

## OPTIMOOR Diary of Principal Developments

### 6.4.8

- 27 Jun 18 Fixed bug where wind or current rose failed to take into account wave motion (WRM)
- 1 Apr 18 Sweep no longer initialises time or Pull-in, allowing sweep for any condition between initial and final time
- 15 Mar 18 Fixed minor difference after sweep between max tensions displayed and max tensions reported
- 9 Mar 18 Removed glitch in deleting segment with lump Wt (Plus)

### 6.4.7

- 22 Feb 19 Fixed bug introduced version 6.4.5 causing failure to recover file names on list of previous cases at start up

### 6.4.6

- 5 Feb 18 Value of loaded Cb now correctly reported (Dynamic with WRM)
- 25 Jan 18 Fixed bugs in setting up tug forces on Guest ship (Dynamic with S2S)
- 23 Jan 18 Anomaly fixed when current drag data for cruise ship is extrapolated beyond its range of draft to water depth ratios

### 6.4.5

- 20 Dec 17 Fixed incorrect display of STS fender positions if Guest yaws. Results are unaffected (Plus with S2S)
- 16 Dec 17 Removed anomalies on menu for choosing lines to display when plotting simulation (Dynamic)
- 14 Dec 17 Fixed occasional failure to display fender pressure
- 13 Dec 17 Correct for moment due to offset friction between ships (Dynamic with S2S)
- 12 Dec 17 Fixed failure to suppress any velocity inherited from dynamic mode after changing to static mode (Dynamic)
- 11 Dec 17 Report velo at target in dynamic simulation (Dynamic)
- 10 Dec 17 Correct phase of heave motion between ends of S2S lines (WRM with S2S)
- 4 Dec 17 Fixed overflow problem calculating fender contact areas when fenders defined far beyond ends of vessel
- 3 Dec 17 Warning shown if LAN is searched for berth or vessel files (very slow if not found)
- 2 Dec 17 Fixed inconsistency in sweep results for fender forces

### 6.4.4

- 4 Oct 17 Fixed bug in dynamic wave drift force, failing to update sufficiently frequently (Dynamic with WRM)
- 3 Oct 17 Increase maximum collar deflection from 1m to 10m (Plus)
- 2 Oct 17 Width or height of fenders cannot be zero, but default to 3m (10ft) and ½width respectively

### 6.4.3

- 22 Sep 17 Improved access to default folder for batch files (Plus)
- 13 Sep 17 Enable graphical positioning of S2S fenders
- 11 Sep 17 Remove restriction on transverse position of ship manifold target
- 6 Sep 17 Improvements to area of fender contact
- 29 Aug 17 Targets on loadout vessel now chosen by user, same as for normal ship (Plus)
- 28 Aug 17 Allow encrypted drag data

### 6.4.2

- 16 Aug 17 Now always report which bollards are in use even if no force on them
- 8 Aug 17 Fixed problem displaying min clearance under Guest (Dynamic with S2S)
- 19 Jul 17 Smoothed display of wave motion limits for rose and limit curve (WRM)
- 18 Jul 17 Sharpen bow of hull drawn in Site Arrangement and reduced step used to move and scale background image if used

### 6.4.1

- 14 Jun 17 Fixed bug not identifying worst line loads in Time Sweep
- 8 Jun 17 Fixed occasional failure to display pier markers
- 1 Jun 17 Option added for own user-defined RAO's (WRM)

### 6.4.0

- 29 May 17 Fixed intermittent error shielding waves locked to wind when the shielding option switched on in berth window
- 22 May 17 Fixed bug in calculating relative wave motion between targets (WRM with S2S)
- 14 May 17 Now displays total bollard/anchor load and percentage of strength
- 12 May 17 Fixed problem with removal of single lines in batch mode for sweep and rose (Plus)
- 11 May 17 Fixed inconsistency of sign convention in simulation of sway excursion (Dynamic)
- 3 May 17 Option to allow fender to float automatically at WL

- 23 Apr 17 Start-up position for Guest ship now specified relative to Host, not berth coordinates (Dynamic with S2S)
- 13 Apr 17 Fixed bug in calculating drag of ship through water with current in dynamic simulation (Dynamic)
- 11 Apr 17 Fixed failure to trigger wave response in batch mode (Plus with WRM)
- 4 Apr 17 Legend on simulation plot indicated excursion at centre, changed to excursion at target
- 20 Mar 17 Fixed bug at start-up which indicated fairleads measured from midship but displayed from AP
- 17 Mar 17 Fixed position error when transom of loadout vessel not same as AP (Plus)

### 6.3.10

- 28 Feb 17 Maximum bollard/anchor uplift now reported after sweep
- 27 Feb 17 Option to specify if winch brakes fade (fail) after slippage = 33% of vessel breadth (Dynamic)
- 22 Feb 17 Fixed glitch on display of maximum permitted bollard/buoy load
- 21 Feb 17 Fixed failure to specify friction on Ship2Ship fenders (Dynamic with S2S)
- 14 Feb 17 Fixed glitch plotting forces on undefined fenders (Dynamic)
- 13 Feb 17 Corrected interchange of direction and period in dynamic set up of waves (Dynamic)
- 10 Feb 17 Fixed bug in selection of bollard forces in simulation plot (Dynamic)

### 6.3.9

- 24 Jan 17 Fixed bug caused if tail is longer than distance from bollard to fairlead
- 20 Jan 17 Smoothed some curves on capability roses by interpolation
- 12 Jan 17 Anomalous spikes on capability roses reduced by re-setting slippage on lines for each increment

### 6.3.8

- 14 Dec 16 Batch jobs speeded up by temporarily suppressing display of mooring window (Plus)
- 13 Dec 16 Fixed occasional failure to recalculate spectrum after changing wave period (WRM)
- 10 Dec 16 Fixed problem identifying worst excursions in batch mode (Plus)
- 6 Dec 16 Option to exclude/include chain lines when automatically removing lines sequentially in batch (Plus)
- 5 Dec 16 Changing units now automatically changes batch data to match (Plus)
- 4 Dec 16 Fixed failure to save newly-typed data unless cursor moved after updating (spreadsheets OK)
- 2 Dec 16 Target on correct side of Host now used to report Host offset when starboard to side (S2S)
- 30 Nov 16 Fixed failure to display worst directions for current and sea-wave sweep
- 21 Nov 16 Automatically cleans up corrupted vessel files where feasible
- 11 Nov 16 Fixed bug preventing initialisation after plotting wave rose if wave height zero (WRM)
- 5 Nov 16 Latest batch file automatically loaded (Plus)
- 3 Nov 16 Fixed various bugs with using sweep in batch mode (Plus)
- 10 Oct 16 Made fibre tail colours alternate to identify the segment lengths
- 7 Oct 16 Max allowable load can now be specified for buoy as well as bollard (Plus)
- 6 Oct 16 Limit on gap between Host & Guest increased from 10 m to maximum 100 m (S2S)
- 5 Oct 16 Option to hide display of pier
- 6 Sep 16 Height of anchor above seabed now correctly reported when USA units chosen (Plus)
- 3 Sep 16 Adjustable pier can now be shown on loadout site arrangement (Plus)

### 6.3.7

- 26 Aug 16 Ship2Ship fender load-compression curves now display properly (S2S)
- 16 Jul 16 Equilibrium start in Dynamic mode now properly allows for Other Forces (Dynamic)
- 15 Jul 16 Exceeding bollard limit no longer disconnects attached lines (Dynamic)
- 14 Jul 16 Correction to scale for wind & current rose in USA units
- 13 Jul 16 Static Other Force is now added Other Forces in Dynamic setup (Dynamic)
- 29 Apr 16 Double clicking on Guest ship now generates new fairlead on Guest, not incorrectly on Host (S2S)

### 6.3.6

- 19 Apr 16 Fixed various glitches in display of lines, no change to numerical results
- 15 Apr 16 Fixed error reporting percent of bollard strength in USA units.

### 6.3.5

- 29 Mar 16 Fixed failure to display all wave motions at targets (WRM)

### 6.3.4

- 28 Mar 16 Presence of Other External Force noted on Rose and Sea State Limit diagrams

- 22 Mar 16 Fixed errors (introduced version 6.3.0) in calculating wave drift force (WRM)
- 21 Mar 16 Fixed bug with shielding waves locked to wind direction during wind sweep
- 11 Mar 16 New batch feature to remove each line in turn automatically, one at a time (Plus)

### 6.3.3

- 27 Feb 16 Improved accuracy at large yaw angles for end-on loadout (Plus)
- 24 Feb 16 Clarified display of excursions for loadout (Plus)
- 10 Feb 16 Other Static Force now retained irrespective of any others set up in dynamic Force History (Dynamic)

### 6.3.2

- 28 Jan 16 Bug fixed setting default data on opening batch window (Plus)
- 25 Jan 16 Rose now allowed for times after initial, without forcing any re-initialisation
- 22 Jan 16 Sweep now allowed for times after initial, without (as previously) forcing re-initialisation

### 6.3.1

- 4 Jan 16 Streamline output from batch sweep (Plus)
- 31 Dec 15 Flag note if pre-tension not specified
- 18 Dec 15 Trap out waves steeper than about 0.1 of wavelength (WRM)
- 12 Dec 15 Cured problem of spikes to dynamic simulation with waves and changing draft (WRM)
- 9 Dec 15 Draft and trim etc now displayed to 2 decimals
- 8 Dec 15 Clean up repetition of error warnings when starting dynamic simulation (Dynamic)
- 26 Oct 15 Wave motion at target of Host displayed wrt berth axes, and for Guest wrt Host axes (Ship2Ship with WRM)
- 19 Oct 15 Remove all “new” rope data as misleading and only applicable for setting up new permanent moorings
- 14 Oct 15 Line tension limits associated with vessel data, not the case data.
- 9 Oct 15 Batch window now cannot be exited during batch run (Plus)
- 8 Oct 15 Excursion less than 10 displayed to 2 decimal points
- 5 Oct 15 Sweep in batch now calculates at 5° intervals not 10° (Plus)

### 6.3.0

- 7 Jul 15 Horizontal bollard force as percent of strength added to report
- 13 Jun 15 Removed restrictions on tail connections going through a fairlead – tails can now be any length
- 14 May 15 Contact area corrected if fender partially above deck level
- 28 Feb 15 Force history can now be applied to both Guest and Host (Dynamic)
- 20 Feb 15 Display relative excursions at Guest target (Ship2Ship)
- 19 Feb 15 Show mode of analysis on Arrangement plan
- 22 Oct 14 Converted current from m/s to knots when displayed at top of dynamic simulation output file (Dynamic)
- 18 Sep 14 Small improvement to formula for natural roll period
- 29 Aug 14 Differentiate port & stbd targets on vessel
- 20 Jun 14 Relative motions between targets implemented (WRM with Ship2Ship)
- 17 May 14 Allow for phasing of wave motions in S2S moorings, previously random phasing (WRM with Ship2Ship)
- 27 Apr 14 Option to set up OCIMF conditions in batch mode (Plus)
- 20 Apr 14 Option for bight to sheave on buoy (effectively 3 lines from ship to buoy controlled by one line from shore to buoy)
- 21 Jan 14 Zero line diameter no longer defaults to 50mm
- 18 Aug 13 Now allows deletion of line diameter in vessel file without it automatically being restored to 30mm
- 8 Jul 13 Allow flat side to extend 20% outside Lpp
- 19 Jun 13 Right click popup menu to copy/paste added to Dynamic setup window (Dynamic)
- 1 May 13 If wave period not set, now defaults to 6 for wave, 10 for swell, 25 for seiche

### 6.2.9

- 20 May 14 If Bollard strength exceeded now all lines to that bollard are disconnected (Dynamic)
- 7 Apr 13 Fixed bug displaying wave component of excursion at target in Dynamic mode (Dynamic with WRM)

### 6.2.8

- 31 Mar 13 Increased default roll damping from 5% to 10% (WRM)
- 25 Mar 13 Bug fixed when deleting/removing bight lines

### 6.2.7

- 17 Mar 13 Seiche now simulated as sinusoidally varying force, not constant (Dynamic)