

CONTEX 2018

UAVs and gamma spectrometry

Reykjavik, 26.09.2018



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www.nrpa.no

Introduction

- 1986: Started my life @ Nesodden.
- 2011: My first meeting with NRPA.
- 2018: CONTEX, Madrid -> Iceland
- 2046: ??



The beginning

- NKS project on UAV's spearheaded by Magnus Gårdestig – Univeristy of Lindköping



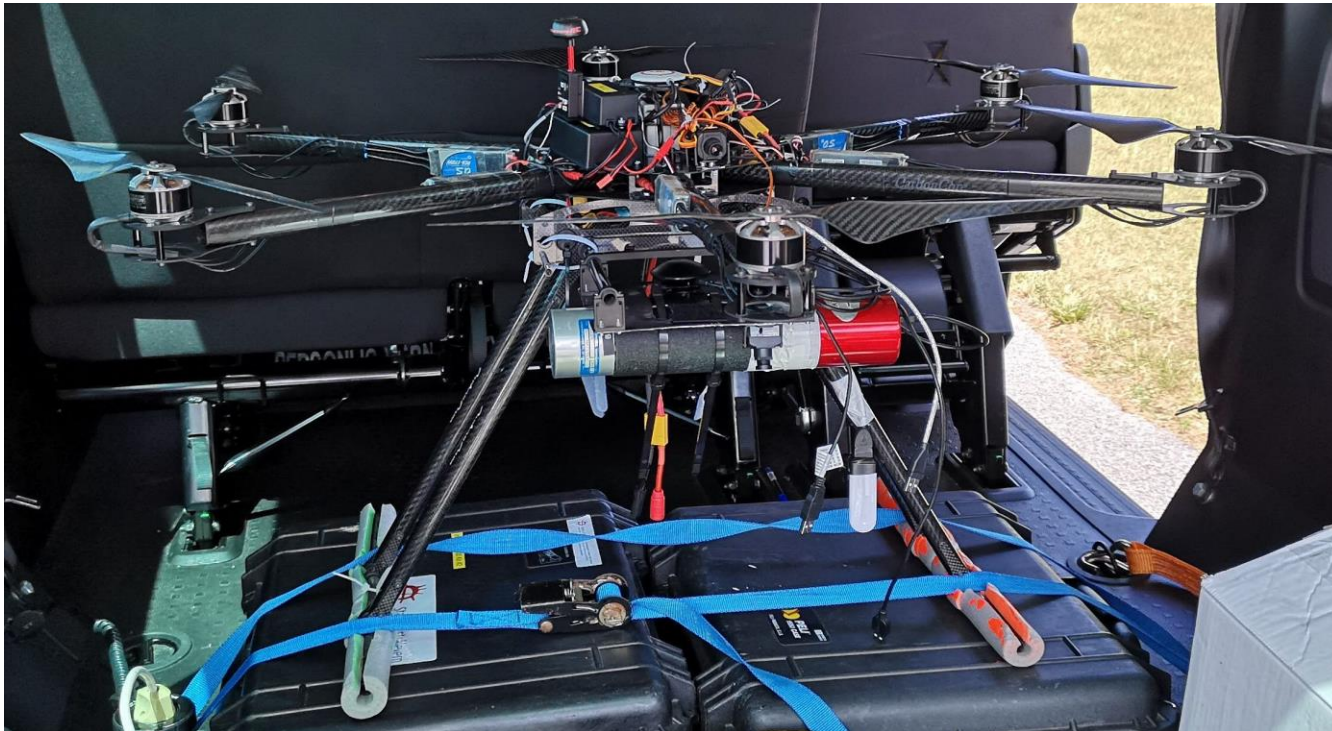
Preparations for CONTEX 2018

- Not everything goes according to plan!



Our systems

- DJI Wookong UAV
- 2 inch NaI detector + Osprey MCA
- Raspberry-pi computer + Wifi dongle



Our systems

- DJI Phantom UAV
- Kromek GRZ-1 detector
- Raspberry-pi computer + Wifi dongle



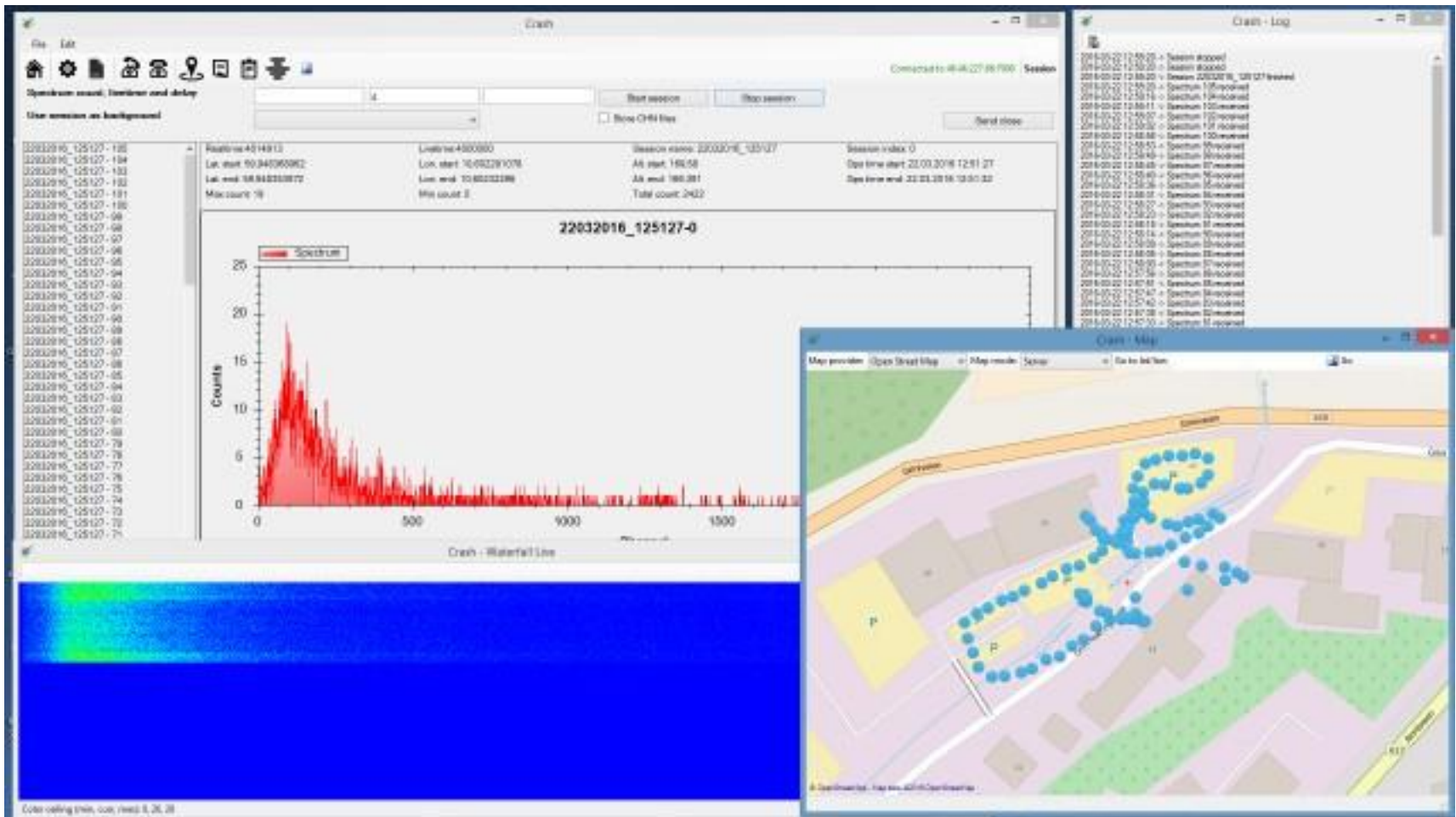
Our systems

- ICE.net router
- Wifi router
- Screens and computer



Our systems

- Self-developed software



CONTEX 2018 day 0

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CONTEX 2018 day 1

- Assigned as foot team.
- Flights of DJI Wookong
- Hectic!
- Test run of DJI Phantom



CONTEX 2018 day 2

- More flights
- Tackling civilians



CONTEX 2018 - Area overview

- Drone flight
- Drone team lead hold
- Completed areas day 1 (all areas)



CONTEX 2018 summary

- Drones are your friends!
- How will we use UAV's in the future?
 - Mapping hard to reach areas
 - Quick area scans
 - Exploring hot areas



Challenges

- Weather conditions
- Alternating heights and undergrowth
- Detecting multiple nuclides
- Aviation authorities
- Efficient use



What did I learn?

- Be prepared for anything!
- Roll with it!

