1.	Record Nr.	UNINA9910785180603321
	Titolo	Atmospheric turbulence, meteorological modeling and aerodynamics [[electronic resource] /] / Peter R. Lang and Frank S. Lombargo, editors
	Pubbl/distr/stampa	New York, : Nova Science Publishers, c2010
	ISBN	1-61728-264-2
	Descrizione fisica	1 online resource (740 p.)
	Altri autori (Persone)	LangPeter R LombargoFrank S
	Disciplina	551.5501/5118
	Soggetti	Atmospheric turbulence - Mathematical models Reynolds analogy Aerodynamics
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	<ul> <li>""ATMOSPHERIC TURBULENCE, METEOROLOGICAL MODELING AND AERODYNAMICS""; ""ATMOSPHERIC TURBULENCE, METEOROLOGICAL MODELING AND AERODYNAMICS ""; ""CONTENTS""; ""PREFACE"";</li> <li>""RESEARCH AND REVIEW STUDIES"; ""CLIMATOLOGY OF THE ARCTIC PLANETARY BOUNDARY LAYER ""; "ABSTRACT""; ""1. INTRODUCTION "";</li> <li>""2. THEORETICAL STRUCTURE OF THE ARCTIC PBL ""; ""3. DATA SETS AND PROXIES ""; "Pan-Arctic Data Sets ""; ""Maritime Arctic Regions "";</li> <li>""Central Arctic Regions ""; "Continental Sub-Arctic Regions "";</li> <li>""Greenland Region"; "4. ARCTIC PBL CLIMATOLOGY RECONSTRUCTION""</li> <li>"Dynamic Re-Stratification Processes"""Radiation Re-Stratification Processes"; "Temperature Inversions"; "Clouds"; "Wind Speed and Aero-Dynamical Surface Roughness"; "Turbulent Surface Fluxes and the PBL Life-Time"; "5. REGIONAL SPECIFICS OF THE ARCTIC PBL CLIMATOLOGY ""; "Arctic and Sub-Arctic PBL over Continents (Canadian, Siberian and Alaska Regions) ""; ""Arctic PBL over Ice- Covered Arctic Ocean (Central and Siberian Arctic Regions) ""; ""Arctic PBL over Ice Sheets and Glaciers (Greenland Region) ""; ""Arctic PBL near Ice Edge (Atlantic and Baffin Bay Regions) ""</li> </ul>

Century ""; ""7. SUMMARY ""; ""ACKNOWLEDGMENTS ""; ""REFERENCES""; ""NONEQUILIBRIUM THERMODYNAMIC THEORY OF ATMOSPHERIC TURBULENCE ""; ""ABSTRACT ""; ""1. INTRODUCTION""; ""2. BASIC THEORY OF NONEQUILIBRIUM THERMODYNAMICS OF ATMOSPHERIC TURBULENCE""; ""2.1. The Entropy Equilibrium Equation and the Linear Phenomenological Relations of Atmospheric System "" "2.2. Turbulent Transport of the Atmospheric Heat and Vapora€? Fouriera€?s Law, Ficka€?s Law, Dufour Effect and Soret Effect of the Atmospheric Turbulent Eddy Viscosity """2.3. The Turbulent Transport of Atmospheric Momentum and the Vortex Theorem ""; ""2.3.1. Linear Phenomenological Relation of the Atmospheric Momentum Transport ""; ""2.3.2. The Theorem of Turbulent Intensity and the Theorem of Turbulent Momentum Transport ""; ""2.4. Vortex Theorem ""; ""3. SIMILARITY THEORY AND DETERMINING LINEAR PHENOMENOLOGICAL COEFFICIENTS "" "3.3.3. The Form of the Similarity Function, ()zLI?, of the Turbulent Intensity ""