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Flight of frigatebirds inside clouds – energy gain, stability and control

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Highlights

- It is shown for the first time how birds perform and control flights inside clouds.
- This is verified with frigatebirds ascending to high altitudes in trade cumuli.
- The control of flight inside clouds as a challenging environment is dealt with.
- Frigatebirds have aerodynamics and mass properties suited for flying inside clouds.
- This also holds for their flight mode in terms of ascents involving circling soaring.



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