

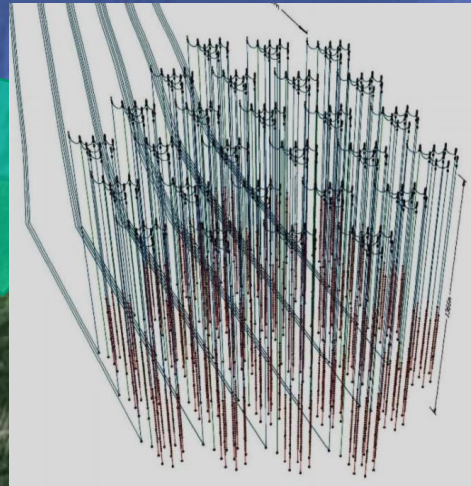


Assembling the GVD detector

I.Belolaptikov on behalf of BAIKAL collaboration



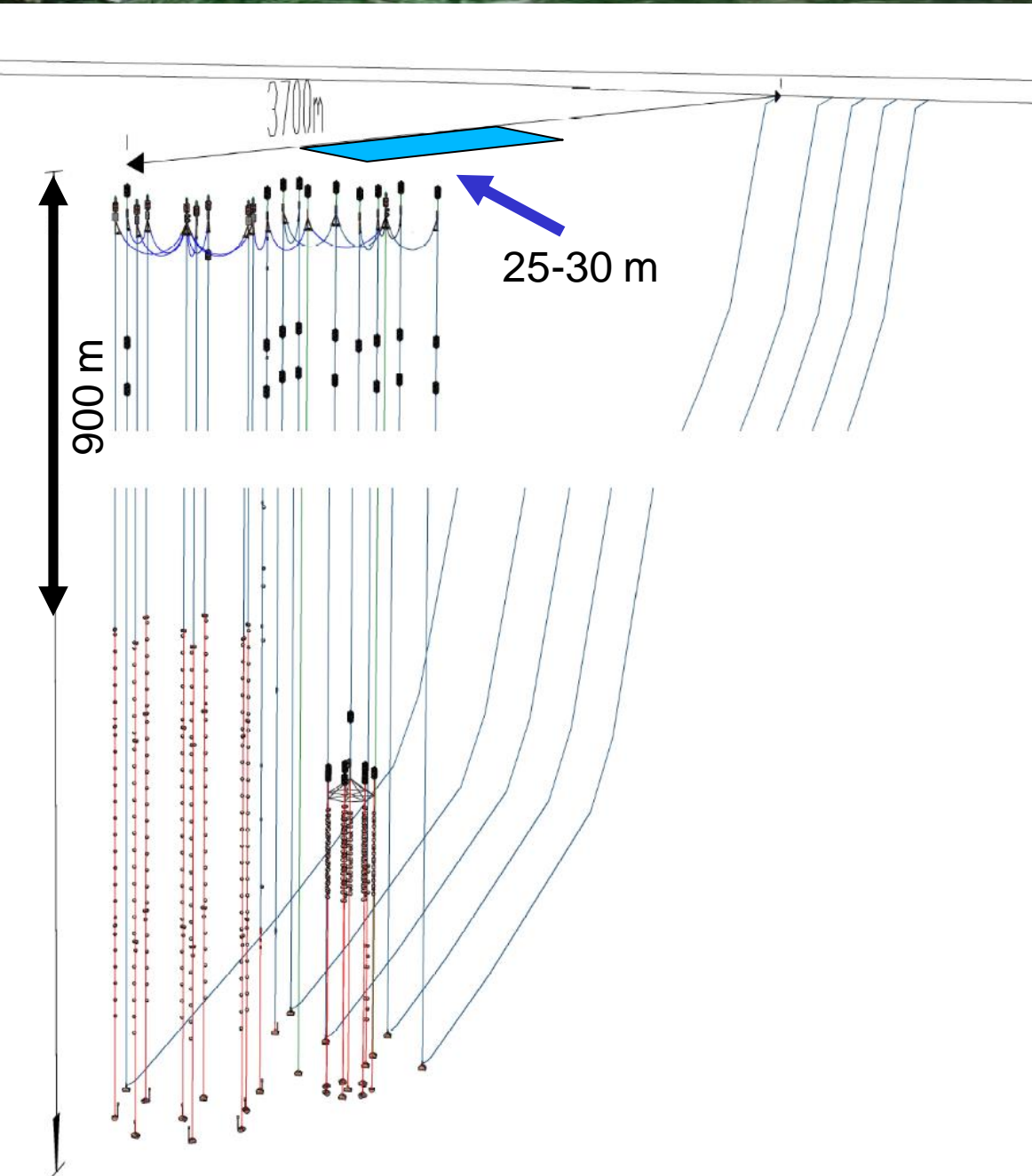
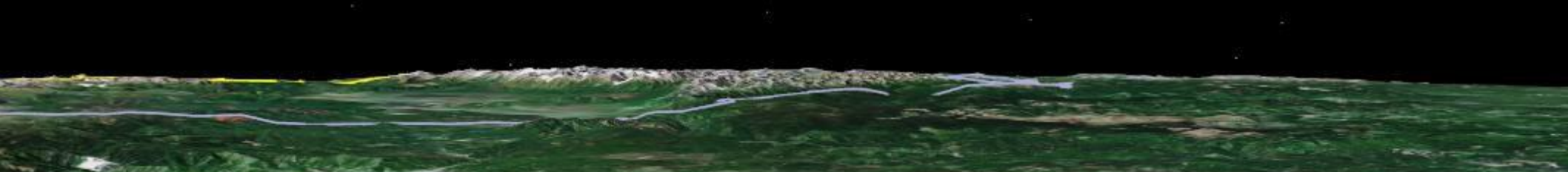
The site



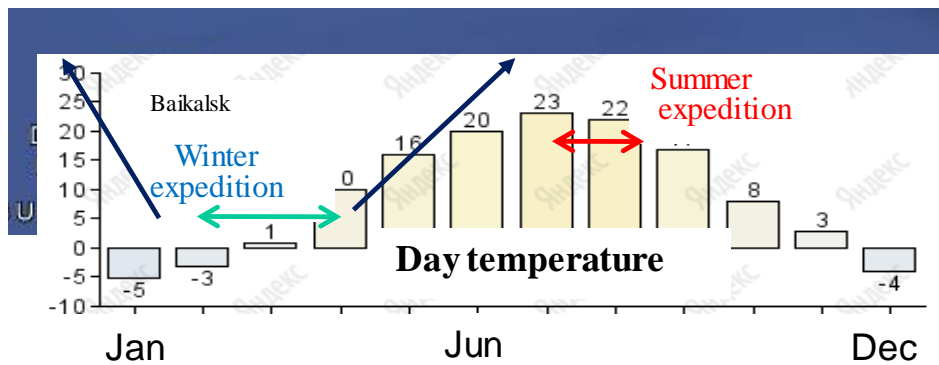
Data INTAS Project 99-1669

Image Landsat

Google earth



Ice thickness ~ 60-90 cm (sometimes up to 120 cm)



Stage 0

Usually on February 16-20

Timeline:
0-1 days



Ice thickness $>35\text{cm}$



Cracks and faults
Pathfinding needed



Pointing the site...
(GPS, triangulation with the shore marks) Precision $\sim 20\text{ cm}$



... and marking
it

Vehicles



Stage 1

Making ice-holes

Timeline:
1-2 days



Stage 1

*Timeline:
1-2 days*

> 20 units need to transport to Ice-camp



...and even more in the next days

Stage 1

Divers

*Timeline:
3-5 days*

attach the rope to the top of the string



Stage 2

- 15-20 men on 4 groups, 3-5 men each
- Support personnel — drivers, electricians, mechanics



Stage 2

*Timeline:
5-45 days*



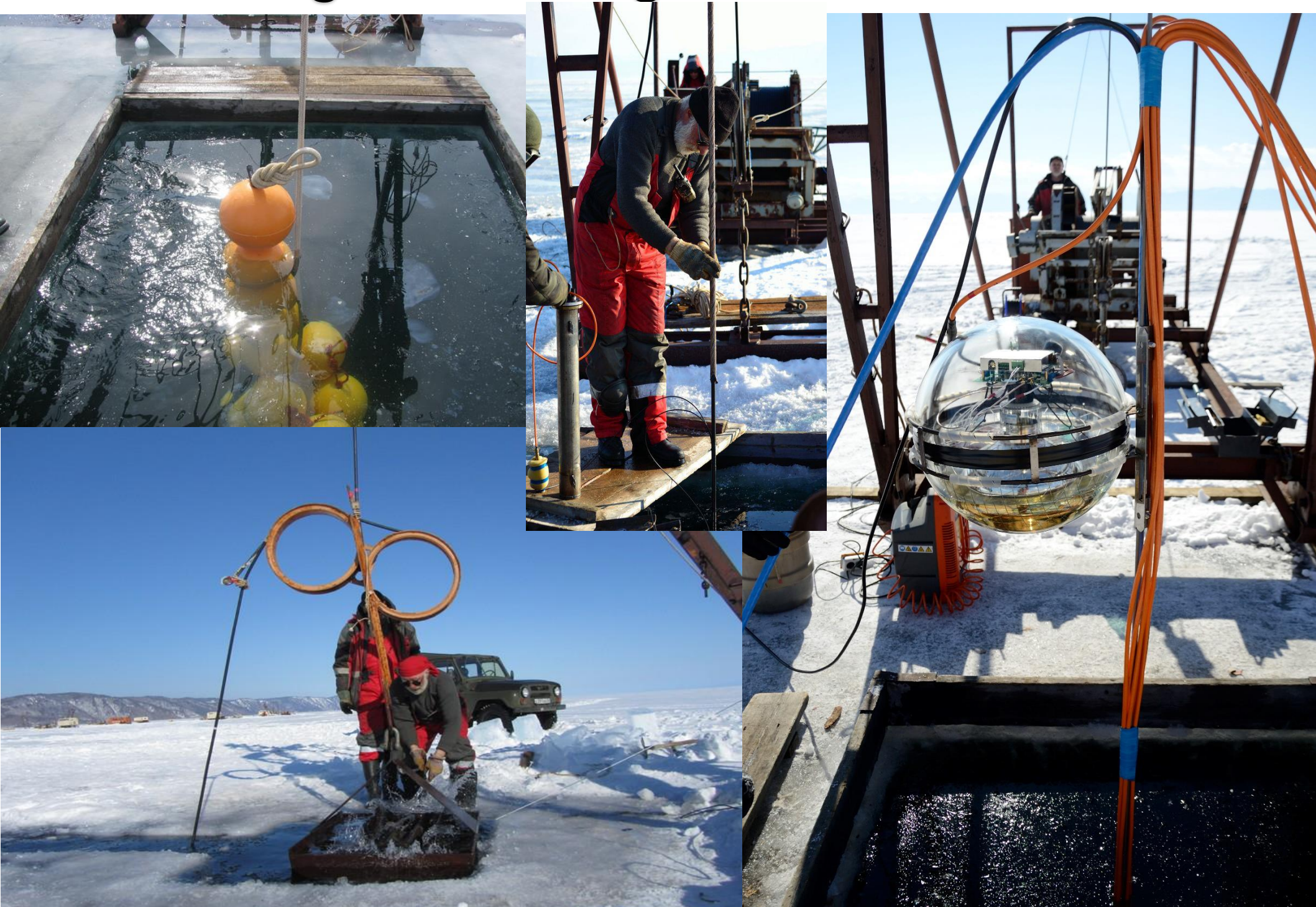
Stage 2 mounting new string

*Timeline:
5-40 days*

*4-5 days for a group (4-5 men) to fully
assemble and install new string from
a prepared parts*



mounting new string: technical features



cabling to the shore



ice-cutter



Cable layer & winch



Screw-propelled vehicle

need one cable for each two clusters

task parallel to other work

takes ~3 week to prepare and only 2 days to complete

cabling to the shore



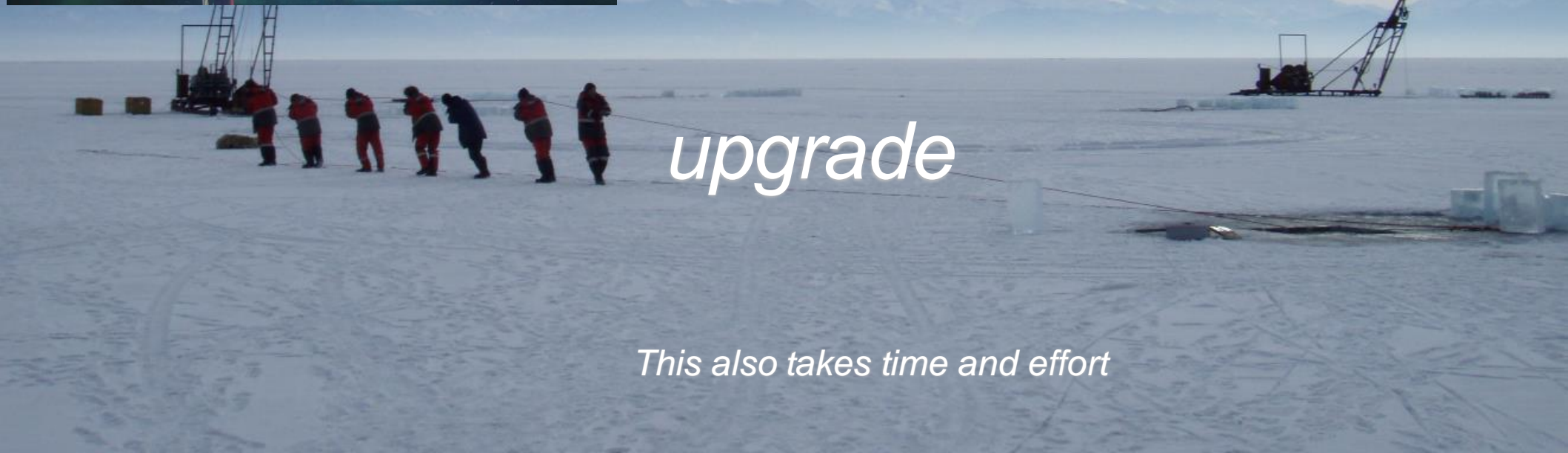
repairing,



maintenance,



upgrade



This also takes time and effort

Force Majeure

May takes 2-5 days

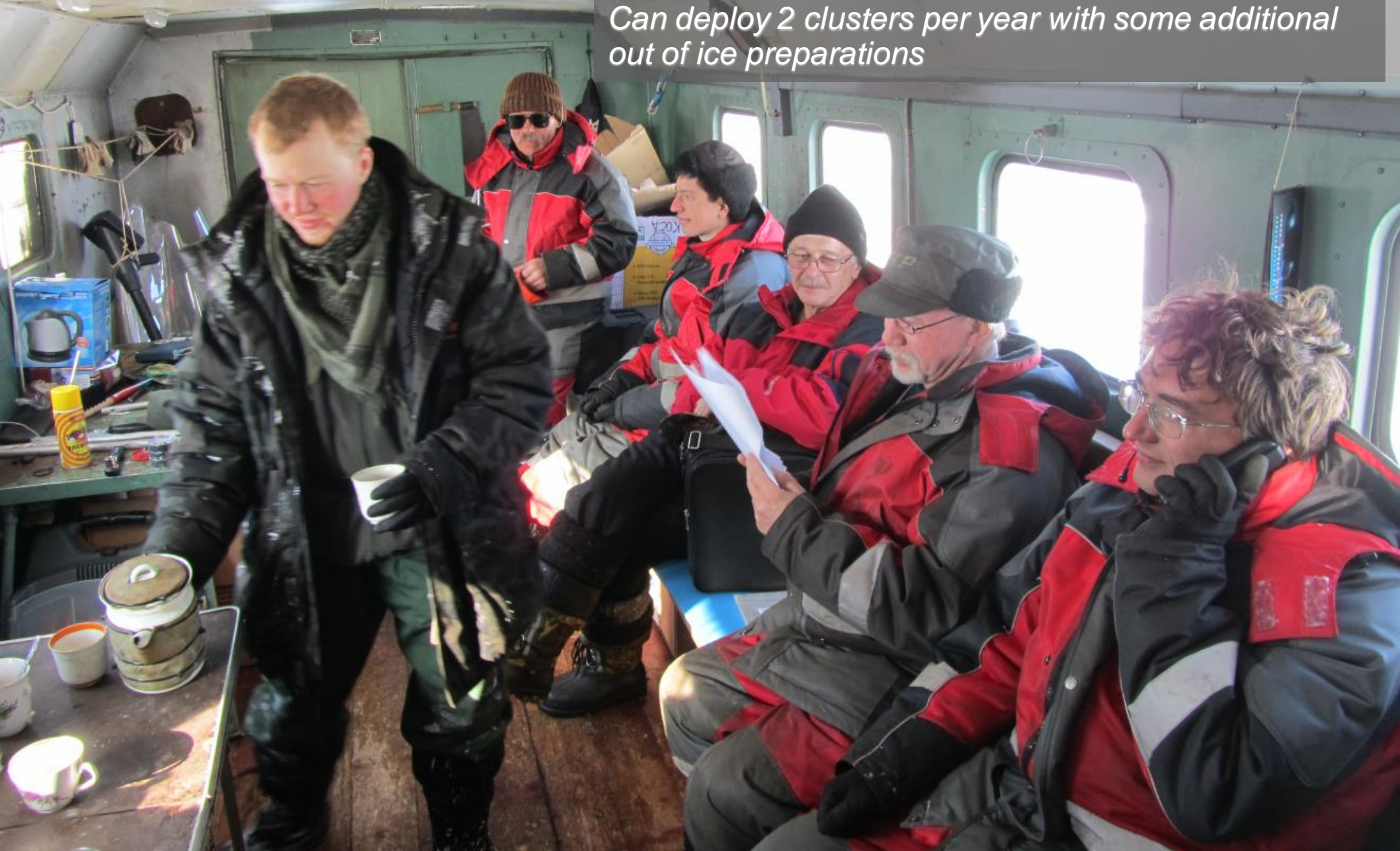
Of course, weather changed to its best two minutes after the job was done!



Totally 50-55 days

We can deploy 1 clusters per season right now

*Can deploy 2 clusters per year with some additional
out of ice preparations*



*It's over. Until next year.
Same place, same time...*

On April 6-12





Thank you