Movies

Movie 1:
Contours of the temperature field for $Ra = 10^5$ of Setup B. The arrow below each simulation indicates the speed of the travelling wave. Travelling wave speeds from top to bottom: $\Omega = 0.01, 0.1$ and 1.0.

Movie 2:
Contours of the temperature field for $Ra = 10^6$ of Setup B. The arrow below each simulation indicates the speed of the travelling wave. Travelling wave speeds from top to bottom: $\Omega = 0.01, 0.1$ and 1.0.

Movie 3:
Contours of the temperature field for $Ra = 10^7$ of Setup B. The arrow below each simulation indicates the speed of the travelling wave. Travelling wave speeds from top to bottom: $\Omega = 0.01, 0.1$ and 1.0.

Movie 4:
Contours of the temperature field for $Ra = 10^5$ of Setup B. The arrow below each simulation indicates the speed of the travelling wave. Prograde moving plumes are observed for $\Omega = 0.1$ (top) and retrograde moving plumes for $\Omega = 0.316$ (bottom).

Movie 5:
Contours of the temperature field and time evolution of the zonal flow $\langle u_x \rangle$ for $Ra = 10^6$ and $\Omega = 0.1$. The arrow below each simulation indicates the speed of the travelling wave. Retrograde moving structures are observed for Setup A (top) and prograde moving structures for Setup B (bottom).

Movie 6:
Contours of the temperature field for $Ra = 10^5$ of the 3D cylindrical system. Travelling wave speeds from left to right: $\Omega = 0.01, 0.1$ and 1.0.

Movie 7:
Contours of the temperature field for $Ra = 10^6$ of the 3D cylindrical system. Travelling wave speeds from left to right: $\Omega = 0.01, 0.1$ and 1.0.

Movie 8:
Contours of the temperature field for $Ra = 10^7$ of the 3D cylindrical system. Travelling wave speeds from left to right: $\Omega = 0.01, 0.1$ and 1.0.