Propeller geometry

The propeller has the following main particulars:

Propeller diameter	D_P	[mm]	250.0000
Pitch at r/R=0.7	$P_{0.7}$	[mm]	408.7500
Pitch at r/R=0.75	$P_{0.75}$	[mm]	407.3804
Mean pitch	P_{mean}	[mm]	391.8812
Chord length at r/R=0.70	$C_{0.70}$	[mm]	104.1670
Chord length at r/R=0.75	$C_{0.75}$	[mm]	106.3476
Thickness at r/R=0.75	$t_{0.75}$	[mm]	3.7916
Pitch ratio	$P_{0.7}$/D	[-]	1.6350
Mean pitch ratio	P_{mean}/D	[-]	1.5675
Area ratio	A_E/A_0	[-]	0.7790
Skew	θ_{eff}	[°]	18.8000
Hub diameter ratio	d_h/D_P	[-]	0.1500
Number of blades	z	[-]	5
Direction of rotation			right-handed

- The propeller is designed for academic purposes, with the intention to generate a stable tip vortex.
- The propeller is a controllable pitch propeller.

Hub cap
The hub cap geometry is provided. Please refer to the geometry file. The propeller is investigated in a pull configuration. The hub cap is accordingly.