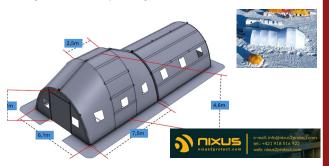
# Successful Field Deployment of an Inflatable Drilling Tent

Grant Boeckmann<sup>1</sup>, Julien Westhoff<sup>1</sup>, Kevin Nicholaus<sup>1</sup>, Steffen Bo Hansen<sup>1</sup>, Dorthe Dahl-Jensen<sup>1</sup>

<sup>1</sup> Niels Bohr Institute, University of Copenhagen, Copenhagen, Denmark

A drill tent, utilizing inflatable beams, has been procured and used for the first time at the Mueller Ice Core Project in the Canadian arctic during the summer of 2025.

The success opens opportunities to **reduce overall camp weight** and increase the drilling time in the field by **reducing construction time**.

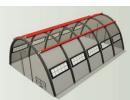


The tent was designed and built by Nixus (Zepelin, s.r.o.) according to our unique needs; with the goal of reducing both weight and construction time without sacrificing performance.

Feature	Description
Portability	All shipped pieces weigh <150kg*, total weight 582kg
Scalability	Designed in modular pieces; currently uses 2 sections – drill dome and PRO extension
Rapid Deployment	Modules are nearly complete after inflation, only requiring the addition of purlins and joining modules
Rugged	Rated for winds up to 100 kph
Full-Height Drill Dome	Supporting beams at the "dome" allow the drill tower to be up to 4.5m in height
Breathable Fabric	Duratex 500D HT FR polyester tent fabric is light and provides good lighting in the tent. It also breathable, improving working quality during wet-drilling
Modularity	All inflatable beams can be isolated and replaced without disassembling the tent.

<sup>\*</sup>spares were added to the duffels, making each 200kg

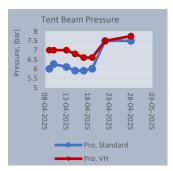
Suggested Changes: The purlins where time consuming and difficult to assemble, we recommend using the design with three external inflatable purlins. However, there is a risk of collecting snow with this design





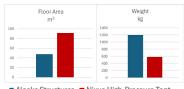


**Pressure Circuits**: The purlin beams and arches are on separate pressure circuits, but each circuit is linked and inflated together



Mueller Ice Cap, Statistics		
Setup Time	5:30 hr*	
Min Temp	~-30C	
Max Wind	33 kph <i>40+ gusts</i>	
Packing Time	2:00 hr	

\*Crew had not seen the tent prior to arrival



■ Alaska Structures ■ Nixus High-Pressure Tent (WeatherPort)



2x duffel – main tent body. Includes spares and tools. 200kg each



1x Air Compressor - Nardi Extreme 3T 2 HP 1400, 32kg

**1x long duffel** – purlins, beams, door frames, 150kg





# Main finding goes here, keep it simple! Emphasize important words.



# **INTRO**

- Just give context for the gap you're filling
- You're not going to get yelled at if you don't cite the 5 papers from 1937 that defined this construct. They'll download your paper if they want that.

### **METHODS**

- 1. N = ###,
- 2. Collected this
- Tested with X statistical test

### **RESULTS**

- Graph or table with essential results only.
- All the other correlations in the ammo bar.

### DISCUSSION

 "If this result actually generalized and I didn't have to humbly disclaim the possibility of a thousand confounds and limitations, it would imply that...."

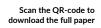
Keep font size as **high above 28** as possible.

### AMMO BAR

Delete this and replace it with your...

- Extra Graphs
- Extra Correlation tables
- Extra Figures
- Extra nuance that you're worried about leaving out.
- Keep it messy! This section is just for you.









# Main finding goes here, keep it simple! Emphasize important words.



# **INTRO**

- Just give context for the gap you're filling
- You're not going to get yelled at if you don't cite the 5 papers from 1937 that defined this construct. They'll download your paper if they want that.

### **METHODS**

- 1. N = ###,
- 2. Collected this
- Tested with X statistical test

### **RESULTS**

- Graph or table with essential results only.
- All the other correlations in the ammo bar.

### DISCUSSION

 "If this result actually generalized and I didn't have to humbly disclaim the possibility of a thousand confounds and limitations, it would imply that...."

Keep font size as **high above 28** as possible.

#### AMMO BAR

Delete this and replace it with your...

- · Extra Graphs
- Extra Correlation tables
- Extra Figures
- Extra nuance that you're worried about leaving out.
- Keep it messy! This section is just for you.



