

# **GB0 plan – Japan side**

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# GBO support plan – Japan side

## Static 100 Hz EMCCD ASIs:

2 stations **GAK, PFRR**

Already deployed and operative

## New EMCCD and sCMOS ASIs:

2 stations **Venetie, Fort Yukon**

→ EMCCD ASI @ Venetie

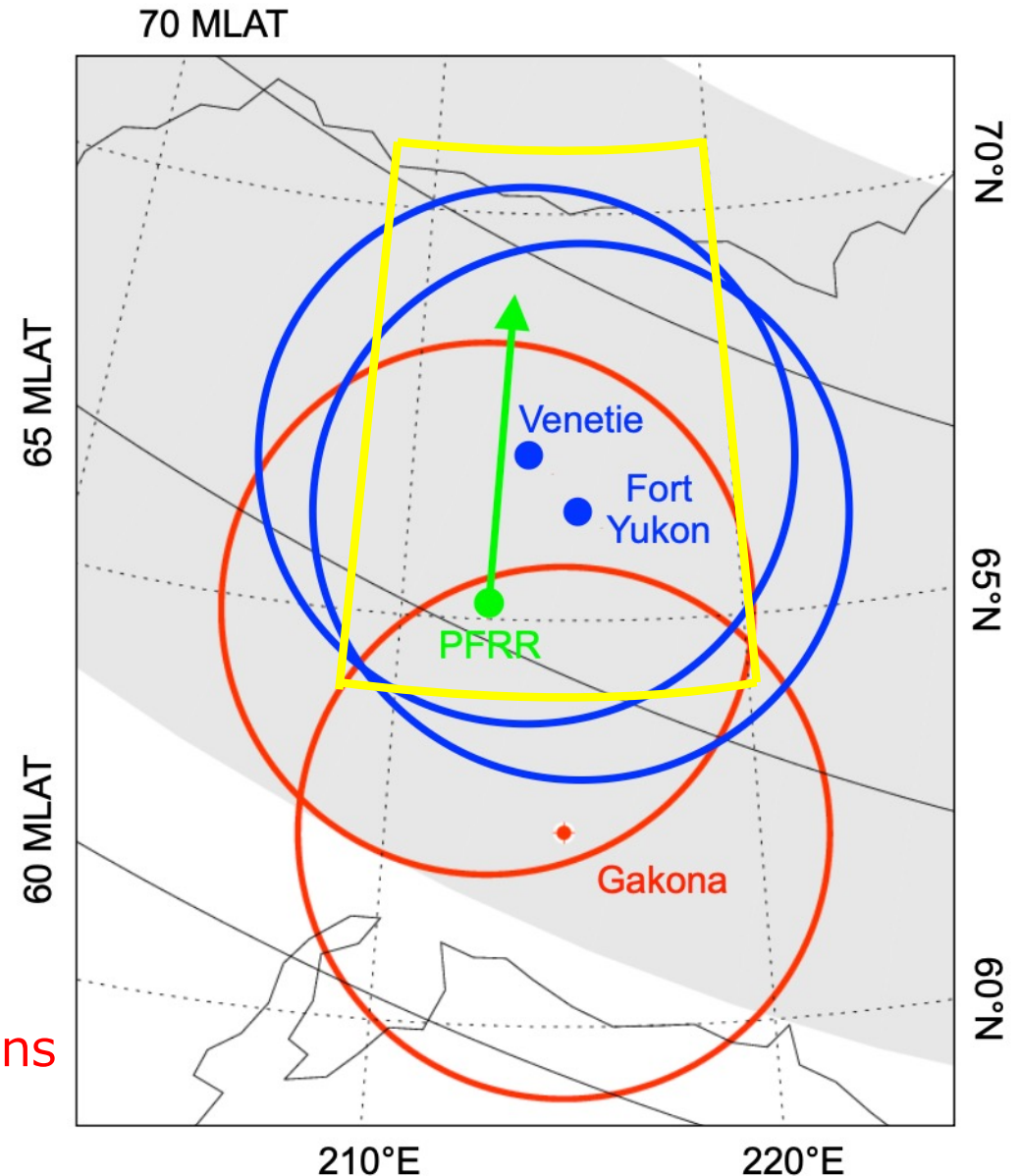
→ sCMOS ASI @ Fort Yukon

## Monochromatic twin-ASIs (ZWO):

2 stations **Venetie, Fort Yukon**

→ 427.8 nm, 844.6 nm

→ Derivation of the energy of electrons



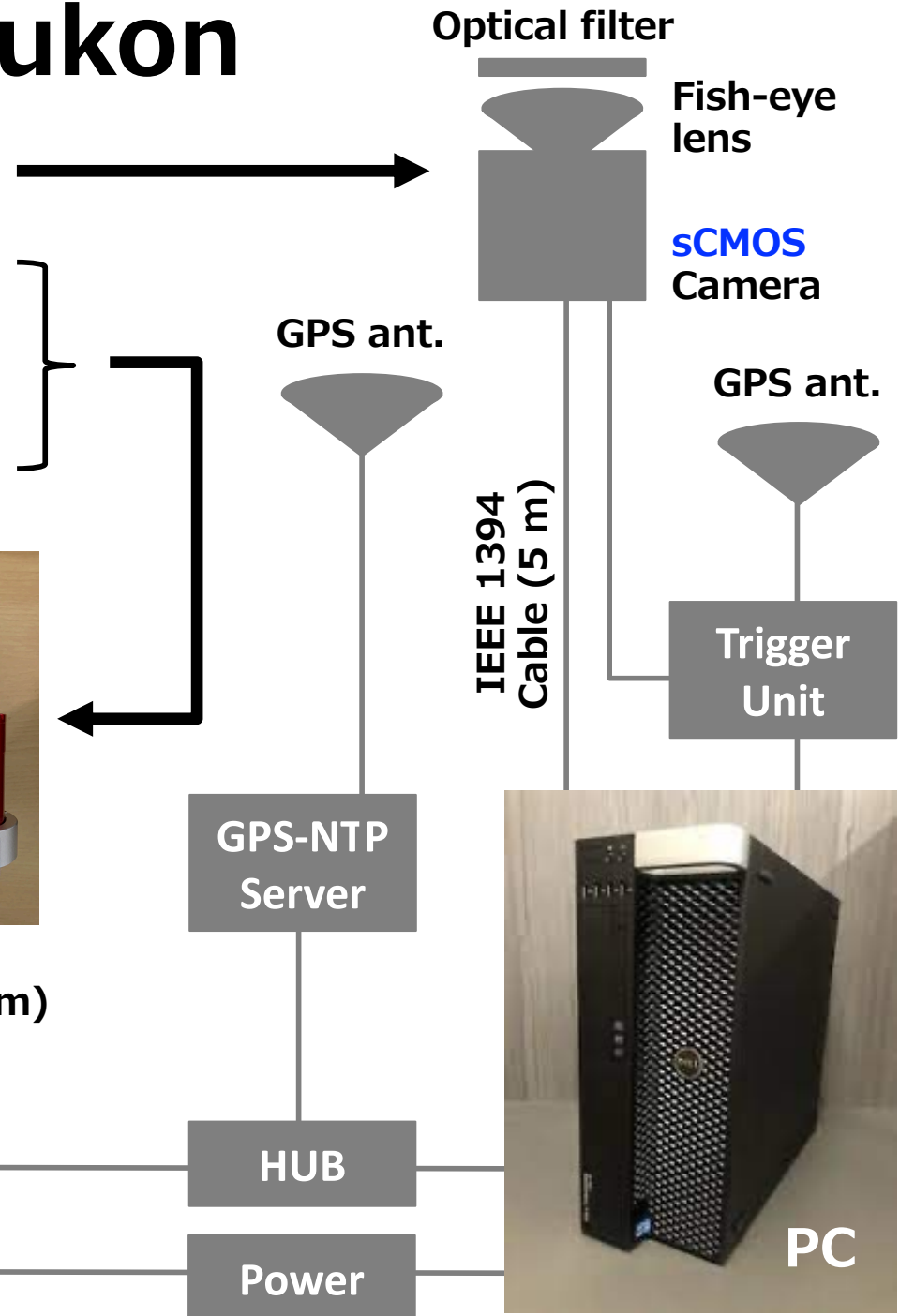
# Cameras to Fort Yukon

1. **sCMOS** ASI (BG3 optical filter) – big one  
100 Hz sampling
2. ZWO ASI (4278 optical filter) – small one  
10 Hz sampling
3. ZWO ASI (8446 optical filter) – small one  
10 Hz sampling

Small PC



USB3 cables (3 m)



# Cameras to Fort Yukon





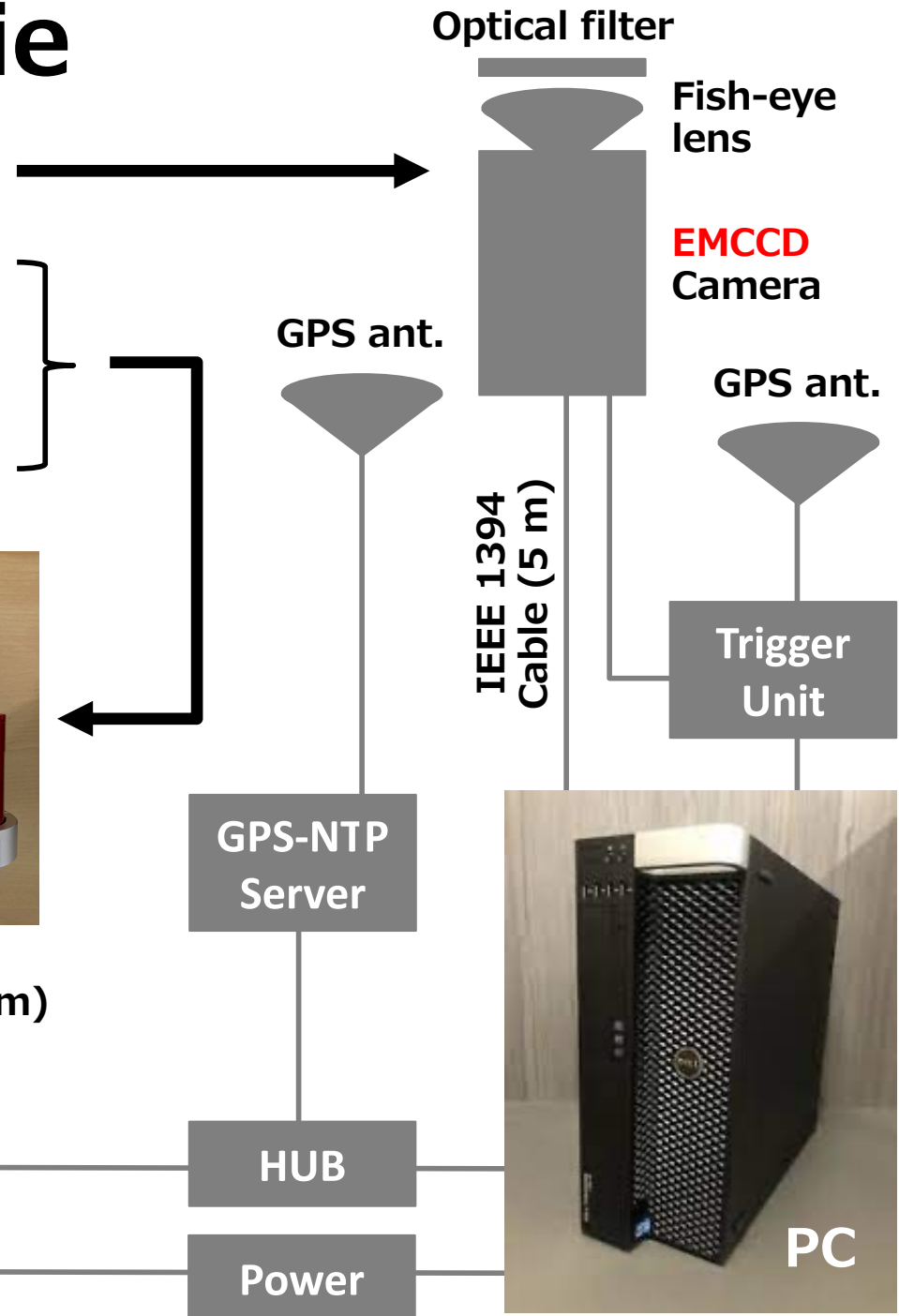
# Cameras to Venetie

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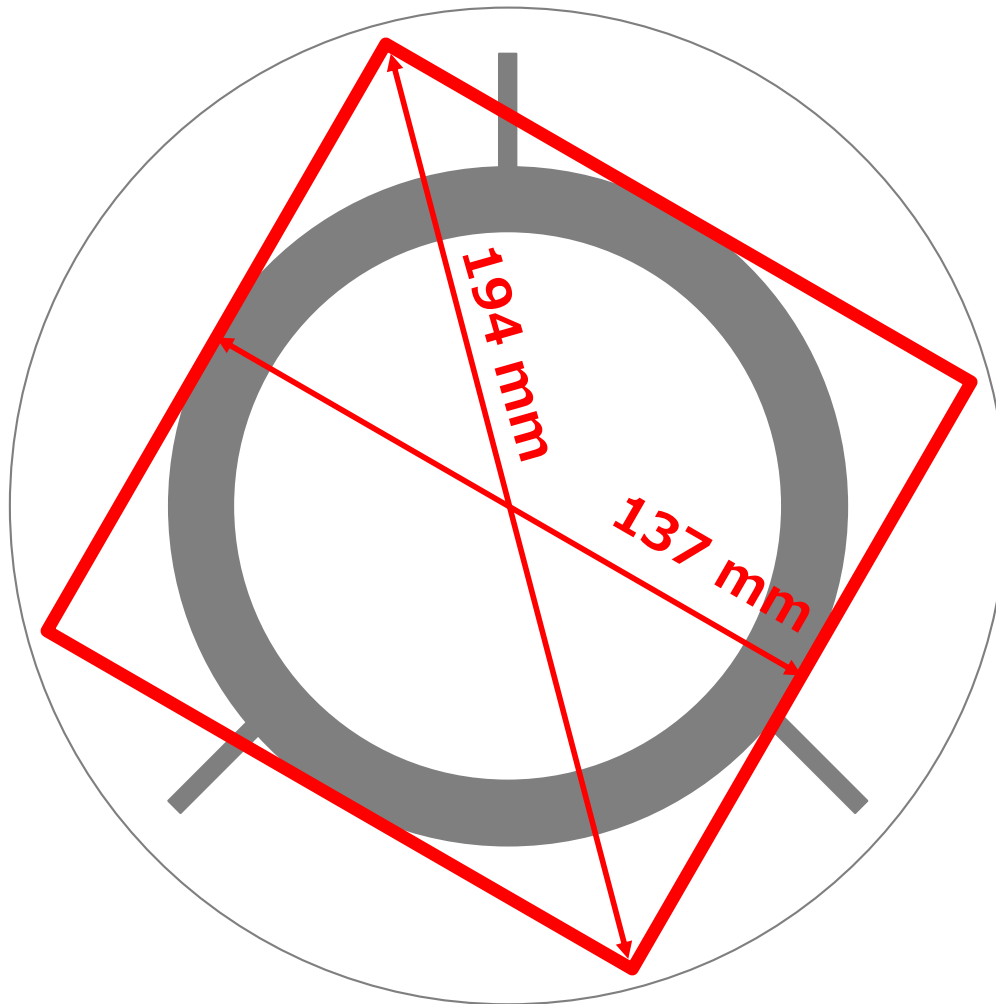


USB3 cables (3 m)



# Dome size – EMCCD ASI @ Venetie

Since we put the BG3 optical filter in front of the fish-eye lens, we would need a relatively larger optical dome to accommodate the top part of the system. 8-inch dome or larger is necessary to accommodate the top part



# Dome size – ZWO ASIs @ Venetie

6-inch dome can accommodate one of the ZWO ASIs. But, it is difficult to have two ASIs in single 6-inch dome. So, we need two 6-inch domes or single 8-inch dome

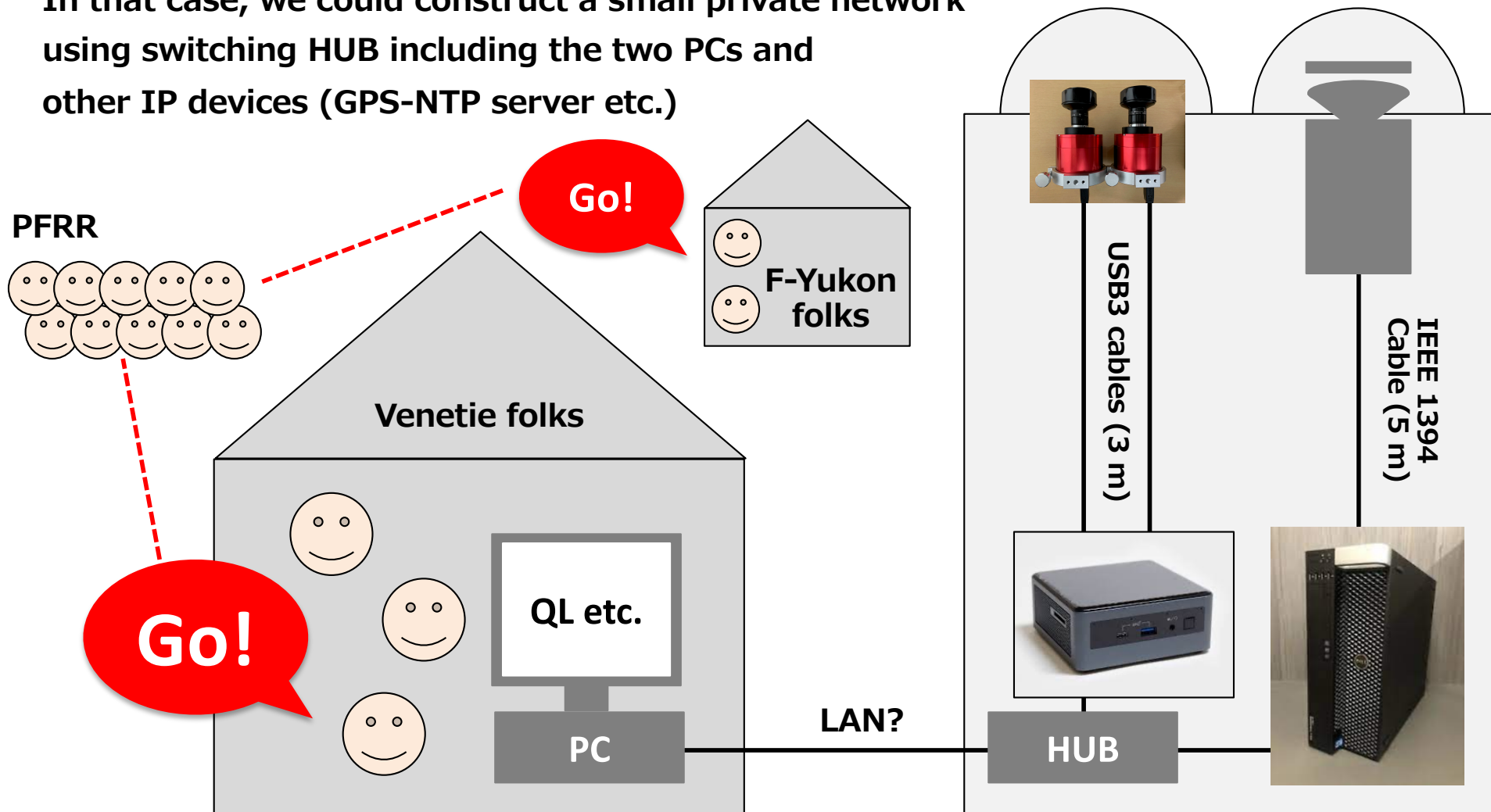


# Actual operation plan @ Venetie?

We hope to monitor the data from the ASIs from the trailer house.

The connection to the ASI housing would be LAN?

In that case, we could construct a small private network using switching HUB including the two PCs and other IP devices (GPS-NTP server etc.)





# Things to ask Don

- How will the network environment at Venetie look like?  
Satellite network link or telephone?
- Is it possible to construct a small private network at Venetie?  
We will have at least 4 IP devices within the network:
  1. PC for EMCCD
  2. PC for small ASIs
  3. monitoring PC
  4. GPS-NTP server
- Is it feasible to use LAN (ethernet) cable for connection between the trailer house and the ASI housing?
- Is it possible to prepare over 8-inch domes?
- Do you think UPS is necessary?