

DICOM Correction Item

Correction Number		CP-385
Log Summary: Supplemental Palette Color Compression		
Type of Modification	Name of Standard	
Clarification	PS 3.3 2003	
Rationale for Correction		
<p>The Enhanced MR Image Storage SOP Class adds a mechanism for encoding continuous grayscale information in the lower stored pixel values and indexed color lookup table in the upper stored pixel values.</p> <p>Such images cannot be irreversibly compressed since that would potentially change the index values and result in different colors being rendered.</p>		
Sections of documents affected		
PS 3.3 C.8.13.3.1.2.1		
Correction Wording:		

C.8.13.3.1.2.1 Supplemental Palette Color LUTs

Figure C.8.13-1 presents two separate image visualization pipelines that can be used for interpreting the stored pixel values.

If Pixel Presentation (0008,9205) equals COLOR, the stored values are split into two ranges. The stored values up to the values specified in the attribute Largest Monochrome Pixel Value (0028,9099) are passed through the gray scale visualization pipeline. The values greater than the Largest Monochrome Pixel Value (0028,9099) are mapped by the Palette Color LUTs.

The complete range of stored pixel values can also be displayed via the grayscale visualization pipeline only, but the information content may be less useful because the color information is not available.

Note: Images containing Supplemental Palette Color LUTs cannot be irreversibly (lossy) compressed, since that would potentially change the index values and result in different colors being rendered.