
Supplementary information

The Radcliffe Wave is oscillating

In the format provided by the
authors and unedited

Supplementary Information Guide

We describe all Supplementary Figures in detail below. We provide corresponding links and HTML files for Supplementary Figures 1 through 5. Since Supplementary Figure 6 requires an active server to run, we only provide a link to Supplementary Figure 6.

Supplementary Figure 1 (interactive 3D visualization of the Radcliffe Wave's vertical oscillation)

This figure is the first interactive 3D counterpart to Figure 1. Colors and symbols are the same as in the static version of Figure 1. The figure supports interactive panning, zooming, and rotation. Individual data layers can be toggled on/off by clicking on the layer in the legend on the right side of the figure. Click "Play" to see the Radcliffe Wave's oscillation evolve with phase. Click "Reverse" to see the evolution in reverse. Click "Pause" to stop the animation. Alternatively, drag the slider back and forth to view the motion at any phase.

Supplementary Figure 1 is available online at

<https://faun.rc.fas.harvard.edu/czucker/rkonietzka/radwave/interactive-figure1.html>

Supplementary Figure 2 (interactive 3D visualization of the Radcliffe Wave's in-plane motion)

This figure is the interactive 3D counterpart to Extended Data Figure 2b. Colors and symbols are the same as in the static version of Extended Data Figure 2b. The figure supports interactive panning, zooming, and rotation. Individual data layers can be toggled on/off by clicking on the layer in the legend on the right side of the figure. Click "Play" to see the Radcliffe Wave evolve with time. Click "Reverse" to see the evolution in reverse. Click "Pause" to stop the animation. Alternatively, drag the slider back and forth to view the motion at any time.

Supplementary Figure 2 is available online at

<https://faun.rc.fas.harvard.edu/czucker/rkonietzka/radwave/interactive-figure2.html>

Supplementary Figure 3 (interactive 3D visualization of the clouds along the Radcliffe Wave including lines of sight from the Sun)

This figure is the interactive 3D counterpart to Extended Data Figure 3b. Colors and symbols are the same as in the static version of Extended Data Figure 3b. The figure supports interactive panning, zooming, and rotation. Individual data layers can be toggled on/off by clicking on the layer in the legend on the right side of the figure.

Supplementary Figure 3 is available online at

<https://faun.rc.fas.harvard.edu/czucker/rkonietzka/radwave/interactive-figure3.html>

Supplementary Figure 4 (animated comparison between a traveling and a standing wave)

This figure is the animated counterpart to Extended Data Figure 1. Colors and symbols are the same as in the static version of Extended Data Figure 1. Click “Play” to see the waves evolve with phase. Click “Pause” to stop the animation.

Supplementary Figure 4 is available online at

<https://faun.rc.fas.harvard.edu/czucker/rkonietzka/radwave/interactive-figure4.html>

Supplementary Figure 5 (interactive 3D visualization of the Radcliffe Wave’s total motion, oscillation + in-plane drift)

This figure is the second interactive 3D counterpart to Figure 1. Colors and symbols are the same as in the static version of Figure 1. The figure supports interactive panning, zooming, and rotation. Individual data layers can be toggled on/off by clicking on the layer in the legend on the right side of the figure. Click “Play” to see the Radcliffe Wave’s total motion evolve with time.

Click “Reverse” to see the evolution in reverse. Click “Pause” to stop the animation.

Alternatively, drag the slider back and forth to view the motion at any time.

Supplementary Figure 5 is available online at

<https://faun.rc.fas.harvard.edu/czucker/rkonietzka/radwave/interactive-figure5.html>

Supplementary Figure 6 (interactive 3D visualization of the Radcliffe Wave’s vertical oscillation in WorldWide Telescope)

This figure is the interactive 3D counterpart to Figure 2. Colors and symbols are the same as in the static version of Figure 2. The figure supports interactive panning, zooming, and rotation. Click on the play button to see the Radcliffe Wave’s oscillation evolve with phase. Once the play button is clicked, click on the pause button to stop the animation. Alternatively, drag the slider back and forth to view the motion at any phase. Click the reset button to go back to the default view.

Supplementary Figure 6 is available online at

<https://faun.rc.fas.harvard.edu/czucker/rkonietzka/radwave/interactive-figure6/>