

## A comparison of kinematic evidence for tropical cells in the Atlantic and Pacific oceans

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Kinematic evidence for the existence of Tropical Cells (TC) in the Atlantic Ocean is offered. Mean sections of meridional velocity, its horizontal divergence and vertical velocity are estimated from twelve available sections centered at about 35°W. Of the twelve sections, six were occupied in March and April, thus there is a boreal spring bias to the observations. Equatorial upwelling and off-equatorial downwelling, between 3°N and 6°N, represent the southern and northern boundaries of a northern hemisphere TC. Uncertainties for the estimates of average quantities are large. However, favorable comparisons with observational representations of Pacific TC's provide support for the existence of a northern hemisphere Atlantic TC.

### 1. INTRODUCTION

In the Pacific and Atlantic Oceans, meridional-vertical circulation is a superposition of larger Subtropical Cells (STCs) and more localized Tropical

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