



Belgian Lightning Location System since 1992

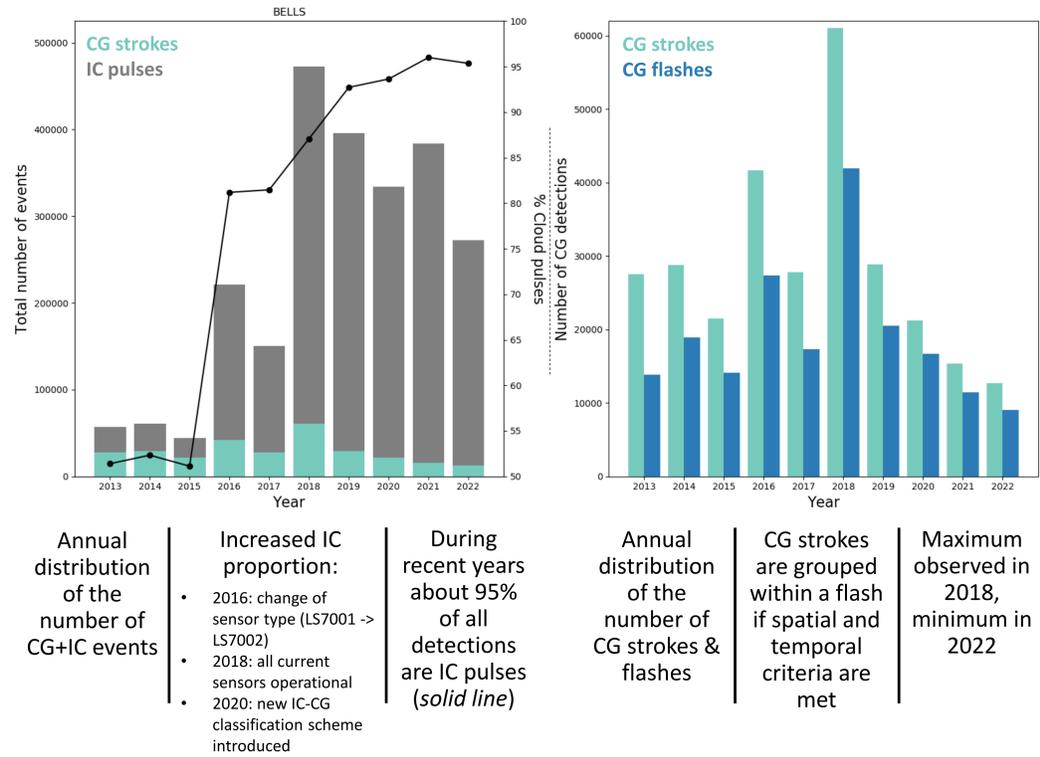
Intracloud (IC) & cloud-to-ground (CG) detection

BELLS modernized starting from 2013

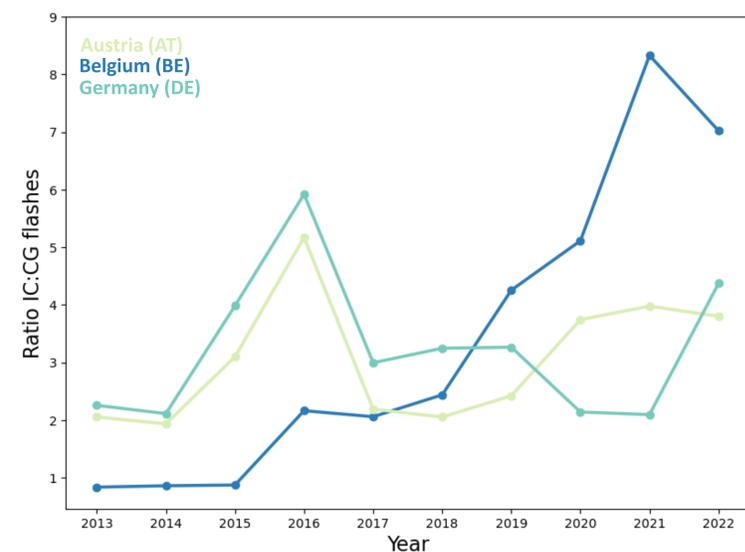
Currently 14 low frequency LS7002 sensors, of which 5 RMI-owned (blue)

Sensor baselines down to 70km in Belgium and up to 150-200km at the edge of BELLS

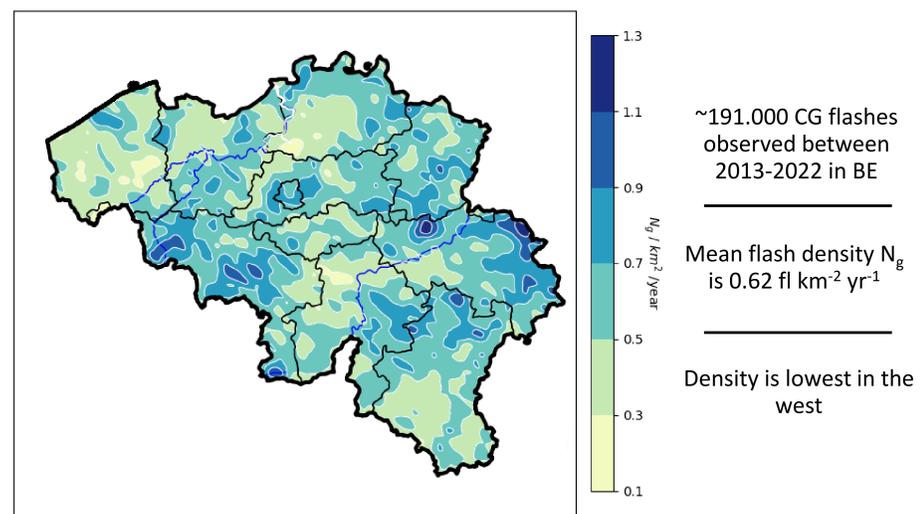
2 Number of detections



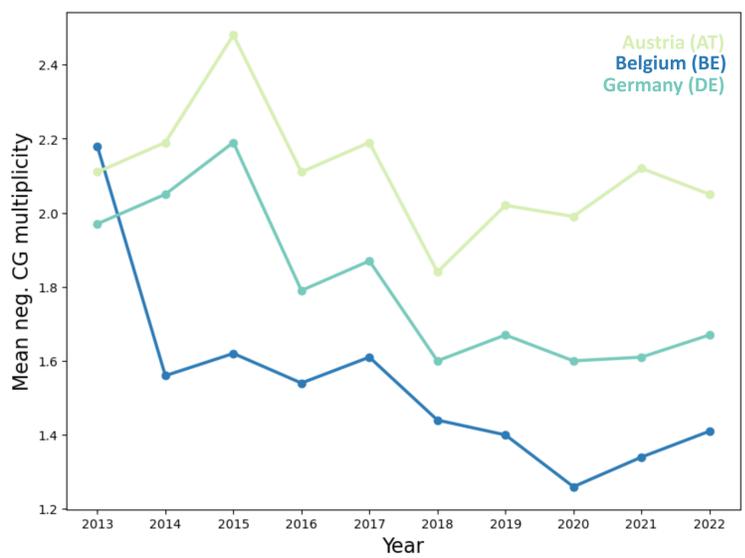
3 IC:CG flash ratio



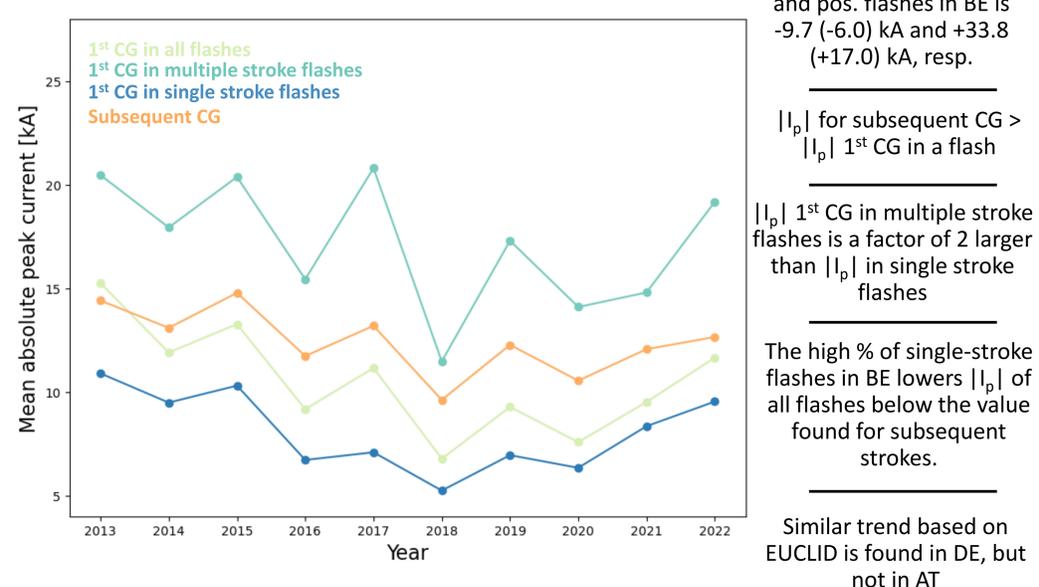
4 Flash density N_g



5 Multiplicity



6 Peak current I_p



Conclusions

Short sensor baselines in BELLS facilitate the detection of cloud discharges [see 2 & 3]

The low multiplicity in Belgium [see 5] is caused by BELLS' high IC sensitivity and some misclassification of IC pulses as isolated single-stroke CG flashes

A reduced peak current (factor 2-3) in single-stroke flashes compared to first strokes in multiple-stroke flashes [see 6] indicates a degree of misclassification of IC pulses as isolated single-stroke CG flashes