

# NKE FLOATS STATUS

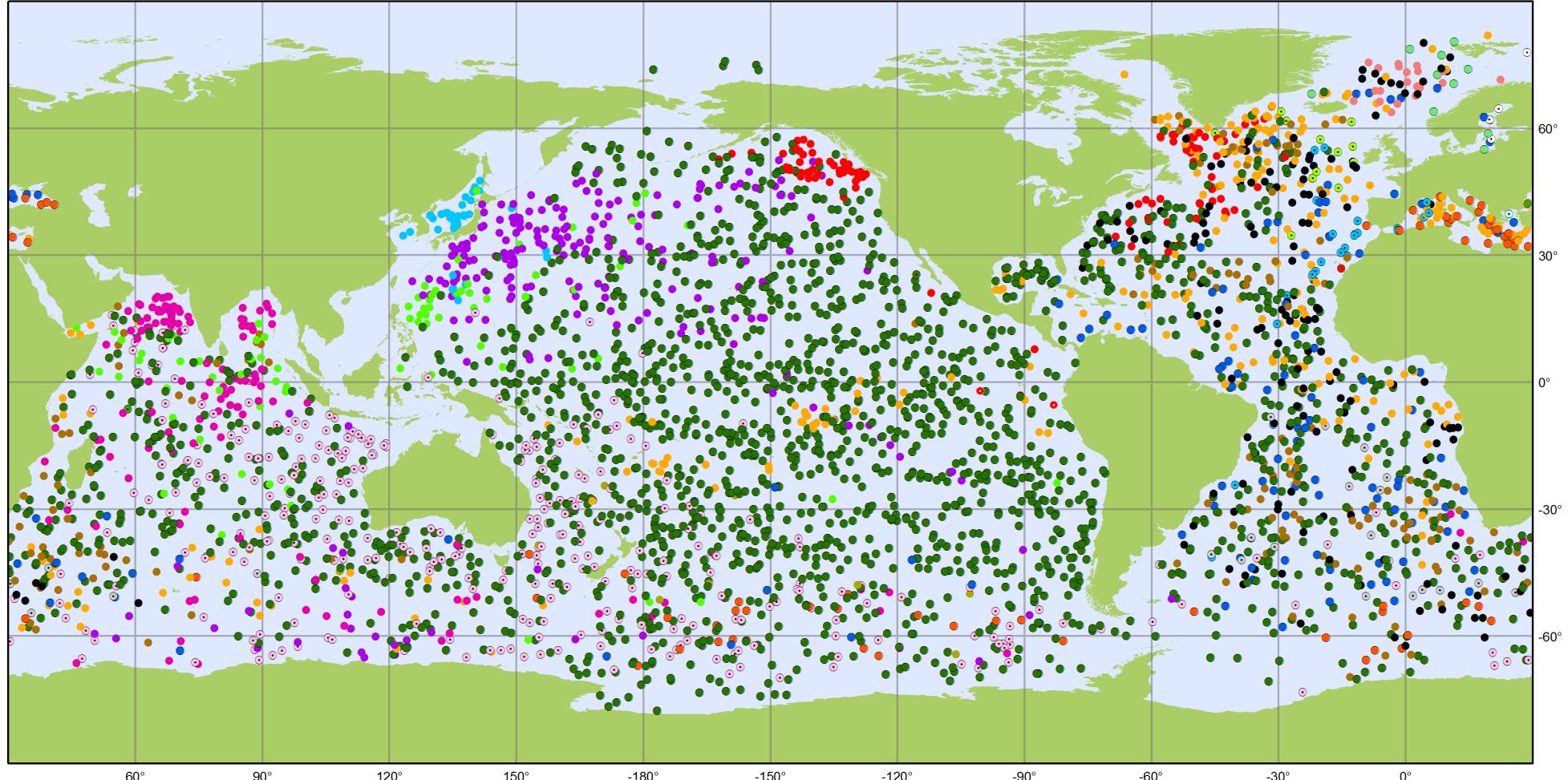
Mathieu Belbéoch  
JCOMMOPS Lead

[mbelbeoch@jcommops.org](mailto:mbelbeoch@jcommops.org)



## ARGO STATUS

- Stable status – first signs of a decrease noted. Stretched/flat resources
- Expansion anticipated (BGC/Deep) but not sustainably funded yet within National Argo programmes, and not a reality at sea.
- 250-300 cycles is the new Argo target (respectively 20 - 8% achieved)
- 60% reach 150 cycles ...
- Future environmental concerns
  - To be discussed and prepared within AST
  - Planning/recovery combo is key: i.e. ship time.
- Rules/ Best Practices with float deployments
  - Notification at JCOMMOPS before data flows ....
  - MSR requests for any deployment into EEZ (a few exceptions – contact JCOMMOPS)
  - MSR requests for any R&D float that might drift into EEZ
  - Marginal Seas access issue (deal: more transparency/planning vs more flexibility from coastal states)



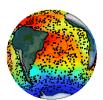
Argo

**National contributions - 3871 Operational Floats**

December 2019

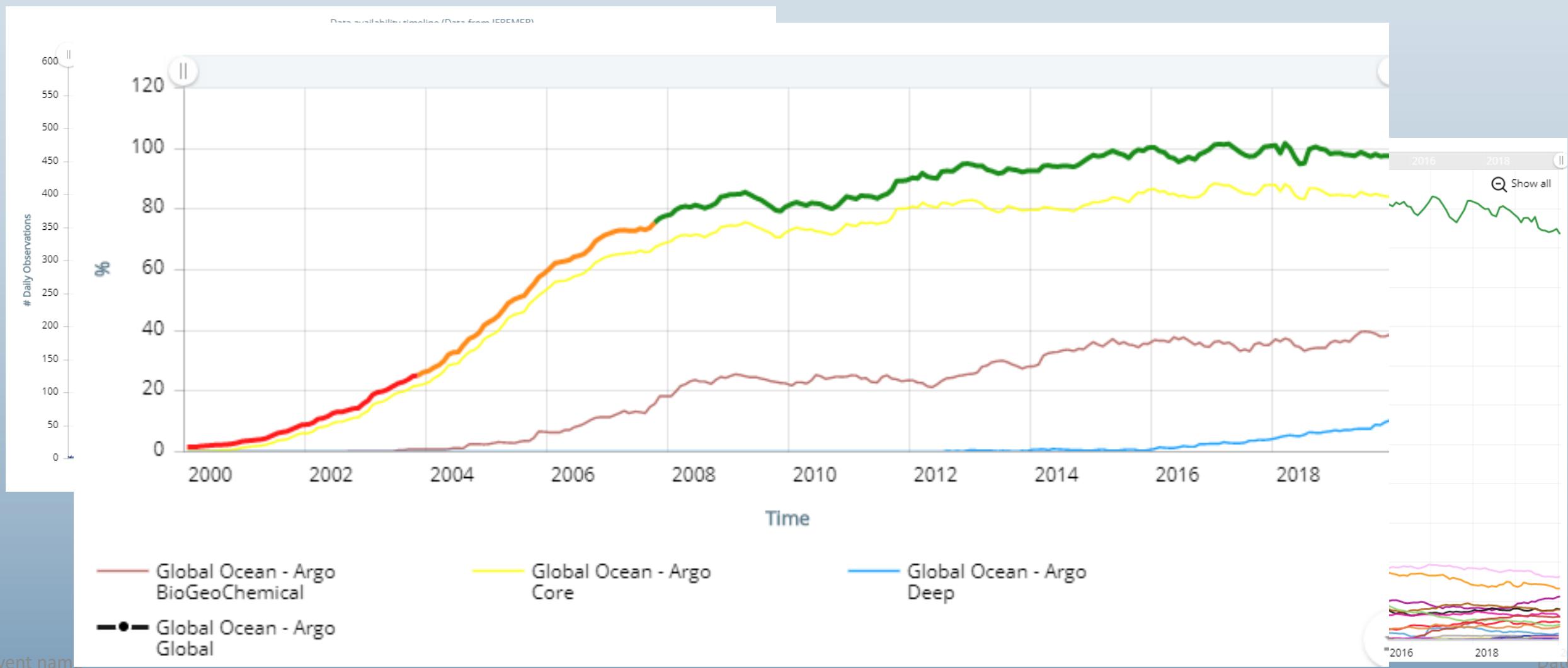
Latest location of operational floats (data distributed within the last 30 days)

- |                   |                 |                |               |                    |                           |
|-------------------|-----------------|----------------|---------------|--------------------|---------------------------|
| • AUSTRALIA (329) | • EUROPE (121)  | • GREECE (1)   | • JAPAN (215) | • NETHERLANDS (25) | • POLAND (10)             |
| • BULGARIA (2)    | ◦ FINLAND (5)   | • INDIA (137)  | • KENYA (1)   | • NEW ZEALAND (10) | • KOREA, REPUBLIC OF (36) |
| • CANADA (97)     | • FRANCE (268)  | • IRELAND (12) | • MEXICO (1)  | • NORWAY (22)      | • SPAIN (24)              |
| • CHINA (78)      | • GERMANY (160) | • ITALY (69)   | • MOROCCO (1) | • PERU (3)         | • UK (160)                |
|                   |                 |                |               |                    | • USA (2083)              |



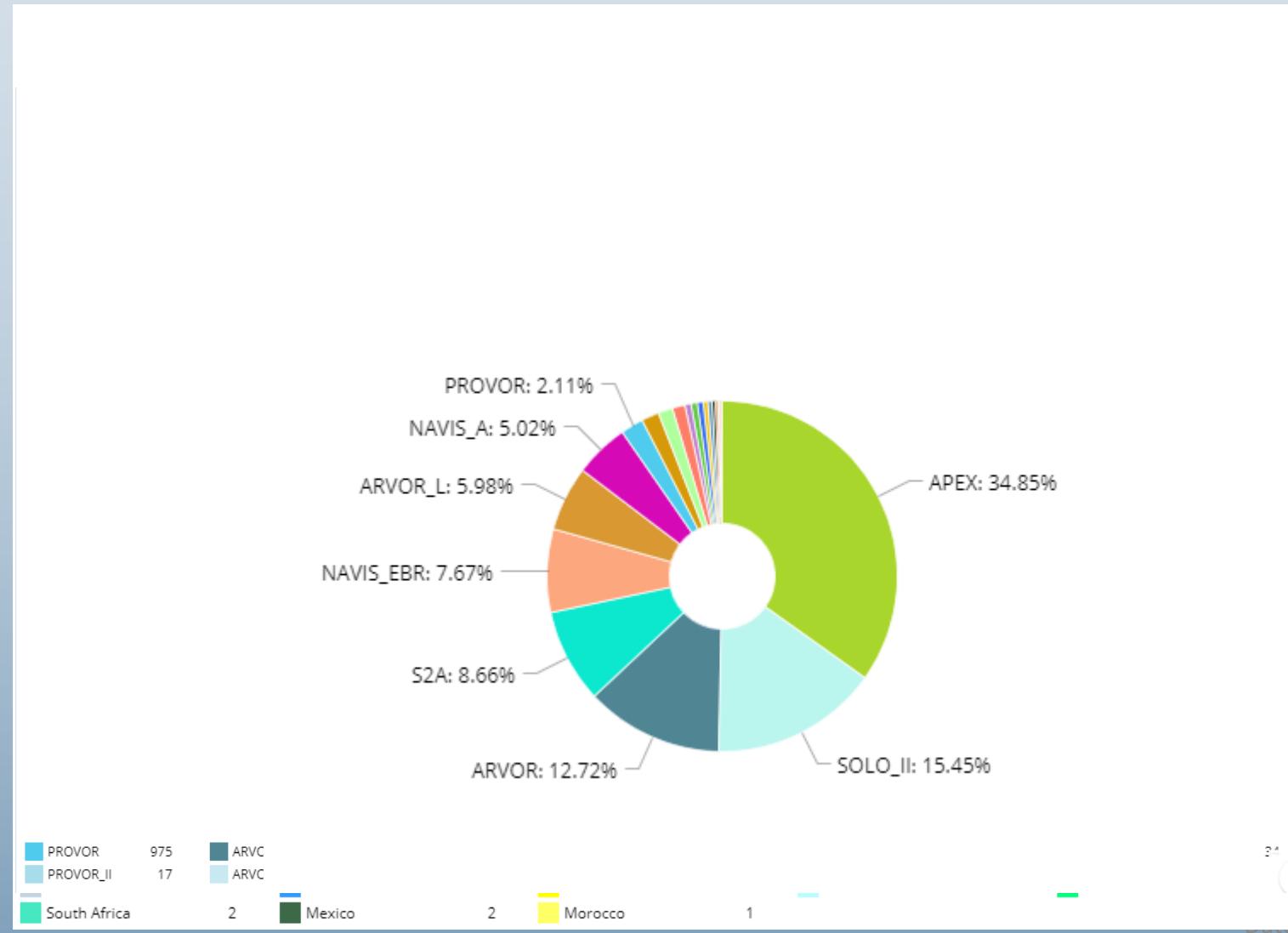
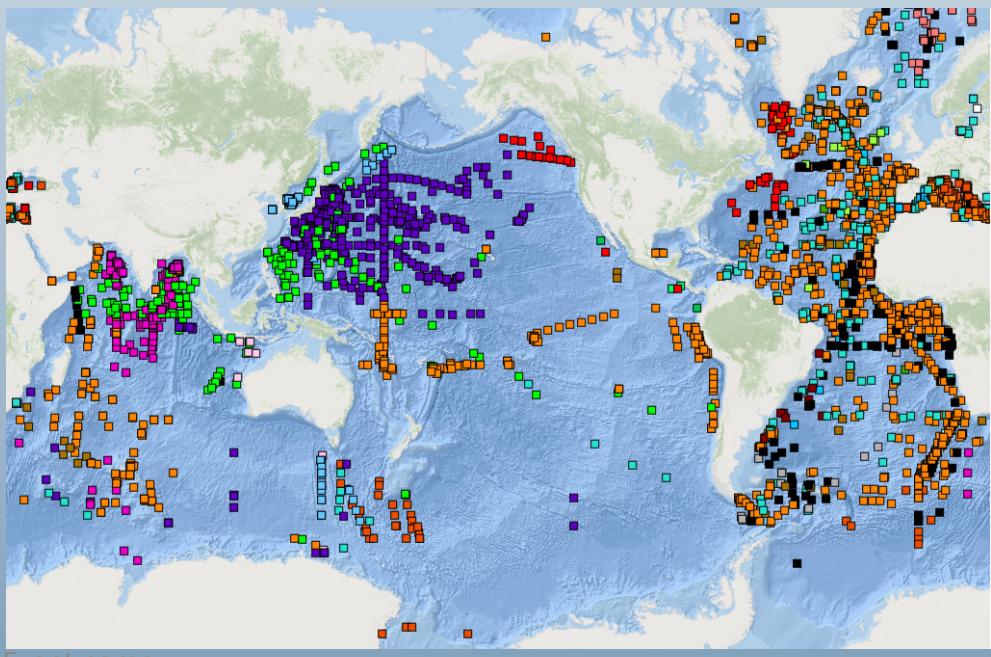
# ARGO STATUS

Argo is lightly decreasing ...



# NKE FLOATS

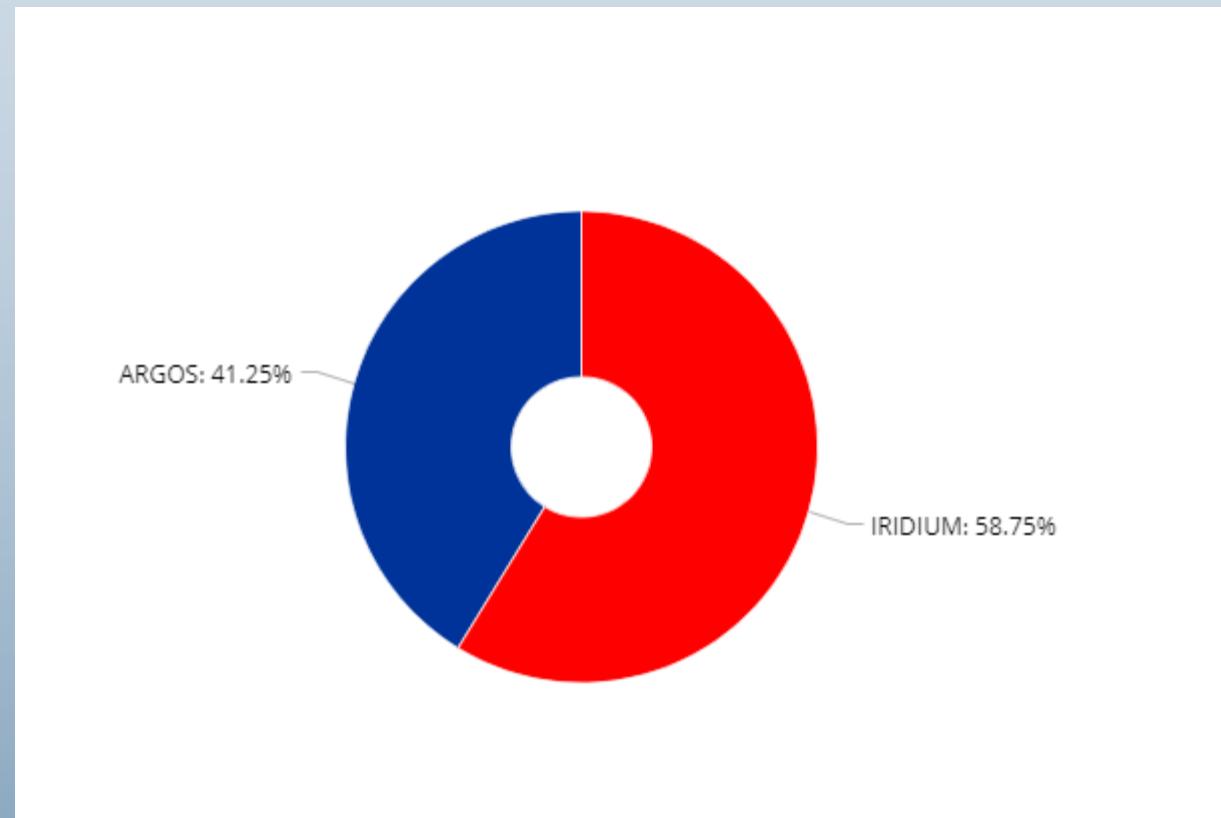
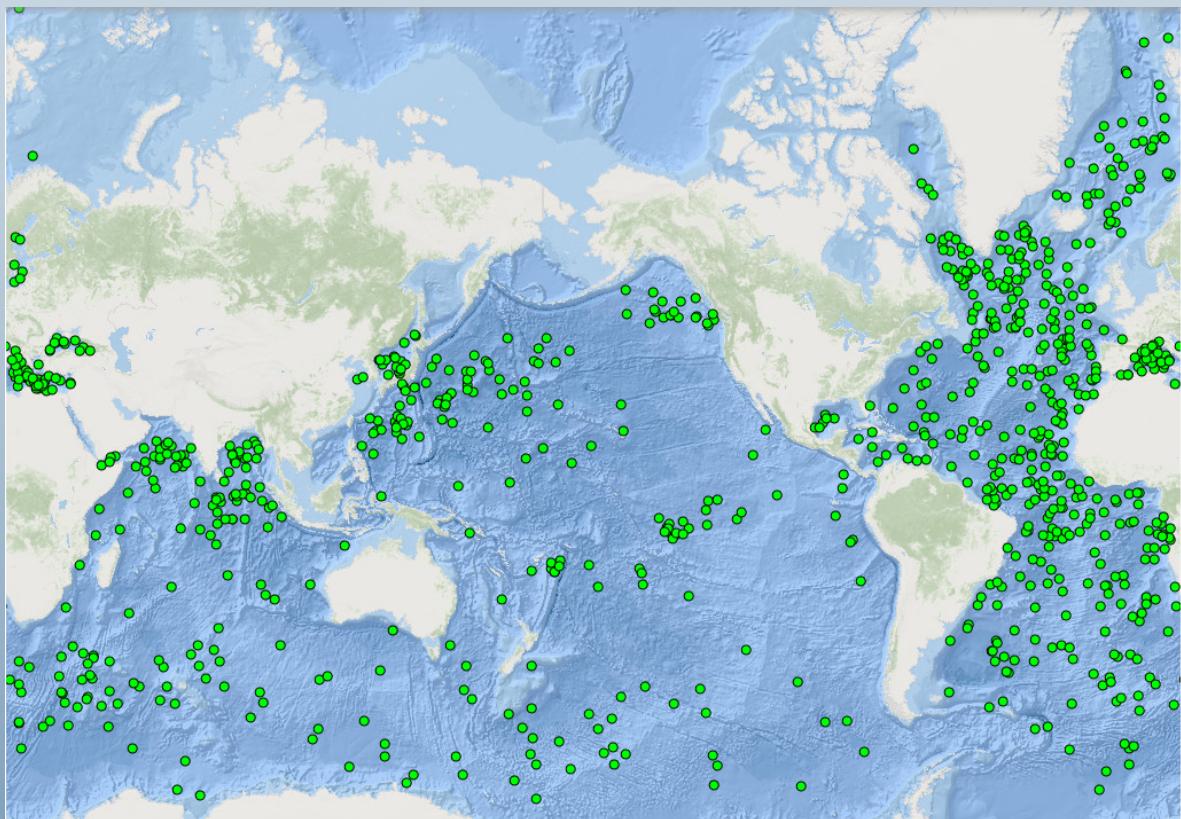
- ~3000 floats deployed
- Not used by USA and Australia
- 20% of the operational array



# NKE FLOATS

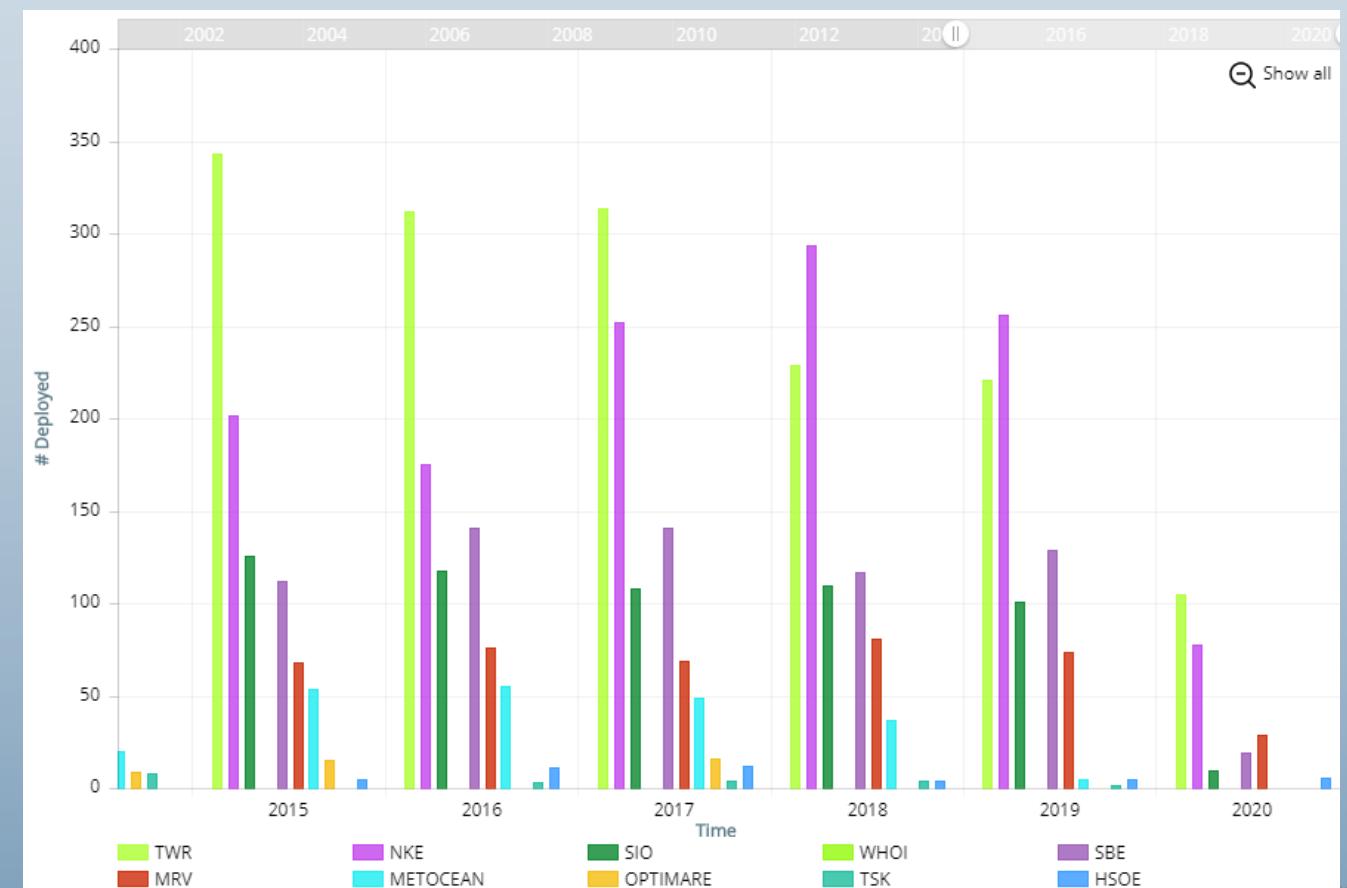
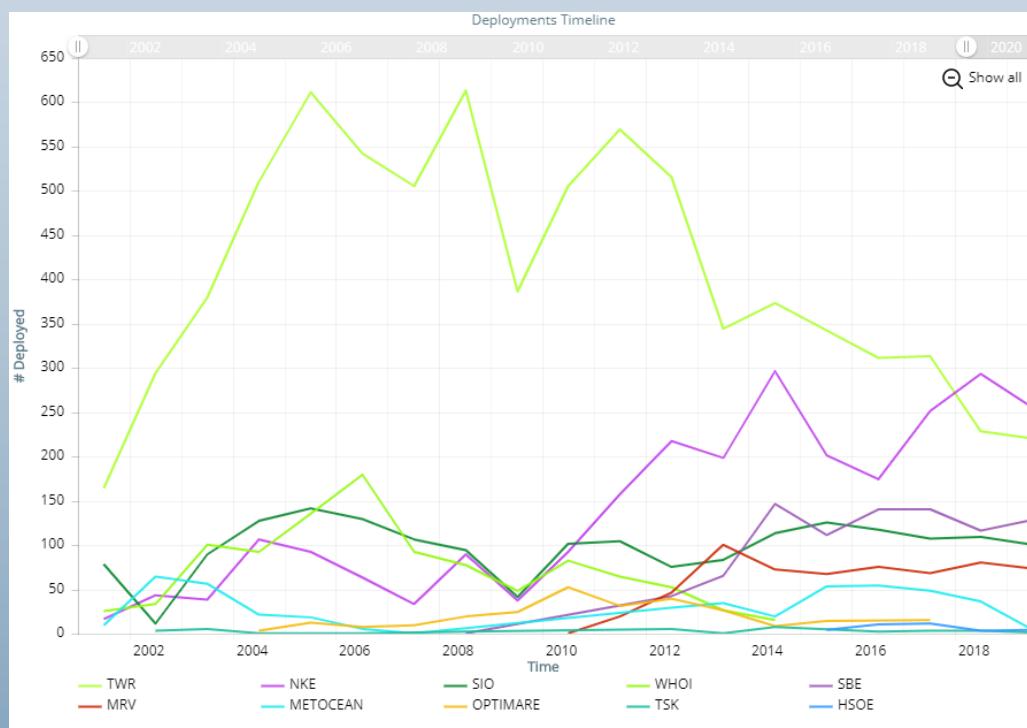
Today

- 880 floats now
- Still some Argos (41% vs 24% global)



# NKE FLOATS

- 1<sup>st</sup> Argo manufacturer in 2018 and 2019 (units deployed / year)
- with 1/3 of the market (33%, 32% respectively)



## FLOATS LIFETIME

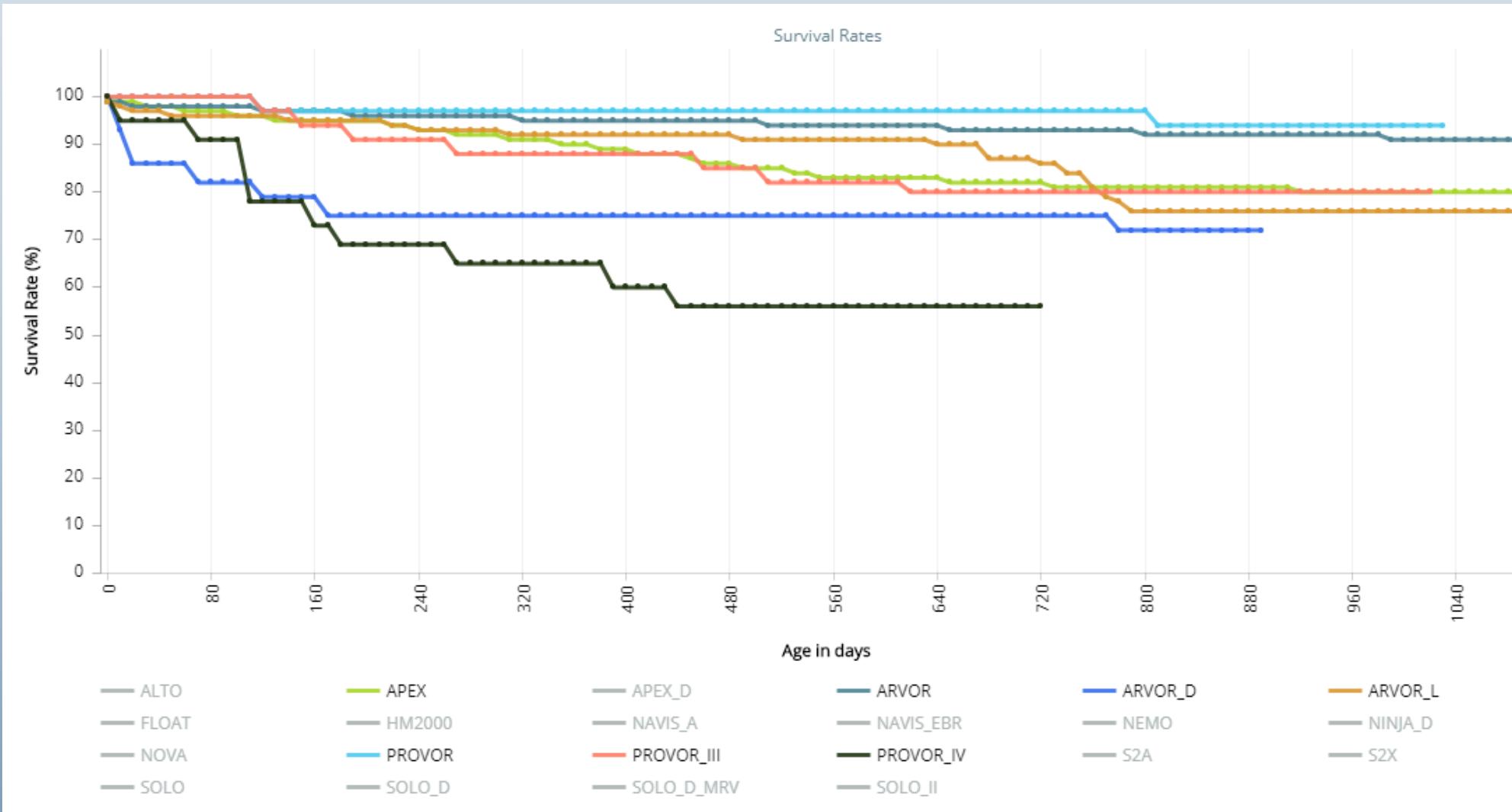
- 3-year challenge (2017-2019 deployments)
- SOLO\_II/S2A, then ARVOR/NAVIS\_EBR have similar good performance
- APEX – issues on early profiles

- 50 cycles target:
  - SOLO\_II 98.9%
  - NAVIS\_EBR 96.9%
  - S2A 96.5%
  - ARVOR 95.9% (PROVOR BGC 96.8%)
  - APEX: 87.7% (95.5 % for UW)
  - Argo average: 75%



# FLOATS LIFETIME

NKE Floats



## ISSUES & CONCLUSION

- Are the NKE floats ready for the 300 cycles anytime soon?
- What are the developments made to facilitate metadata access ?
- Specific features, R&D sensors, deployment practices impact the reliability stats
- Large deployments of same batches seems better to track performance
- Can the floats be improved to facilitate operations by non - experts: deployments/retrieval (ergonomics, colors, , launching procedures, etc)
- Why some additional tests/costs are transferred from manufacturers to Argo teams (engineering, data)?
- What is the price of a float refurbishment ? Is a circular deployment/retrieval strategy reasonable (for core/bgc/deep) ?

Спасибо

Thank you

Gracias

Merci

謝謝

شُكْرًا

Maximize the value of every single float ...

[support@jcommops.org](mailto:support@jcommops.org)

