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LARGE IGNEOUS PROVINCES

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CAMBRIDGEUNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9780521871778

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First published 2014

Printing in the United Kingdom by TJ International Ltd. Padstow Cornwall

A catalogue record for this publication is available from the British Library

Library of Congress Cataloging in Publication data Ernst, Richard E., author.

Large igneous provinces / Richard E. Ernst, Department of Earth Sciences, Carleton University & Ernst Geosciences.

pages cm

Summary: "Large Igneous Provinces (LIPs) are intraplate magmatic events, involving volumes of mainly mafic magma upwards of 100 000 km³, and often above 1 million km³. They are linked to continental breakup, global environmental catastrophes, regional uplift and a variety of ore deposit types. In this up-to-date, fascinating book, leading expert Richard Ernst explores all aspects of LIPs, beginning by introducing their definition and essential characteristics. Topics covered include continental and oceanic LIPs; their origins, structures, and geochemistry; geological and environmental effects; association with silicic, carbonatite and kimberlite magmatism; and analogues of LIPs in the Archean, and on other planets. The book concludes with an assessment of LIPs' influence on natural resources such as mineral deposits, petroleum and aquifers. This is a one-stop resource for researchers and graduate students in a wide range of disciplines, including tectonics, igneous petrology, geochemistry, geophysics, Earth history, and planetary geology, and for mining industry professionals"—Provided by publisher.

ISBN 978-0-521-87177-8 (Hardback)

Igneous rocks.
 Magmatism.
 Earth (Planet)—Mantle.
 Geodynamics.
 Title. QE461.E76 2014
 551.21–dc23 2014006194

ISBN 978-0-521-87177-8 Hardback

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