

Atmospheric and Oceanic Fluid Dynamics

Fundamentals and Large-Scale Circulation

Geoffrey K. Vallis

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A satellite image of Earth's atmosphere, showing large-scale fluid dynamics patterns. The image displays complex, swirling structures in shades of blue, white, and grey, representing atmospheric circulation and weather systems. The patterns are most prominent in the mid-latitudes, showing a mix of high and low pressure systems. The overall appearance is that of a dynamic and turbulent fluid system.

ATMOSPHERIC AND OCEANIC FLUID DYNAMICS

Fundamentals and Large-scale Circulation

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An asterisk indicates more advanced material that may be omitted on a first reading. A dagger indicates material that is still a topic of research or that is not settled.

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