Supplement 189:
Parametric Blending Presentation State Storage
Overview

• Objective
• Input data
• Blending operation
• Example
Allows showing spatial relationship of the parametric maps and structural images without loosing the ability to use:

- Geometry
- Spatial and Parametric Information
- Thresholds

Major usage for Surgery and Therapy planning

Is Modality independent
Describes the different information sets that will be blended:

- Structural dataset(s) for anatomy
- Parametric Maps for Functional Information
Blending operation

- Apply Threshold to highlight the important areas
- Supports the use of the Color information in the input datasets
- Blends the different datasets in specified order without losing the color information
Blending operation

Requires Frame of Reference

Supports usage of

• Padding
• Graphics overlays
• Segmented Color LUT description
• Real World value measurements

CP 1584 added for color support in Parametric maps.
Use case is brain mapping for pre-treatment planning. The goal is to visualize white matter, eloquent cortex for language with respect to the anatomy

- White matter is done by Color DTI
- Eloquent cortex is done by multiple language fMRI paradigms
- Anatomy is post contrast T1
View combining:
- Anatomical image
- 3 parametric maps
- DTI map

Using:
- Thresholds
- Opacity
Individual Images

- Anatomical
Individual Images

- Parametric map showing coloring and applying threshold coloring of the image
Individual Images

- Parametric map showing coloring and applying threshold coloring of the image
• Parametric map showing coloring and applying threshold coloring of the image
Individual Images

- RGB image showing the DTI information having no threshold
Result view

- Result view after blending of the different images
• Result view after blending of the different images with application added information.
What is not specified

- The algorithms used to make the different spatial datasets map to each other
- Windowing of gray scale information before it is colored and blended