

BeVERLI Hill Validation Challenge

CFD post-processing

The values being referenced in the Tecplot style files are written with the following naming convention: (Note that the Tecplot data templates use two single quotes for the Favre fluctuating components, e.g., u'' , while these variable names use a double quote, e.g., u'''')

Variable	Variable label in Tecplot
X coordinate	X (m)
Y coordinate	Y (m)
Z coordinate	Z (m)
u/u_{ref}	u/u_{ref}
v/u_{ref}	v/u_{ref}
w/u_{ref}	w/u_{ref}
C_p	C_p
C_f	C_f
C_{f_X}	C_{f_X}
C_{f_Y}	C_{f_Y}
C_{f_Z}	C_{f_Z}
$\langle \rho u''u'' \rangle / (\rho u_{ref}^2)$	$\langle \rho u''u'' \rangle / (\rho u_{ref}^2)$
$\langle \rho u''v'' \rangle / (\rho u_{ref}^2)$	$\langle \rho u''v'' \rangle / (\rho u_{ref}^2)$
$\langle \rho u''w'' \rangle / (\rho u_{ref}^2)$	$\langle \rho u''w'' \rangle / (\rho u_{ref}^2)$
$\langle \rho v''v'' \rangle / (\rho u_{ref}^2)$	$\langle \rho v''v'' \rangle / (\rho u_{ref}^2)$
$\langle \rho v''w'' \rangle / (\rho u_{ref}^2)$	$\langle \rho v''w'' \rangle / (\rho u_{ref}^2)$
$\langle \rho w''w'' \rangle / (\rho u_{ref}^2)$	$\langle \rho w''w'' \rangle / (\rho u_{ref}^2)$
theta	theta
$TKE/(u_{ref})^2$	$TKE/(u_{ref})^2$
$\omega/(u_{ref}/H)$	$\omega/(u_{ref}/H)$

Additional Notes:

1. The labels are case sensitive.
2. To use these style files, you will need to extract the required data into a single zone and have only that zone loaded into Tecplot. The variable names also need to be exactly as specified above. It should be OK if you have extra variables loaded, as long as the required ones are there.