

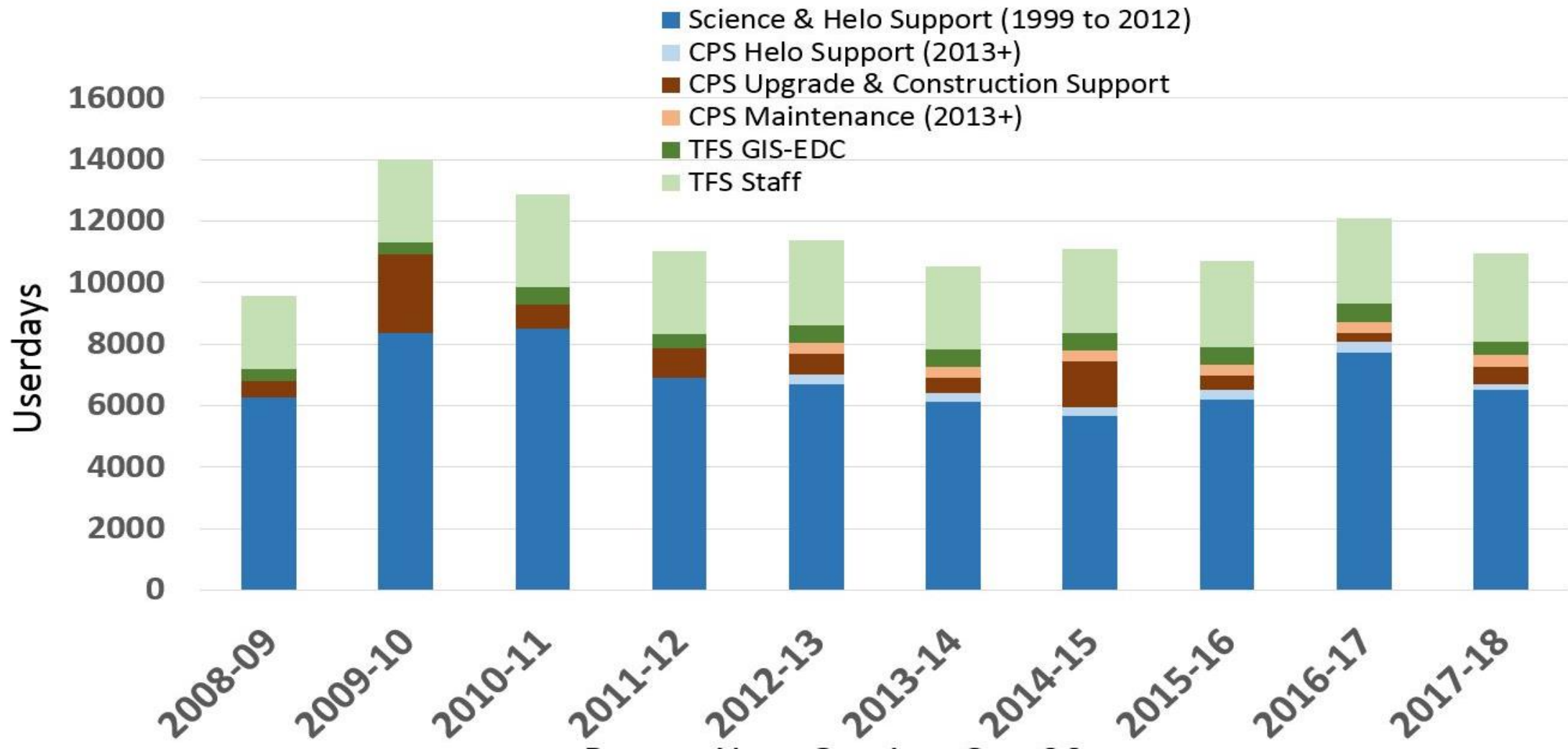
# TOOLIK FIELD STATION

OCT 1, 2017- SEPT 30, 2018 REPORT  
2019 OVERVIEW

MIKE ABELS, BRETT BIEBUYCK, FAUSTINE BERNADAC, CHAD DIESINGER, JEB TIMM, SKYE GREER

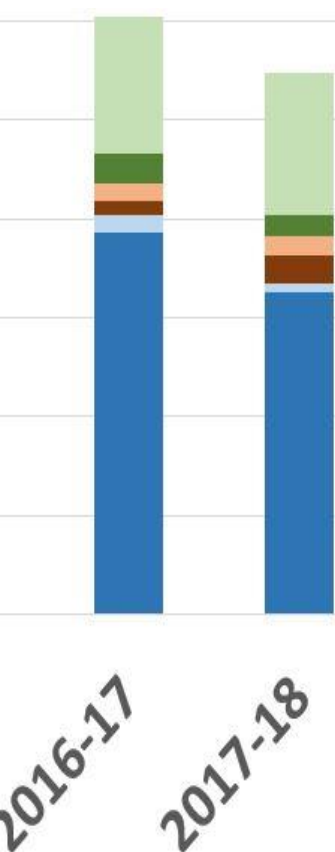
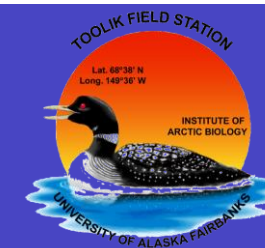


# USERDAY TOTALS



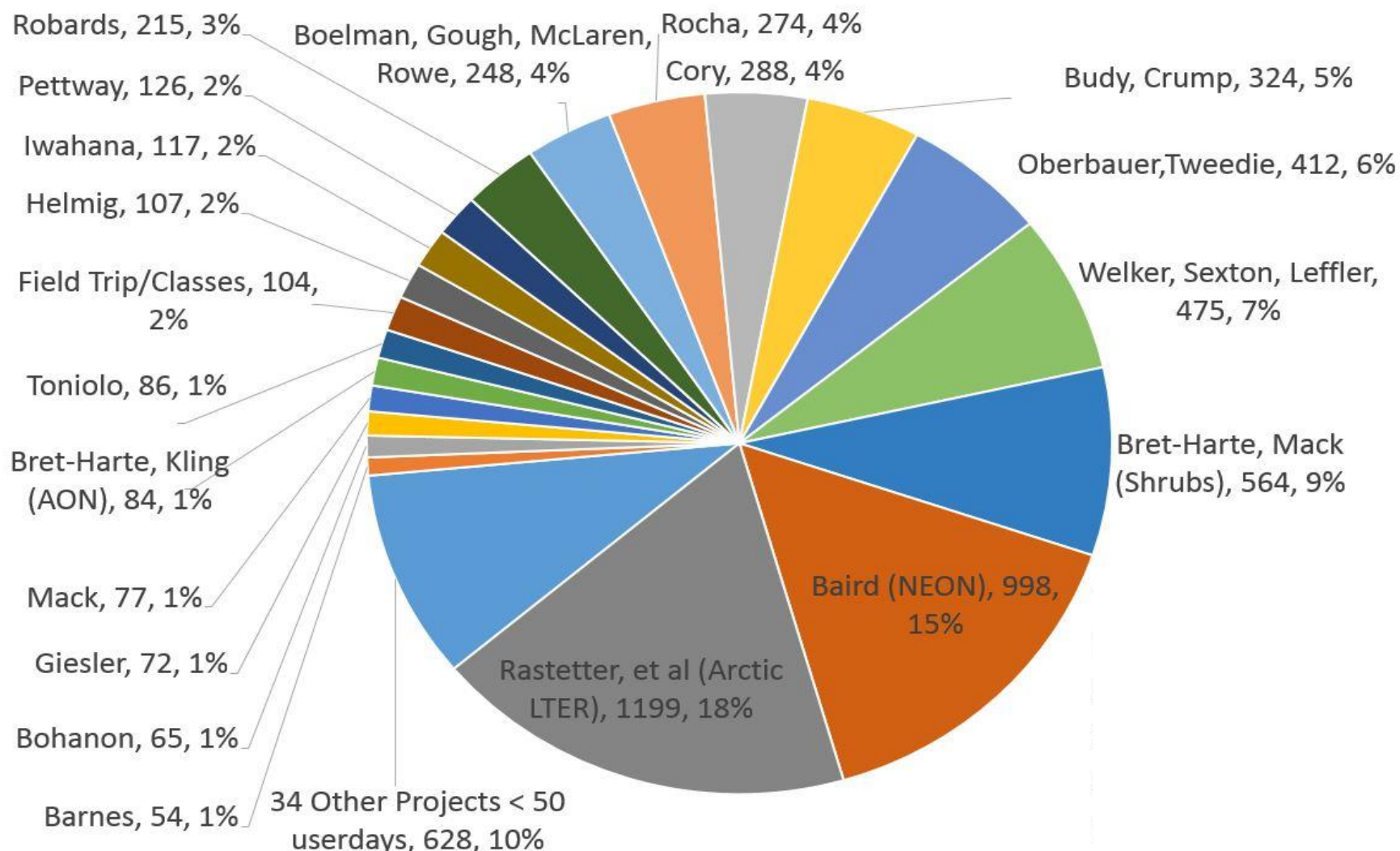
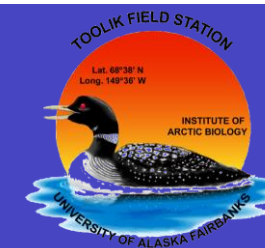


# TOTAL USERDAY COMPARISON



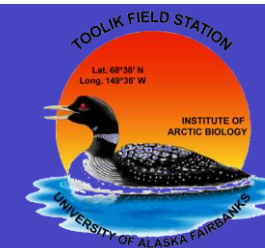
	2016-17	2017-18	CHANGE	PERCENT
TFS Staff	2763	2883	120	4%
GIS/EDC	616	429	-187	-30%
CPS Russ/Tim	349	371	22	6%
CPS & Contractors	268	586	318	119%
Helo Coord. & Pilot	349	181	-168	-48%
Science	7739	6517	-1222	-16%
<b>TOTAL</b>	<b>12084</b>	<b>10967</b>	<b>-1117</b>	<b>-9%</b>

# TOOLIK FIELD STATION PROJECTS 2017/18



- 60 Science Projects
- 4 Field Trip/Classes
- 6517 Science Userdays

# PER PROJECT USERDAY COMPARISON

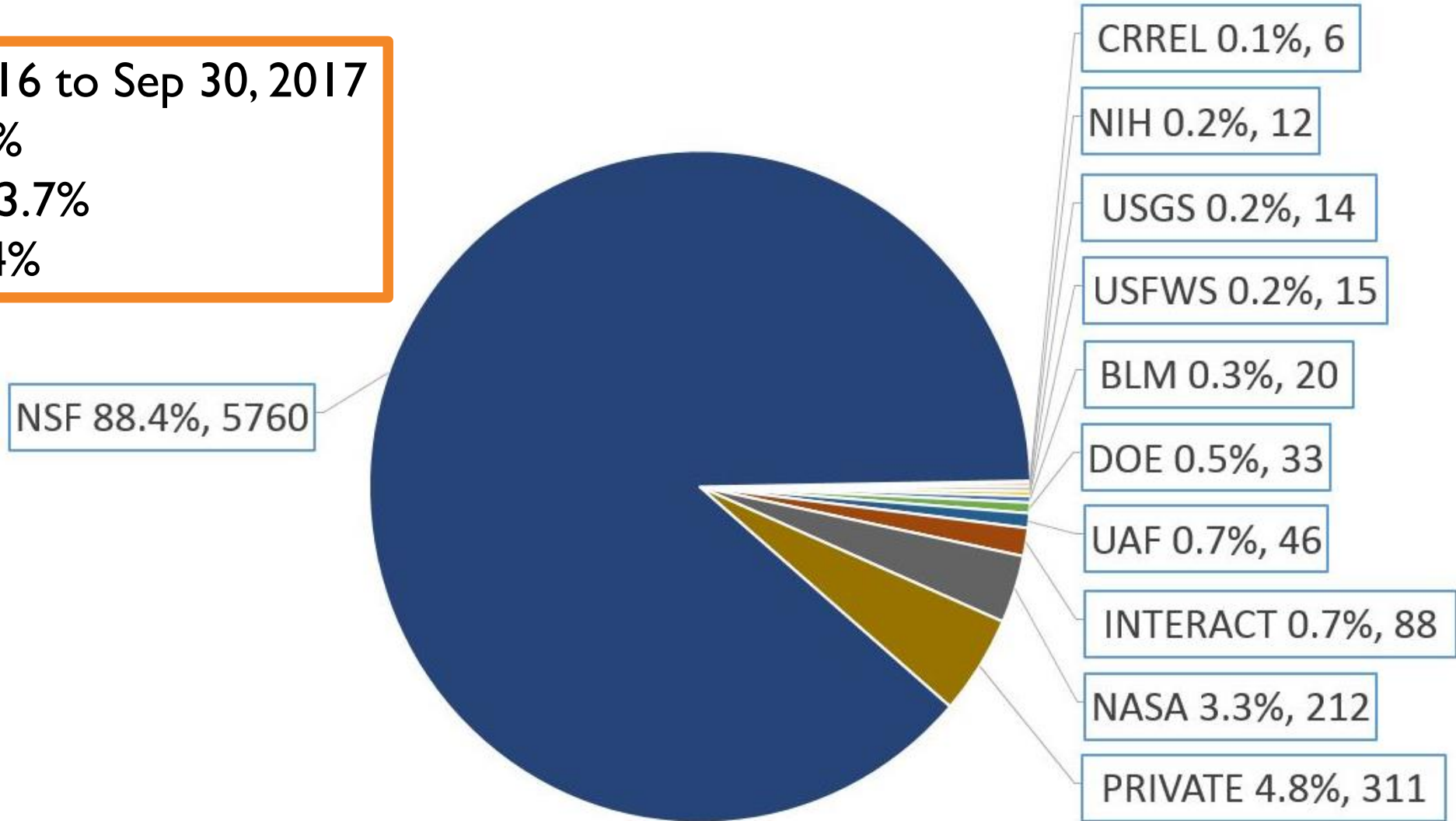


PROJECT	2016-2017	2017-2018	Difference
LTER	1231	1199	-32
Neon Operations	1003	998	-5
NASA ABoVE projects	237	212	-25
Bret-Harte (AON)	117	84	-33
Bret-Harte/Mack	498	564	+156
Welker/Sexton/Leffer	45	475	+430
Oberbauer/Tweedie (ITEX)	214	412	+198
Neon Construction	527	18	-509
Fetcher/Moody/Tang	492	1	-491

# USERDAY FUNDING BREAKDOWN 2017/18

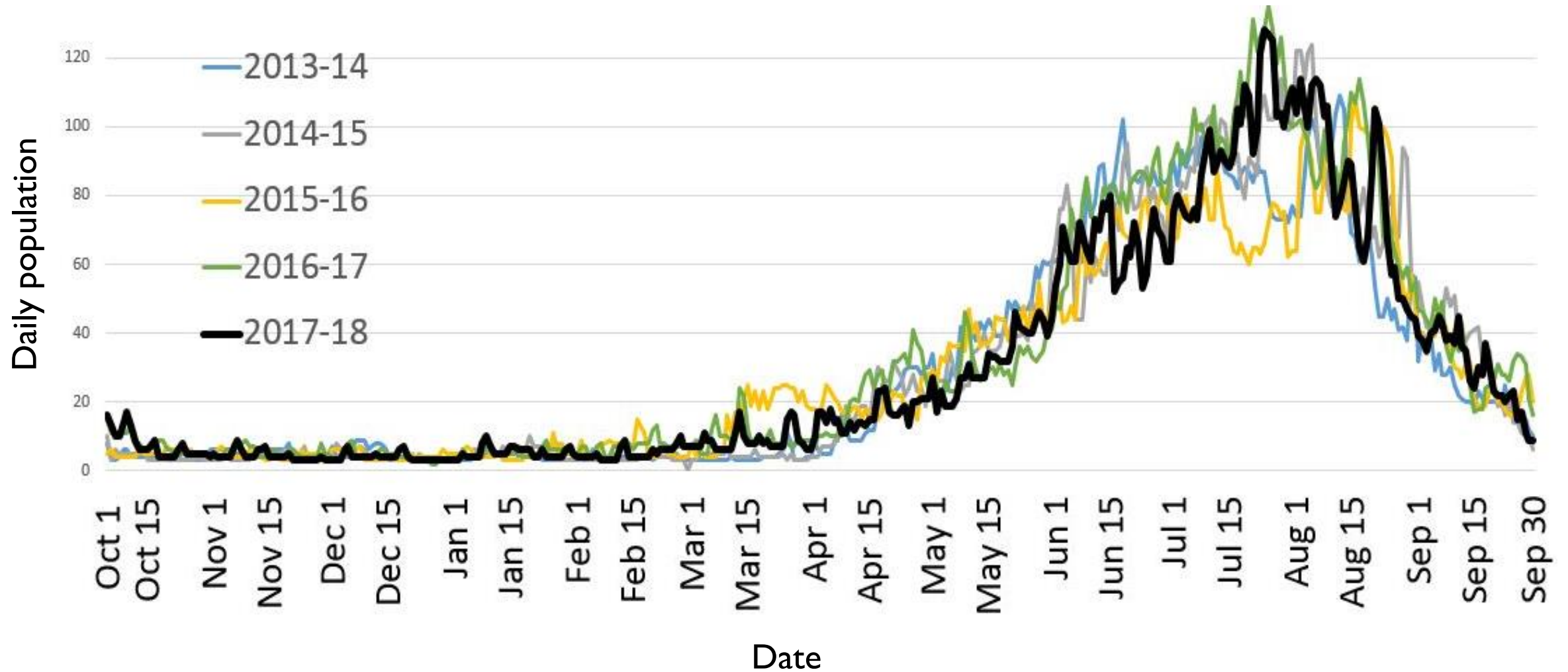


Oct 1, 2016 to Sep 30, 2017  
NSF 88.3%  
PRIVATE 3.7%  
NASA 4.4%





# RESIDENT POPULATION



# STAFF CHANGES AND UPDATES



- New Facility Supervisor started late June 2018
- Chad is Assistant Manager
- Recruitment for Expeditor and Logistics Coordinator
- Recruitment for Safety Coordinator/EMT (target early summer 2019)
- Recruitment Spatial and Environmental Data Center Manager (target Spring 2019)



# MY TOOLIK SYSTEM



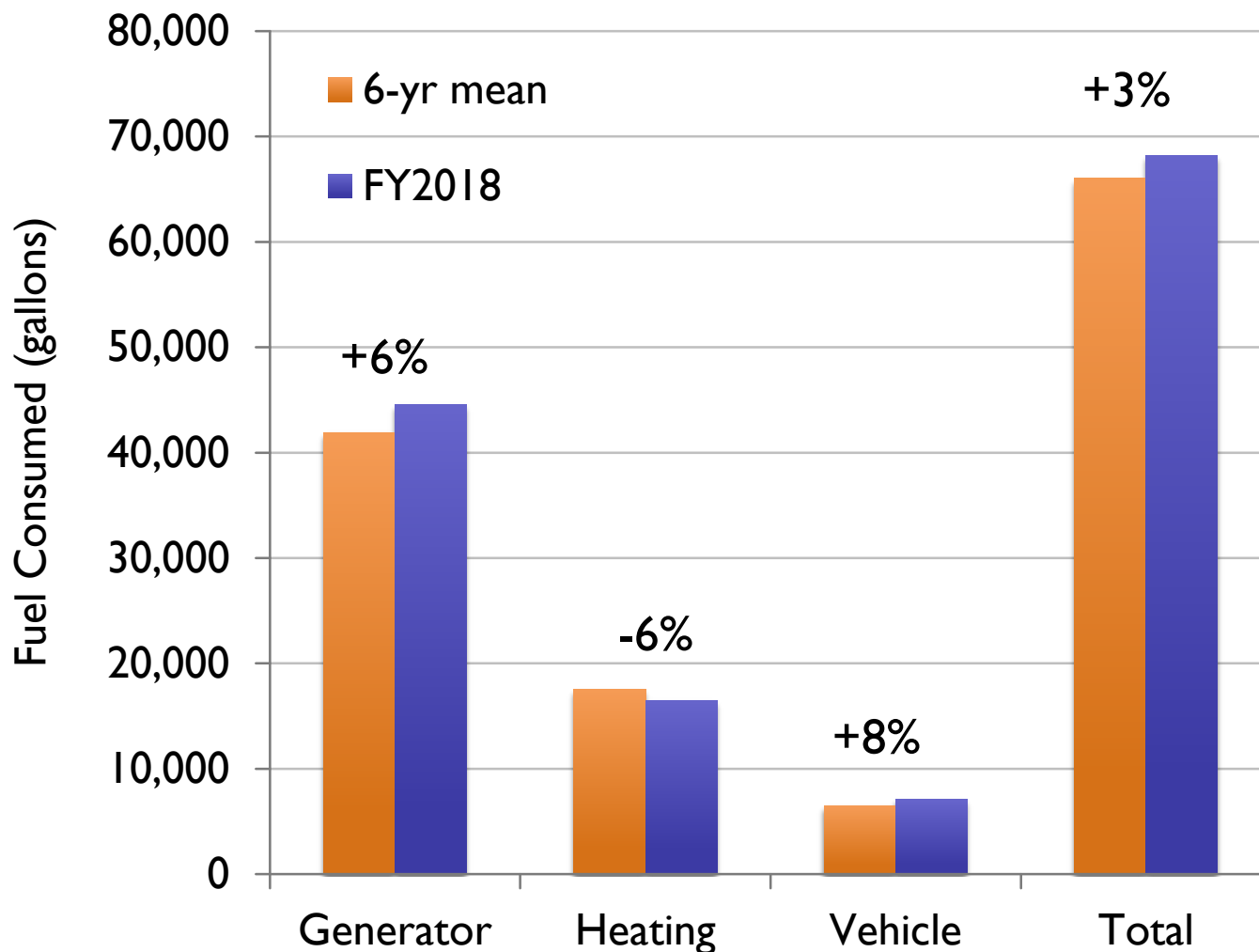
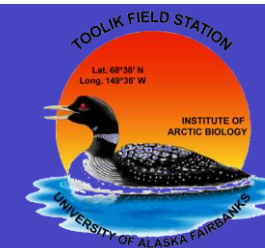
- The goals:
  - Create an online portal for managing all things Toolik.
  - Create an easily searchable publicly accessible project metadatabase that includes project information, spatial data, publications, and links to project data
- System went live in 2018 integrating project registrations, housing and truck reservations, and individual accounts including training modules
- Next steps: Continue to integrate all TFS services management into the system
  - Soon: TFS user billing and userday summary and the ability to make multiple of the same reservation in one request
  - Next: Add other service requests and management under the system, shipping and receiving, and lab space assignments
  - Also: Currently working with ESRI to link the TFS GIS plots database with myToolik projects and make the information available and publicly searchable on the TFS website
- We will continue to add to the system in a staged approach as resources allow

# LOGISTICS



- Planning on taking delivery of a new NSF truck and a 4wd van/coach!
- Similar public truck schedule to recent past, including a van charter to supplement NSF trucks
- Working on allowing non-UAF employees/researchers easier access to ride in UAF vehicles
- Reminder that any outbound HazMat or international shipments that TFS will handle need to be arranged in advance and will be routed through the appropriate UAF departments to ensure compliance

# POWER AND FUEL CONSUMPTION

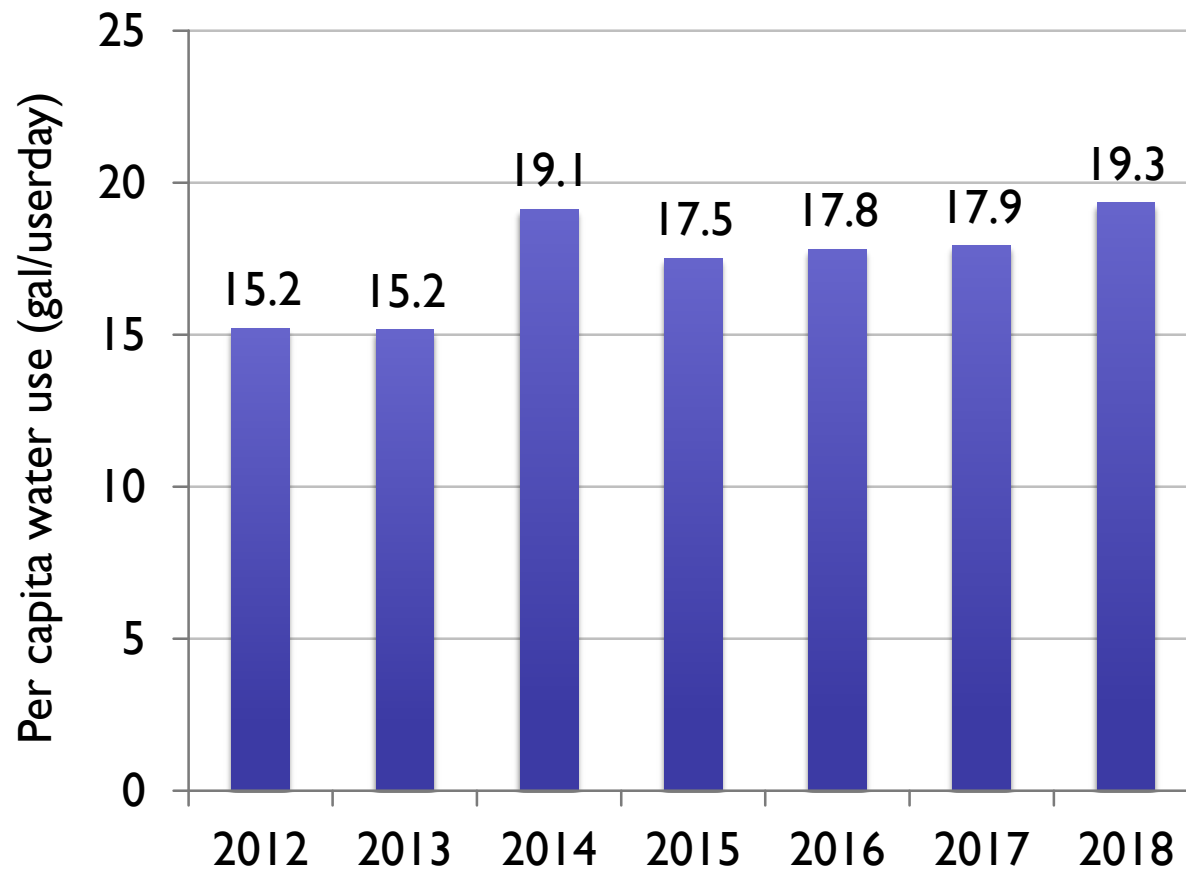


- Total Power:
  - 529 MWh
  - ↑ 3% from 6-yr mean
- Weatherport heating: 9% of all camp power use (May-Sept)
- Labs: 19% of all camp power use (May-Sept)

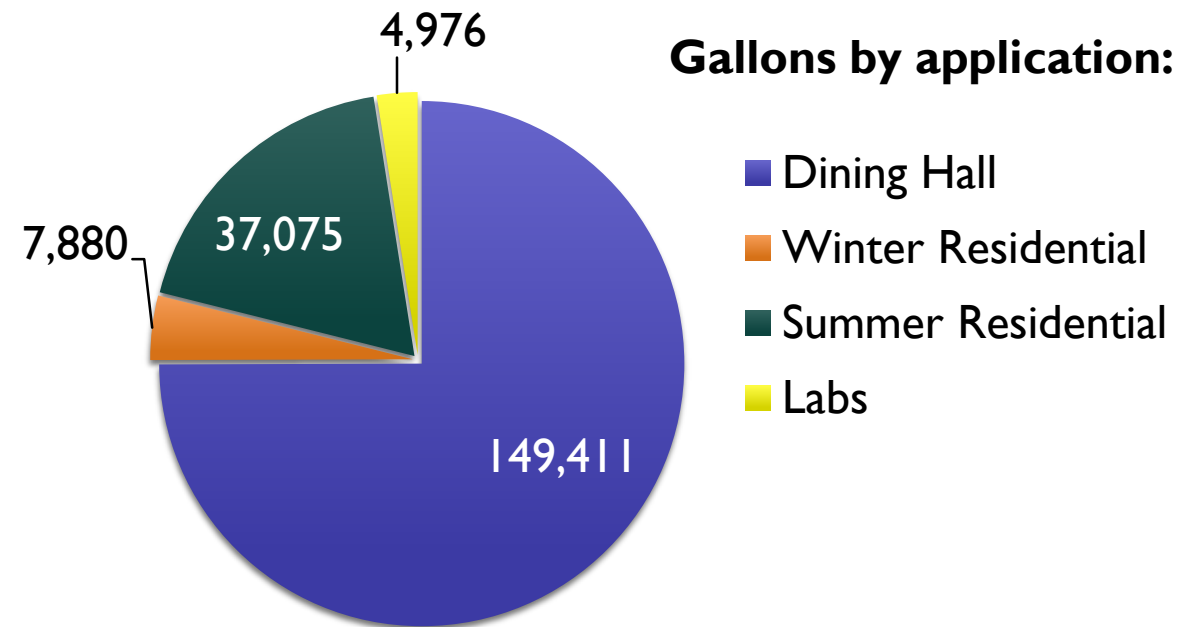
# WATER CONSUMPTION



- Per capita water use ↑8% from 2017



- Summers users can influence ~20% of camp water use!





# INCLUSIVITY



- TFS/UAF offered Green Dot bystander intervention training to the TFS community in June 2018
- The U.S. Department of Education has issued draft guidance on Title IX. It is unclear on how this will affect TFS
- Regardless, TFS will retain its current code of conduct and maintain a community of respect, expectations for appropriate behavior, and a dialog on inclusivity
- TFS is working with the UAF Diversity and Action Center to explore the possibility of offering two new training opportunities to the TFS community: LGBTQ+ Inclusivity and Suicide Prevention

# MANAGER'S PERSPECTIVE



- Smooth transition at the beginning of the busy season
- Working on a variety of tools and organizational systems to improve operations, planning, and team work, within Toolik and with CPS
- Excited to have the opportunity to enhance collaboration in science support and lab/space management with new SEDC Manager
- Camp improvements:
  - Dorm 7/8 and completion of fiber optic ring (2018)
  - 2019 approved upgrades: New 4x4 van and new dorms, single rooms
  - Plans for upgraded EMT facility, and a new washeteria
  - Being discussed: Possible opportunity to partially convert from diesel to natural gas

# SOLID WASTE MANAGEMENT



- Objective: Be more sustainable by increasing recycling and decreasing trash burning
- Why?
  - Be good stewards to the environment
  - Atmospheric projects have requested the decrease or elimination of incinerator use
- How?
  - Transport more trash and recyclables to Fairbanks
  - Industrial composter for all food waste
  - Decrease paper products
  - Use more biodegradable products
  - Decrease canned products

# NEW PROJECTS IN 2019

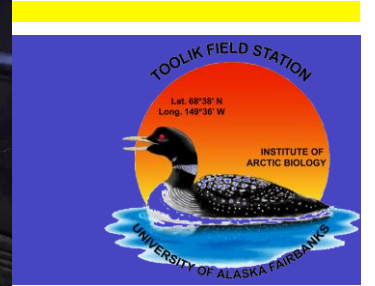


- Alaska DGGs/USGS STATEMAP - mapping project – Amanda Willingham
- USNA/CRREL - material fluxes on small rivers – Shawn Gallaher
- NHNZ TV – filming project documenting Arctic ground squirrels – Loren Buck
- NSF NNA:
  - BIO EF: Peat expansion in Arctic Tundra – Zicheng Yu
  - BIO DEB: Tundra iron cycling – David Emerson/Breck Bowden
- Field courses:
  - Oregon community college students on an Arctic Soils Tour: 7 people mid-September (funding pending)
  - Caltech Division of Geological and Planetary Sciences: 2 day trip, 25 people in mid-August
  - Olivet Nazarene University on a field observation tour in Arctic/SubArctic environments: 5 days, 17 people, mid-June



## MAINTENANCE

- Major repair of 540I front end
- NEON generator
- Well House permitting
- Upgrades
- Network v in place
- Grading of



system,

of the

nd

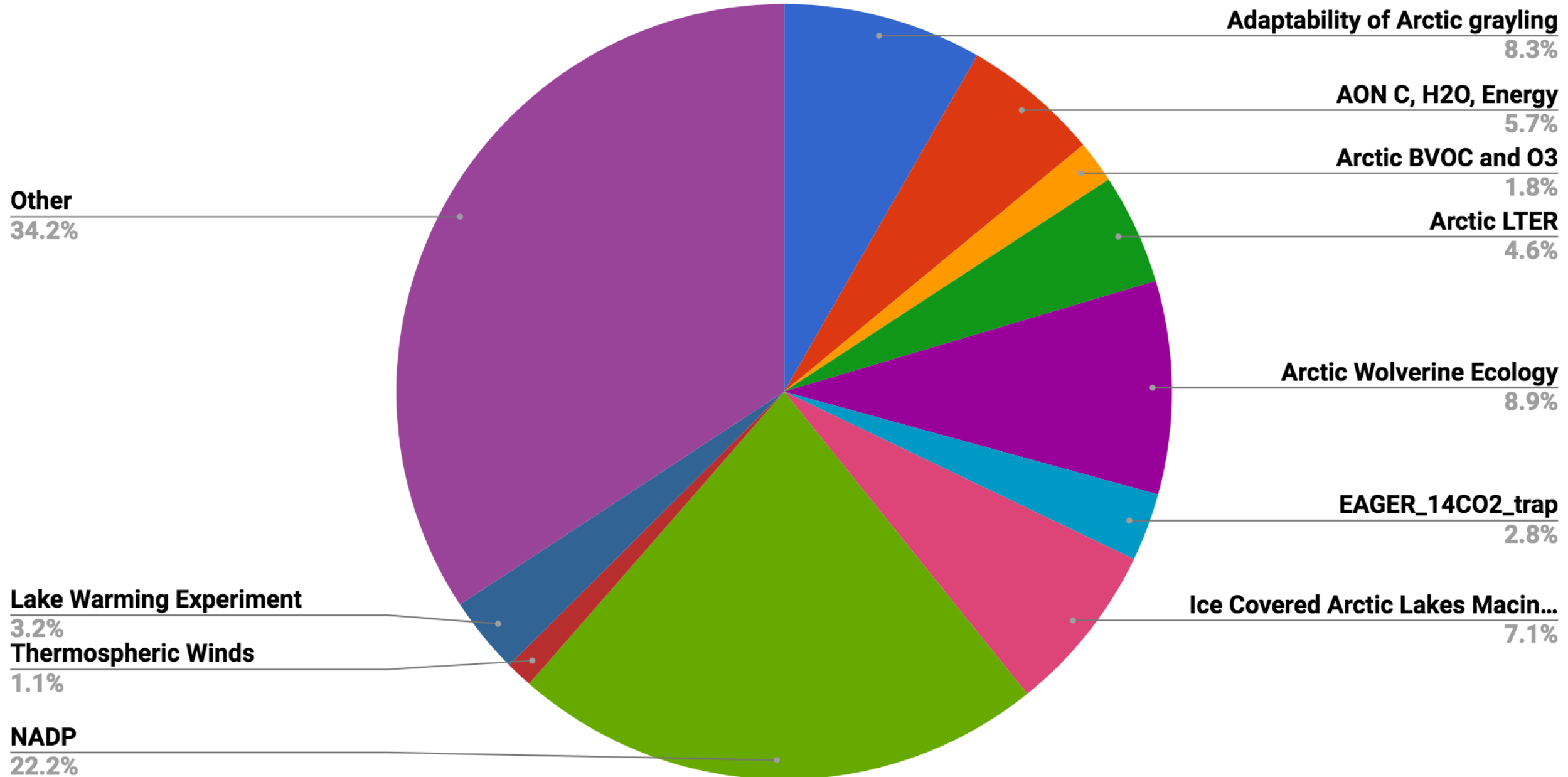
lab 6 deck  
orms are

# SCIENCE SUPPORT HIGHLIGHTS

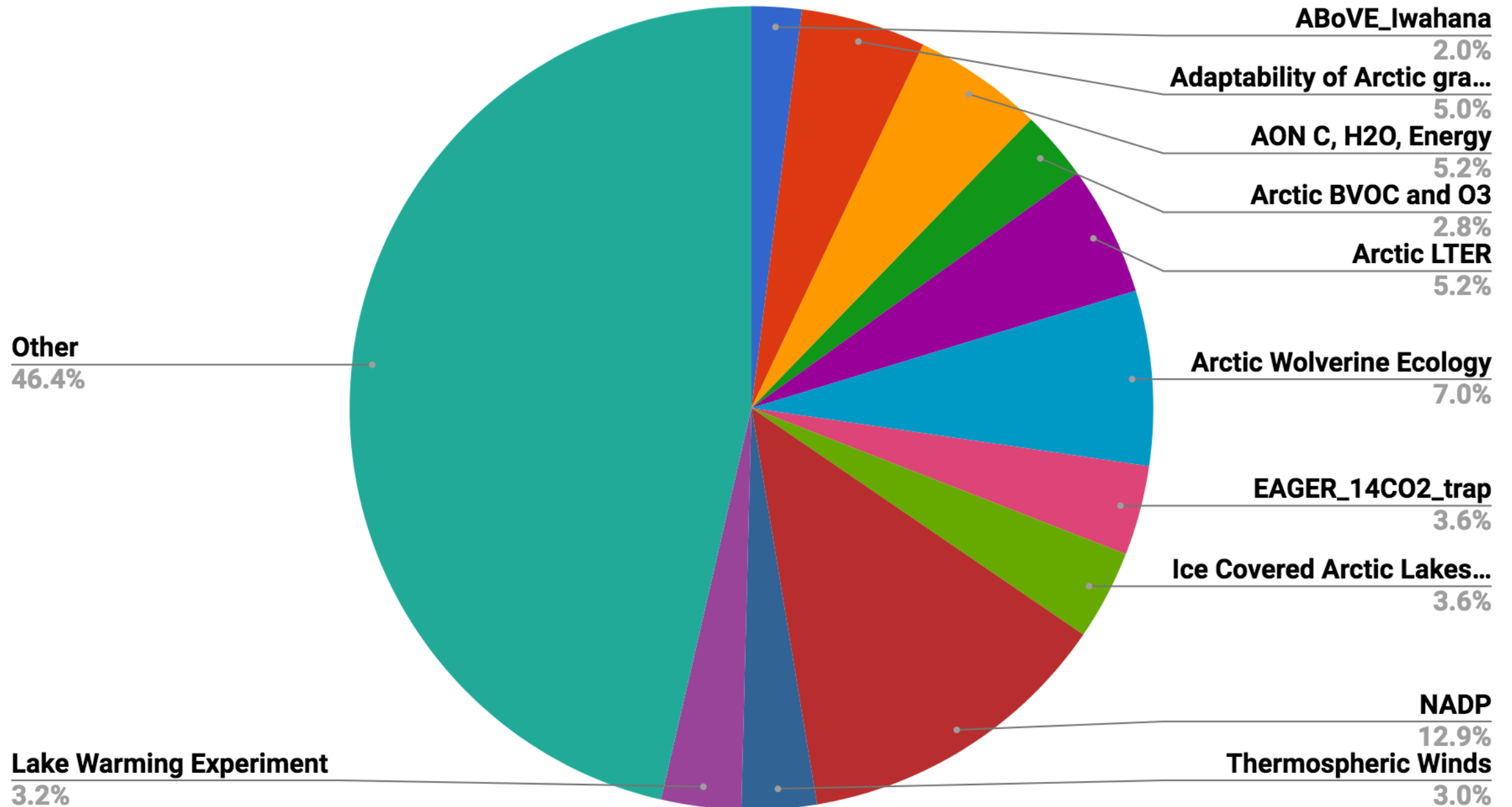


- Winter season support for overwintering and autonomous projects remains abundant and continues to grow – both for in camp and assistance out in the field
  - Support for Welker, MacIntyre, Conde, Hampton, Deegan, AON, Stanford, Georgia Tech, NEON, and more.
  - 160 different requests over 26 different funded projects (an increase over the 138/24 last year)
- Usual suite of summer season science support projects – including fabrication, field support, technical support, and equipment repair
  - 338 requests over 48 different funded projects (also an increase over the 307/51 last year)

## Science Support Hours (480 total)

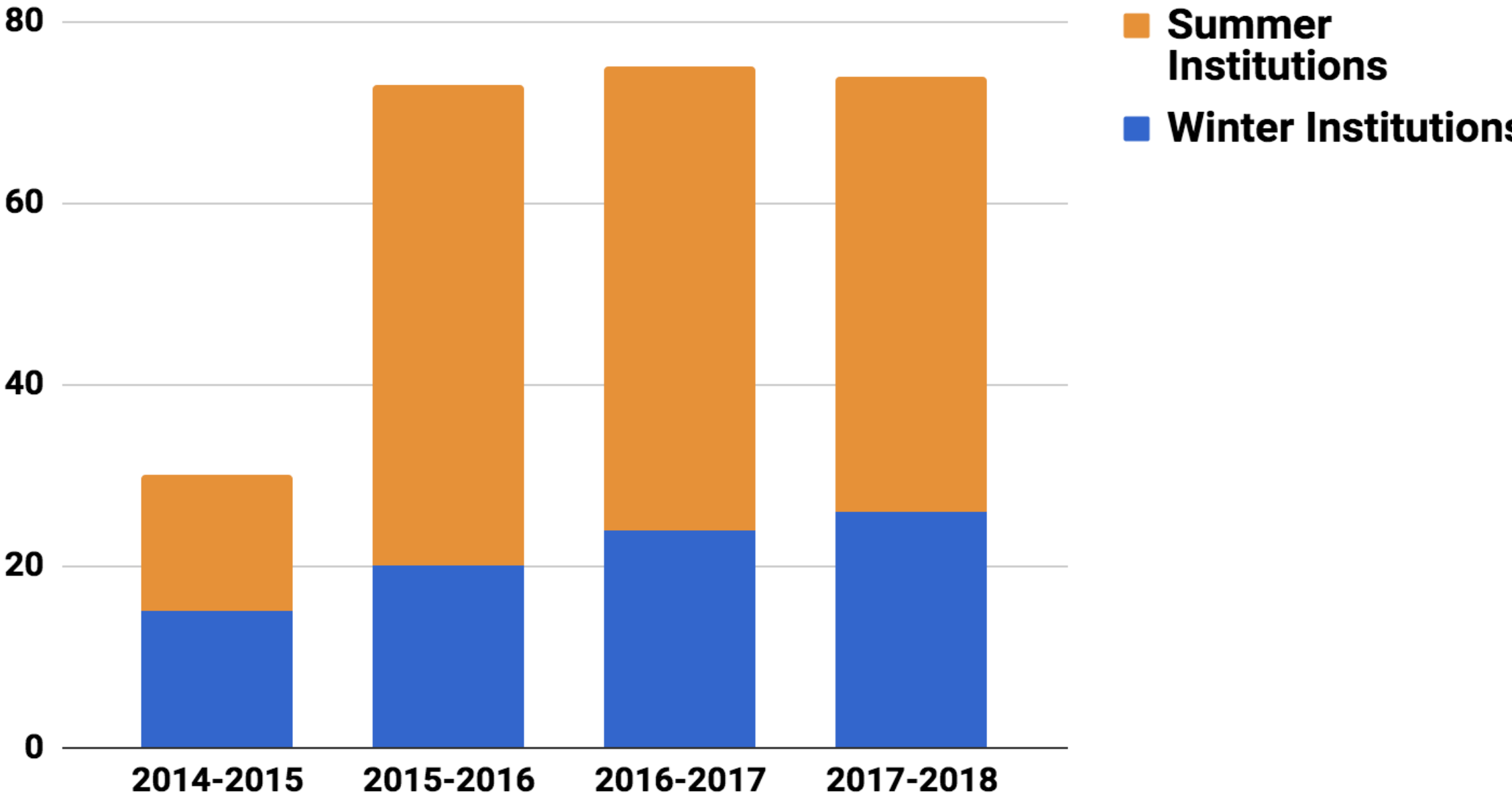


# Science Support requests (498 total)

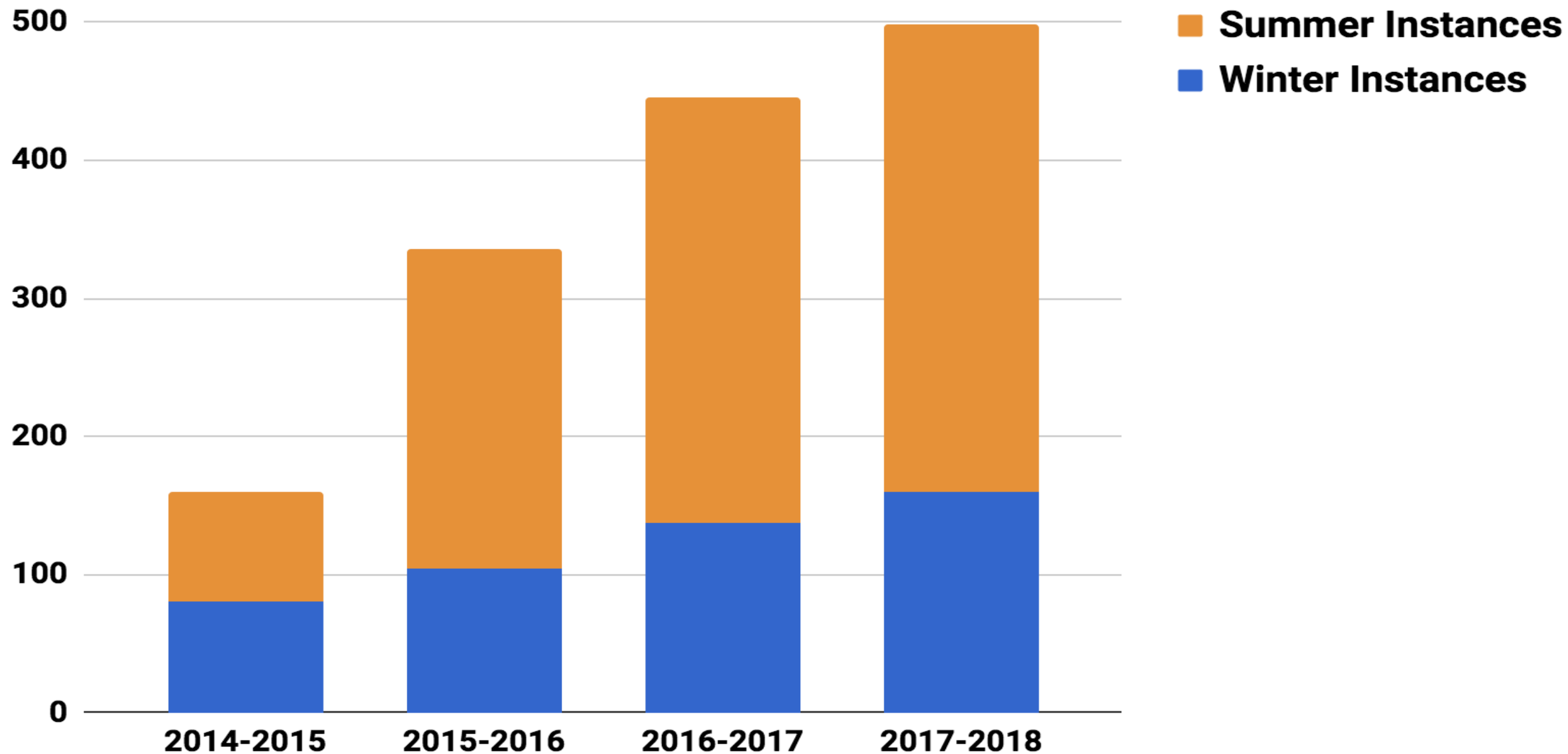




# Science Support - number of Institutions

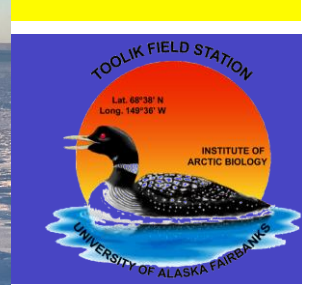


## Science Support - number of requests



# SCIENCE

- AON W
- Deegan
- MacInty
- Sample
- Eager, H
- ABoVE
- WCS W
- LTER fe
- Add IM



t) for

rs



THANK YOU!



QUESTIONS?

