This book is edited for the researchers and students who are interested in overviewing and knowing the specific progress of tropical cyclone research. This book is devoted to either an up-to-date review or report of new research on the tropical cyclone, encompassing the problems of the genesis, development, climate control of tropical cyclone in terms of wide-ranging scales based on every types of method -- theoretical, modeling, and observational analysis. Not only comprehensive climate model but stand-alone theoretical and conceptual modeling researches will continue to play important role in illustrating the essential physics of tropical cyclone, and observational studies will support their specific features. *

* for full Table of Contents please visit our website