# Section 2

## Video: Imagery analysis in ArcGIS Pro

Print

| Time | Caption |
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| 0:00 | ♪ [music] ♪ |
| 0:08 | Hi, I'm Vinay Viswambharan, |
| 0:10 | and I'm a principal product manager on the Imagery team. |
| 0:13 | Imagery and raster analysis is all about extraction of information |
| 0:17 | from imagery to derive actionable insights. |
| 0:20 | ArcGIS has a robust set of image- analysis tools and capabilities. |
| 0:25 | From deep learning to multidimensional analysis to terrain analysis and tools |
| 0:30 | to perform advanced analytics on different types of data, |
| 0:34 | and you can do all of this from within ArcGIS. |
| 0:38 | These tools and these capabilities are available from within desktop, |
| 0:42 | Enterprise, and online deployments. |
| 0:45 | We will be going through each one of these |
| 0:48 | deployments over the next few weeks. |
| 0:50 | However, this week, we'll talk about our |
| 0:53 | flagship desktop product, ArcGIS Pro. |
| 0:56 | We will first introduce you to raster functions. And raster functions, |
| 1:01 | they're a foundational technology that our image-processing |
| 1:04 | and raster-analytics capabilities are built on top of. |
| 1:08 | Now, simply put, raster functions are image-processing algorithms. |
| 1:13 | They can be used as is, or they can be chained together |
| 1:16 | to create focused information products. |
| 1:19 | Performing change detection, identifying burn scars, these are |
| 1:23 | just some of the different products that can be created. |

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| 1:26 | There are other key capabilities, one of which being change detection. |
| 1:30 | Change detection is critical to imagery and raster GIS workflows. |
| 1:35 | Imagery is collected from many sensors. |
| 1:38 | Most of that data collected is being used |
| 1:41 | for monitoring environmental changes, |
| 1:43 | land use, land-cover change detection, and similar workflows. |
| 1:47 | ArcGIS Pro provides tools to achieve these workflows, as well as tools |
| 1:53 | to perform image-to-image and time-series change detection. |
| 1:57 | Now, we have only touched on a fraction of the analysis |
| 2:01 | that can be conducted in ArcGIS Pro. |
| 2:04 | We will explore many different tools and capabilities in the coming weeks. |