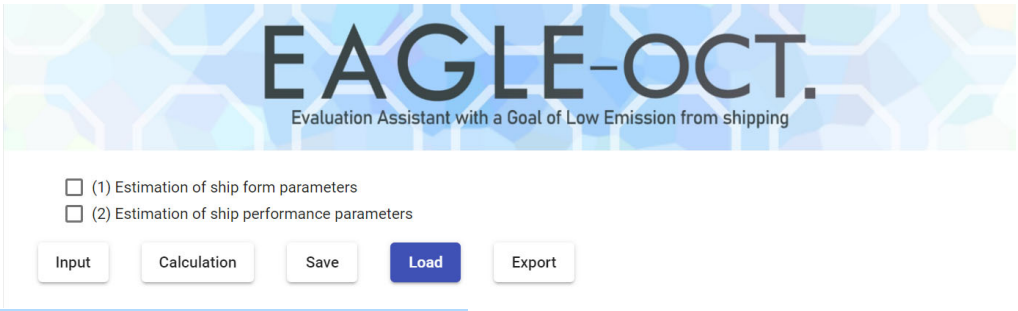
EAGLE-OCT.-web

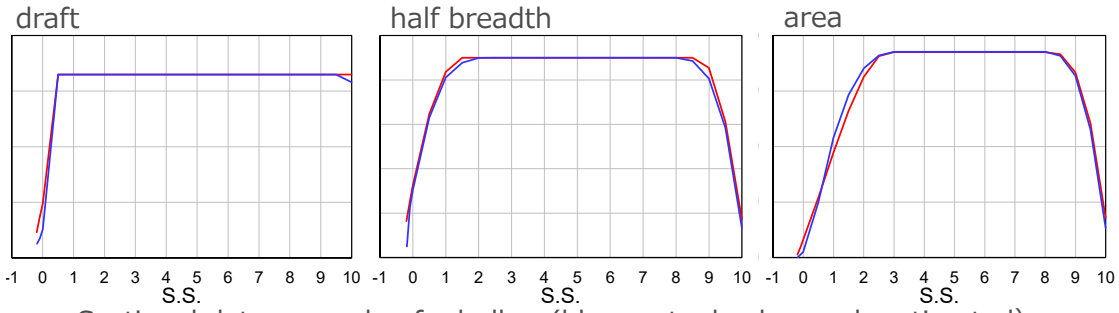
EAGLE-OCT.-web is a program developed in the OCTARVIA Project and provides ship form and ship performance data from their main particulars and enables an assessment of their performance in actual seas.

This program allows users who do not have detailed ship geometry and performance data to assess the performance of their ships in actual seas.

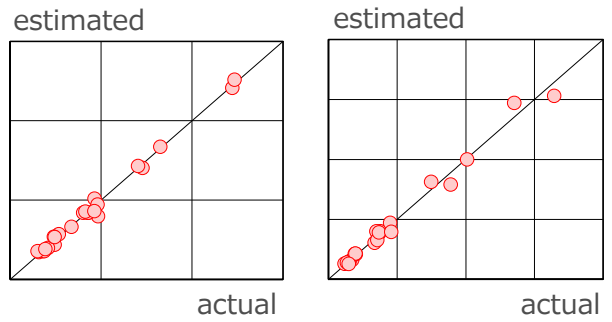


Input	Output
✓ Ship type (Container ship, PCC, bulker, and tanker are available.) ✓ Length overall, length between perpendiculars, maximum breadth ✓ Draft at mid, fore, aft in design full and operation condition ✓ Design speed ✓ Propeller diameter ✓ Transmission efficiency and gear ratio of main engine ✓ MCR of main engine and engine revolution at MCR	✓ Sectional data (draft, half breadth, and area), waterplane ✓ Blockage coefficient (C_B, C_P etc.) ✓ Superstructure parameters ✓ Longitudinal and vertical center of gravity ✓ Height of transverse metacenter and natural roll period ✓ Radius of gyration (pitch, roll, and yaw) ✓ Self-propulsion factors ✓ Propeller open characteristics

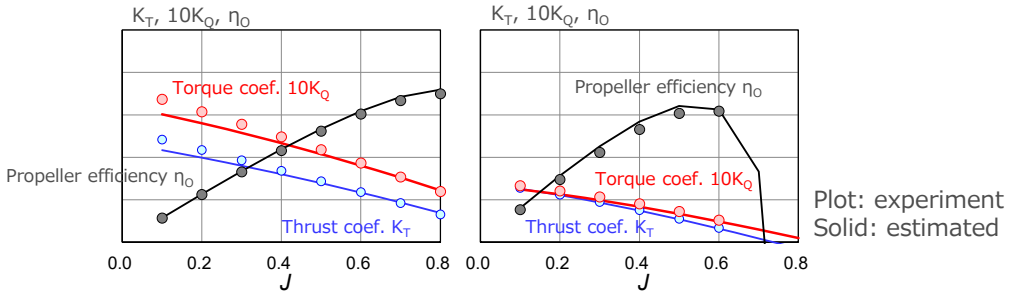
Validation of the calculation



Sectional data example of a bulker (blue: actual value, red: estimated)



left: lateral projected area,
right: transverse projected area



Plot: experiment
Solid: estimated

Propeller open characteristics
(left: container ship, right: domestic cargo ship

Effectiveness of EAGLE-OCT.-web has been validated by comparing with actual value and experimental data.