

IUMI2022
CHICAGO SEPTEMBER 18-21



IUMI Claims Database

Dave Matcham, International Underwriting Association

PLENARY MEETING, SEPTEMBER 2022



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IUMI claims database - the aim of our joint initiative:

Create a large and consistent loss database (hull and cargo) with standardized data from member companies in order to analyze major losses with respect to loss severity, frequency, location and cause

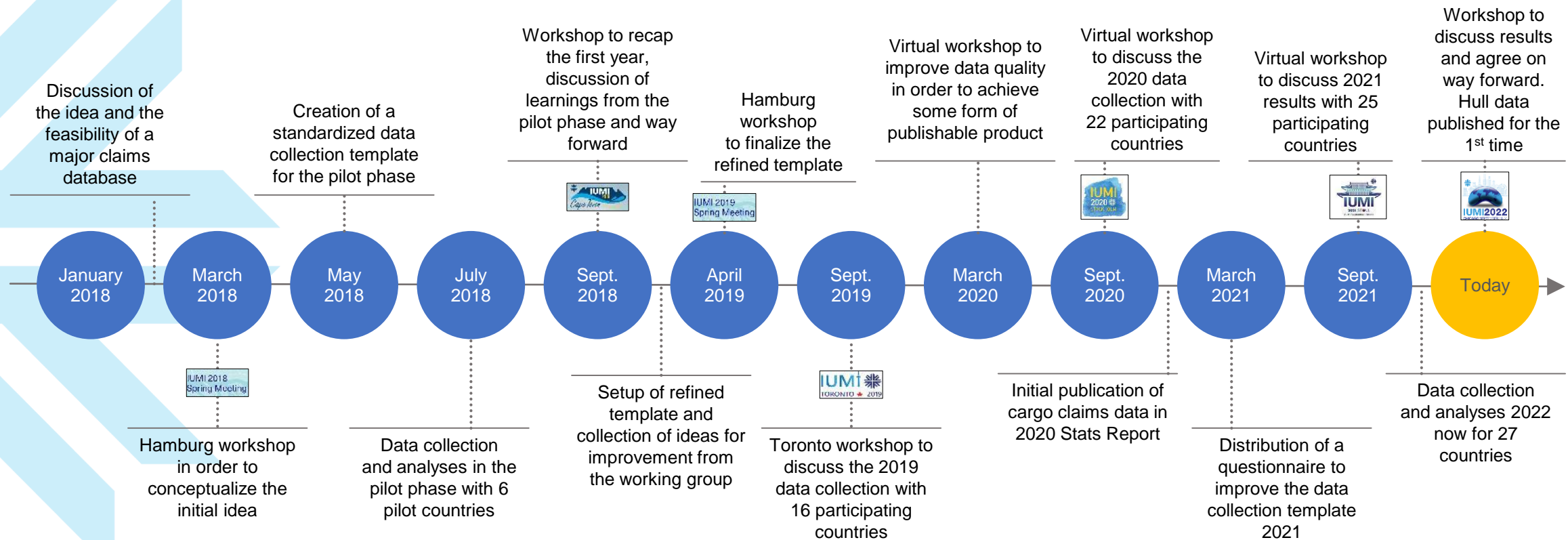
IUMI expresses its sincere thank you to the Boston Consulting Group for the ongoing support in this joint project

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CONSULTING
GROUP





The IUMI claims database was kicked off in 2018 – in 2022 we have already reached 27 participating countries





Our 2022 claims database consists now of 27 countries, after 25 participants in 2021 and 22 participants in 2020

Countries	Working Group Member	Scope of data
Lead: Dave Matcham		
Belgium	Christoffel Cornette	Hull & Cargo
Germany	Jens Jaeger	Hull & Cargo
Japan	Kotaro Miyata	Hull & Cargo
Netherlands	Marko v. Leeuwen	Hull & Cargo
Singapore	Paul H. / Kai W. / Iris N.	Hull & Cargo
Sweden	Mikaela Tamn	Hull & Cargo
Switzerland	Tanja Wilke	Cargo
Greece ¹	Eva Varouchaki	Hull & Cargo
Australia	Aparna Reddy	Hull & Cargo

2018 pilot participants

Countries	Working Group Member	Scope of data
Lead: Dave Matcham		
India	Sanjiv Singh	Hull & Cargo
Italy	Cristina Castellini	Hull & Cargo
Malaysia	Farizah	Hull & Cargo
Poland	Marek Lewandowski	Hull & Cargo
Slovenia ¹	Mateja Lamovšek	Hull & Cargo
Spain	Antonio Guardiola Martínez	Hull & Cargo
Turkey	Ceyda Çaptuğ	Hull & Cargo
United Kingdom ²	Dave Matcham	Hull & Cargo
France	Jean-Paul Thomas	Hull & Cargo

Countries	Working Group Member	Scope of data
Lead: Dave Matcham		
United Arab Emirates ²	Fareed Lutfi	Hull & Cargo
New Zealand	John Lucas	Hull & Cargo
Hong Kong	Selina Lau	Hull & Cargo
Cyprus	Andreas Athanasiades	Hull
Philippines	Michael Rellosa	Hull & Cargo
Croatia	Tanja Stahuljak	Hull
South Africa	Viviene Pearson	Hull & Cargo
Taiwan	Alice Wang	Hull & Cargo
Thailand ³	Nongrat Pithakchatsakun	Hull & Cargo

New participant³

1. Greece and Slovenia reported in 2022 no new claims to submit
2. United Kingdom and United Arab Emirates did not participate in the 2022 data collection, but are expected / claimed to be part of the 2023 data collection again
3. Thailand joined the initiative in 2022 with non-standardized data and is expected to adopt the standard format in 2023



In total, we have collected ~11,000 claim records from 27 countries that sum up to ~\$17.3B of total losses

Countries



Hull



Cargo



Data fields

- Date of accident
- Underwriting year
- Loss amount
- Type of loss
- Location of loss
- Event name
- IMO number
- Vessel name
- Vessel type
- Comments

- Date of accident
- Underwriting year
- Loss amount
- Type of loss
- Location of loss
- Event name
- IMO number
- Vessel name
- Mode of transport
- Type of cargo
- Standard industrial classification
- Comments

Cumulated losses

~\$10.4b
~7,100 observations

+29%¹

~\$6.9b
~ 3,900 observations

+17%¹

1. Based on cumulated losses, YoY growth

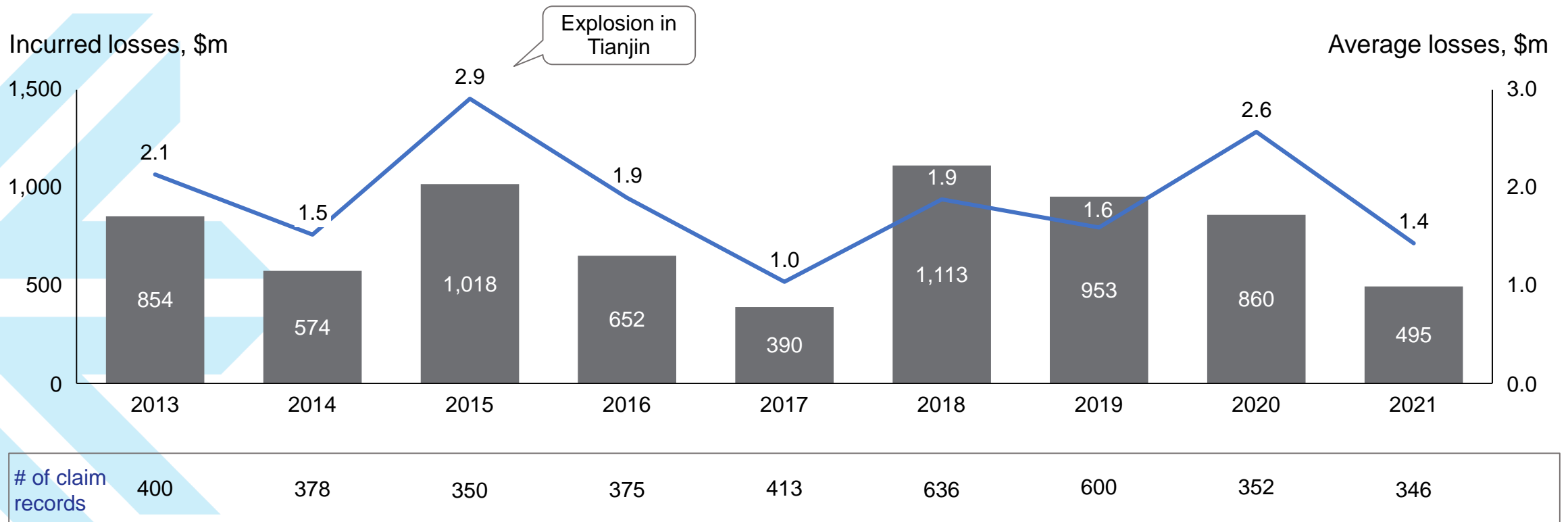


Examples of analyses based on the 2021 data submission for Cargo





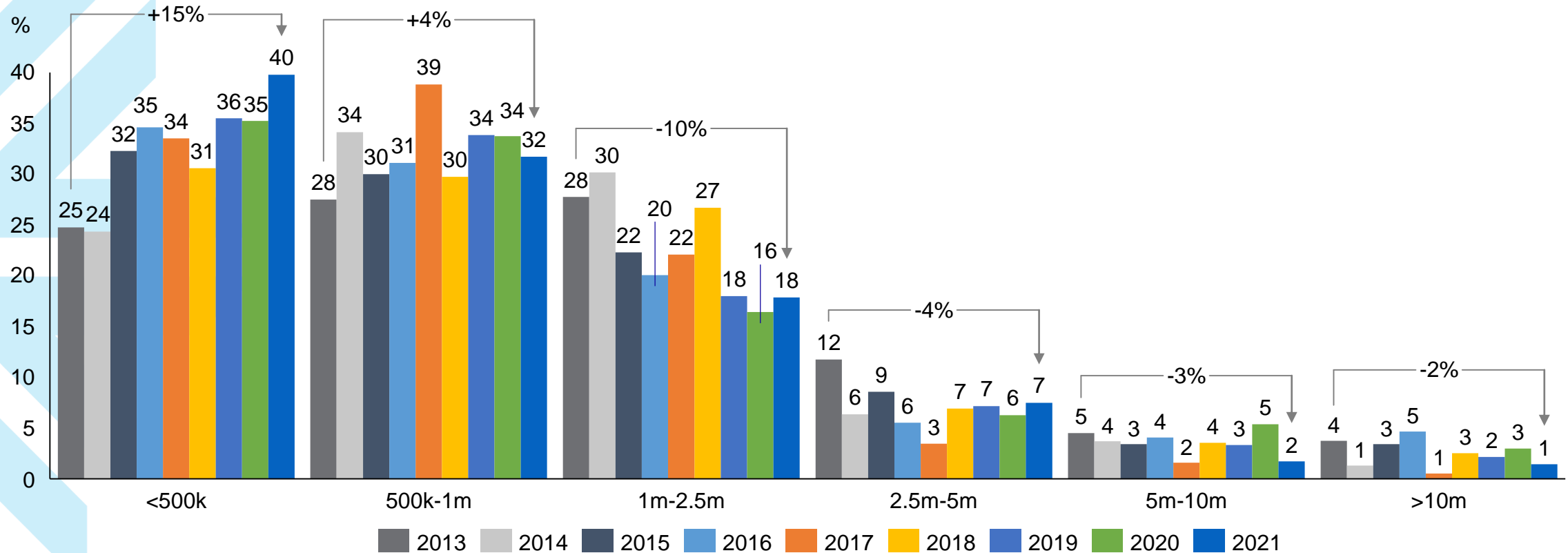
Cargo: Incurred losses and average losses in the period 2013-2021



Note: More than 99% of all observations can be used for analysis
 Source: IUMI Major Claims Database



Cargo: Normalized¹ number of losses across different loss size buckets in the period 2013-2021



1. Number of losses divided by number of claim records for every year

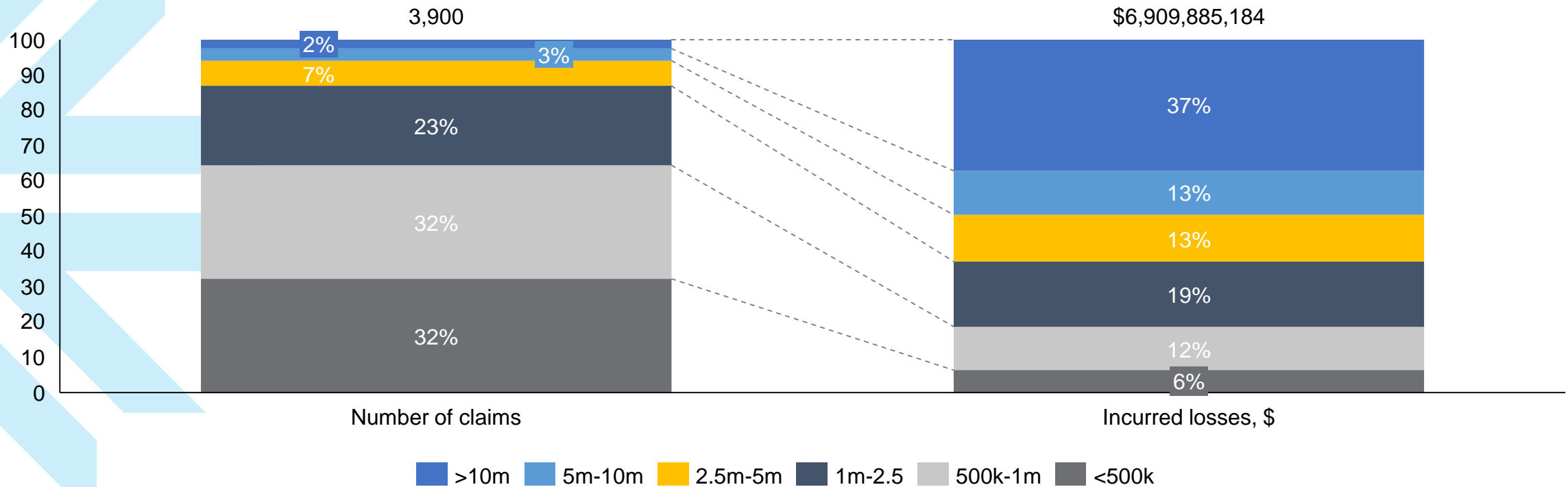
Note: More than 99% of all observations can be used for analysis; Losses are categorized by individual claim records rather than aggregates / events

Source: IUMI Major Claims Database



Cargo: Number of claims and incurred losses by size categories for the 2013-2021 accident years

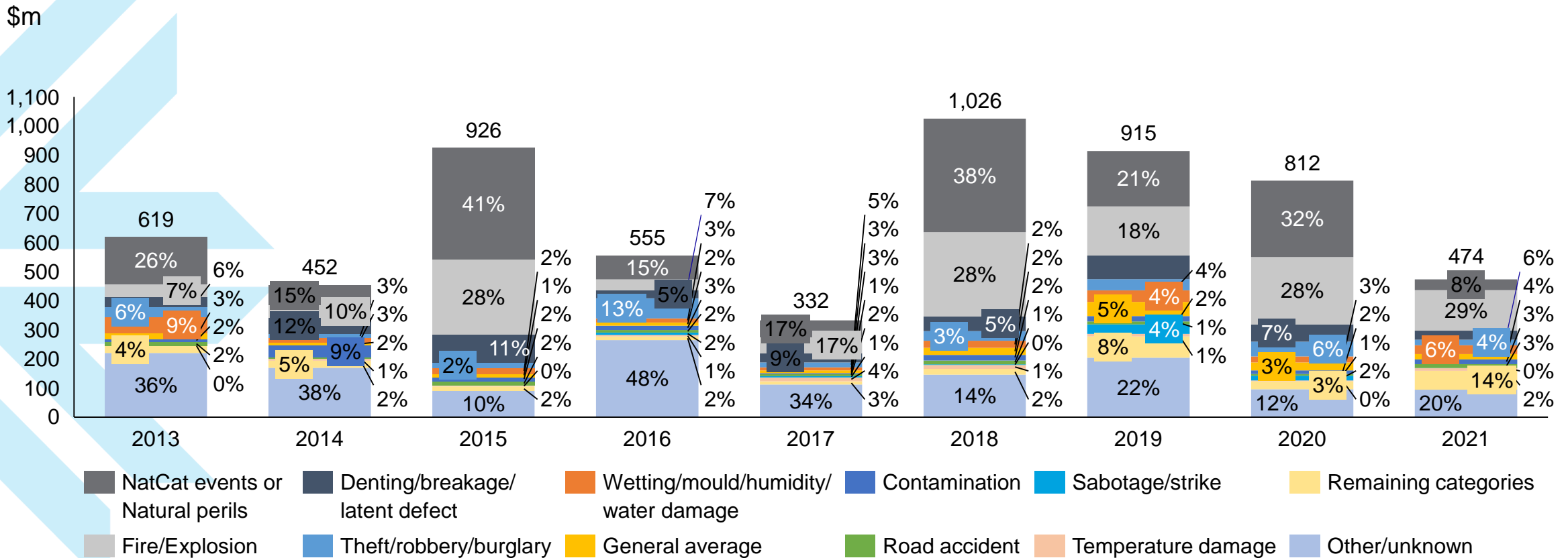
Distribution of claims by claim size categories, %



Note: 99% of all observations can be used for analysis, Losses are categorized by individual claim records rather than aggregates / events
 Source: IUMI Major Claims Database



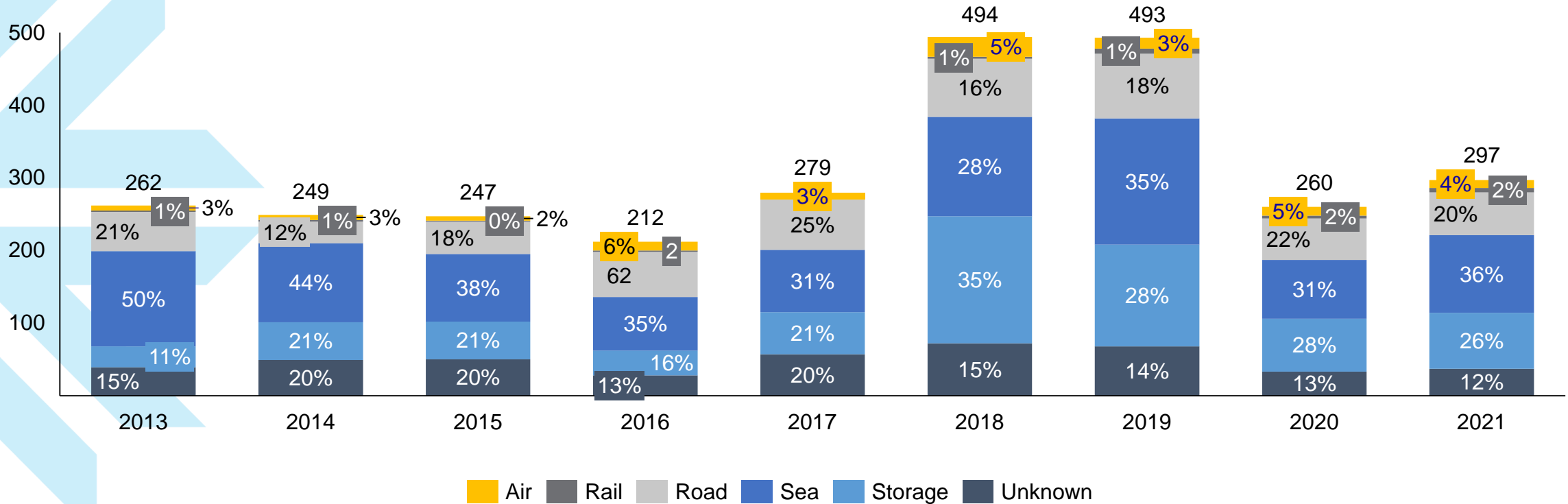
Cargo: Top 10 major losses by type of loss in the period 2013-2021, \$m



Note: Due to manual mapping work about 89% of all observations can be used for analysis (compared to 80% otherwise); Remaining categories includes minor types of losses (e.g. piracy)
 Source: IUMI Major Claims Database



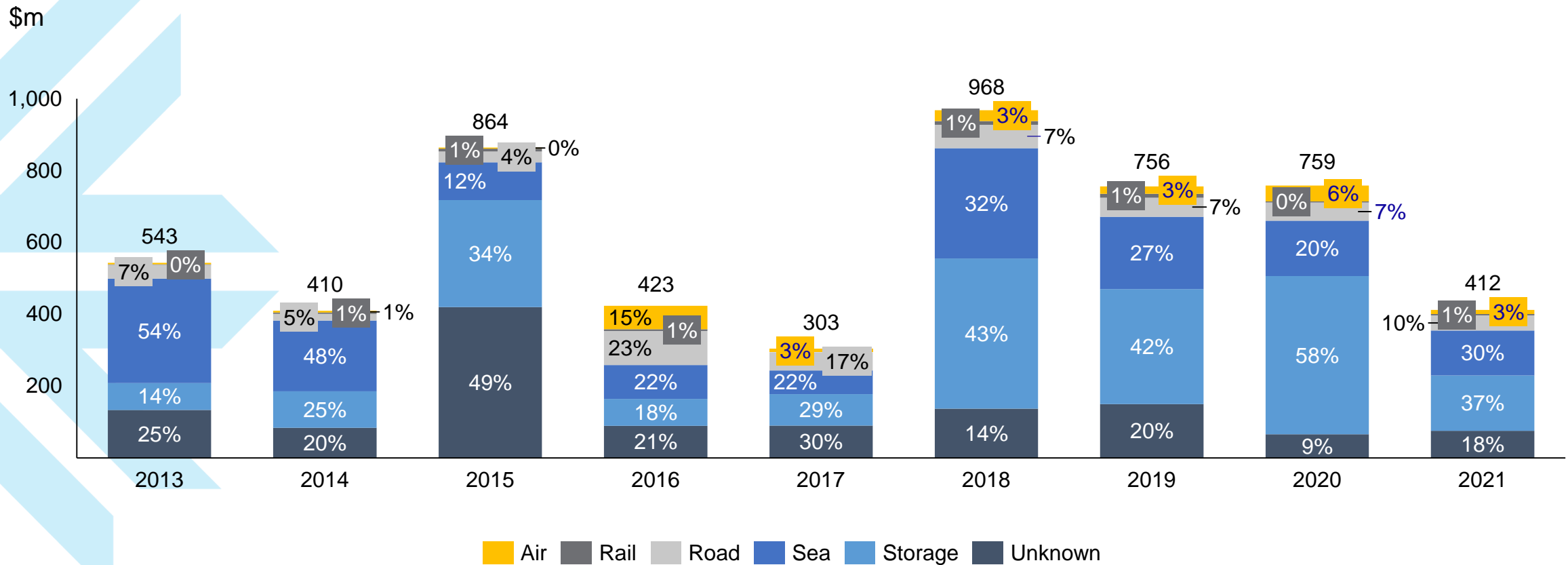
Cargo: Number of losses by mode of transport in the period 2013-2021



Note: Due to manual mapping work about 61% of all observations can be used for analysis (compared to 57% otherwise)
 Source: IUMI Major Claims Database



Cargo: Incurred losses by mode of transport in the period 2013-2021, \$m

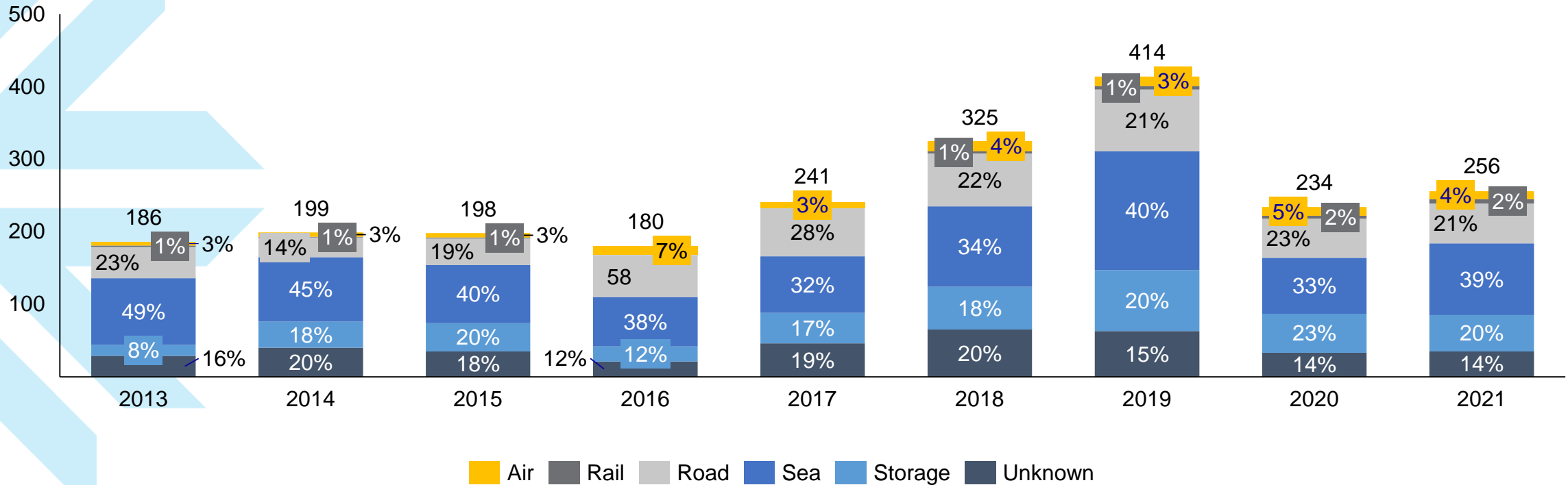


Note: Due to manual mapping work about 61% of all observations can be used for analysis (compared to 57% otherwise)
 Source: IUMI Major Claims Database



Cargo: Number of losses by mode of transport without NatCat events or natural perils in the period 2013-2021

ex NatCat

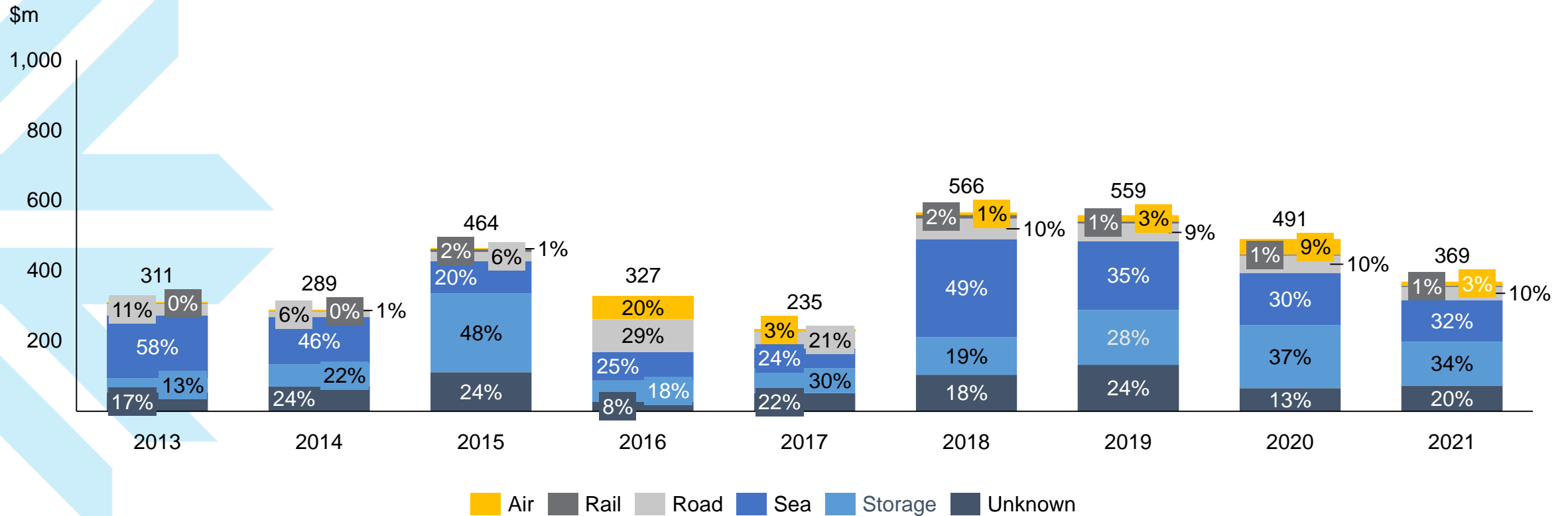


Note: Due to manual mapping work about 61% of all observations can be used for analysis (compared to 57% otherwise)
 Source: IUMI Major Claims Database



Cargo: Incurred losses by mode of transport without NatCat events or natural perils in the period 2013-2021, \$m

ex NatCat



Note: Due to manual mapping work about 61% of all observations can be used for analysis (compared to 57% otherwise)
 Source: IUMI Major Claims Database

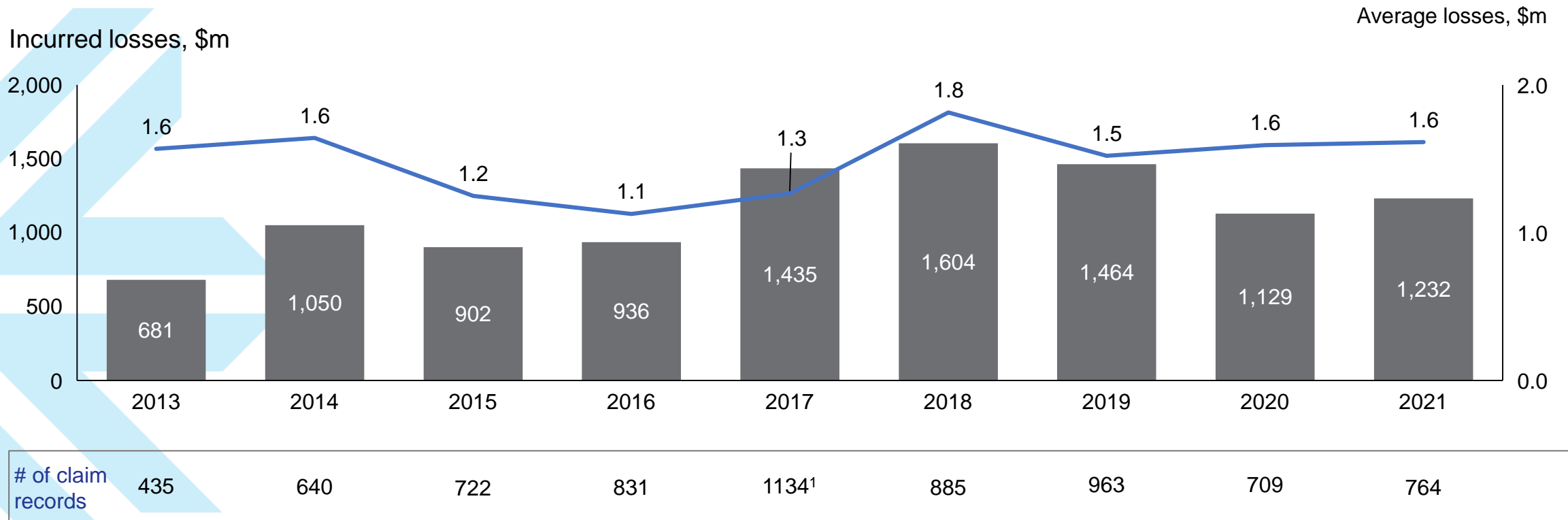


Examples of analyses based on the 2021 data submission for Hull





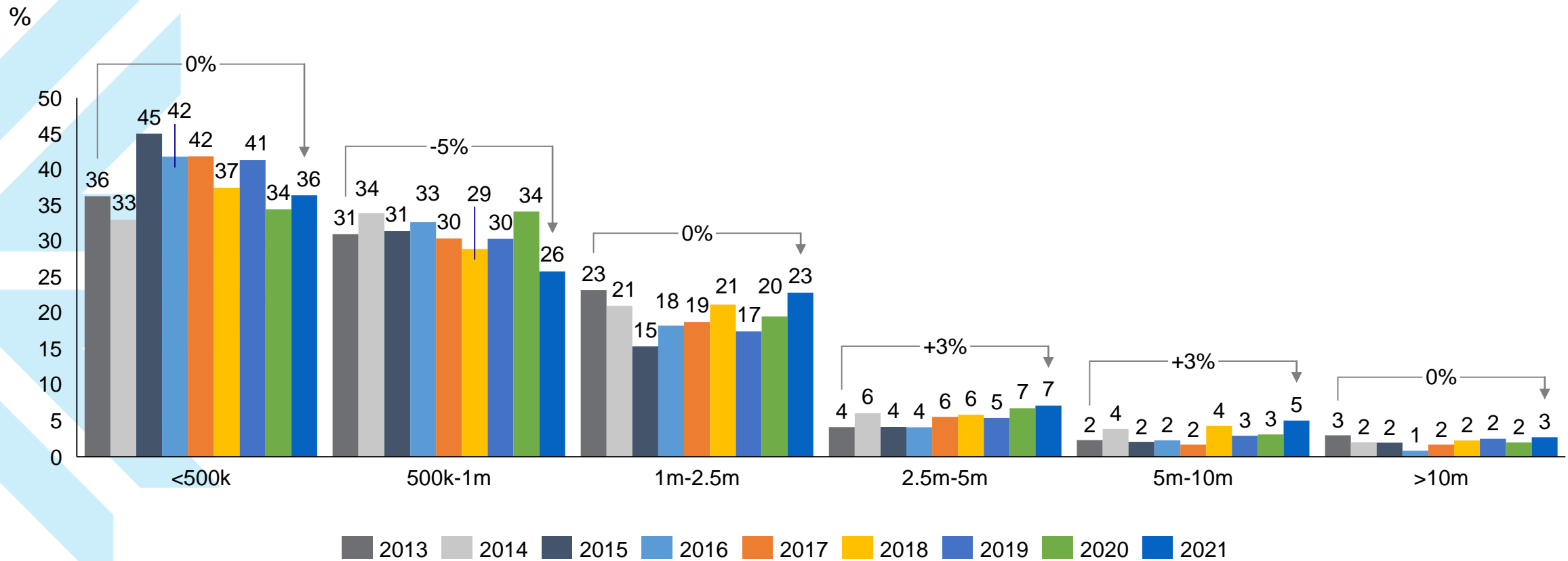
Hull: Incurred losses and average losses in the period 2013-2021, \$m



Note: More than 99% of all observations can be used for analysis
 1. Number of claims in 2017 seems to be an outlier and therefore preliminary / under investigation
 Source: IUMI Major Claims Database



Hull: Normalized¹ number of losses across different loss size buckets in the period 2013-2021



1. Number of losses divided by number of claim records for every year

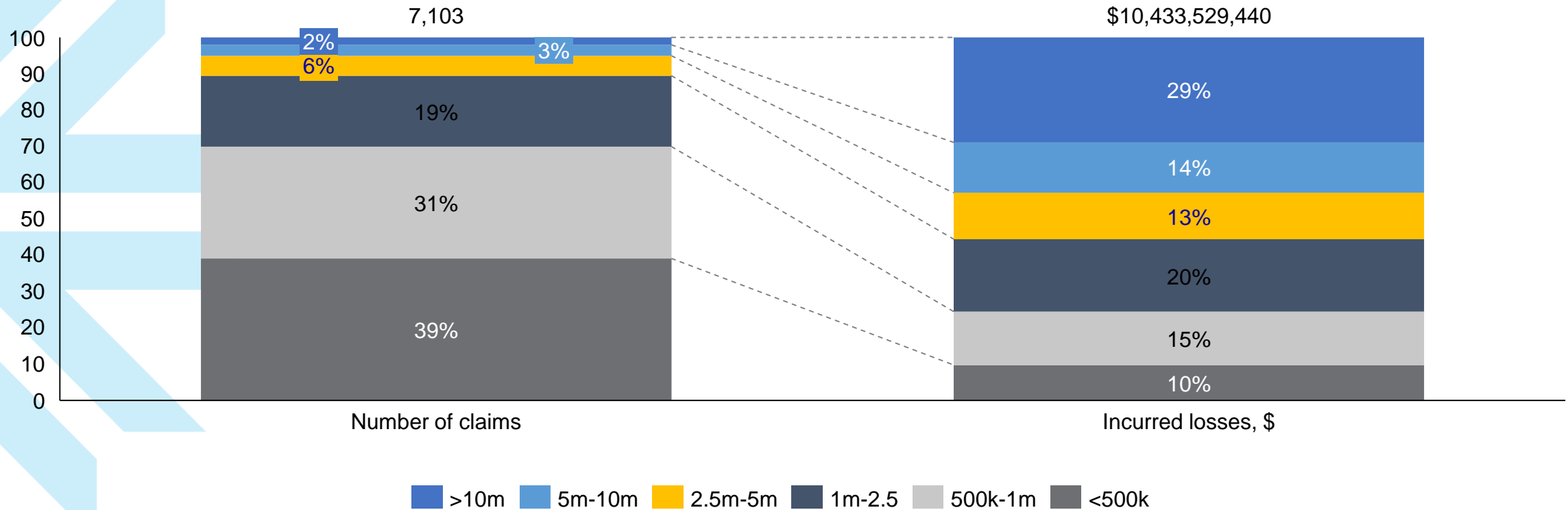
Note: More than 99% of all observations can be used for analysis, Losses are categorized by individual claim records rather than aggregates / events

Source: IUMI Major Claims Database



Hull: Number of claims and incurred losses by size categories for the 2013-2021 accident years

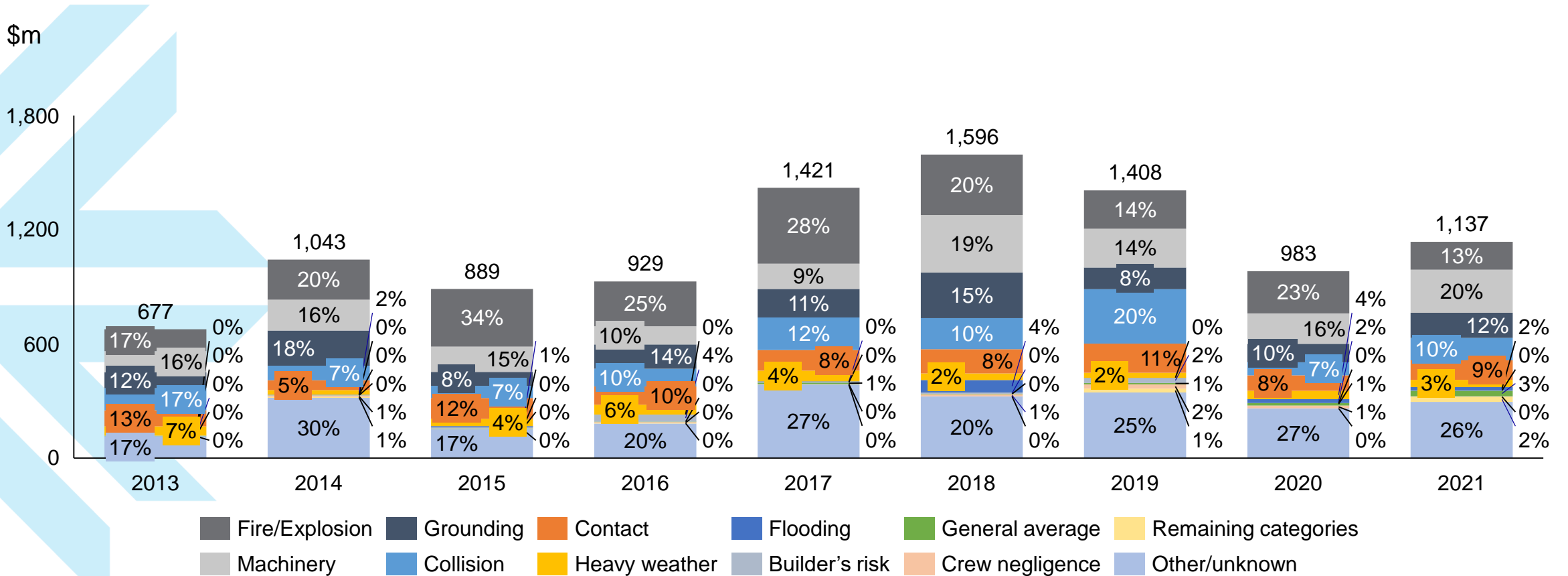
Distribution of claims by claim size categories



Note: 99% of all observations can be used for analysis, Losses are categorized by individual claim records rather than aggregates / events
Source: IUMI Major Claims Database



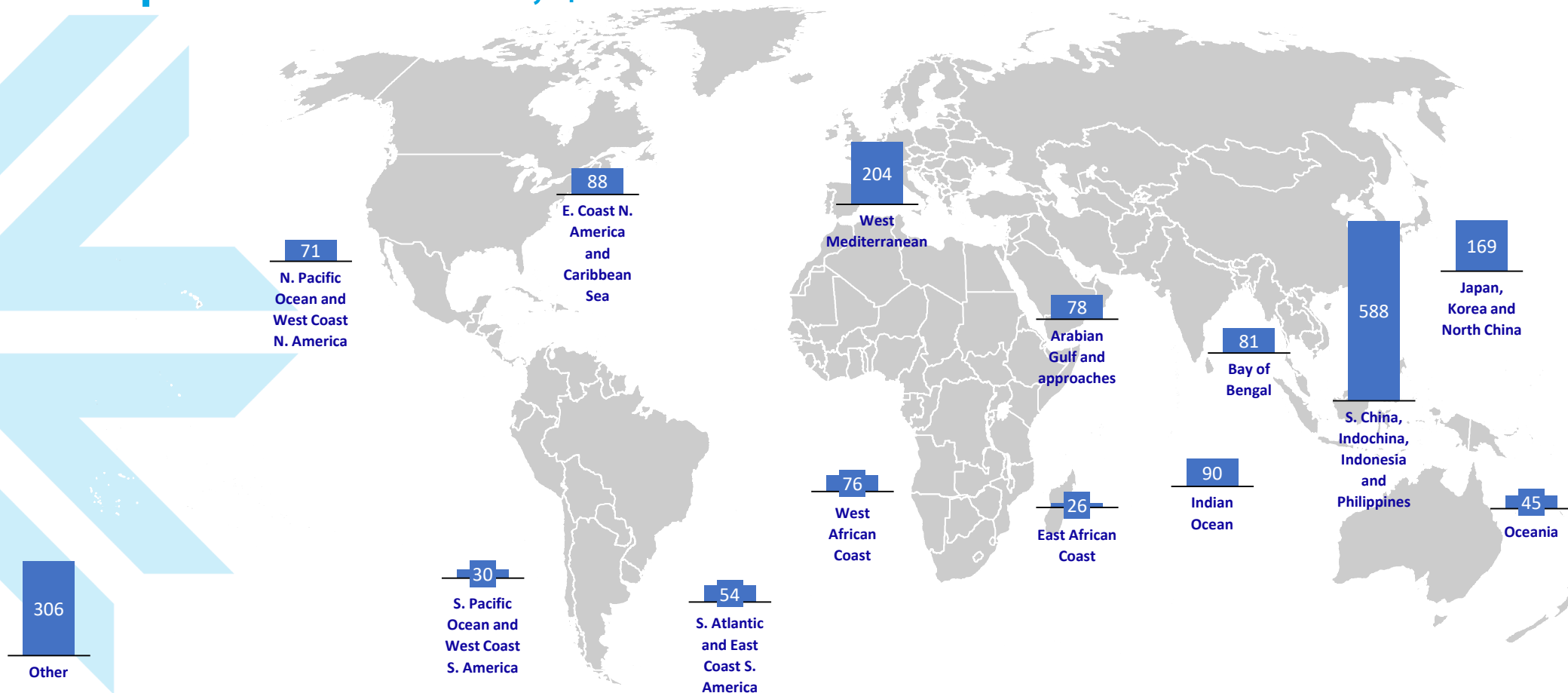
Hull: Top 10 major losses by type of loss in the period 2013-2021, \$m



Note: Due to manual mapping work about 98% of all observations can be used for analysis (compared to 77% otherwise), Remaining categories include minor types of losses (e.g. cyber); number and frequency of machinery claims are under investigation – especially with respect to reporting biases and a different distribution in the other/unknown category
 Source: IUMI Major Claims Database



Hull: Incurred losses by loss location for ocean voyage in the period 2013-2021, \$m



Note: Due to manual mapping work about 25% of all observations can be used for analysis (compared to 20% otherwise); new and more granular region reporting will be used from 2021 onwards
 Source: IUMI Major Claims Database



Executive Summary

We have received hull and/or cargo data from 27 countries:

- About 11,000 observations covering the period 2013-2022
- Amounting to total losses of \$17.3b

All participating associations are using the new template, leading to improved data quality and consistency across countries, particularly for new data, and for the location of loss

Cargo results keep showing solid maturity, reflecting insurers' books. We observe the following trends:

- The share of lower loss size buckets (<\$500K) increases steadily
- NatCat events, Fire/Explosion, and Denting/Breakage/Latent Defect are the most important types of losses

Hull results are now mature with an improvement in data quality. We observe the following trends:

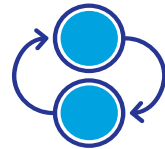
- Average losses have stabilized over the last three years at ≈\$1.6m
- Losses between \$2.5m and \$10m account for 12% of total losses in 2021, while they accounted for only 6% in 2013
- Fire/Explosion, Machinery, and Grounding are the most important types of losses



**Proposed
next steps**



Ongoing publication of analyses of the IUMI claims database



Invite further associations to participate in the 2023 data collection