

## OPTIMOOR Diary of Principal Developments

### 6.3.10

- 21 Feb 17 Fixed failure to specify friction on Ship2Ship fenders (Dynamic)
- 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 except/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)
- 16 Mar 13 Direction of seiche force now set by user (not automatic ±)
- 19 Feb 13 Display of red line on rose suppressed if the winch brake is set lower than the permissible tension
- 2 Feb 13 Improve numerical stability by predicting mooring reactions at end of each TimeStep (Dynamic)
- 20 Jan 13 Environmental forces only updated every second, no longer every TimeStep (Dynamic)

### 6.2.6

- 5 Jan 13 More menu options for displaying forces in simulation plot (Dynamic)
- 4 Jan 13 Added terms in wave drift spectrum to ensure non-repetition of force pattern (Dynamic with WRM)

- 17 Nov 12 Key dongle software updated to solve problem of USB v.3 port
- 12 Sep 12 Pan simulation plot display with left click hand pointer, and zoom with mouse wheel (Dynamic)
- 5 Sep 12 Removed scroll bars from site plan as superseded by mouse drag
- 4 Sep 12 Pan site display with left click hand pointer, and zoom with mouse wheel. Left double click to centre Host vessel
- 22 Jun 12 Narrowband for sea waves now means regular sinusoidal wave (Longuet-Higgins retained for swell) (WRM)
- 9 Mar 12 Option to change shape of pier on site plan
- 13 Nov 11 Option to adjust scale of capability rose

**Points Regarding USB Port v.3 Compatibility:**

- 1 USB keys supplied before 2013 are not compatible with the new USB port v.3 (these are usually blue on the inside).
- 2 Keys supplied after 2012 are compatible with both v.3 and older v.2 ports (these are usually black on the inside).
- 3 Optimoor versions earlier than 6.2 will not recognise any key in the new USB port v.3.
- 4 Optimoor versions from 6.2 onward will recognise all keys of any age, subject to point 1 above.

**6.1.19**

- 6 Sep 12 Small increase in damping based on mooring reactions for numerical stability (Dynamic version)

**6.1.17**

- 3 Aug 12 Option to lease by date. Automatic reminder when maintenance about to expire

**6.1.16**

- 11 May 12 fixed bug introduced 8 Jan 12 causing wrong sign of yaw drag (Dynamic version)

**6.1.15**

- 8 Jan 12 Integration timestep reduced from 0.2 to 0.1 (Dynamic version)

**6.1.13**

- 19 Dec 11 Fixed error arising if large angles yaw angles occur with large longitudinal offsets between S2S vessels (S2S)

**6.1.12**

- 14 Dec 11 Fixed error if current used with S2S and both ships lock due to friction (Dynamic with S2S module)

**6.1.11**

- 7 Dec 11 Fixed bug using constant tension winch in dynamic mode (Dynamic version)
- 28 Nov 11 Fixed bug in tracking rope hysteresis (Dynamic version)
- 15 Aug 11 Display of end fenders moved from AP to transom (or FP to bow) (Plus version)

**6.1.10**

- 5 Aug 11 Installation problem under XP fixed (only affects XP installation since version 6.1.8, not Optimoor itself)
- 4 Aug 11 Fixed bug in STS if the Host is starboard to berth and STS fenders not symmetrical about midship (Ship2Ship)

**6.1.9**

- 25 Jul 11 Minor improvements in display of summary of batch results (Plus version)
- 24 Jul 11 Fixed summary results from batch runs sometimes displaying metric when using USA units (Plus version)

**6.1.8**

- 17 Jul 11 Bug fixed when using time history to change current direction in dynamic setup (Dynamic)
- 18 May 11 Type of wave spectrum (if used) now displayed on wind rose (WRM)
- 17 May 11 Corrected display of bollard limits when using Loadout option in USA units. Batch data amended for Loadouts (Plus)
- 16 May 11 Batch data now automatically updated when units changed (Plus version)
- 12 May 11 Flag warning in batch data if trying to set wave data without Wave Response Module (Plus)
- 7 Apr 11 Small improvement to convergence reliability
- 1 Apr 11 Directional sweep now made for the condition at the specified time (previously it always reverted to initial time)
- 28 Mar 11 Fixed bug using Wave Response Module with collar vessel restraint (WRM)
- Jan/Feb 11 New batch feature introduced (Plus version)

**6.0.15**

- 17 Mar 11 Fixed bug in display of pressure in S2S fenders (S2S)