



After the Battle of Gravelines, in 1588, the Spanish Armada headed back to Spain. The route home, however, would be extremely long, difficult and—for many seamen—deadly.

With the wind blowing from the south, the only direction the heavy Spanish galleons could head was north (since they had to sail with the wind behind them). To reach Spain by the best-possible route, the men would have wanted to sail west, initially, and then south (which is where they needed to be in order to reach Spain).

Even if the Spanish ships could have sailed against the wind, the English fleet was blocking the route west (across the English Channel). This put the Armada in a very difficult position.

The Spanish fleet had to sail home first by traveling north (along the British and Scottish coasts), then west (around Scotland), then south (along the rocky coast of Ireland).

The map, depicted above, was created by Robert Adams (an English cartographer) who produced seven maps for a book (*Expeditionis Hispanorum in Angliam*), published in 1590, chronicling the Armada battles. This illustration (Map 7) illustrates "Expeditions of the Spanish in England" (the English translation of the book's title).

If we could position Adams' map over a modern map, what would we see?

NASA's Landsat satellite images allows us to do precisely that. The image, below, depicts the area of Adams' map as it appeared between May and October of 2013.



NASA image, by Mike Taylor, using Landsat 8 OLI bands 4,3,2, between May and October of 2013. Click on both images for a much-better view. Credits:

Image of Robert Adams' map, described above, online courtesy NASA.

NASA image, described above, created using Landsat 8 OLI bands 4,3,2. The image, collected between May and October of 2013, by Mike Taylor using Landsat data available from the USGS archive.

See Alignments to State and Common Core standards for this story online at:

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Media Stream



<u>1588 Armada Landsat.Adams Map 7</u> View this asset at: <u>http://www.awesomestories.com/asset/view/</u>