

DICOM Correction Item

Correction Number	CP-969		
Log Summary:	Correct Surface Processing Algorithm Family codes		
Type of Modification	Name of Standard		
Modification	PS 3.16-2008 + Sup132		
Rationale for Correction:			
An extra digit was added into the DCM codes in the publication of Supplement 132 Final Text, resulting in seven digit rather than six digit codes.			
Sections of documents affected			
PS 3.16 Annex B CID 7162			
Correction Wording:			

Item: Add following to Annex B

CONTEXT GROUP 7162 – Surface Processing Algorithm Families

CID 7162
 Surface Processing Algorithm Families
 Type: Extensible Version: 20080829

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM	1231001	Neighborhood Analysis
DCM	1231002	Adaptive Filtering
DCM	1231003	Edge Detection
DCM	1231004	Morphological Operations
DCM	1231005	Histogram Analysis
DCM	1231006	Multi-Scale/Resolution Filtering
DCM	1231007	Cluster Analysis
DCM	1231008	Multispectral Processing
DCM	1231009	Manual Processing
DCM	1231010	Artificial Intelligence
DCM	1231011	Deformable Models

Item: Add the following entries to the table in Annex D.

DICOM Code Definitions

Code Value	Code Meaning	Definition	Notes
...

1231001	Neighborhood Analysis	Surface processing utilizing predefined weighting factors (i.e. kernels) applied to different data values depending on their location relative to other data values within the data domain. Includes Low Pass, High Pass, Gaussian, Laplacian, etc.	
1231002	Adaptive Filtering	Surface processing applied non-uniformly utilizing a priori knowledge of the system and/or relative locations of the data values within the data domain. Example: Neighborhood analysis where weighting factors are modified continuously based on predefined criteria.	
1231003	Edge Detection	Surface processing through the exploitation of discontinuities in the data values within their domain. Includes Gradient filters.	
1231004	Morphological Operations	Surface processing based on the connectivity of values based on the shape or structure of the data values within their domain. Includes erode, dilate, etc.	
1231005	Histogram Analysis	Surface processing applied to the distribution of the data values. Includes thresholding, Bayesian Classification, etc.	
1231006	Multi-Scale/Resolution Filtering	Surface processing accomplished through varying the data domain size. Include deformable models.	
1231007	Cluster Analysis	Surface processing accomplished by combining data values based on their relative location within their domain or value distribution. Includes K- and C-means, Fuzzy Analysis, Watershed, Seed Growing, etc.	
1231008	Multispectral Processing	Surface processing accomplished through the weighted combination of multiple data sets. Includes Principle Component Analysis, linear and non-linear weighed combinations, etc.	
1231009	Manual Processing	Surface processing accomplished through human interaction. Region drawing	
1231010	Artificial Intelligence	Surface processing using Artificial Intelligence techniques, such as Machine Learning, Neural Networks, etc.	
1231011	Deformable Models	Surface processing using Deformable Model techniques, such as Point Distribution Models, Level Sets, Simplex Meshes, etc.	
...