SLD Reference Sheet

<ColorMap>
Attributes are:
- extended – If true then 16bit colours can be used. If false, only 8bit (256) colours.
- type – type of color map entries. Options:
  - type="values" – interpolate between colours.
  - type="intervals" – colorbands, no gradients.
<ColorMapEntry>
Each entry assigns a quantity to a colour.
<ColorMapEntry>
  - color – colour as #RRGGBB
  - label – used for legends
  - opacity – from 0 to 1
  - quantity – a value in range of the raster data

<ContrastEnhancement>
Adjust relative brightness of the data in a colour channel. Can be used in <RasterSymbolizer> or <ChannelSelection> elements.
- GammaValue
  - Multiply brightness by the gamma value.
- Histogram
  - Applies histogram algorithm.
- Normalize
  - Applies normalize algorithm.

<ExternalGraphic>
- OnlineResource
  - URL or local path relative to the SLD
  - Format
    - MIME type of the image format.

<Fill>
Contains a <Graphic> to pattern the polygon.
<GraphicFill>
- Name of the data attribute to use for the label text.
- Label
  - Name of the data attribute to use for the label text.
  - LabelPlacement
    - Links colour channels of the data to red, green, blue channels or gray channel for rendering.
  - ChannelSelection
    - Links colour channels of the data to red, green, blue channels or gray channel for rendering.
    - GrayChannel
      - SourceChannelName
        - 10
      - ChannelSelection
    - ContrastEnhancement
      - ...
<Geometry>
Set which data attribute to use for geometry. Use this Only if there is more than one geometry column.
<Geometry>
  <PropertyName>the_geom</PropertyName>
</Geometry>
</Geometry>

<Graphic>
- <ExternalGraphic>
  - <Mark>
    - <Opacity>
      - 0 = completely transparent
      - 1 = completely opaque
    - <Opacity>0.5</Opacity>
  - <Size>
    - Height in pixels. Width is scaled to height
    - <Size>12</Size>
  - <Rotation>
    - Clockwise degrees of rotation
  - Negative values are anti-clockwise
  - <Rotation>45</Rotation>
</Mark>
  - <Fill>
    - Width in pixels of the halo.
    - <Radius>2</Radius>
  - <GraphicOutline>
    - Render an outline for each image in a multiple image dataset.
  - <LinePlacement>
    - Controls placement of a label for a geometry.
</LinePlacement>
  - <PointPlacement>
    - Controls placement of a label for a geometry.
</PointPlacement>
</ExternalGraphic>
</Graphic>

<PointPlacement>
Label placement based on point.
</PointPlacement>

<AnchorPoint>
Sets a point in the text label to use to anchor to the spatial element labelled. Ratio from 0.0 (left, bottom) to 1.0 (right, top).
<AnchorPoint>
  <AnchorPointX>0.5</AnchorPointX>
  <AnchorPointY>0.5</AnchorPointY>
</AnchorPoint>
</AnchorPoint>

<Displacement>
Displacement in pixels from the spatial element.
<Displacement>
  <DisplacementX>0</DisplacementX>
  <DisplacementY>0</DisplacementY>
</Displacement>
</Displacement>

<Rotation>
Clockwise degrees of rotation
Negative values are anti-clockwise
<Rotation>45</Rotation>
</Rotation>

<GraphicFill>
Contains a <Graphic> used to pattern the line.
</GraphicFill>
</GraphicStroke>
Contains a <Graphic> used to draw repeatedly on top of the line.
</GraphicStroke>

<CssParameter>
Assigns a styling parameter a value. The parameter set is based on the name attribute.
<CssParameter>
  name="stroke"
  value="#FF0000"
</CssParameter>
</CssParameter>

CSS Parameters for <Stroke> are:
- name="stroke" – stroke colour as #RRGGBB
- name="stroke-dasharray" – series of dash length and gap length pairs in pixels to repeat. For example "8 2 4 2 2 4 2"
- name="stroke-dashoffset" – number of pixels into the dasharray to start drawing
- name="stroke-linecap" – how to render the end of a line. butt, round and square
- name="stroke-linejoin" – how to render line segment joins. bevel, mitre or round
- name="stroke-opacity" – from 0 to 1
  name="stroke-width" – in pixels
</Stroke>

<ShadedRelief>
- <ReliefFactor>
  - Controls exaggeration of shading.
  - Ratio from 0.0 (left, bottom) to 1.0 (right, top).
</ReliefFactor>

Attribute Filters
- PropertyIsEqualTo
- PropertyIsNotEqualTo
- PropertyIsLessThan
- PropertyIsLessThanOrEqualTo
- PropertyIsGreaterThan
- PropertyIsGreaterThanOrEqualTo
- PropertyIsLike
- PropertyIsNull

Spatial Filters
- BBOX
- Beyond
- Contains
- Crosses
- Disjoint
- Distance
- Equals
- Intersects
- Overlaps
- Touches
- Within
- DWithin