

Included vs excluded Bishop Creek data (Phillips et al., 2009)

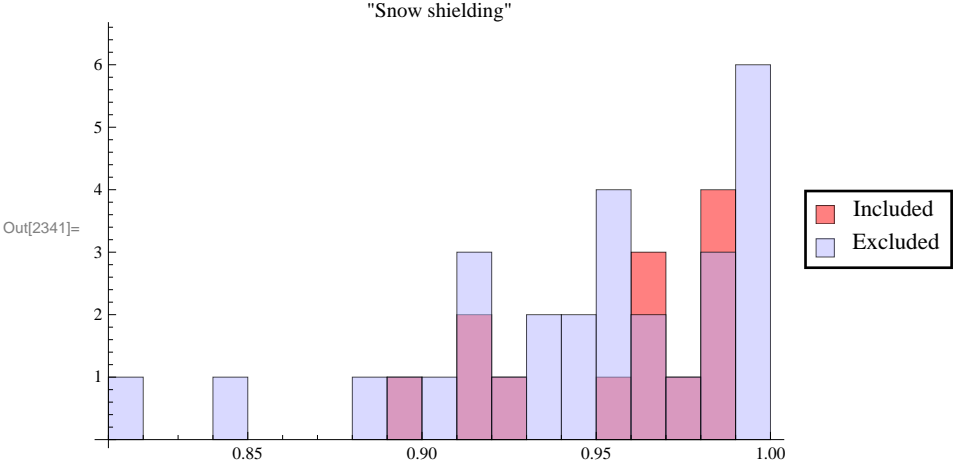
The Phillips et al. (2009) data set contains 45 samples from Tioga - 4 and Recess Peak landforms.
31 are listed as Tioga - 4 age.
14 are listed as Recess Peak age.

The proposal is to include 9 out of 31 Tioga-4 samples, and 4 out of 14 Recess Peak samples in the CRONUS primary Cl-36 calibration.

The figures below compare the distribution of included and excluded samples geographically, by snow-cover correction, by total shielding correction and by the ages published in Phillips et al. (2009).

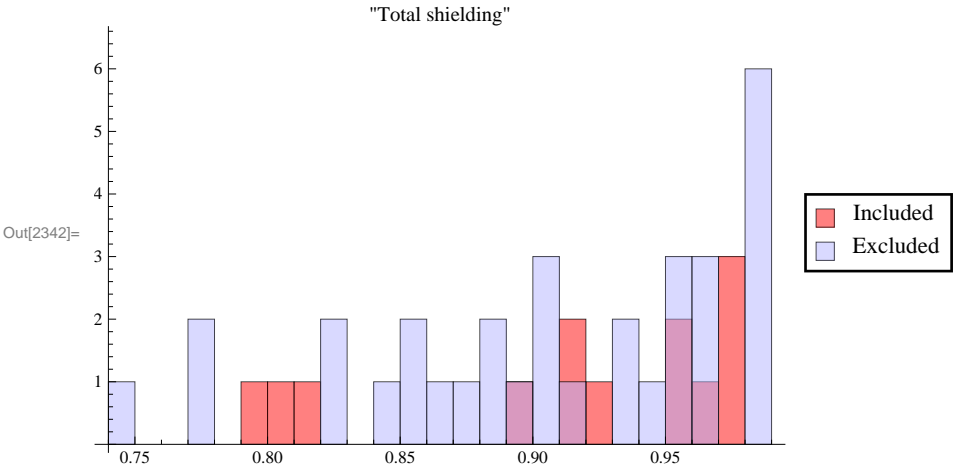
Snow Shielding

```
In[2341]:= Histogram[{includedsnowcover, excludedsnowcover}, {0.01},  
ChartStyle -> {RGBColor[{1, 0, 0}], RGBColor[{0.7, 0.7, 1}]},  
ChartLegends -> {"Included", "Excluded"}, PlotLabel -> "\"Snow shielding\""]
```



Total Shielding

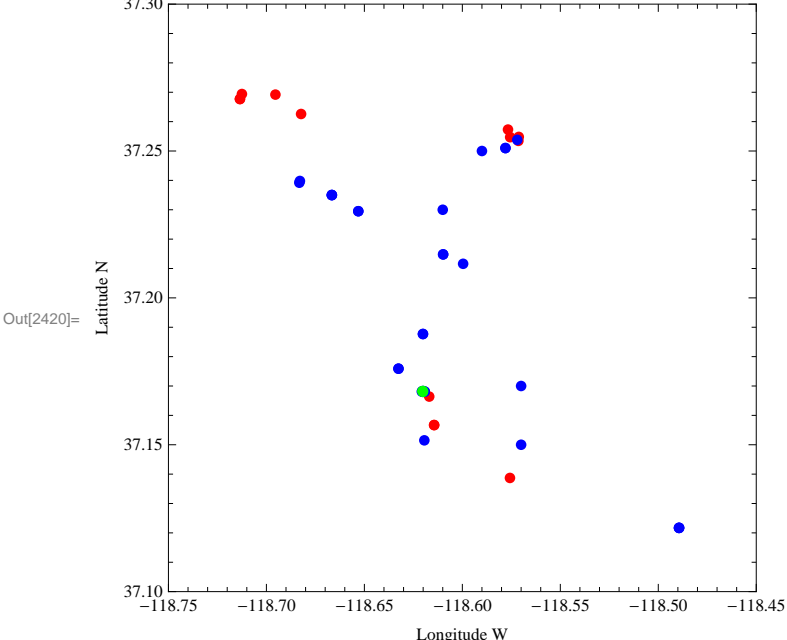
```
In[2342]:= Histogram[{includedhorizons, excludedhorizons}, {0.01},  
ChartStyle -> {RGBColor[{1, 0, 0}], RGBColor[{0.7, 0.7, 1}]},  
ChartLegends -> {"Included", "Excluded"}, PlotLabel -> "\"Total shielding\""]
```



Geographic position

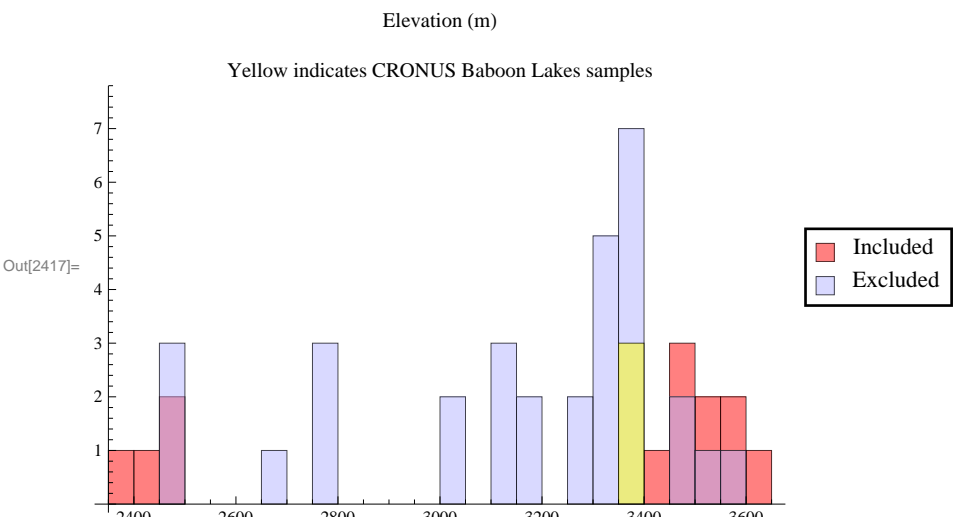
```
In[2420]:= (*Red points = included samples. Blue points =  
excluded samples. Green point = Baboon Lakes. No attempt at map projection.*)
```

```
ListPlot[{includedlonglat, excludedlonglat, baboonlkslonglat}, PlotStyle ->  
{PointSize[0.018], Red}, {PointSize[0.018], Blue}, {PointSize[0.018], Green}},  
PlotRange -> {{-118.75, -118.45}, {37.10, 37.30}}, AxesOrigin -> {-118.75, 37.10},  
Frame -> True, FrameLabel -> {"Longitude W", "Latitude N"}, AspectRatio -> 1]
```



Elevation

```
In[2417]:= Histogram[{includedelevation, excludedelevation, baboonlakeselevation}, {50},  
ChartStyle -> {RGBColor[{1, 0, 0}], RGBColor[{0.7, 0.7, 1}], RGBColor[{1, 1, 0}]},  
ChartLegends -> {"Included", "Excluded"}, PlotLabel -> "Elevation (m)\n  
Yellow indicates CRONUS Baboon Lakes samples"]
```



Exposure ages (Tioga 4 landforms)

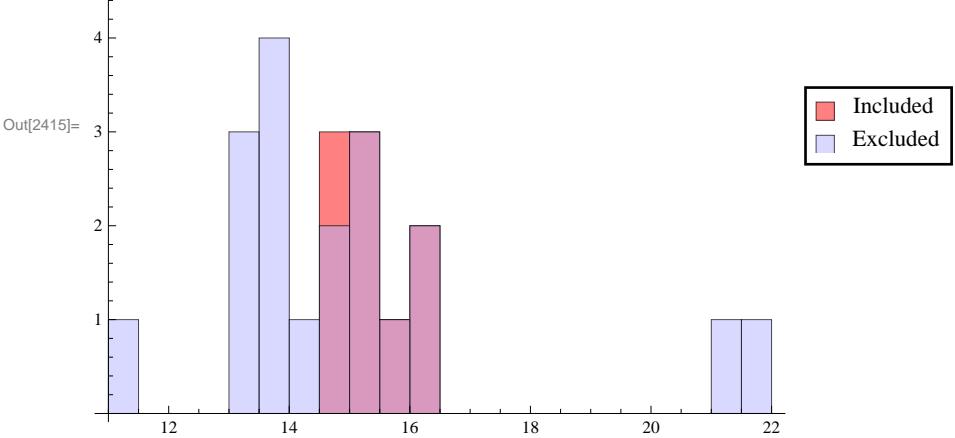
```
In[2415]:= Histogram[{includedeti4ages, excludedeti4ages}, {0.5},  
ChartStyle -> {RGBColor[{1, 0, 0}], RGBColor[{0.7, 0.7, 1}]},  
ChartLegends -> {"Included", "Excluded"},  
PlotLabel -> "Exposure ages, Tioga-4 landforms (Phillips et al. 2009).\n  
Computed using Phillips et al. 2001 production constants\n  
assuming 1mm/kyr erosion rate.\n  
C-14 age for Tioga-4 = 16,060 cal yr BP"]
```

Exposure ages, Tioga-4 landforms (Phillips et al. 2009).

Computed using Phillips et al. 2001 production constants

assuming 1mm/kyr erosion rate.

C-14 age for Tioga-4 = 16,060 cal yr BP



Exposure ages (Recess Peak landforms)

```
In[2416]:= Histogram[{includedrpages, excludedrpages}, {0.5},  
ChartStyle -> {RGBColor[{1, 0, 0}], RGBColor[{0.7, 0.7, 1}]},  
ChartLegends -> {"Included", "Excluded"},  
PlotLabel -> "Exposure ages, Recess Pk landforms (Phillips et al. 2009).\n  
Computed using Phillips et al. 2001 production constants\n  
assuming 1mm/kyr erosion rate.\n  
C-14 age for Recess Pk = 13,310 cal yr BP"]
```

Exposure ages, Recess Pk landforms (Phillips et al. 2009).

Computed using Phillips et al. 2001 production constants

assuming 1mm/kyr erosion rate.

C-14 age for Recess Pk = 13,310 cal yr BP

