

The U.S. Navy's Use of ICOADS



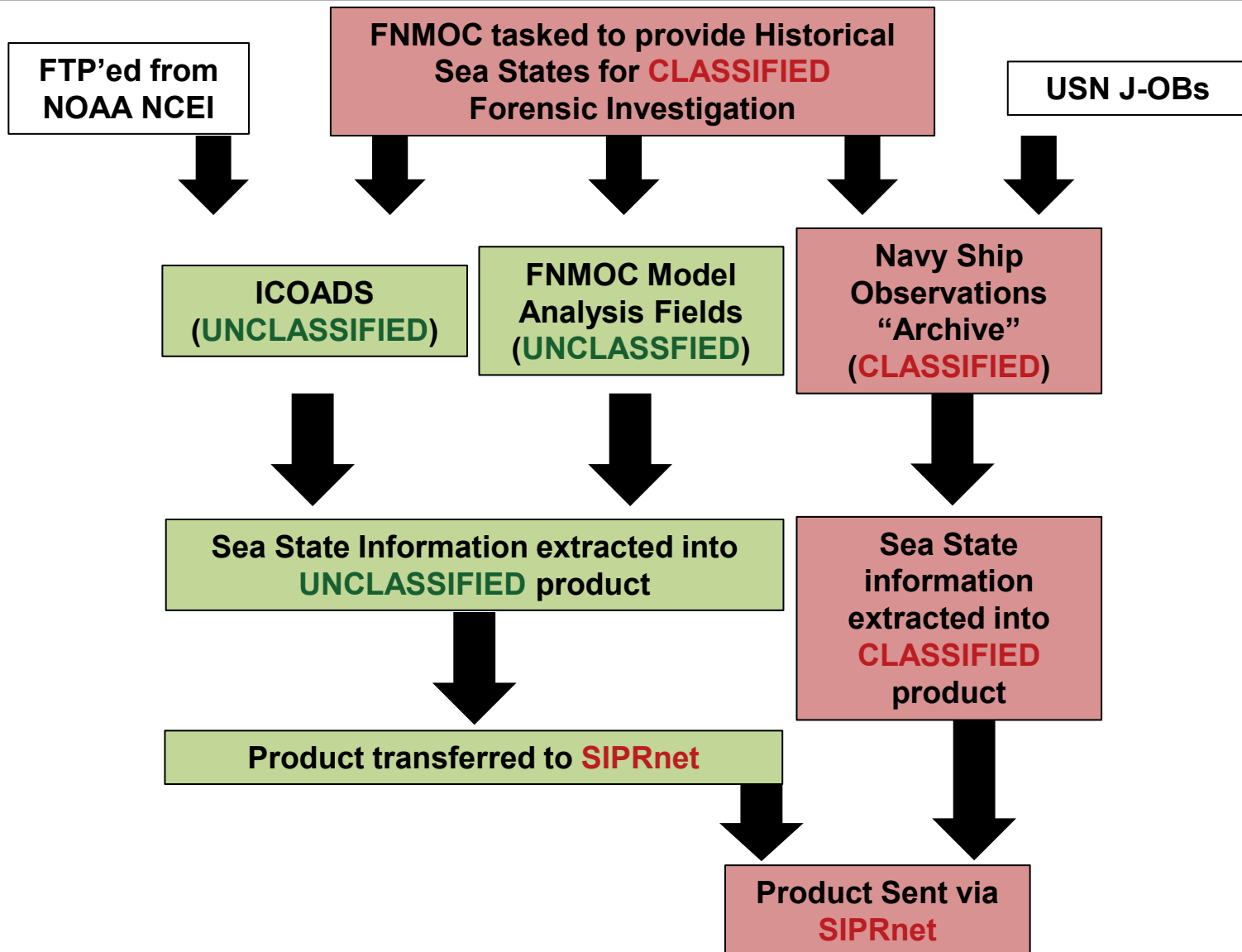
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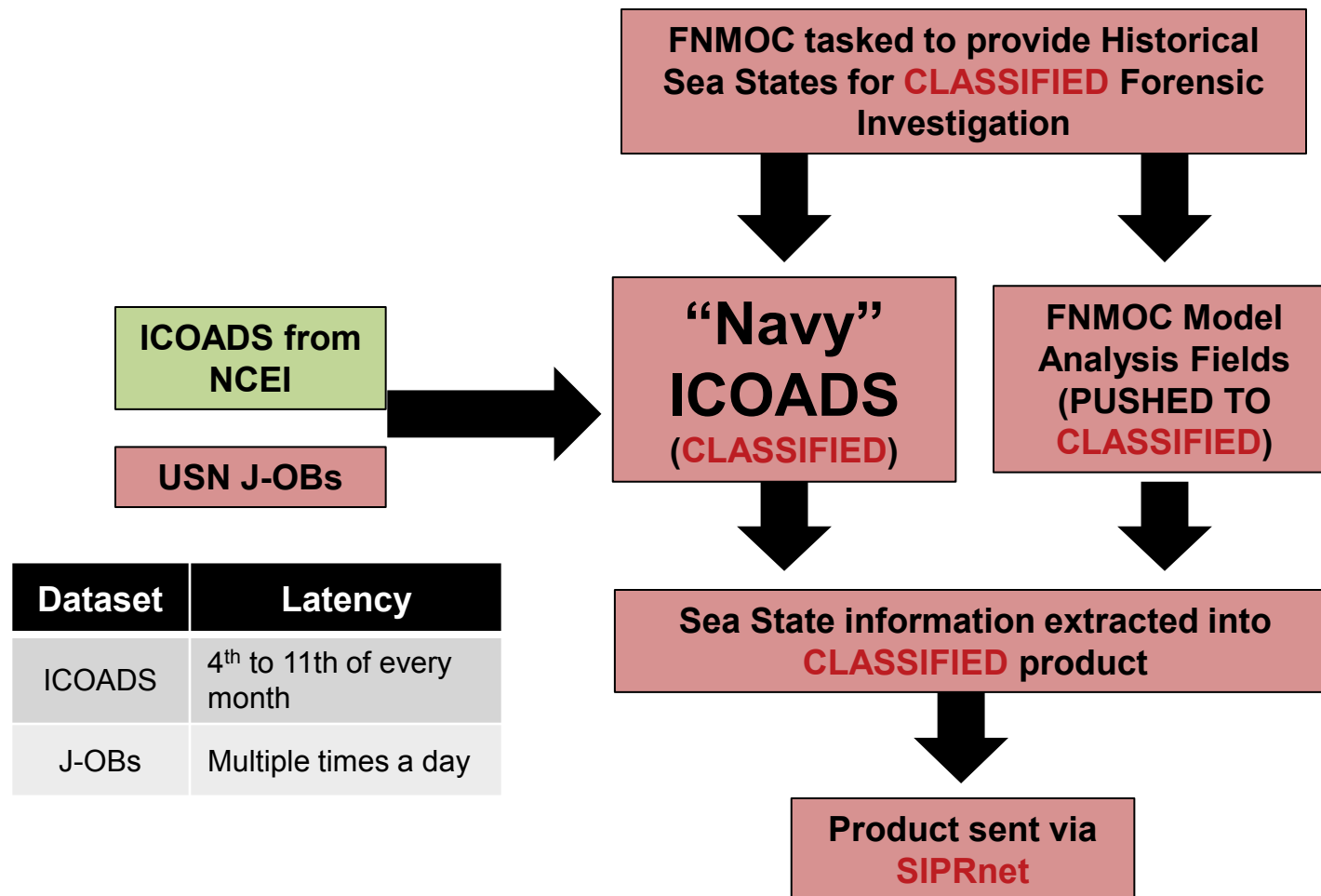


Most Frequent ICOADS Use





Future ICOADS Use



Conclusion: For FNMOC to develop a "Navy ICOADS" exclusive to SIPRnet and JWICS by merging ICOADS and J-Obs, then their update cycles need to match.



Real World Examples

Background

- On 09 OCT 2016, the USS Mason was operating in the Red Sea when it was targeted by missiles fired from Houthi-controlled territory in Yemen. On 12 OCT 2016, missiles were again targeted towards the USS Mason. Neither attempt hit the ship.
- On 31 JAN 2017, a Saudi warship operating in the same area was attacked by a swarm of Houthi suicide boats, killing 3 sailors (very similar to USS Cole attack in 2000).

Saudi Warship – Jan 2017



USS Mason – Aug 2016



Support Request

- On 31 JAN 2017, Rear Admiral Gallaudet tasked CNMOC to conduct an evaluation of the sea states and visibilities occurring at the time of both attacks in order to determine if they were factors that can be exploited in our current counter FAC / FIAC performance models.
- CNMOC tasked FWC-SD to conduct the evaluation. They requested historical weather from FNMOC to assist with the investigation.

FNMOC Climate Team provided:

- USS Mason:**
 - ICOADS observations in the vicinity of the attack from 08-10 OCT 2016 (58 observations!)
 - Navy ship-based observations from the USS Mason and other nearby USN assets.
- Saudi warship:**
 - FNMOC had to wait until 07 FEB 2017 to gain access to 29-31 JAN 2017 ICOADS from NCEI.** (56 observations!)
 - No Navy-based ship obs were submitted in the area of attack.



COAs To Consider

1

Improve ICOADS Latency

- Engage with NOAA NCEI management to scope possibility
- What would it take for NCEI to improve the ICOADS update cycle from monthly to daily? (\$\$\$, FTE, etc)

2

Partner with USAF 14WS

- 14WS already receives observational data feed from 557 with their own internal QC process for forensic inquiries.
- Engage with SMEs to identify scope of possibility.

3

Integrate FNMOC Model Data used for NWP

- We could stay internal, but would require a lot of work.
- Set up feed to Climate team, create an internal QC process, and maintenance. (\$\$\$, FTE, etc)