

Hi,

I recognized, that the Highpass Onlinefilter does not remove DC.

Example 1:

Signal is sampled with 100Hz, Cutoff frequency is 2Hz, order is 1

```
HP = MathNet.Filtering.OnlineFilter.CreateHighpass(ImpulseResponse.Finite, 100, 2, 1);
```

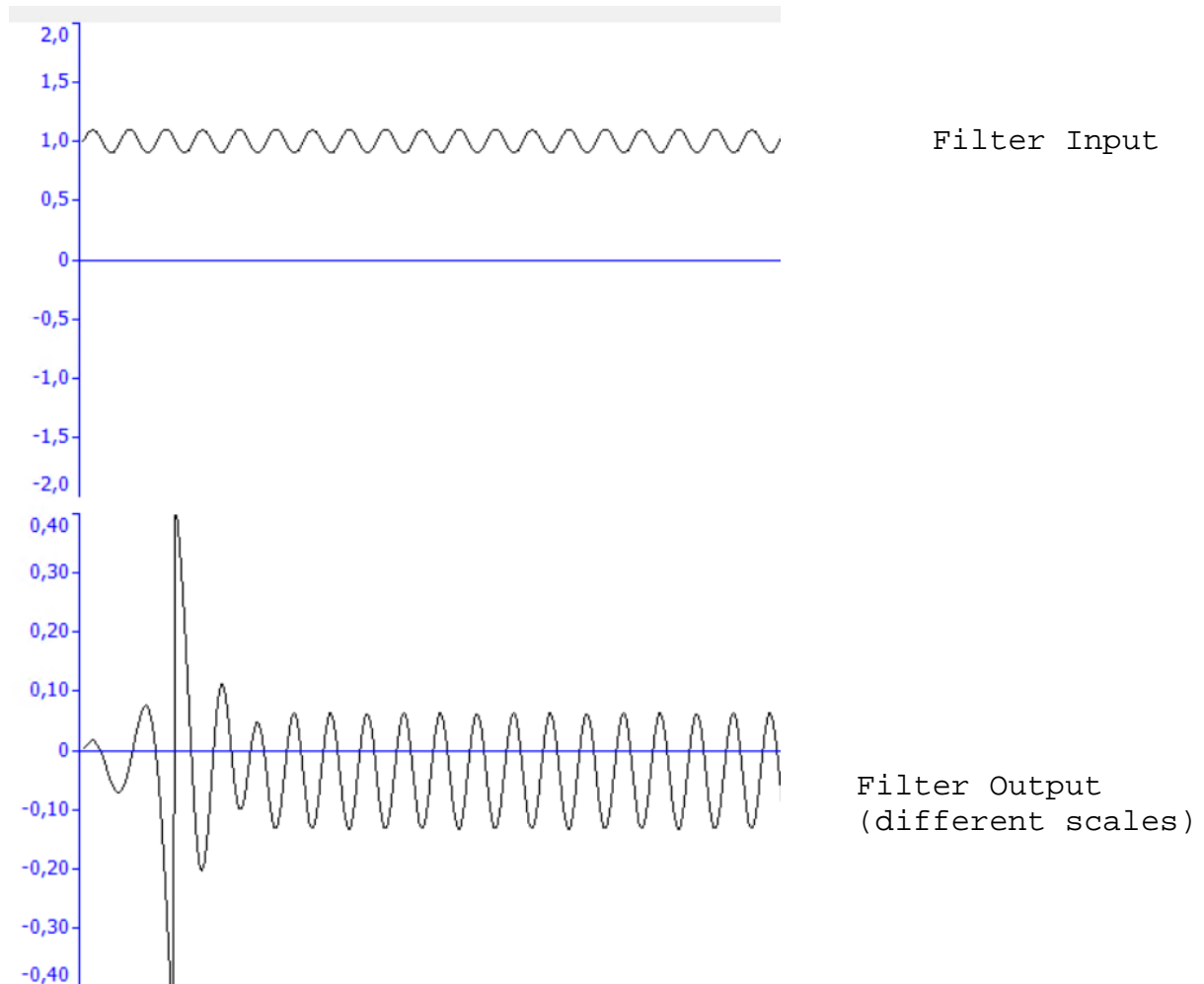
```
double result = HP.ProcessSample(1.0); -> result = -0.033589 (After settling)
```

```
double result = HP.ProcessSample(2.0); -> result = -0.067178
```

Example 2:

Setting as in Example 1, Mixed Signal: DC= 1; Sine wave: f=3Hz, amplitude = 0.1

Filter output's DC is not 0



Example 3:

Signal is sampled with 100Hz, Cutoff frequency is 2Hz, order is 2

```
HP = MathNet.Filtering.OnlineFilter.CreateHighpass(ImpulseResponse.Finite, 100, 2, 2);
```

```
double result = HP.ProcessSample(1.0); -> result = 0.880210 (After settling)
```

```
double result = HP.ProcessSample(2.0); -> result = 1.76
```

Example 4:

Settings as in Example 3, Mixed Signal: DC= 1; Sine wave: f=3Hz, amplitude = 0.1

