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# Recent Improvements in Acquisition Speed to Initial Operational Capability (IOC)

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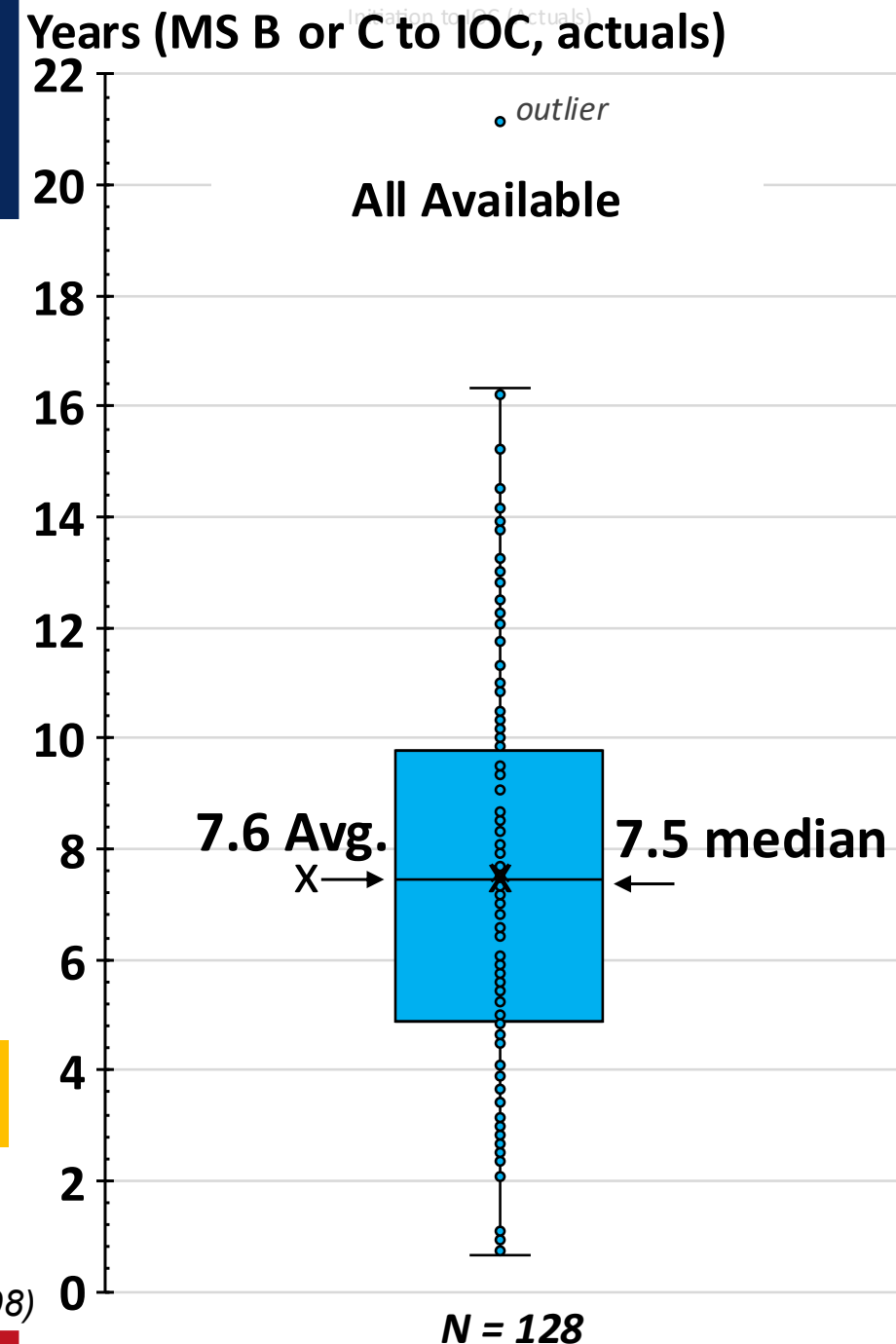
*With all the emphasis on speed...*

Have MDAPs (Major Defense Acquisition Programs)  
been fielding initial capabilities faster?

- **Common misconception:** MDAPs take over 7+ years to field initial capabilities
- **Population view:**  $\sim 7\frac{1}{2}$  is the average, not the historical floor
  - Some fielded in less than a year
  - $\sim 25\%$  took  $< 5$  years
  - Yes, others have been much longer

**Question: Have more recent MDAPs been faster?**

*Time from MDAP Initiation at MS B or C to Achieved IOC (SARs since ~1998)*



- Calculate time...
  - from formal MDAP initiation (Milestone B or C) [whichever came first]
  - to Initial Operational Capability (IOC)
- Statistically compare populations before and since January 2010

**Data:**

All SARs (Selected Acquisition Reports) and MSARs (Modernized SARs) available in DAVE and Advana (since ~1998)

- Contains MDAPs initiated as early as FY 1979
- Large numbers of older MDAPs, low numbers, and infrequent starts bias results to older values, so we wanted to compare more recent MDAPs to the older ones
- Examined actual (achieved) IOC
- 2010 date somewhat arbitrary (but enabled sufficient sample sizes for comparisons)

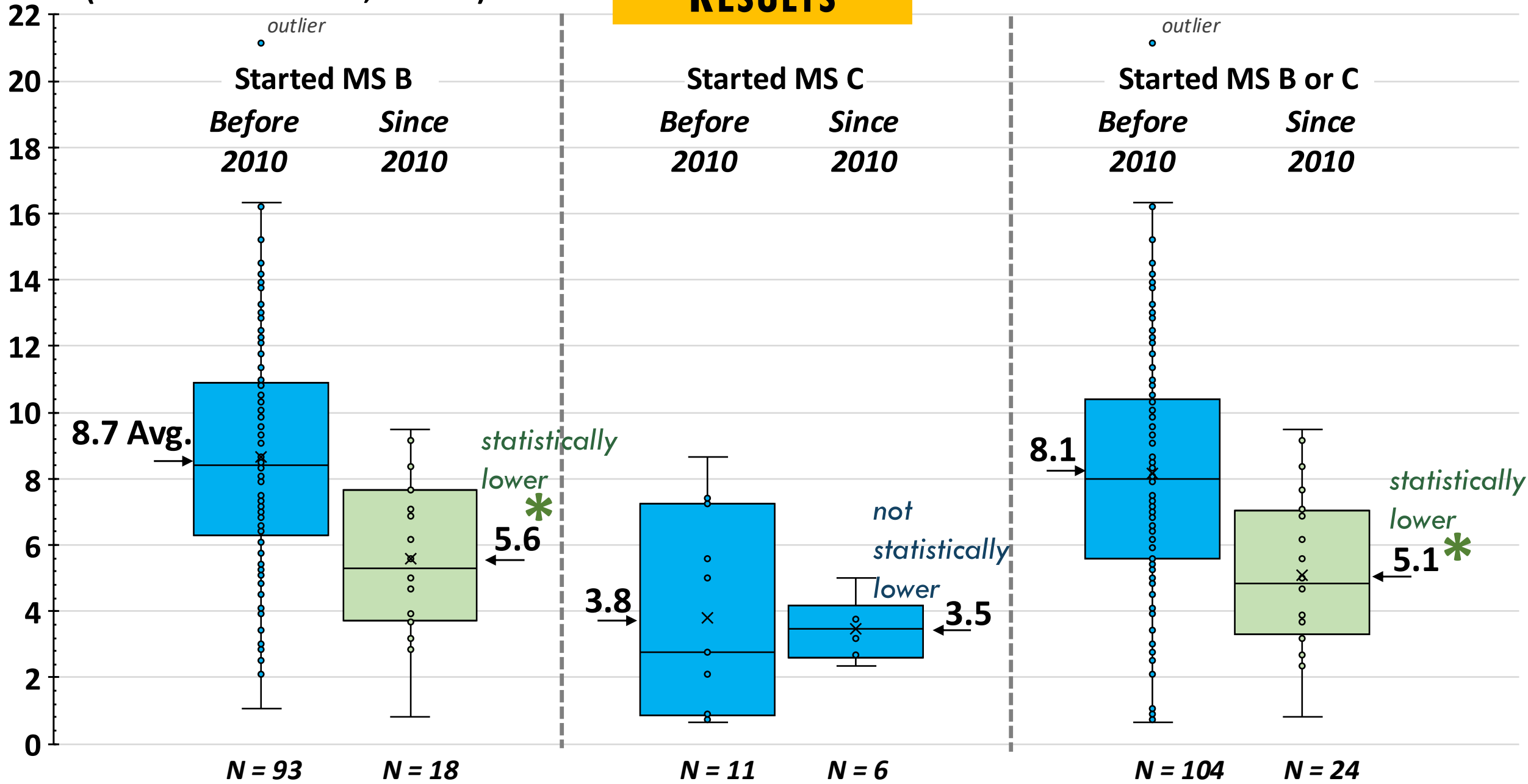
**Statistics:**

- Mann Whitney test (Wilcoxon rank sum test with continuity correction) for p-values < 5% or better

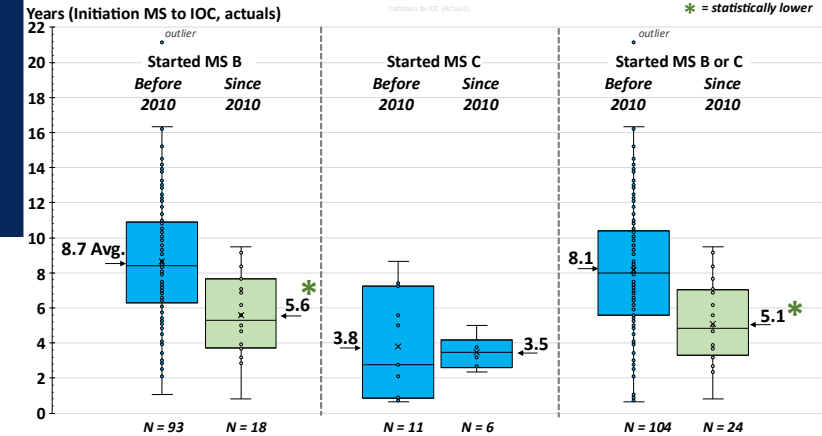
# Years (Initiation MS to IOC, actuals)

# RESULTS

\* = statistically lower



- MDAPs since 2010 avg. ~5 years to IOC (MS B or MS B/C)
  - About the max. time for Middle Tier (MTA) rapid prototyping or fielding
- MDAPs using mature technology (*a best practice for speed*) averaged ~3.5 years ( $3/4^{\text{ths}}$ : <5.3 yrs) from MS C initiation to IOC (no change since 2010)
- Also found some portfolios averages lower since 2010 (MS B/C)
  - Aircraft/Aviation: 5.6 yrs (down from 9.9 yrs)
  - Missiles/Munitions: 4.3 yrs (down from 7.3 yrs)
  - Ships/Maritime: 4.3 yrs (down from 7.3 yrs)
- Comments:
  - Medians similar
  - Small sample sizes prevented conclusions for other portfolios (MS B/C)
  - 2010 date somewhat arbitrary (but enabled sufficient sample sizes for comparisons)
  - Always some MDAP system type differences when comparing between periods (apples and oranges?)
  - Does not count time from needs identification to MDAP initiation
  - Does not consider smaller ACAT II–IV major capability programs



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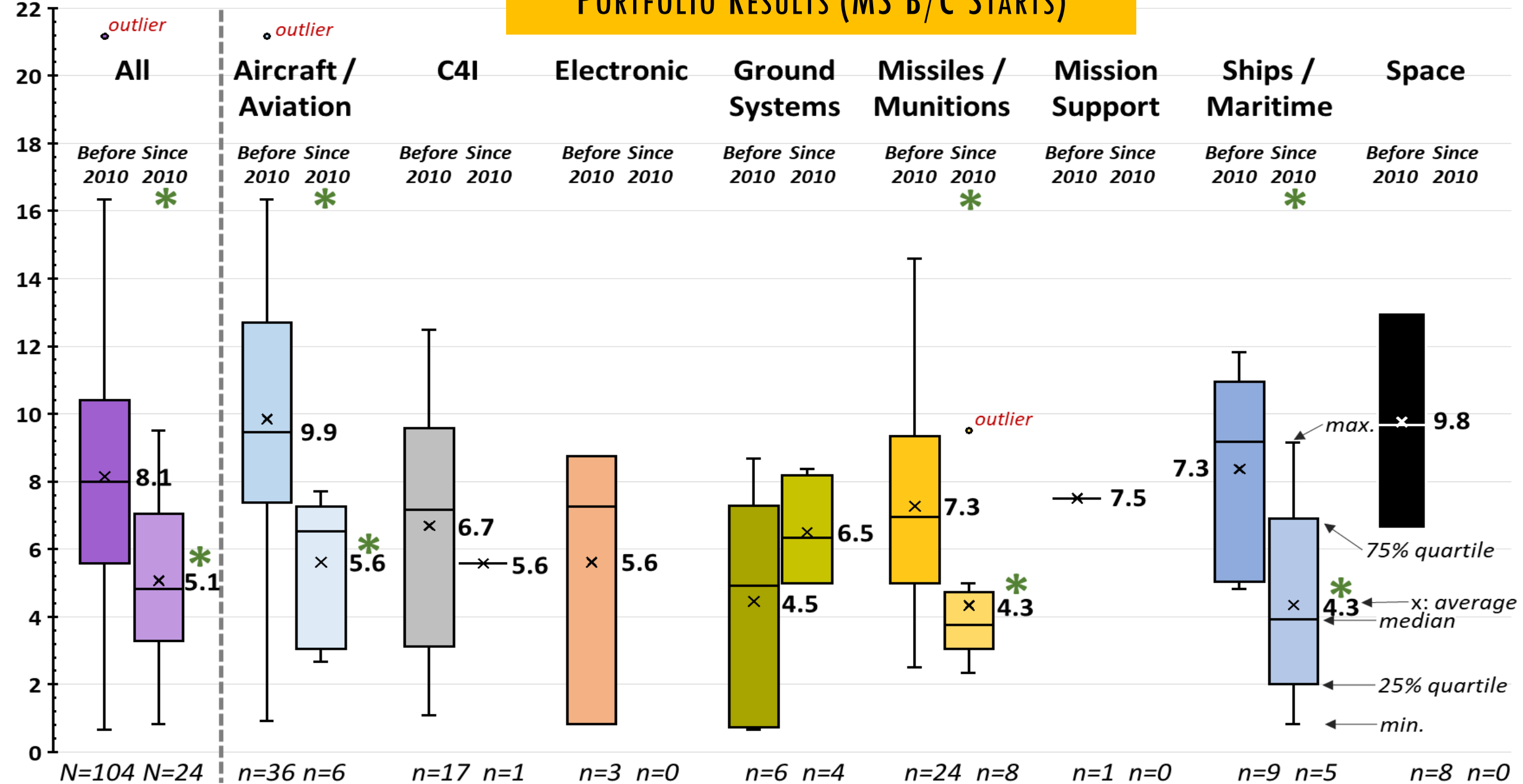
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# BACKUPS

Years (MS B/C to IOC, actuals)

# PORTFOLIO RESULTS (MS B/C STARTS)

\* = statistically lower



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