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A beautiful, fascinating, visual exploration of the power and behavior of light across the entire electromagnetic spectrum and how it affects life on Earth and everything in the Universe.



### Praise for *Your Ticket to the Universe*

"A delightful jaunt through space and time, equal parts knowing verve and dazzling views." —**Dan Vergano, USA Today**

"Combining stunning images with text geared towards the non-scientist [Arcand and Watzke] take readers on a comprehensive journey through the wonders of space." —**Discovery**

"Every page, from crater to quasar, testifies to authors Kimberly Arcand and Megan Watzke's devotion to their work." —**Scientists' Bookshelf**



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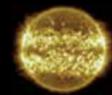
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LIGHT

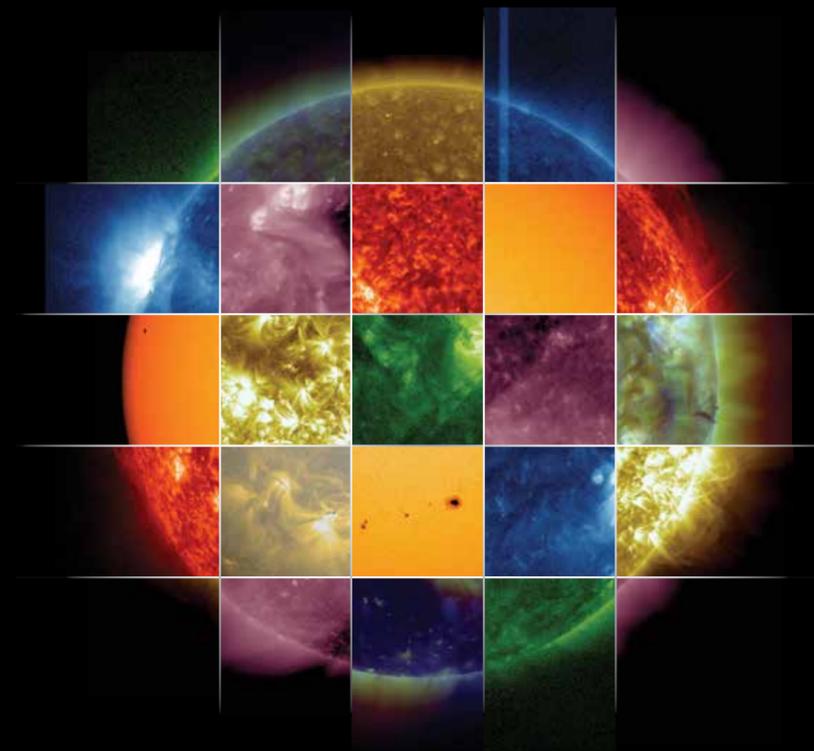
The Visible Spectrum and Beyond  
Kimberly Arcand and Megan Watzke



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# LIGHT

## The Visible Spectrum and Beyond



Radio Waves • Microwaves • Infrared • Visible Light • Ultraviolet • X-rays • Gamma Rays

Kimberly Arcand and Megan Watzke

Light illuminates our world and allows us to see everything around us.

But humans can see only a sliver of the full spectrum of light known as the electromagnetic spectrum. In this highly visual, original exploration, Kimberly Arcand and Megan Watzke present the subject of light as never before. Organized along the order of the electromagnetic spectrum, from radio waves to gamma rays, each chapter focuses on a different type of light, describing its particular properties, characteristics, and practical uses.

From radio waves that allow for TV and mobile phone communication, to infrared light that makes thermal body scanning possible, to X-rays that allow us to peer inside the human body and view areas around black holes millions of light years away, Arcand and Watzke show us all the important ways that light impacts life on Earth and beyond.

An introductory chapter gives an overview of the electromagnetic spectrum. Special features that appear in each chapter include "A Day in the Light," which tells how light affects our everyday lives; "Scientist Spotlight," which features a scientist who discovered that particular type of light or made important use of it; "Spanning the Spectrum," which covers characteristics that occur in all types of light such as fluorescence or refraction; and "Across the Universe," which discusses how light exists in deep space and how we can harness it to see things beyond the power of the naked eye.

Hundreds of full-color photographs and illustrations clearly demonstrate concepts and make for a stunning book that's a joy to read and browse.