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Cosmos: The Infographic Book of Space

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In writing "Cosmos: The Infographic Book of Space" [1], we had the task of creating 100 infographic spreads spanning all of astronomy and space. From the solar system to cosmology and from space exploration to time dilation. The coverage is very broad. The same is true of the designs used through the book.

With such a wide range of information, and to stop it getting repetitive, we used a huge variety of visual techniques. We also wanted to keep the book approachable. Some graphics are very simple, while others require more careful study.

For each graphic we started from a topic. We then collated information or processed catalogues and databases. In some cases we did our own manual classification. We even asked for the help of the crowd! Once we had identified the key story we wanted to tell, we would create an initial draft. For datadriven designs, we did this with scripts written in perl, python or even javascript. We then worked with graphic designer Mark McCormick (Founded) to evolve each design to a final version. Working with both a designer and a publisher without physics backgrounds was invaluable in ensuring we presented the right message.

We had several constraints in creating the book. One was the "compressed" colour palette provided by the design aestheic. It is visually appealing but sometimes limited the information that we were able be convey. This, along with other constraints, led us to try different approaches. We learned a lot about producing infographics and presenting data to non-specialists.

Our experience of data visualisation, together with Mark's eye for design and the latest scientific results, has created a book that has been well received by readers and critics.

In this talk we will explain the methodology used to create the graphics. We will describe the lessons we learned in how to create successful infographics - as well as how not to!

[1] S Lowe & C North (2015), Aurum Press Ltd, ISBN 1781314500