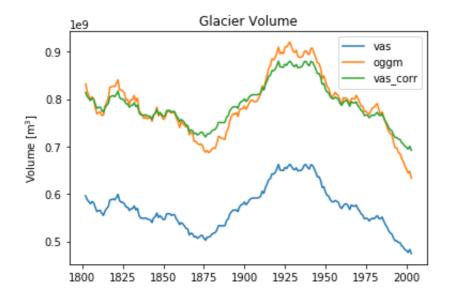
Relative RMSE with corrected data?!

Since the absolute values of the results produced by OGGM and the VAS model are highly different I thought about a different way of calculating the RMSE.

- 1. I compute the average difference between the OGGM results and the VAS results
- 2. The computed average offset is added to the VAS results
- 3. Then I compute the RMSE between the OGGM results and the corrected VAS results

Does this make any sense?!

```
mean_diff = (df.oggm - df.vas).mean()
df['vas_corr'] = df.vas + mean_diff
ax = df.plot(title='Glacier Volume')
ax.set_ylabel('Volume [m$^3$]');
```



```
mean = df.oggm.mean()
rmse = np.sqrt(mse(df.oggm, df.vas))
rmse_corr = np.sqrt(mse(df.oggm, df.vas_corr))
print('Relative RMSE with absolute data {:.0f}% vs. with corrected data {:.0f}%.'.\
format(rmse/mean*100, rmse_corr/mean*100))
```

```
$> Relative RMSE with absolute data 28% vs. with corrected data 3%.
```