

# Eye formation in rotating convection

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## Summary

Rotating Rayleigh-Bénard convection has been extensively studied in the case on a container with an aspect ratio close to unity. Here we stress new effects associated with rotating thermal convection in elongated domains. Perhaps, surprisingly, we find that in such domains, an eye develops near the axis of the convective cell, in the form of a reversed vortex, reminiscent of Moffatt vortices. Although our system is very idealised compared with atmospheric convection, we highlight connections between the mechanism at work in our model and the formation of eye in tropical cyclones.