

SIMMAN 2020

Call for participants for the third SIMMAN workshop

Purpose

The next SIMMAN 2020 (Simulation Workshop for Ship Maneuvering) will be held in Songdo, Incheon, Korea on 6-8 April 2020 and hosted by KRISO. The objective of the workshop is the assessment of current simulation methods for ship maneuvering to aid code development, establish best practices and guide industry and will be the latest of the series of workshops, i.e. SIMMAN 2008 and 2014 held at FORCE, Copenhagen Denmark. The workshop web site is: <http://simman2019.kr/>.

Participation

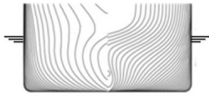
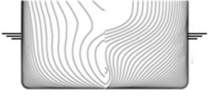
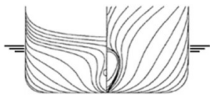
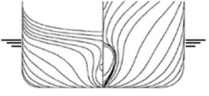
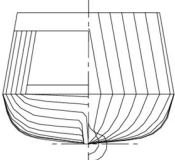
The workshop organizers welcome broad participation from the ship manoeuvring simulation community. Submitters are required to attend the workshop and represent their submissions. Interested participants are encouraged to fill out the *Interested Persons* form accessed on the website's Registration menu. This form needs to be filled out to get access to the captive data sets. Final registration for the workshop must be done on the website.

Test Cases

The test cases are shown in Table 1, including captive in calm deep/shallow water and free running in calm deep/shallow water and deep-water waves for tanker KVLCC2, container KCS and surface combatant ONRT hull forms. Different from SIMMAN 2014 are the following new features:

- The captive and free running test cases are reduced to maximize the number of submissions for more robust statistical analysis;
- Participants should make submissions for a systematic range of captive test conditions instead of a few spot checks of conditions;
- New free running tests (in shallow water) have been conducted to enable better comparisons;
- As new test cases and challenge, KCS and ONRT turning circles in a regular wave is included; since manoeuvring in waves is also of importance in assessment of manoeuvring prediction capability;
- Each case will have obligated manoeuvres to assure enough submissions.

TABLE 1: Description of the test cases

			1	2	3	4	5
							
			KVLCC2-deep	KVLCC2-shallow	KCS deep	KCS shallow	ONRT
Calm Water	Captive test (forced motion)	Combinations of drift angles and rate of turn;	1.1 Test data by HMRI	2.1 Test data by BSHC	3.1 Test data by IHI	4.1 Test data by KRISO	5.1 Test data by SNU
		Comparison of force and moments	1.1.1: Static drift 1.1.2: Drift & yaw	2.1.1: Static drift 2.1.2: Drift & yaw	3.1.1: Static drift 3.1.2: Drift & yaw	4.1.1: Static drift 4.1.2: Drift & yaw	5.1.1: Static drift 5.1.2: Drift & yaw
	Trajectories of self-propelled ship	Manoeuvres; Comparison of trajectories and derived characteristics	1.2 Test data by MARIN	2.2 Test data by MARIN	3.2 Test data by MARIN	4.2 Test data by MARIN	5.2 Test data by IIHR
			1.2.1: SP & 20°/20° ZZ PS 1.2.2: 35° PS	2.2.1: SP & 20°/5° ZZ PS 2.2.2: 35° TC PS	3.2.1: SP & 20°/20° ZZ PS 3.2.2: 10°/10° ZZ PS 3.2.3: 35° TC PS 3.2.4: 20°/20° ZZ SB	4.2.1: SP & 20°/5° ZZ PS 4.2.2: 35° TC PS	5.2.1: SP 5.2.2: 20°/20° ZZ PS 5.2.3: 35° TC PS
Waves	Trajectories of self-propelled ship	Turning circle 35 to PS;			3.3 Test data by HU		5.3 Test data by IIHR
		Comparison of trajectories and derived characteristics			3.3.1: 35° TC PS, calm water 3.3.2: 35° TC PS, head waves		5.3.1: 35° TC PS, starting in head waves

Notes:

- Packages: x.1.1 must be submitted in order to submit x.1.2; similarly for x.2.1 and x.2.2 etc.
- Before submitting 5.3.1 and 5.3.2 you have to submit 5.2.2
- The ship speed and the model scale are different between case 3.3.1(14.5 knots) and 3.2.3(24 knots)
- SP means self-propulsion, indicating that every 20/20 zigzag should start from self-propulsion point and that the propeller RPM or thrust are validation variable (for CFD-based simulations)

Venue and Time Schedule

The venue is the Central Park Hotel Songdo (<http://www.centralparkhotel.co.kr/en-sdHotel/>)

The schedule for the workshop is provided in Table 2.

TABLE 2: Workshop schedule

Feb 2019	3 rd Announcement Website released Data available
8. Nov 2019	Submission of data
1. Feb 2020	Submission of papers and posters
6-8. Apr 2020	Workshop

The program will cover assessment of the experimental data, assessment of the prediction capability and open discussion for captive tests, free running tests and manoeuvring in waves on Monday, Tuesday and Wednesday morning, respectively.

The steering committee looks forward to your participation and welcoming you to SIMMAN 2020.