

# Layer Styling

## Introduction

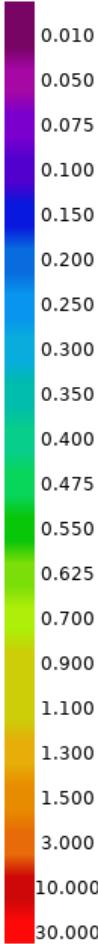
A style defines how underlying data gets visualized. When dealing with raster data this usually means having a value-color mapping, either categorized or graduated.

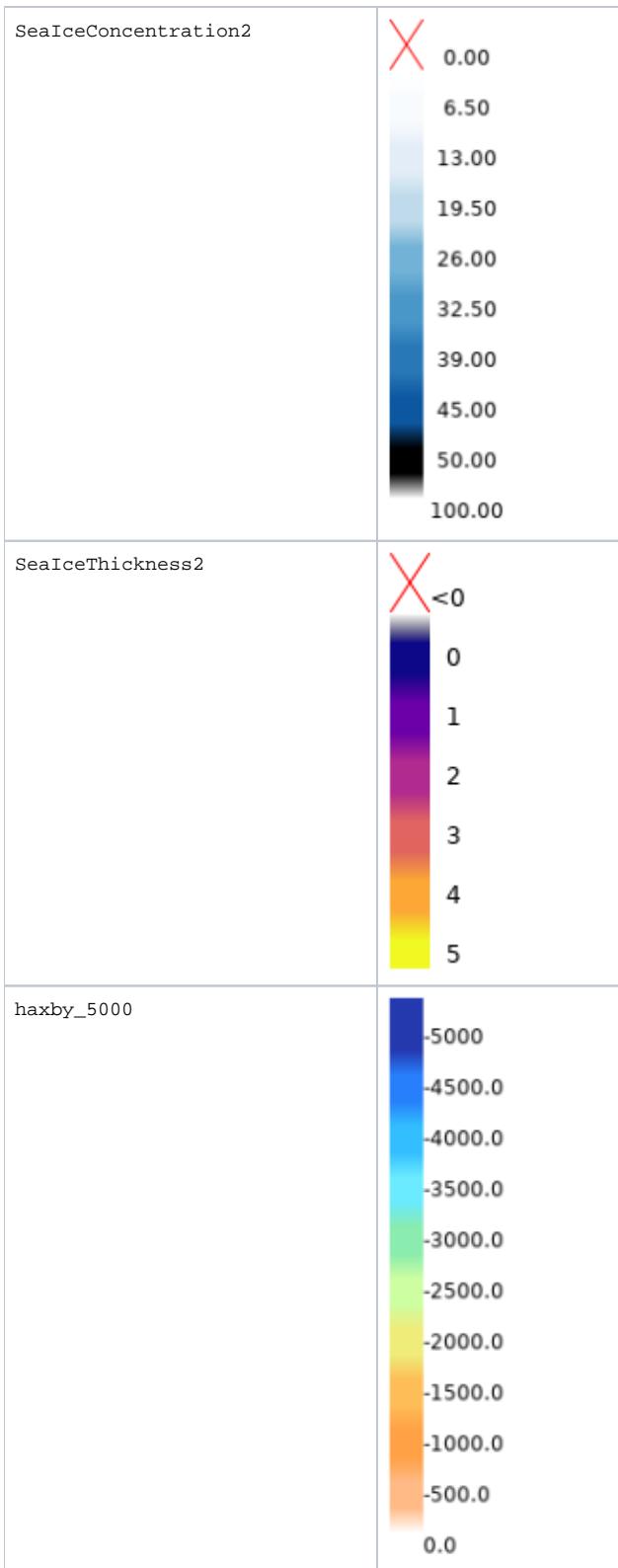
It is possible to refer to a specific style when sending a GetMap request to a Web Map Service (WMS), resulting in accordingly rendered images. If no style is specified, a default style will be used.

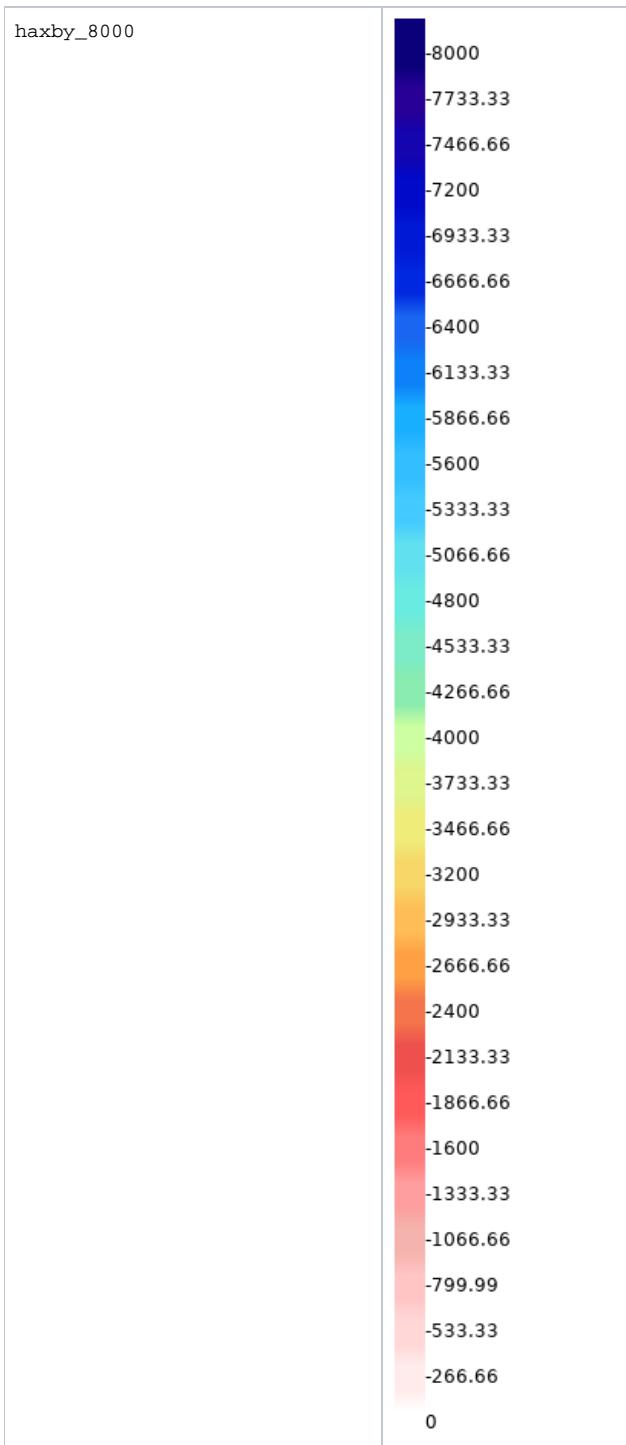
This page describes which pre-defined and curated styles (static styles) our spatial data infrastructure offers and how our customizable styles (template /dynamic styles) work. All styles offered are as SLD files (Styled Layer Descriptor).

## Raster Layers

### Static Styles

Style Name	Legend Preview
GlobColour2	 <p>0.010 0.050 0.075 0.100 0.150 0.200 0.250 0.300 0.350 0.400 0.475 0.550 0.625 0.700 0.900 1.100 1.300 1.500 3.000 10.000 30.000</p>



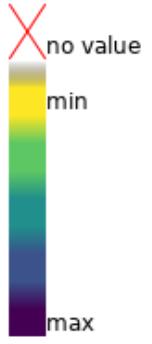


## Template/Dynamic Styles

There are eight "empty" styles available which can be manipulated to one's needs. If used without any changes they will default to values between 0 and 1 being mapped to a viridis color ramp (with 3 to 9 defined color steps) or to a two-step black-white color ramp. In between these defined color steps a value's color will gradually change. The following table shows styles `template_2col` and `template_5col` as examples. Style names go up to `template_9col`.

Color (RGB hexvalue), opacity, value (quantity) and label (how it appears in the legend) are variables which can be specified explicitly in a GetMap request.

Style Name	Default Legend	SLD File Excerpt
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template_2col	 <p><b>Style: template_2col</b></p> <pre>&lt;sld:ColorMap&gt;   &lt;sld:ColorMapEntry color="\${env('colnv','#000000')}" opacity="\${env('opanv',0.0)}"   quantity="\${env('valnv',-1)}" label="\${env('labnv','no value')}"/&gt;   &lt;sld:ColorMapEntry color="\${env('coll','#FFFFFF')}" opacity="\${env('opal',1.0)}"   quantity="\${env('val1',0)}" label="\${env('lab1','min')}"/&gt;   &lt;sld:ColorMapEntry color="\${env('col2','#000000')}" opacity="\${env('opa2',1.0)}"   quantity="\${env('val2',1)}" label="\${env('lab2','max')}"/&gt; &lt;/sld:ColorMap&gt;</pre>	
template_5col	 <p><b>Style: template_5col</b></p> <pre>&lt;sld:ColorMap&gt;   &lt;sld:ColorMapEntry color="\${env('colnv','#000000')}" opacity="\${env('opanv',0.0)}"   quantity="\${env('valnv',-1)}" label="\${env('labnv','no value')}"/&gt;   &lt;sld:ColorMapEntry color="\${env('coll','#FDE725')}" opacity="\${env('opal',1.0)}"   quantity="\${env('val1',0)}" label="\${env('lab1','min')}"/&gt;   &lt;sld:ColorMapEntry color="\${env('col2','#5DC863')}" opacity="\${env('opa2',1.0)}"   quantity="\${env('val2',0.25)}" label="\${env('lab2',''))}"/&gt;   &lt;sld:ColorMapEntry color="\${env('col3','#21908C')}" opacity="\${env('opa3',1.0)}"   quantity="\${env('val3',0.5)}" label="\${env('lab3',''))}"/&gt;   &lt;sld:ColorMapEntry color="\${env('col4','#3B528B')}" opacity="\${env('opa4',1.0)}"   quantity="\${env('val4',0.75)}" label="\${env('lab4',''))}"/&gt;   &lt;sld:ColorMapEntry color="\${env('col5','#440154')}" opacity="\${env('opa5',1.0)}"   quantity="\${env('val5',1)}" label="\${env('lab5','max')}"/&gt; &lt;/sld:ColorMap&gt;</pre>	
template_3col template_4col template_6col template_7col template_8col template_9col	like above	like above