32R.exe (for 32-bit systems) iMOD_V3_4_X64R.exe (for 64-bit systems)
Date	30-06-2016	
Based On	3.3	
Changed Functionality	SVN 647	- 3D TOOL: 3D Tool is organized differently whereby the dialog is attached to the graphical screen and the tool operates independently of the existing 2-D screen.
	SVN 666	- IMODBATCH: EXPORTASC Write results per row instead of free-formatted
	SVN 660	- IMODBATCH CUS: Usage of IEXPZONE to include an additional buffer around each isolated formation to ensure a more logical connection within parts of the formation laterally; - Usage of ICLIP to include a clipping IDF for each formation to be internally blanked out to ensure usage of overlapping maps for formations
	SVN 635	- XYZTOIDF: Interpolation of interfaces from IPF files, median values are not supported anymore
	SVN 707	- WATERBALANCE: Always using files with/without *sys* in their given names
	SVN 709	- STARTPOINTS: Tried to read from the non-existing SDF-file the first time an SDF-file is created
	SVN 713	- GENERAL: The numeric format of plotting IDF values is now depending on the accuracy of the IDF values
	SVN 738	- CONTOURING: Improved contouring algorithm, especially to include delineation of flat areas
	SVN 756	- CONTOURING: Legend label on contours uses appropriate number of decimals - LEGEND: Legend plotting now plots a grey rectangle around classes - 3DTOOL: The menu option 'Select' is now part of the main dialog and removed from the main menu

	SVN 762	- LEGEND: Enhanced legend plotting for 255 and 50 classes categories
	SVN 781	- IMODBATCH: Testbank does not subtract results if one-of-the-two is equal to its Nodatavalue
	SVN 787	- IMODPATH: Restored functionality to save deepest model layer during particle tracking (MAXLAY)
New Functionality	SVN 635	- SOLID TOOL: Usage of separate IPF files to include (additional) interpolation points, or use those points solely for the interpolation, with- and without associated txt files that describe the elevations of the individual interfaces. Without associated txt files, each IPF describes the z-elevation at the third column
	SVN 642	- GENERAL: Relative path can be read from IMF-files, those are relative to the name of the current - IMF-file and are converted to global paths
	SVN 734	- LEGEND: Legend can be adjusted with chosen intervals
	SVN 778	- GENERAL: Added debug reporting level
	SVN 784	- GENERAL: Reading of Point Shapefiles will be converted to IPF-files, also Shapefiles can be read from the MAP-tab on the iMOD Manager
	SVN 849	- GEOCONNECT TOOL: Geoconnect tool is usable to determine the geologic origin of 3D models (what geologic formation is within what model layer) and (re)create the parameterisations of a 3D model (compute the correct k-values for each model layer based on the fractions of geologic formations in that model layer)
Fixed Bugs	SVN 625	- TIMESERIES TOOL: Series can be plotted while new files are added to the selected folder in the background as a model is still running
	SVN 630	- IMPORT MODFLOW: Time units to adjust PERLEN to days, usage of TSMULT included to generate additional stress-periods - ISS flag does not to be read from the BCF package in 2000 and 2005 configurations - Conversion of time units to days was wrong for the WEL, DRN, RIV packages - GENERAL: Out greying of the iMOD Info button on the menu-bar didn't synchronize with the rest
	SVN 634	- PROFILE TOOL: Cross-section did not work whenever DX is not equal to DY
	SVN 636	- ISG EDIT TOOL: Gridding of transient data gave error, in combination of computing the mean and entered start and end date
	SVN 640	- GEOCONNECT: Factors in preprocessing were not used; iMODBatch in preprocessing array already allocated; Added coordinates on tab 1; include the identify button on tab 3 to inspect the current existing formations on the current window. - DEMO-MODE: 3D DEMO functionality was not working properly
	SVN 695	- MF2005 EXPORT: HFB was not assigned to the utmost row and column, e.g. irow=1, irow=nrow, icol=1 and icol=ncol - MODELTOOL: Applied quotes for file names
	SVN 698	- PATHLINES: Writing of column/row numbers at start- and end location in IPF files was switched
	SVN 706	- WATERBALANCE: Could not find the *sys* files from iMODFLOW V3.0 and younger
	SVN 709	- GENERAL: Usage of MAXSHAPES is supported from the preference menu - IPS: Usage of constant values from a iMODPATH runfile for TOP and BOT parameters
	SVN 727	- IMODBATCH: Whenever an argument is missing after the "=" of an optional argument an error message appeared

- SVN 732
 - MODELTOOL: Including the PST parameter while converting to a imodflow.run file
 - GENERAL: Didn't position a contour line in between a class of 0.0
- SVN 744
 - PROJECTMANAGER: Saving of number of timeseries in run-file on right position PST was not mentioned in the header of packages
 - ISGEDIT: Gridding of ISG file did not overrule grid-dimensions entered on the last window
- SVN 750
 - KRIGING: Improved algorithm, NUGGET effect was not correctly processed
- SVN 762
 - LEGEND: Bug in class-legend gave a crash whenever a negative value from the legend was selected in the table
- SVN 776
 - PROFILETOOL: Loading of BMP causes the 21st filename (IDF, IPF or IFF) to be closed by the Winteracter routine IGR-FILEINFO.
- SVN 781
 - PROJECTMANAGER: Removal of PST didn't work properly
 - GEOCONNECTTOOL: Small issues resolved, crash by repeatedly starting the post-processing

DRAFT

Version	3.6	iMOD_V3_6_X32R.exe (for 32-bit systems) iMOD_V3_6_X64R.exe (for 64-bit systems)
Date	10-05-2016	
Based On	3.4	

Starting from iMOD 3.6 we summarize all new, changed, extended and fixed functionalities on the iMOD-website: <http://oss.deltares.nl/web/imod/release-notes>. Per release these release notes are also distributed per email to all iMOD-community members,

DRAFT

DRAFT

Release Notes iMODFLOW

Version	3.00.01	iMODFLOW_V3_00_01_METASWAP_SVN1004_X32R.exe (for X32-bit systems) iMODFLOW_V3_00_01_METASWAP_SVN1004_X64R.exe (for X64-bit systems)
Date	15-10-2014	
Based On	3.00.00	
New Functionality		
Changed Functionality		linked with MetaSWAP SubVersion number 1004 from repository https://repos.deltares.nl/repos/GWSobek/trunk/src/modmsw/
Fixed Bugs	SVN 49	When a GEN-file coincides exactly with cell face no HFB-cell face was assigned resulting in a barrier with a hole. This bug has partially been fixed; with the real world test model NHI the bug fix works, however, the standard USGS HFB-test still fails because the test contains a barrier partly at a cell face. Version 3.00.01 was released because the bug manifests only in exceptional cases; a subsequent bugfix is planned to also fix these exceptional cases.
Version	3.00.02	iMODFLOW_V3_00_02_METASWAP_SVN1004_X32R.exe (for X32-bit systems) iMODFLOW_V3_00_02_METASWAP_SVN1004_X64R.exe (for X63-bit systems)
Date	20-11-2014	
Based On	3.00.01	
New Functionality		
Changed Functionality		
Fixed Bugs	SVN 80 SVN 81 SVN 82	IMOD-319: default value added for KVA-module (1.0). IMOD-327: bug fixed upscaling anisotropy factor (most frequent occurrence). Bug fixed applying factor for recharge.
Version	3.01.00	iMODFLOW_V3_01_00_METASWAP_SVN1031_X64R.exe (for 64-systems) iMODFLOW_V3_01_00_X32R.exe (for 32-bit systems) iMODFLOW_V3_01_00_X64R.exe (for 64-bit systems)
Date	17-07-2015	
Based On	3.00.02	
New Functionality	SVN 194	In Perched Water Table PWT-package: new conceptual enhancements implemented for how groundwater flows at the edges of a Perched Water Tables to avoid some numerical instabilities.
Changed Functionality	SVN 188 SVN 194 SVN 202 SVN 221 SVN 242 SVN 259 SVN 260	linked with MetaSWAP SubVersion number 1032 from repository https://repos.deltares.nl/repos/GWSobek/trunk/src/modmsw/ Update for VS2008 (EXTERNAL statements removed) - Update for interface MODFLOW-TRANSOL. HFB-package update (based on an earlier implementation in iMODFLOW 2.6.) improving the discretization of curved lines to the model grid. PEST package update based on iMODFLOW 2.6. Update for TRANSOL interface. Update interface with TRANSOL to previous version. Some minor iPEST-messages and I/O adjustments. Removed 'modflow' subdirectory from output results directory.

	SVN 214, 215, 228- 230, 234, 246	Update of iMOD license text.
Fixed Bugs	SVN 105 SVN 191 SVN 212 SVN 238 SVN 257 SVN 258 SVN 261 SVN 261	In SGWF2BCF7C: adding uninitialized variable CR to variables list. Initialization of constant CNSTNT added for u1drel and u2dint. In HFB package: minor error-correction for case that lines are outside model domain. In Grid2MetaSWAP: reading ascii files standard with xllcorner and yllcorner which also could be xllcenter and yllcenter. In coupling Modflow-MetaSWAP with Mozart: change of general missing parameter value. In HFB package: minor error-correction for case that lines are outside model domain. In ISG package: a small change in the ISG calculation routine was made. Automated scaling factor: the computation of the simulation window was sometimes incorrect in case the extent of the entered model was not exactly divisible by the cell size of the model.

Version	3.2	iMODFLOW_V3_2_METASWAP_SVN1044_X64R.exe (for 64-systems) iMODFLOW_V3_2_X32R.exe (for 32-bit systems)
Date	10-09-2015	
Based On	3.01.00	
New Functionality		
Changed Functionality		linked with MetaSWAP SubVersion nr. 1044 from repository https://repos.deltares.nl/repos/GWSobek/trunk/src/modmsw/
Fixed Bugs	SVN 317 SVN 318 SVN 344 SVN 352	Bug fix uninitialized arrays when using the ANI package. This problem may result in a floating point error at some machines. Bug fix automatic assigning ISG to layer: a floating point error (division by zero) might occur on specific machines. Bug fixes CHD-package: 1. input start/end head was swapped; 2. iMOD usage of factors (e.g. $h = 0.5h_1 + 0.5h_2$) was incorrect. Bug fix ISG 2-D cross sections.

Version	3.2.1	iMODFLOW_V3_2_1_METASWAP_SVN1044_X64R.exe (for 64-systems) iMODFLOW_V3_2_1_X32R.exe (for 32-bit systems)
Date	20-11-2015	
Based On	3.2	
New Functionality	SVN 438	iMODFLOW can now work with folder names containing spaces.
Changed Functionality		
Fixed Bugs		

Version	3.3	iMODFLOW_V3_3_METASWAP_SVN1047_X64R.exe (for 64-systems) iMODFLOW_V3_3_X32R.exe (for 32-bit systems)
Date	25-03-2016	
Based On	3.2.1	
New Functionality		
Changed Functionality		linked with MetaSWAP SubVersion nr. 1047 from repository https://repos.deltares.nl/repos/GWSobek/trunk/src/modmsw/

Fixed Bugs	SVN 561	Restoring the gridding functionality of flow-width in ISG.
	SVN 618	Bug fix Metadata package (MET) timestep management in MODFLOW, causing a delayed read of transient well data. This bug was relevant when defining stress period lengths that were larger than the available time discretisation present in the ipf- and txt-files used as the source of the abstraction data.
	SVN 621	Adjusted scaling of well extraction from median value to mean values weighted to time - usage of nodata values in txt files.

Version	3.4	iMODFLOW_V3_4_METASWAP_SVN1047_X64R.exe (for 64-systems) iMODFLOW_V3_4_X32R.exe (for 32-bit systems)
Date	20-06-2016	
Based On	3.3	
New Functionality		
Changed Functionality		

Fixed Bugs	SVN 660	DRN: Memory reallocation of the drain package will be performed whenever the number of drains exceeds the previous allocated memory.
	SVN 662	TIMESERIES: A limited number of unit numbers were available (10-99) for time series, now it is set to (10-999). COMMON: An inactive package in the runfile was seen as "reuse" package instead of a new package definition without any entries.
	SVN 680	PCG: The cleaning of the matrix coefficients was not done correctly.
	SVN 671	IPF: Reading screen depths only needed whenever ilay.eq.0.
	SVN 719	ANI: The incorrect nodata values were assigned to the inactive corner cells at the computational area.
	SVN 720	HFB: The issue with the out of array boundary horizontal flow barrier package is solved.
	SVN 732	COMMON: The initialization problem is solved for iMOD license agreement file.
	SVN 786	COMMON: A non-converging steady-state MODFLOW simulation was not finalized correctly.
	SVN 792	BALANCE: Computing the waterbalans, the ANI-terms were not included in the constant-head boundary flux, also they were not applied as a correction on the BDFFFF and BDGFRF fluxes for the LPF-configuration.
	SVN 799	PWT: The floating point exception for inactive cells should be skipped in the perched water table package.
SVN 806	CHD: For zero-thickness cells at a subdomain boundary a constant head cell could be activated incorrectly resulting in an error message "no-flow cells cannot be converted to constant head cells".	

Version	3.6	iMODFLOW_V3_6_METASWAP_SVN1196_X64R.exe (for 64-systems) iMODFLOW_V3_6_X32R.exe (for 32-bit systems)
Date	30-05-2017	
Based On	3.5	

Starting from iMOD 3.6 we summarize all new, changed, extended and fixed functionalities on the iMOD-website: <http://oss.deltares.nl/web/imod/release-notes>. Per release these release notes are also distributed per email to all iMOD-community members,

DRAFT

Deltares, 2016. "BIBTEX key with no entry, needed if no citations are made in the document."

DRAFT

DRAFT

DRAFT



Deltares

PO Box 85467
3508 AL Utrecht
Princetonlaan 6-8
3584 CB Utrecht
The Netherlands

+31 (0)88 335 81 00
imod.support@deltares.nl
www.deltares.nl