Layer Styling

Introduction

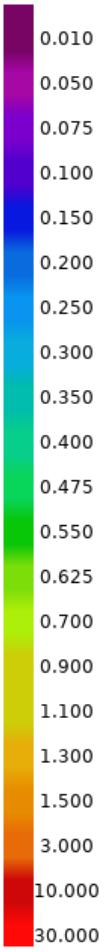
A style defines how underlying data gets visualized. When dealing with raster data this usually means having a value-color mapping, either categorized or graduated.

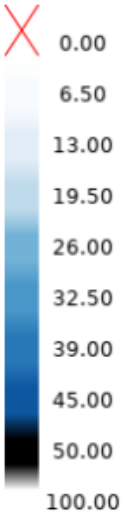
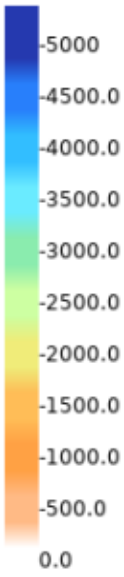
It is possible to refer to a specific style when sending a GetMap request to a Web Map Service (WMS), resulting in accordingly rendered images. If no style is specified, a default style will be used.

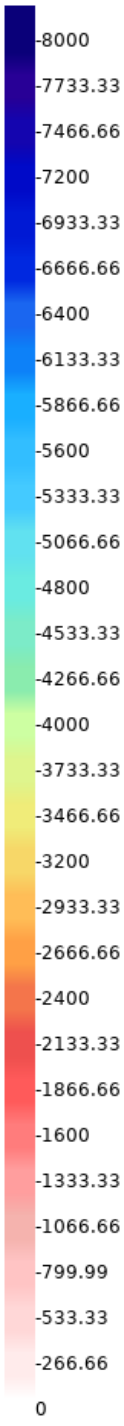
This page describes which pre-defined and curated styles (static styles) our spatial data infrastructure offers and how our customizable styles (template /dynamic styles) work. All styles offered are as SLD files (Styled Layer Descriptor).

Raster Layers

Static Styles

Style Name	Legend Preview
`GlobColour2`	

SeaIceConcentration2	
SeaIceThickness2	
haxby_5000	

`haxby_8000`	

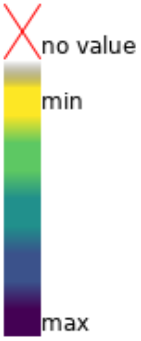
Template/Dynamic Styles

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

template_2col		**Style: template_2col**
		
		`<sld:ColorMap>`
		`  <sld:ColorMapEntry color="${env('colnv','#000000')}" opacity="${env('opanv',0.0)}" quantity="${env('valnv',-1)}" label="${env('labnv','no value')}"/>`
		`  <sld:ColorMapEntry color="${env('col1','#FFFFFF')}"  opacity="${env('opa1',1.0)}" quantity="${env('val1',0)}"  label="${env('lab1','min')}"/>`
		`  <sld:ColorMapEntry color="${env('col2','#000000')}"  opacity="${env('opa2',1.0)}" quantity="${env('val2',1)}"  label="${env('lab2','max')}"/>`
		`</sld:ColorMap>`

template_5col		**Style: template_5col**
		
		`<sld:ColorMap>`
		`  <sld:ColorMapEntry color="${env('colnv','#000000')}" opacity="${env('opanv',0.0)}" quantity="${env('valnv',-1)}"  label="${env('labnv','no value')}"/>`
		`  <sld:ColorMapEntry color="${env('col1','#FDE725')}"  opacity="${env('opa1',1.0)}" quantity="${env('val1',0)}"  label="${env('lab1','min')}"/>`
		`  <sld:ColorMapEntry color="${env('col2','#5DC863')}"  opacity="${env('opa2',1.0)}" quantity="${env('val2',0.25)}" label="${env('lab2','')}"/>`
		`  <sld:ColorMapEntry color="${env('col3','#21908C')}"  opacity="${env('opa3',1.0)}" quantity="${env('val3',0.5)}"  label="${env('lab3','')}"/>`
		`  <sld:ColorMapEntry color="${env('col4','#3B528B')}"  opacity="${env('opa4',1.0)}" quantity="${env('val4',0.75)}" label="${env('lab4','')}"/>`
		`  <sld:ColorMapEntry color="${env('col5','#440154')}"  opacity="${env('opa5',1.0)}" quantity="${env('val5',1)}"  label="${env('lab5','max')}"/>`
		`</sld:ColorMap>`

template_3col template_4col template_6col template_7col template_8col template_9col	like above	like above