

Davison Art Center Image Files: Technical Specifications

General Notes:

- See *Davison Art Center Image Files: File Naming* document for details of standard file naming.
- Basic metadata (outside this document's scope) is embedded into all files described below.
- Macintosh byte order is preferred but not required for all TIFFs.
- Progressive encoding is preferred but not required for all JPEGs.
- Master TIFFs, Use TIFFs, Use JPEGs, and Open Access TIFFs have only capture sharpening applied, not output sharpening. This supports optimal quality in variously resized derivatives that may be made from them, both in and out of house. After a derivative of any of these files is resized to its final pixel dimensions for a specific use, output sharpening should be applied to the derivative file at that use-specific size (see *DAC Open Access Images "ReadMe": Technical Notes for Image Users*).

Master TIFF:

Filename suffix: _mas.tif

Colorspace: eciRGB v2 ICCv4 with embedded profile

Bit depth: 16 bits per channel (48-bit file)

Compression: none

Crop: includes as much of physical-object ID slip and ISA Object-Level Target as captured

Pixel dimensions: full capture pixels (no scaling/resizing)

Stated pixels per inch: "600 ppi" (this is arbitrary, not referenced to object measurement)

Sharpening: only capture sharpening (typically *Photoshop Smart Sharpen: 46%, 1px, "Lens Blur" (deconvolution), "More Accurate"; parameters may be judiciously adjusted for certain types of images*)

Application: archiving for future use, long-term quality assessment across multiple projects

Note: Legacy Master TIFFs may remain as is, in Adobe RGB (1998) colorspace with profile.

Use TIFF:

Filename suffix: _use.tif

Colorspace: sRGB (IEC61922-2.1) with embedded profile

Bit depth: 8 bits per channel (24-bit file)

Compression: none

Crop: outside platemark per DAC practice and cropping instructions (no ID slip or target)

Pixel dimensions: full capture pixels remaining after crop (no scaling/resizing)

Stated pixels per inch: "300 ppi" (this is arbitrary, not referenced to object measurement)

Sharpening: only capture sharpening (same as Master TIFF: no further sharpening added)

Application: Zoomify rendering (see note at end); live archiving for derivative production

Use JPEG:

Filename suffix: _use.jpg

Colorspace: sRGB (IEC61922-2.1) with embedded profile

Bit depth: 8 bits per channel (24-bit file)

Compression/Quality: "12" (100%) for maximum quality

Crop: same as Use TIFF

Pixel dimensions: full capture pixels remaining after crop (same as Use TIFF; no scaling/resizing)

Stated pixels per inch: "300 ppi" (this is arbitrary, not referenced to object measurement)

Sharpening: only capture sharpening (same as Master TIFF: no further sharpening added)

Application: loading into EmbARK Collection Manager for EmbARK CM and Web Kiosk

Open Access TIFF:

Filename suffix: _OA.tif

Colorspace: sRGB (IEC61922-2.1) with embedded profile

Bit depth: 8 bits per channel (24-bit file)

Compression: LZW (bit-for-bit lossless)

Crop: same as Use TIFF

Pixel dimensions: 4096 pixels maximum height or width, or less if source file has less.

Stated pixels per inch: "300 ppi" (this is arbitrary, not referenced to object measurement)

Sharpening: only capture sharpening (same as Master TIFF: no further sharpening added)

Application: Public delivery as a DAC Open Access Image for publication and other uses

Note: see DAC Open Access Images "ReadMe": Technical Notes for Image Users for more.

Open Access JPEG:

Filename suffix: _OA.jpg

Colorspace: sRGB (IEC61922-2.1) with embedded profile

Bit depth: 8 bits per channel (24-bit file)

Compression/Quality: "12" (100%) for maximum quality

Crop: same as Use TIFF

Pixel dimensions: 1024 pixels maximum height or width

Stated pixels per inch: "72 ppi" (this is arbitrary, not referenced to object measurement)

Sharpening: Typically Photoshop Unsharp Mask (Amount 20%, Radius 0.7 pixels, Threshold 1); OA JPEG output sharpening method and parameters may be individually adjusted based on visual assessment.

Application: Public delivery as a DAC Open Access Image ready for slides, web, etc.

Note: see DAC Open Access Images "ReadMe": Technical Notes for Image Users for more.

AAMD Fair Use JPEG:

Filename suffix: _249.jpg

Colorspace: sRGB (IEC61922-2.1) with embedded profile

Bit depth: 8 bits per channel (24-bit file)

Compression/Quality: "12" (100%) for maximum quality

Crop: same as Use TIFF

Pixel dimensions: 249 pixels maximum height or width

Stated pixels per inch: "72 ppi" (this is arbitrary, not referenced to object measurement)

Sharpening: Typically Photoshop Unsharp Mask (Amount 17%, Radius 0.5 pixels, Threshold 1); thumbnail output sharpening method and parameters may be individually adjusted based on visual assessment.

Application: Web thumbnail usable for all art images under AAMD Fair Use Guidelines

Other Derivatives:

- For each suitable image representing a work in the DAC collection, the six files above are made via automated processes, except for steps requiring human eyes and intelligence. In addition to these, when an image is added to the DAC's collection management system (EmbARK), it automatically makes small JPEGs for display at standard sizes in that system.
- The Use TIFF also is fed into Zoomify software to create tiled image sets for web delivery.
- One-off derivatives are made on occasion for specific uses. The Use TIFF is the proximate source file for making those derivatives. For example, an image of a representative work of art in a temporary exhibition is fine-tuned for several website contexts, press materials, etc.