



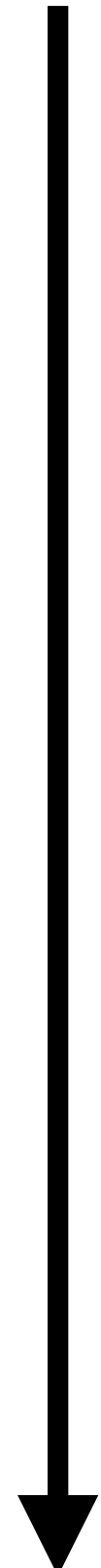
Science and
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Facilities Council

File transfers update

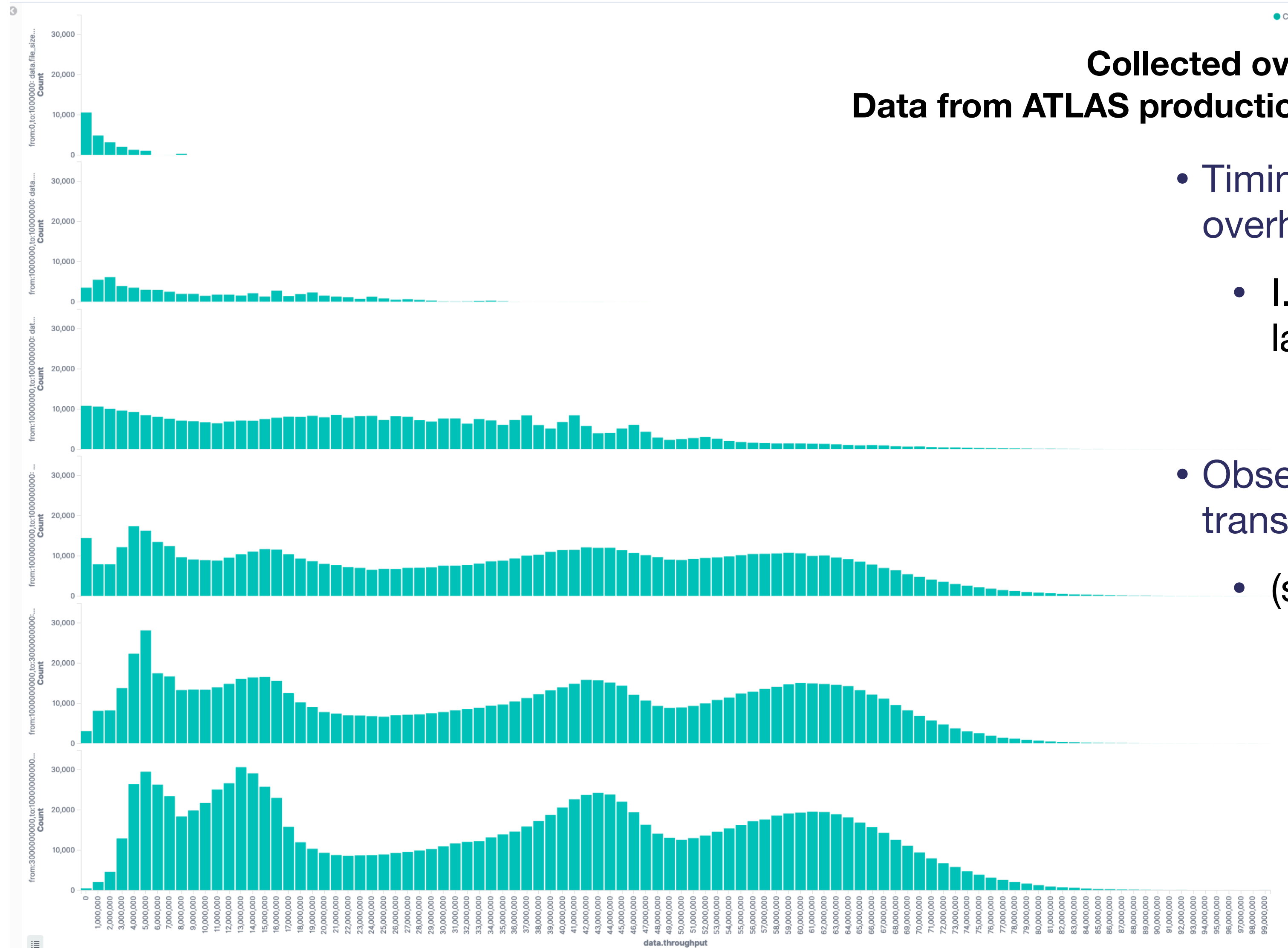
14 April 2021

File transfer speed by Size

Tiny



Big



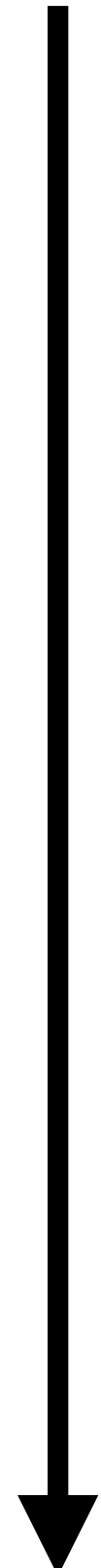
Collected over last few weeks
Data from ATLAS production downloads from Echo to WNs

- Timing likely includes transfer overhead
 - I.e. smaller transfers will have larger fraction of overhead.
- Observe various modes in the transfers
 - (see next slide)

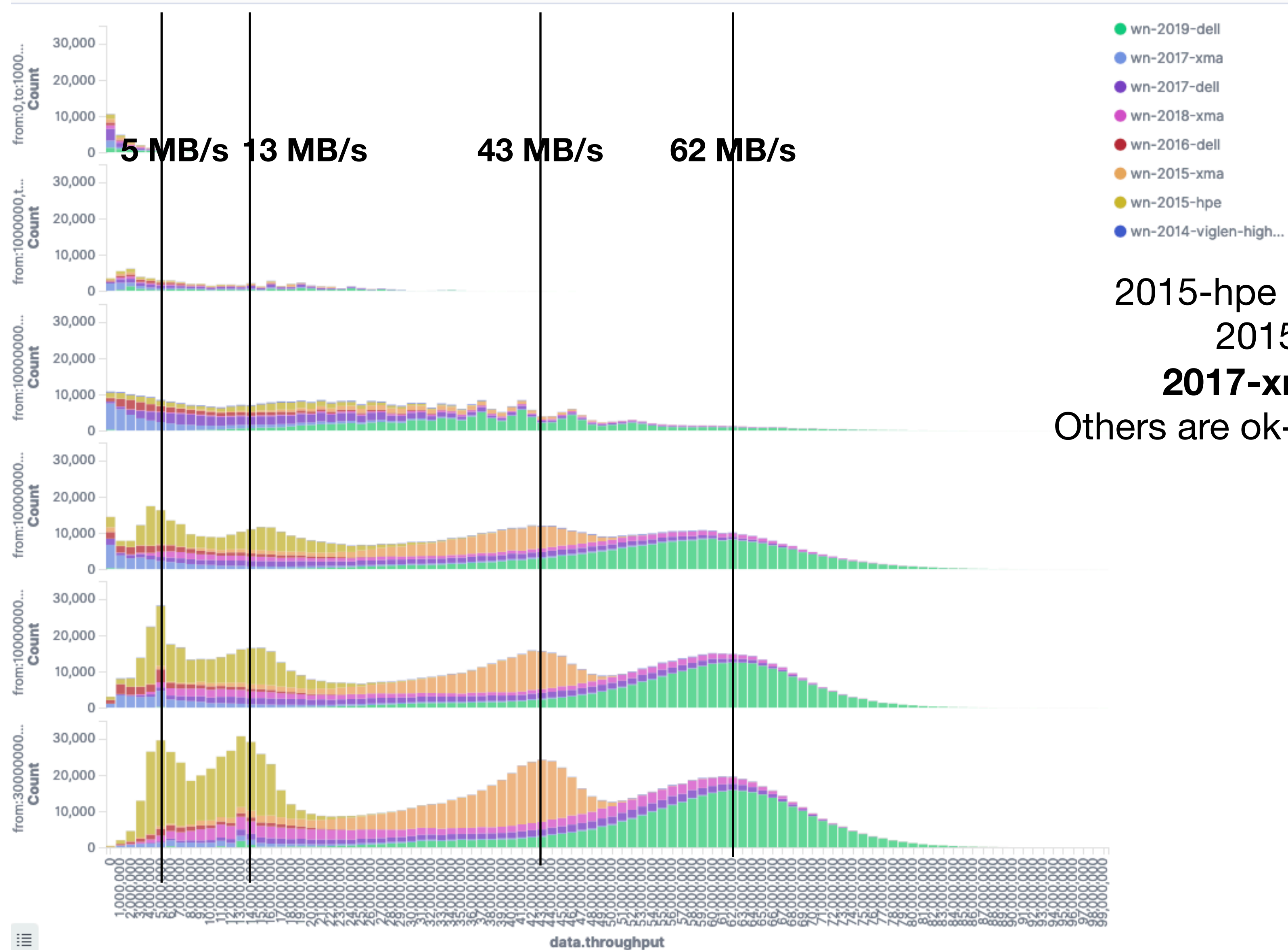


And split by Tranche

Tiny

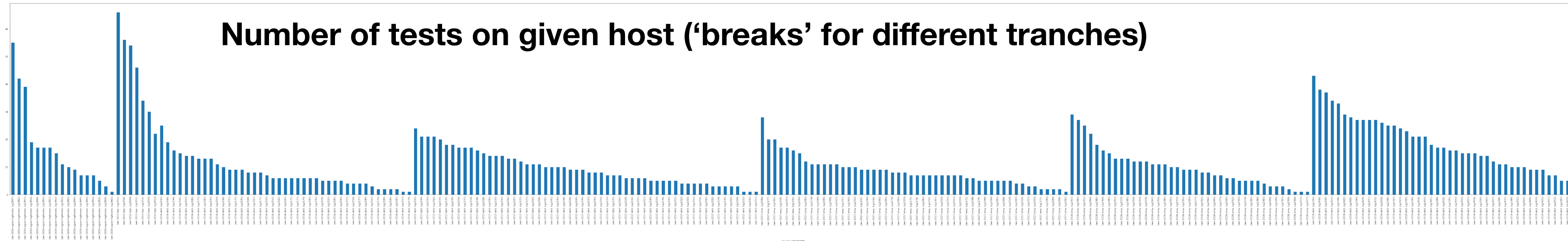


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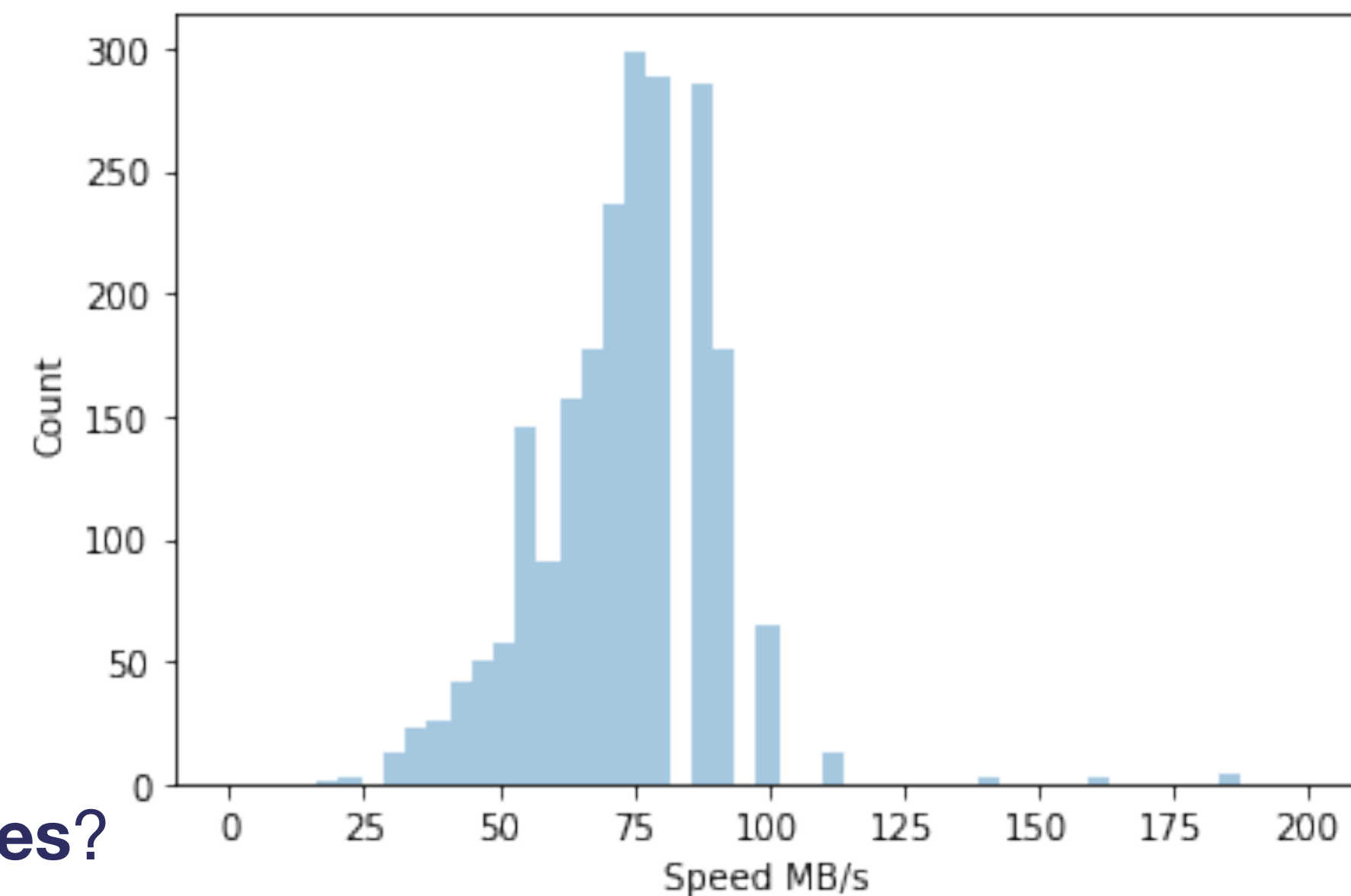


2015-hpe and 2016-dell not great
2015-xma a bit better
2017-xma appears terrible
Others are ok-ish ? (show a broad range)

Attempt own test of transfer speeds



- Main caveat:
 - Uses the external gateways as the proxy/gateway connection; not the WN proxy Xrootd instance
- Reasonable attempts to minimise possible caching
- File is ~ 1GB, transfer with xrdcp
 - Timing includes overheads
- Transfer speed typically between 25 - 100 MB/s
- No control over which nodes chosen (i.e. submitted via batch farm); **preferentially choosing 'emptier' nodes?**



Speed by tranche

- Boxplot of transfer speed by tranche
- No (very) significant deviation across the nodes, and even spread within tranche not 'alarming' ?

- Next steps:

- Check hypothesis regarding whether selected nodes are somehow 'better'
- Run the tests through the WN proxy (If I can work out how)

