

## Appendix A. Gust Definition

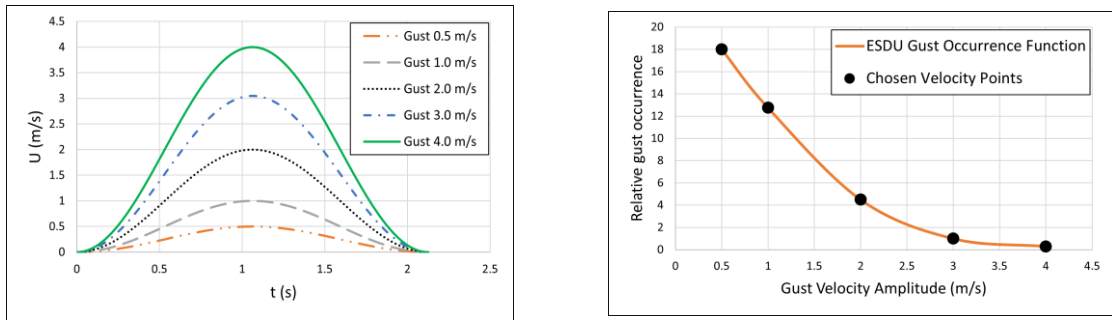


Figure A.1 Gust velocity variation (left) and its occurrence for each flight (right)

## Appendix B. Validation

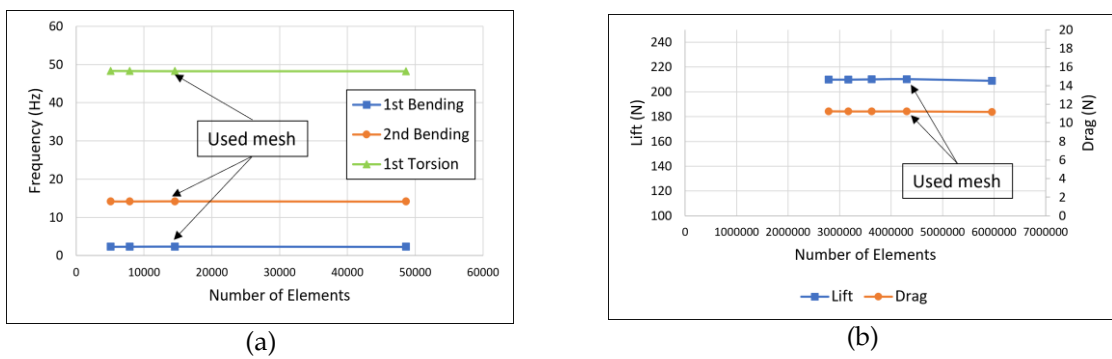


Figure B.1 Rear wing mesh convergence: (a) Structural domain, and (b) Fluid domain

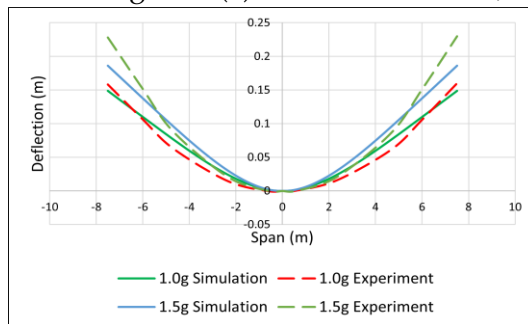


Figure B.2 Comparison of rear wing deflection with static structural test

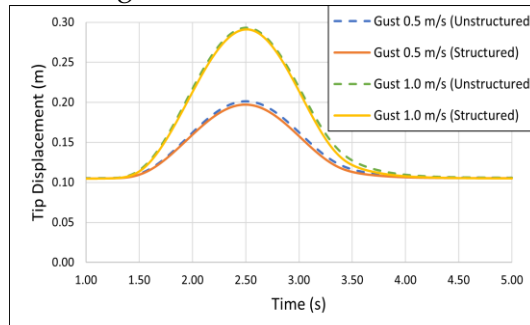
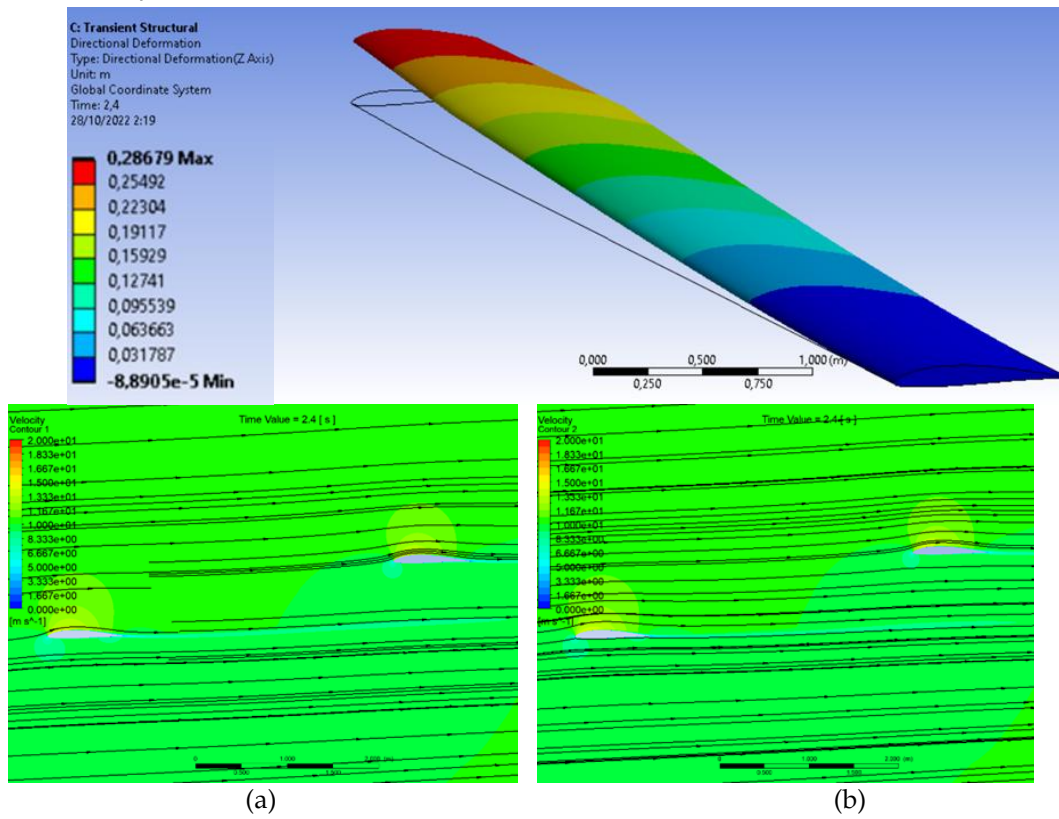
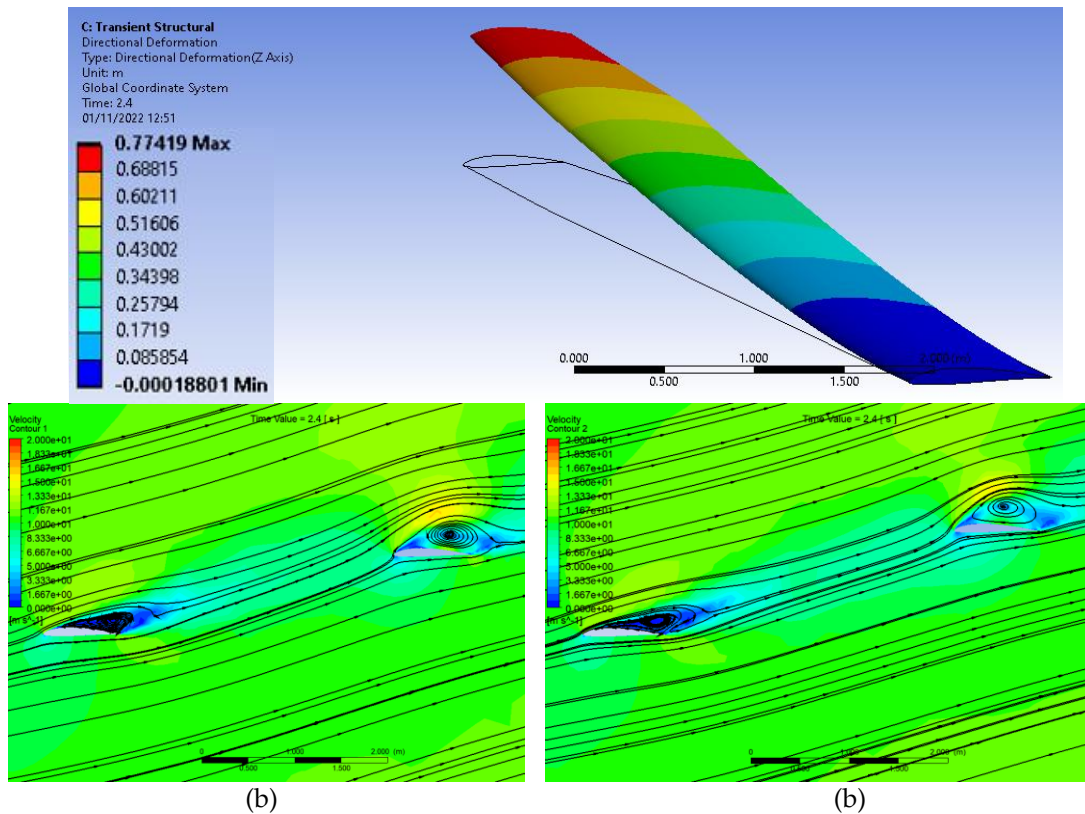


Figure B.3 Comparison of rear wing tip deflection at structured and unstructured mesh

### Appendix C. Dynamic Response Contour



**Figure C.1** Dynamic response contour of structural deformation at maximum gust velocity with 1.0 m/s amplitude: (a) 10% and (b) 50% span of the rear wing



**Figure C.2** Dynamic response contour of structural deformation at maximum gust velocity with 4.0 m/s amplitude: (a) 10% and (b) 50% span of the rear wing