1. Record Nr. UNINA9910254601603321

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Titolo	Air and Water : Trade Winds, Hurricanes, Gulf Stream, Tsunamis and Other Striking Phenomena / / by René Moreau
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-65215-X
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (264 pages) : illustrations, photographs
Disciplina	551.517
Soggetti	Fluids Meteorology Atmospheric science Oceanography Fluid- and Aerodynamics Atmospheric Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	The atmosphere at rest -- The atmosphere in movement -- The vagaries of the atmosphere -- Heavier than air, how can they fly? -- The tranquil sea -- The sea that we see dancing -- Rivers and streams -- Lakes, dams, and major works -- Epilogue -- Appendix: Instabilities and turbulence -- Glossary -- Index.
Sommario/riassunto	Air and water are so familiar that we all think we know them. Yet how difficult it remains to predict their behavior, with so many questions butting against the limits of our knowledge. How are cyclones, tornadoes, thunderstorms, tsunamis or floods generated — sometimes causing devastation and death? What will the weather be tomorrow, next week, next summer? This book brings some answers to these questions with a strategy of describing before explaining. Starting by considering air and water in equilibrium (i.e., at rest), it progresses to discuss dynamic phenomena first focusing on large scale structures, such as El Niño or trade winds, then on ever smaller structures, such as low-pressure zones in the atmosphere, clouds, rain, as well as tides and waves. It finishes by describing man-mad e constructions (dams,

ports, power plants, etc.) that serve to domesticate our water resources and put them to work for us. Including over one hundred illustrations and very few equations, most of the text is accessible to readers with no more than high-school science and who are at ease with quantities such as the temperature of a fluid or the pressure within such a medium. Beyond the primary audience of engineers, teachers, and students, the book is thus also addressed to walkers, hikers, navigators, and all nature lovers. .