

1. Record Nr.	UNINA9910853997703321
Autore	Pellegrino Gianfranco
Titolo	Handbook of the Philosophy of Climate Change
Pubbl/distr/stampa	Springer, 2023 Cham : , : Springer International Publishing AG, , 2024 ©2023
ISBN	3-031-07002-X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (1286 pages)
Collana	Handbooks in Philosophy Series
Altri autori (Persone)	Di PaolaMarcello
Disciplina	363.7387401
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Contents -- About the Editors -- Contributors -- Part I: Introduction -- Introduction -- Introduction -- Overview of the Handbook Sections -- Conclusions -- Cross-References -- References -- Part II: Climate Change, Science, and Philosophy -- Understanding Model-Based Uncertainty in Climate Science -- Introduction -- What Makes a Climate Model -- Overall Model Structure -- Individual Model Components -- Running Model Simulations -- Model Evaluation -- Sources of Uncertainty in Climate Models -- Structural Uncertainty -- Parameter Uncertainty -- Scenario Uncertainty -- Initial Conditions and Internal Variability Uncertainty -- Uncertainty in Observations and Data -- Concluding Remarks -- Cross-References -- References -- Implications of Model-Based Uncertainty: Scientific Responses and Philosophical Interpretations -- Introduction -- Implications of Model Uncertainty for the Science of Climate Change -- Equilibrium Climate Sensitivity and Transient Climate Response -- Detection and Attribution of Anthropogenic Climate Change -- Future Climate Extremes -- Future Climate Impacts -- Scientific Responses to the Challenges of Model Uncertainty -- Model Ensembles -- Alternative Model Pluralisms -- Benchmarking -- Paleo-Reconstructions -- Machine Learning -- Concluding Remarks -- Cross-References -- References -- Climate Models and Robustness Analysis - Part I: Core Concepts and Premises -- Introduction -- Model-Based RA -- Articulating Core Concepts --

Independence -- Agreement -- Establishing the Premises -- Premise of Step 1: Finding the Robust Property -- Premise of Step 2: Finding the Common Structure -- Premise of Step 3: Understanding Robust Theorems -- Conclusion -- Cross-References -- References -- Climate Models and Robustness Analysis - Part II: The Justificatory Challenge -- Introduction -- The Justificatory Challenge. Top-Down Justifications -- Bottom-Up Justifications -- The Likelihood Approach -- Independence Approaches -- The Explanatory Approach -- Conclusion -- Cross-References -- References -- Abrupt Climate Changes and Tipping Points -- Introduction: This contribution has been written in Spring 2021 -- Defining Abrupt Climate Changes -- The Dynamical Systems Theory Perspective: Bifurcations -- Defining Tipping Points in the Climate and Earth Systems -- Tipping Points: Scientific Relevance and Uncertainties -- Communicating About Tipping Points -- Tipping Points in the Anthropocene: The Social Science Perspective -- Conclusion -- References -- Climate Research and Big Data -- Introduction -- Big Data Elements in Climate Research -- Data and Its Uncertainty in Climate Research -- Traditional Climate Data and New Developments -- Modeling, Adequacy, and Uncertainty of Climate Datasets -- Data-Driven Modeling in Climate Research -- Machine Learning and Data-Driven Models -- Representational Accuracy -- Predictions and Uncertainty -- Understanding -- Conclusions -- References -- Environmental Robots and Climate Action -- Introduction -- What Are ``Environmental Robots``? -- Environmental Robots for Climate Action -- Ecobots for Climate Action? -- Robots-for-Ecology for Climate Action? -- Robots-in-Ecology for Climate Action? -- Conclusion -- Works Cited -- Works Consulted -- Part III: Climate Change, Social Sciences, and Philosophy -- Climate Change Sociology: Perspectives and Dilemmas -- Introduction -- A Sociology of Climate Change -- Climate Change Ontology -- On the Different Meanings of Climate -- Climate as Commons -- The Causes of Climate Change: Fossil Energy, Fossil Capitalism, and the Sociology of Energy -- Consequences of Climate Change: Injustice and Inequality -- Conclusions -- Cross-References -- References. Climate Change and Cultural Anthropology -- Introduction -- Climate Ethnography -- The Anthropocene Debate -- More-than-Human Relations -- Conclusion -- References -- Climate Change and Geography -- Introduction -- Mitigation Policies -- Carbon Offsets: Capitalist Vision and Neocolonial Approaches -- GHG Inventories -- Unburnable Fossil Fuels -- Adaptation Policies -- How to Go Beyond Adaptation: Transformation -- Scales and Rescaling -- Rescaling and Individuals -- The Geographical Literature and the IPCC: Relationships and Perspectives -- Cross-References -- References -- Climate Change and Urban Studies -- Introduction -- Why Should Cities Act About Climate Change? -- What Can Cities Do for Climate Change? -- How Are Cities Acting for Climate Change? -- Multi-Level, Collaborative Approaches for a Polycentric Problem -- Urban Climate Experimentalism -- City-led Climate Change Litigation. Cities Use Litigation as a Public Platform -- Cities, Climate Change and Urban Equity and Justice -- Conclusions -- References -- Normative Challenges in Climate Change Economics -- Introduction -- Choice of Welfare Function for Climate Policy Analysis -- Welfare Functions with Equity -- Welfare Functions with Refined Treatment of Risk -- Incorporating Both Risk and Equity Preferences in the Welfare Function -- Ex Ante Egalitarianism -- Ex Post Egalitarianism -- The Challenge of Distinguishing Positive and Normative Assumptions in Economic Models -- Pure Rate of Time Preference -- Risk Aversion, Inequality Aversion, and Intertemporal Elasticity of Substitution -- Value of

Statistical Life in IAMs -- Measurement, Boundaries, and Scope of Analyses -- Co-benefits in the Benefit-Cost Analysis of Climate Policy -- Stock Versus Flow Measures -- Representation of Policy Detail -- Summary -- Cross-References -- References -- Climate Change and Decision Theory.

Introduction -- Climate Change and Decision Theory -- Prisoner's Dilemma -- Expected Utility Theory -- How You Could Make a Large Difference -- How You Probably (Also) Make an Imperceptible Difference -- But Can Decision Theory Handle Extreme Uncertainty? -- Summary -- References -- Climate Change and Psychology -- Introduction -- How Do We Relate to Nature? -- What Prevents Change? -- Habits -- Loss Aversion -- Distance/Discounting -- Autonomy/Efficacy -- Denialism/Skepticism -- Rationalization -- What Are the Effects of Change? -- Direct Psychological Effects of a Changing Climate -- Indirect Psychological Effects of a Changing Climate -- How Can Change Happen? -- Scope for Further Interaction -- Conclusion -- Cross-References -- References -- Climate Change and Legal Theory -- Introduction -- The Historical Relationship Between Climate, Natural Resources, and Law -- The Climate System in Legal Theory -- State Sovereignty and "Planetary Boundaries" -- Tragedy of the Horizon and Metabolic Rift -- Climate Change and Human Rights -- Climate Change and Democracy -- The Legal Practice Between "Tornado" and "Abortion" Politics -- Conclusions: Law in the Weather-World -- Cross-References -- References -- Part IV: Climate Change, Humanities, and Philosophy -- Climate Change and the Environmental Humanities -- Introduction -- The Environmental Humanities -- The Humanities Approach -- Environmental Humanities: Outlook, Concerns, Aims, Functions -- Environmental Humanities and Climate Change: Some Key Themes -- Philosophy and Climate Change: Four Themes -- Future People, Systemic Injustices, Responsibilities -- Climate Narratives, Catastrophism, Alternatives -- Climate Temporalities, Human Becoming, Present Times -- Culture, Nature as Adversary, Societal Inadequacies -- Conclusion: Living with Nature -- References.

Climate Change, Environmental Philosophy, and Anthropocentrism -- Introduction -- Anthropocentrism and Non-anthropocentrism in Environmental Philosophy -- Critiques of Anthropocentrism -- Non-anthropocentric Alternatives -- Anthropocentrism and Climate Change -- Is Anthropocentrism Really the Problem? -- Detecting Anthropocentrism: The Renewable Energy Transition -- Conclusion -- Cross-References -- References -- The Earth Means the World to Me: Earth- and World-Interest in Times of Climate Change -- Introduction -- The Emergence of World in Times of Climate Change -- From World Interest to Earth Interest in Times of Climate Change -- The Givenness of Earth and World -- Conclusion: The Advantage of a Philosophical Concept of Earth and World in Times of Climate Change -- References -- Environmental Aesthetics and Global Climate Change -- Introduction: Aesthetics and Environment -- The Tools of Environmental Aesthetics -- Multisensory Sympathetic Attention and Immersion -- Emotions and Knowledge -- Temporality and Imagination -- Environmental Aesthetics and Loss -- Negative Aesthetic Values -- Conclusion: Aesthetic and Ethical Values -- Cross-References -- References -- Climate Change, Natural Aesthetics, and the Danger of Adapted Preferences -- Introduction -- The Weak Theory of Sustainability -- The Inherent Resistance of Aesthetic Goods to Quantification -- The Circularity of Using Adapted Aesthetic Preferences to Justify the Environmental Degradation That Caused Those Preferences -- The Implications of the Growing Gap Between Aesthetic Needs and (Adapted) Aesthetic Preferences -- Conclusion --

Cross-References -- References -- Climate Change and Religion --
Religious Declarations on Climate Change -- Northcott's Interpretation
of Such Statements and Attitudes -- The Implications of White's and
Passmore's Stances -- The Bearing of Stewardship.
Concluding Remarks.
