

1. Record Nr.	UNINA9910958446603321
Titolo	Understanding climate's influence on human evolution / / Committee on the Earth System Context for Hominin Evolution ; Board on Earth Sciences and Resources ; Division on Earth and Life Studies. ; National Research Council of the National Academies
Pubbl/distr/stampa	Washington, D.C., : National Academies Press, 2010
ISBN	0-309-15239-9 1-282-55443-3 9786612554438 0-309-14839-1
Edizione	[1st ed.]
Descrizione fisica	1 online resource (129 p.)
Disciplina	599.95
Soggetti	Climatic changes Human beings - Effect of climate on Human beings - Effect of environment on Human evolution - Environmental aspects Human ecology
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.
Nota di contenuto	""Front Matter""; ""Preface""; ""Acknowledgments""; ""Contents""; ""Summary""; ""1 Introduction""; ""2 Existing Understanding of the Environmental Context for Hominin Evolution""; ""3 The Research Vision Priority Research Themes""; ""4 Implementing an International Scientific Program for Climate and Human Evolution Research""; ""5 Conclusions and Recommendations""; ""References""; ""Appendixes""; ""Appendix A: Committee and Staff Biographies""; ""Appendix B: Presentations to the Committee""; ""Appendix C: Acronyms and Abbreviations""
Sommario/riassunto	"The hominin fossil record documents a history of critical evolutionary events that have ultimately shaped and defined what it means to be human, including the origins of bipedalism; the emergence of our genus Homo; the first use of stone tools; increases in brain size; and the emergence of Homo sapiens, tools, and culture. The Earth's geological record suggests that some evolutionary events were

coincident with substantial changes in African and Eurasian climate, raising the possibility that critical junctures in human evolution and behavioral development may have been affected by the environmental characteristics of the areas where hominins evolved. Understanding Climate's Change on Human Evolution explores the opportunities of using scientific research to improve our understanding of how climate may have helped shape our species. Improved climate records for specific regions will be required before it is possible to evaluate how critical resources for hominins, especially water and vegetation, would have been distributed on the landscape during key intervals of hominin history. Existing records contain substantial temporal gaps. The book's initiatives are presented in two major research themes: first, determining the impacts of climate change and climate variability on human evolution and dispersal; and second, integrating climate modeling, environmental records, and biotic responses. Understanding Climate's Change on Human Evolution suggests a new scientific program for international climate and human evolution studies that involve an exploration initiative to locate new fossil sites and to broaden the geographic and temporal sampling of the fossil and archeological record; a comprehensive and integrative scientific drilling program in lakes, lake bed outcrops, and ocean basins surrounding the regions where hominins evolved and a major investment in climate modeling experiments for key time intervals and regions that are critical to understanding human evolution."--Publisher's description.
