



# SweGRIDS

## CPC16: Benefits of failure statistics and measurement equipment for maintenance planning

**Postdoc:** Per Westerlund, [perw@kth.se](mailto:perw@kth.se)

**Supervisors:** Patrik Hilber (KTH), Tommie Lindquist (Svenska kraftnät)

**Collaborator:** Jesper Rydén, Sveriges lantbruksuniversitet

**Project funded by:**

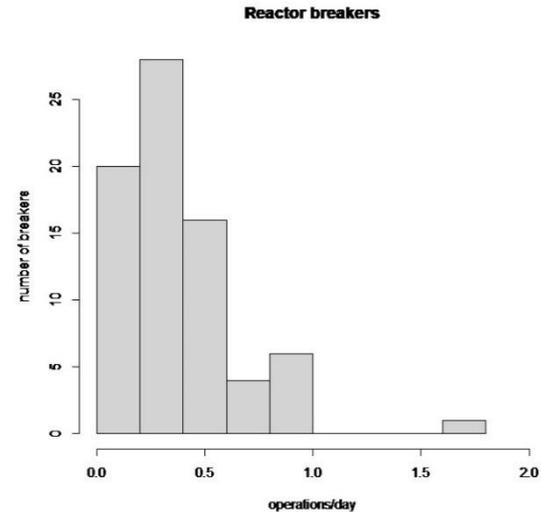
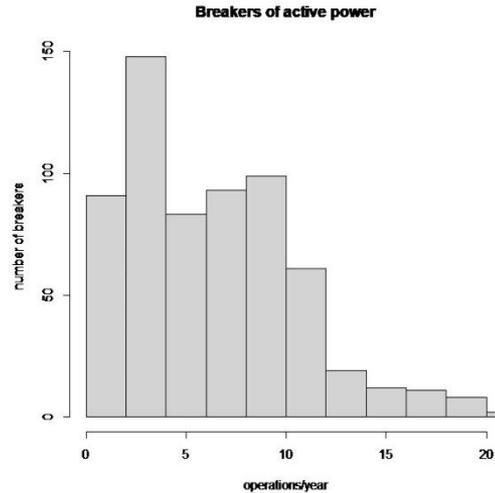


# Statistics about breakers

SweGRIDS



Photo: Jens Bender  
PD Wikimedia



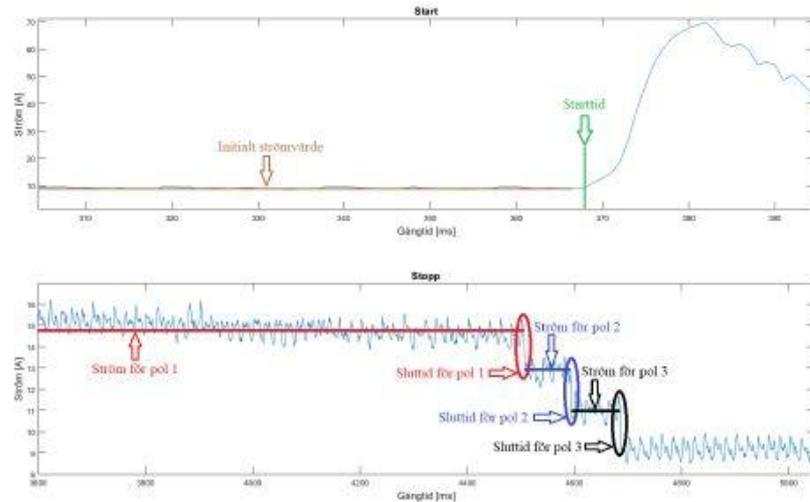
Age + number of operations + type + function -> P(failure)

# Condition of disconnectors

SweGRIDS



Photo: Dingy CC/BY/SA-3.0  
(Wikimedia Commons)

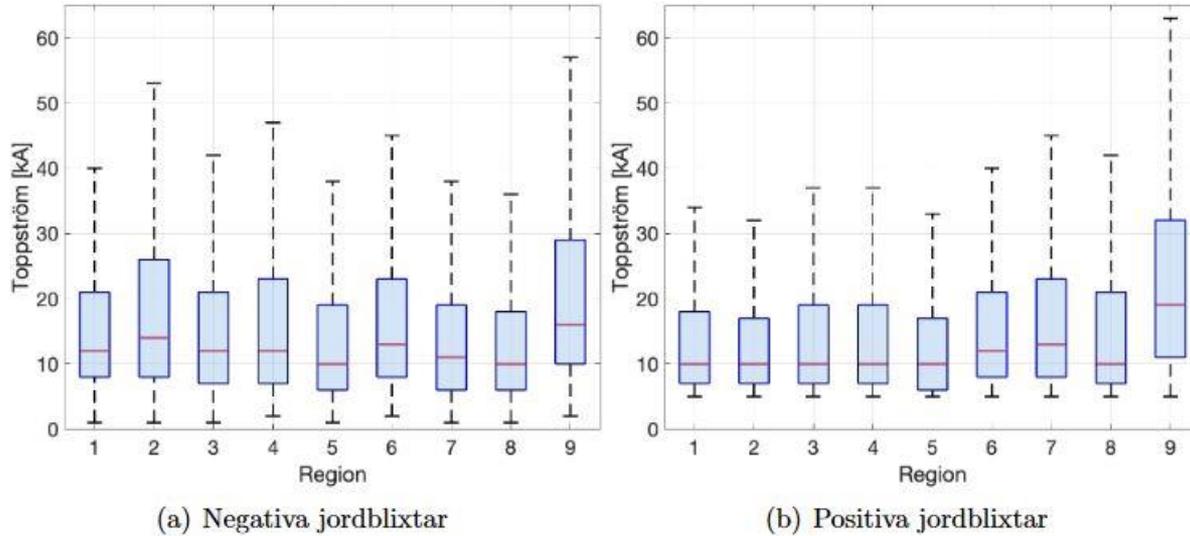


$I$   
 $t$

Start (upper) and end (lower) of the curve of the motor current (Fig. 6 in [Rassam, KTH, 2020])

# Statistics about lightning

SweGRIDS



Currents in negative (left) and positive (right) flashes in different regions in Sweden. (Fig. 16 in [Persson, UU, 2021])