

Image Acquisition

The LRC Core Facility has two systems for imaging cores:

Geotek Geoscan-III
DMT CoreScan Colour

Both systems employ line-scan CCD cameras with fluorescent lights fixed in position relative to the cameras. This design allows the use of polarizing filters to cover both the light source and the camera lens; the filters are oriented perpendicular to each other (such that the direction of polarization is 90 degrees relative to the other filter). In this manner, glare reflected from the surface of wet or moist cores is completely eliminated, and core stratigraphy is revealed perfectly. For example, the following pairs of images are from the same section of two cores, and show the results of imaging with (bottom) and without (top) polarizing filters.



Cores are typically scanned at 10 pixels/mm (~254dpi), although resolutions of 20 and 40 pixels/mm are possible. The digital files produced are uncompressed bitmap (.bmp) or TIFF (.tif) format, and are approximately 30MB per meter of core at standard resolution.

See also [Image Analysis](#)