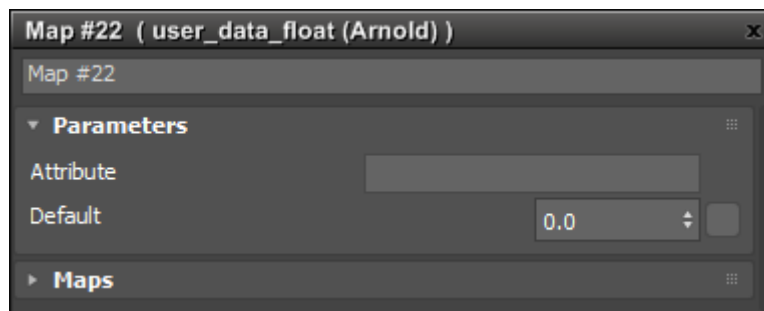


## User Data Shaders

These nodes can be used to retrieve attributes from the attached geometry. When the scene is translated to Arnold, attributes are not exported automatically. They must be declared, according to the Arnold scene syntax, in the User Options field of the Arnold Parameters (see below for some examples). On export, MAXtoA translates them into user attributes on the Arnold geometry. To retrieve this data, a node is then required of the correct type. While there are more types than listed below, these should cover the type dimensions, (int, string, 1,3, and 4 floats). In Arnold, the parameter is selected by name only. The nodes below are very accepting of inputs. If for example, an attribute is named in **user\_data\_rgb** but the input passed is actually an integer, then it will still work and just convert the integer to float and pass it to each of the R, G & B values.

It is also possible to read user data fields from volumetric shapes, allowing things like per-particle user data on volumetric spherical point clouds to affect the result of volumetric shading.

### User Data Float



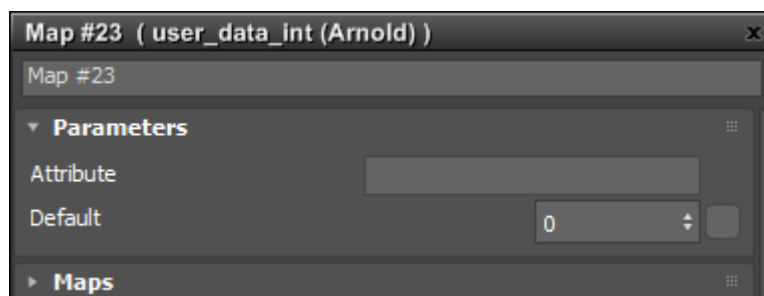
#### Attribute

Read float value from shape user data, at the current shading point on the surface.

#### Default

Output value to use if user data with the specified name is not available.

### User Data Int



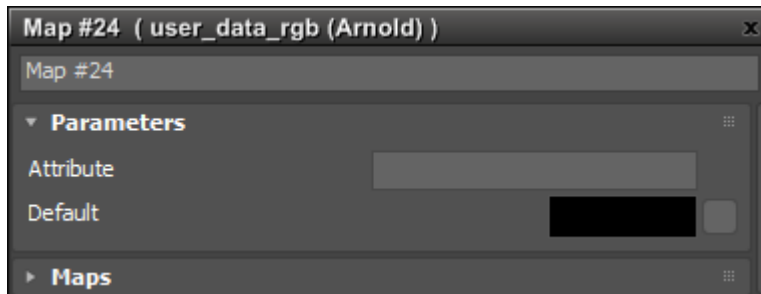
#### Attribute

Read integer value from shape user data, at the current shading point on the surface.

### Default

Output value to use if user data with the specified name is not available.

### User Data RGB



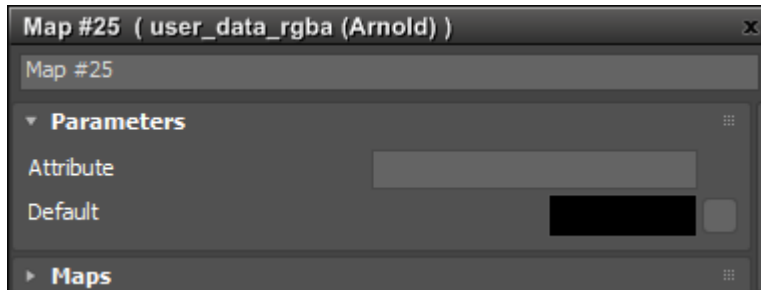
### Attribute

Read RGB color from shape user data, at the current shading point on the surface.

### Default

Output value to use if user data with the specified name is not available.

### User Data RGBA



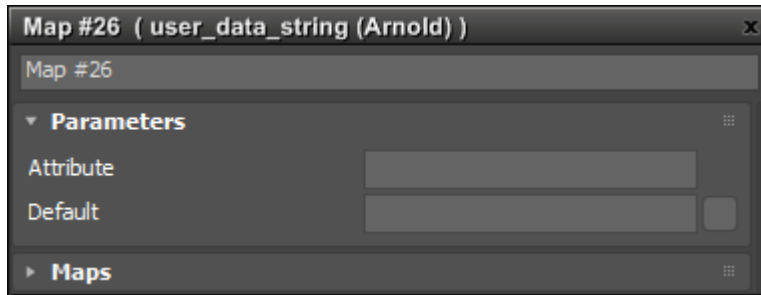
### Attribute

Read RGB color and alpha from shape user data, at the current shading point on the surface.

### Default

Output value to use if user data with the specified name is not available.

### User Data String



### Attribute

Reads the string from shape user data.

### Default

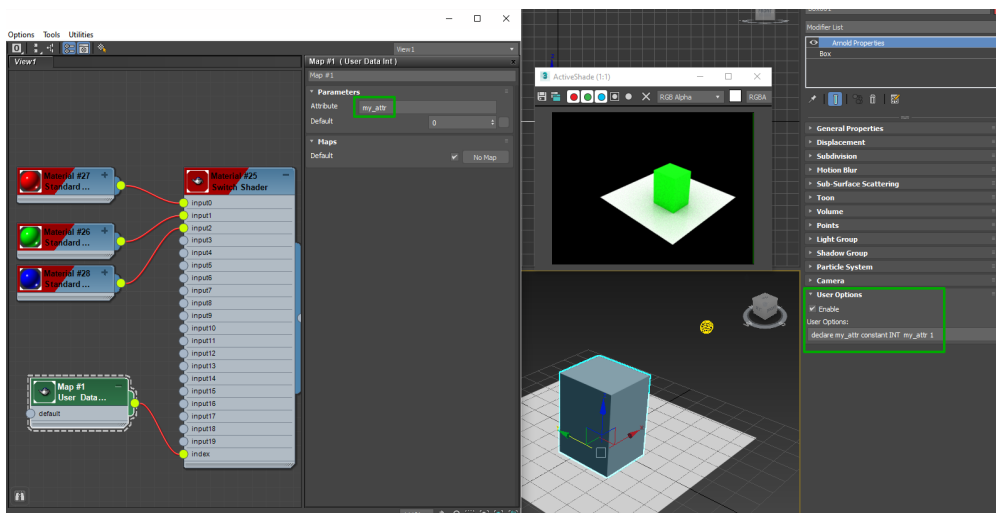
Output value to use if user data with the specified name is not available.

### Examples

In these examples, a User Data Int is used to drive the index of a shader switcher.

The most classic data is of type constant, applying to the entire object, and can be set to 1 by

```
declare my_attr constant INT my_attr 1
```



Also, you can define the data as uniform, meaning one different value for each polygon (12 triangles here) by

```
declare my_attr uniform INT my_attr 12 1 INT 1 1 0 0 2 2 2 2 0 0 1 1
```

