General Information

- Please add the *initial of your first name* and *your surname* + "_" in the beginning of each file name. For example, if your name is John Smith, a file *fig1_1-01.eps* should be *jsmith_fig1_1-01.eps*
- Please archive all of your figure files and integral data files for all cases into one zipped file. The file name should be *your first name initial* and *your surname* + ".zip". For example, if your name is John Smith, the file name is *jsmith.zip* .
- The archived file should be uploaded to the FTP server of NMRI via FTP. User account name and password are required to login the server. Please contact the organizer (cfdws05@nmri.go.jp) to obtain these informations.

Integral variables

File name	int5.dat
Style	plain text

The data should be written as following format.
The items which are not available should be left blank.

// Grid1
CT = *value*
CP = *value*
CF = *value*
1+k = *value*
Usn of CT = *value*
Uv of CT = *value*
E of CT = *value*
// Grid2
CT = *value*
CP = *value*
CF = *value*
1+k = *value*
Usn of CT = *value*
Uv of CT = *value*
E of CT = *value*
// Grid3
CT = *value*
CP = *value*
CF = *value*
1+k = *value*
Usn of CT = *value*
Uv of CT = *value*
E of CT = *value*
// Grid4
CT = *value*
CP = *value*
CF = *value*
1+k = *value*
Usn of CT = *value*
Uv of CT = *value*
E of CT = *value*
// Grid5
CT = *value*
CP = *value*
CF = *value*
1+k = *value*
Usn of CT = *value*
Uv of CT = *value*
E of CT = *value*

Fig.5-1 Axial velocity contours and cross flow vectors on the propeller plane ($x/L_{PP} = 0.48$)

File name	fig5-01_grid$X$.eps ($X = 1 \sim 5$)
Axis size	120 [mm] $\times$ 40 [mm]
Horizontal-axis variable and range	$-0.1 \leq y/L_{PP} \leq 0.1$
Vertical-axis variable and range	$-0.0667 \leq z/L_{PP} \leq 0.0$
Reference vector	magnitude 0.1 corresponds to 2 [mm]
Contour range and levels	$0 \leq u/U \leq 1$, $\Delta(u/U) = 0.1$
Style	u/U contours left side; $(v/U, w/U)$ vectors right side

Fig.5-2 Velocity on the propeller plane ($x/L_{PP} = 0.48$) at $z/L_{PP} = -0.05$

File name	fig5-02_grid$X$.eps ($X = 1 \sim 5$)
Axis size	80 [mm] $\times$ 60 [mm]
Horizontal-axis variable and range	$0 \leq y/L_{PP} \leq 0.05$
Vertical-axis variable and range	$-0.3 \leq u/U, v/U, w/U \leq 1.0$
Style	u/U: CFD solid line; EFD open squares
	v/U: CFD dashed line; EFD open triangles
	w/U: CFD dotted line; EFD open circles

Red line is corrected at 17/Jan/2005

Fig.5-3 Uncertainty analysis of velocity on the propeller plane ($x/L_{PP} = 0.48$) at $z/L_{PP} = -0.05$

File name	fig5-03_grid$X$.eps ($X = 1 \sim 5$)
Axis size	80 [mm] $\times$ 60 [mm]
Horizontal-axis variable and range	$0 \leq y/L_{PP} \leq 0.05$
Vertical-axis variable and range	$-0.1 \leq E/U, \pm U_V/U \leq 0.1$
Style	u/U: E solid line; U_V dashed line
	v/U: E dash dot line; U_V dotted line
	w/U: E long dashed line; U_V dash double dot line

Fig.5-4 Kinematic eddy viscosity (ν_t) and longitudinal component of vorticity (ω_x) contours on the propeller plane ($x/L_{PP} = 0.48$)

File name	fig5-04_grid$X$.eps ($X = 1 \sim 5$)
Axis size	120 [mm] $\times$ 40[mm]
Horizontal-axis variable and range	$-0.1 \leq y/L_{PP} \leq 0.1$
Vertical-axis variable and range	$-0.0667 \leq z/L_{PP} \leq 0.0$
Contour levels	$\Delta\nu_t = 0.5 \times 10^{-5}$, $\Delta\omega_x = 10$
Style	ν_t contours: solid lines, left side
	ω_x contours: (+) solid lines; (-) dashed lines, right side

Fig.5-5 Hull surface pressure contours (port side view)

File name	fig5-05_grid$X$.eps ($X = 1 \sim 5$)
Axis size	125 [mm] $\times$ 33.35 [mm]
Horizontal-axis variable and range	$0.3 \leq x/L_{PP} \leq 0.55$
Vertical-axis variable and range	$-0.0667 \leq z/L_{PP} \leq 0$
Contour range and levels	$-1.0 \leq C_p \leq 1.0$, $\Delta C_p = 0.01$
Style	(+) solid lines; (-) dashed lines

Fig.5-6 Hull surface pressure contours (back view)

File name	fig5-06_grid$X$.eps ($X = 1 \sim 5$)
Axis size	75 [mm] $\times$ 50 [mm]
Horizontal-axis variable and range	$0.0 \leq y/L_{PP} \leq 0.1$
Vertical-axis variable and range	$-0.0667 \leq z/L_{PP} \leq 0$
Contour range and levels	$-1.0 \leq C_p \leq 1.0$, $\Delta C_p = 0.01$
Style	(+) solid lines; (-) dashed lines

Fig.5-7 Hull surface pressure at $x/L_{PP} = 0.4$ and $x/L_{PP} = -0.4$

File name	fig5-07_00_s1_grid$X$.eps ($x/L_{PP} = 0.4, X = 1 \sim 5$)
	fig5-07_00_s9_grid$X$.eps ($x/L_{PP} = -0.4, X = 1 \sim 5$)
Axis size	75 [mm] $\times$ 40 [mm]
Horizontal-axis variable and range	$-0.1 \leq y/L_{PP} \leq 0.1$
Vertical-axis variable and range	$-0.15 \leq C_p \leq 0.05, (x/L_{PP} = 0.4)$
	$-0.45 \leq C_p \leq 0.0, (x/L_{PP} = -0.4)$
Style	CFD solid line, EFD open circles

Red line is corrected at 17/Jan/2005

Fig.5-8 Uncertainty analysis of hull surface pressure (U_{SN}, U_V, E) at $x/L_{PP} = -0.4$ and $x/L_{PP} = 0.4$

File name	fig5-08_00_s1_grid$X$.eps ($x/L_{PP} = 0.4, X = 1 \sim 5$)
	fig5-08_00_s9_grid$X$.eps ($x/L_{PP} = -0.4, X = 1 \sim 5$)
Axis size	80 [mm] $\times$ 60 [mm]
Horizontal-axis variable and range	$-0.1 \leq y/L_{PP} \leq 0.1$
Vertical-axis variable and range	$-0.6 \leq U_{SN}/C_{p\_range}, \pm U_V/C_{p\_range}, E/C_{p\_range} \leq 0.6$
Validation scale	$C_{p\_range} = 0.5, (x/L_{PP} = 0.4)$
	$C_{p\_range} = 0.1, (x/L_{PP} = -0.4)$
Style	$\pm U_{SN}$ dotted line
	U_V dashed line
	E solid line

Fig.5-9 Limiting stream lines (port side view)

File name	fig5-09_grid$X$.eps ($X = 1 \sim 5$)
Axis size	125 [mm] $\times$ 33.35 [mm]
Horizontal-axis variable and range	$0.3 \leq x/L_{PP} \leq 0.55$
Vertical-axis variable and range	$-0.0667 \leq z/L_{PP} \leq 0.0$
Style	Participants choose starting points and spacing