



2026年 第22周市场周报

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本周话题 WEEKLY TOPIC

租船AI是一款利用大模型技术自动整理船货盘邮件、快速检索公开/私密船盘与货盘，并帮助您更高效发布信息的智能工具。
Chartering AI is an AI-powered tool that automatically organises tonnage and cargo circulars, enables fast search and filtering, and helps you publish open tonnage or cargo requirements with ease.

主要用途Key benefits:

- 01 每天收到大量船货盘邮件，阅读工作量大，找船特别费时。HiFleet租船AI使用大模型技术帮您整理船货盘邮件，能高效检索船盘与货盘。
Automatically structures tonnage/cargo emails for efficient review.
- 02 按区域、港口附近智能检索船盘与货盘。Smart search by region or port proximity.
- 03 自动识别发件人角色（船东/OP/经纪人）。Identifies sender type (Owner/Operator/Broker).
- 04 标注 PSC 风险、制裁风险、吊机、舱口等关键技术信息。Tags key technical & risk fields (PSC, sanctions, cranes, hatch specs, etc.).
- 05 支持公开与私密两种模式，适用于不同公司需求。Supports both Public and Private modes for different confidentiality needs.
- 06 按港口多维度筛选预抵船舶，快速锁定目标船舶。Expected Arriving Vessels with multi-dimensional filters for quick targeting.

HiFleet

LLM AI Shipping Chartering Tool


Expected Arrivals Screening

Public or private service modes

AI analysis of cargo & tonnage offers chartering emails

Fast search & filtering of cargo/tonnage offers

Search cargo & tonnage offers by port & its nearby

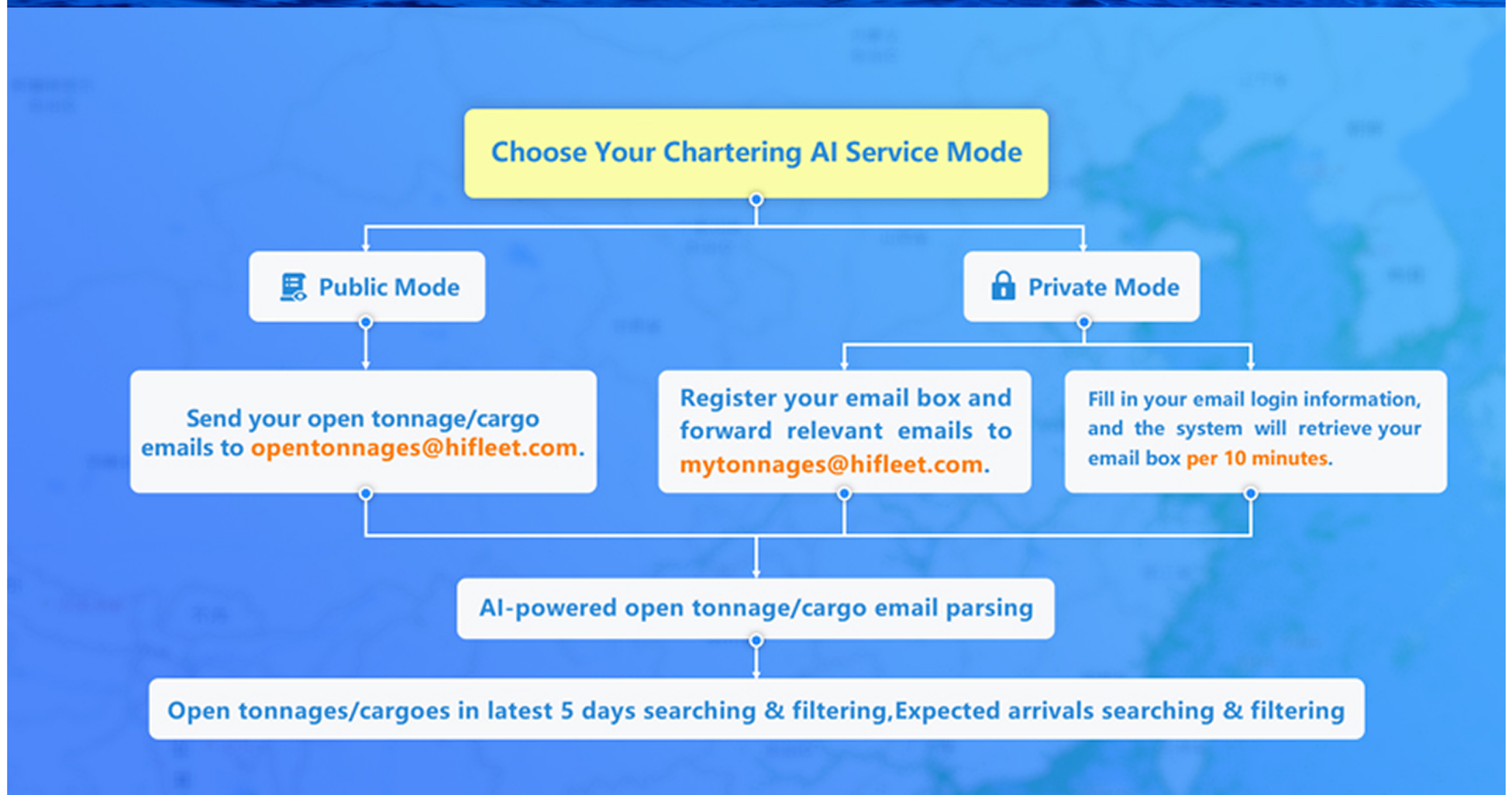


Basic authenticity screening for tonnage offers

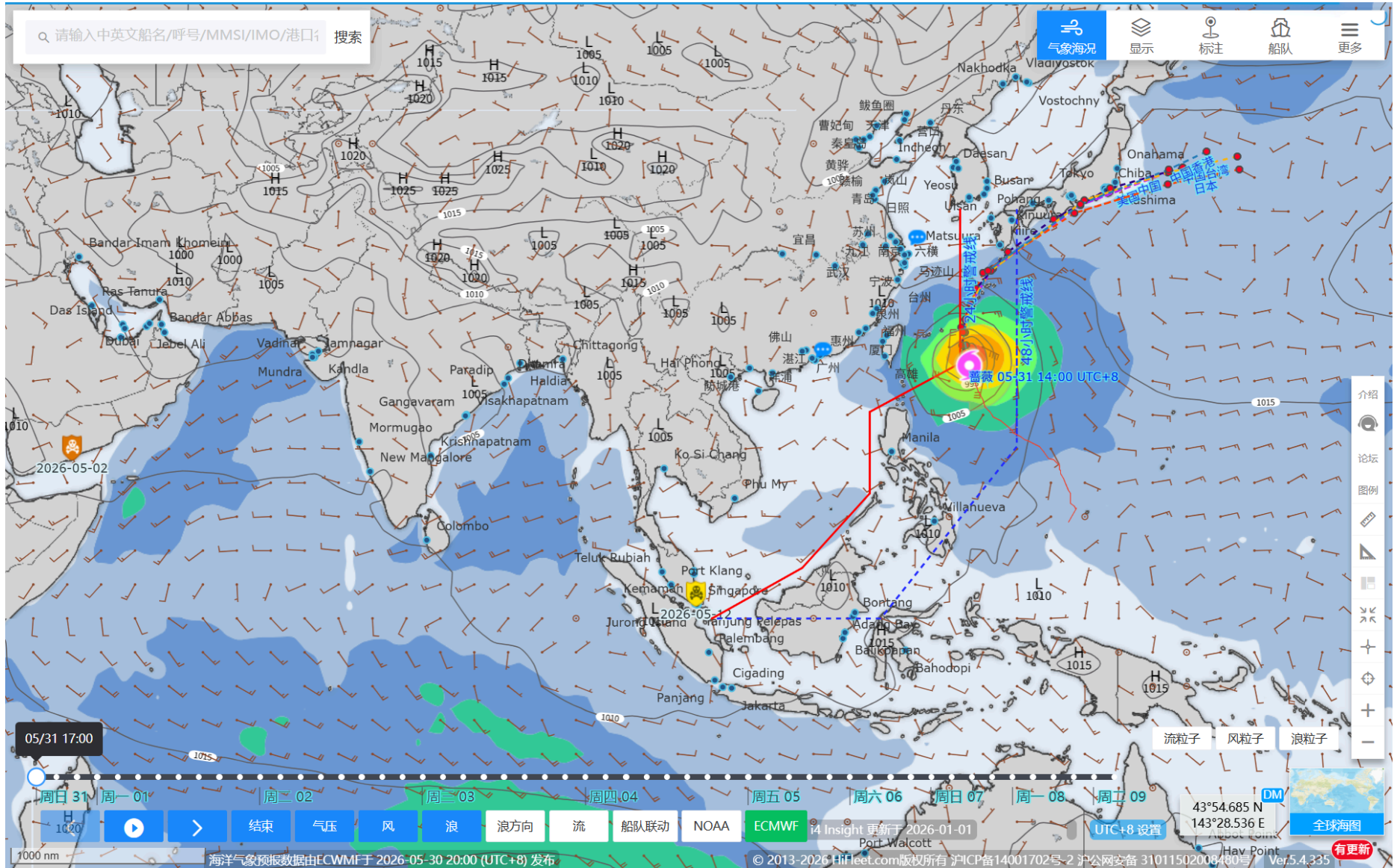
Sanctions-risk alerts for tonnage offers

Basic analysis of 3-year vessel performance (speed/consumption)

Port-of-call country tags (e.g., CIS, AU, BH)



第一部分 航运安全 SHIPPING SAFETY



航行警告 Navigation Warning

HiFleet显示全球目前有效的航行警告有1422个，远东和环加勒比海居多，请相关水域船舶注意航行警告内容。There are currently 1422 navigational warnings in effect around the ocean on hiFleet with the Far East and around the coastal of Caribbean Sea still being the majority. Please pay attention to the navigational warnings in relevant waters.

航海气象 Meteorology

未来一周中国渤海海域风力4-5级，中浪；黄海风力4-5级，有中浪；东海风力4-7级，有巨浪；台湾海峡4-6级风，有中浪；南海大部海域风力3-4级，中浪。台风蔷薇于5月30日晚间形成，正朝日本九州四国一带移动。The coming week the wind in Bohai Sea is moderate with moderate sea. Yellow Sea the wind is moderate with moderate sea. And China East Sea becomes strong with very rough sea in the middle of the week. The wind in the Taiwan Strait is moderate with moderate sea. In most of the South China Sea the wind is moderate with moderate sea. Typhoon "JIANGMI" formed on the evening of May 30th and is currently moving towards the areas of Kyushu and Shikoku in Japan.

海盗事件 Piracy

最近一周没有海盗事件报告。There is no piracy report for the latest week.

海上事件 Marine Incidents

2026年5月26日周二，一艘油轮在阿拉伯海遭到袭击，这一事件进一步加剧了人们对于伊朗与美国之间和平谈判能迅速取得突破的希望破灭的担忧。这艘油轮的船长报告称，在阿曼马斯喀特以东 60 海里（约 97 公里）处发生了爆炸。On Tuesday, May 26, 2026, an oil tanker was attacked in the Arabian Sea. This incident further exacerbated people's concerns that the hope for a rapid breakthrough in the peace negotiations between Iran and the United States would be dashed. The captain of the oil tanker reported that an explosion occurred 60 nautical miles (approximately 97 kilometers) east of Muscat, Oman.

其它 Others

没有 Nil

备注 Remark

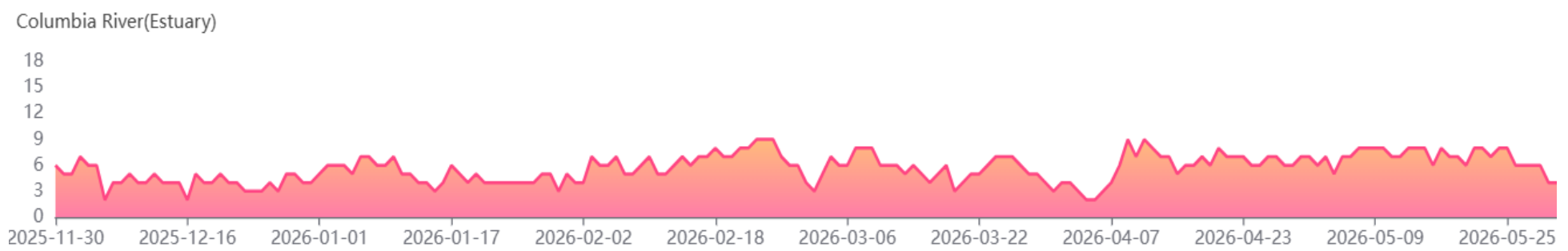
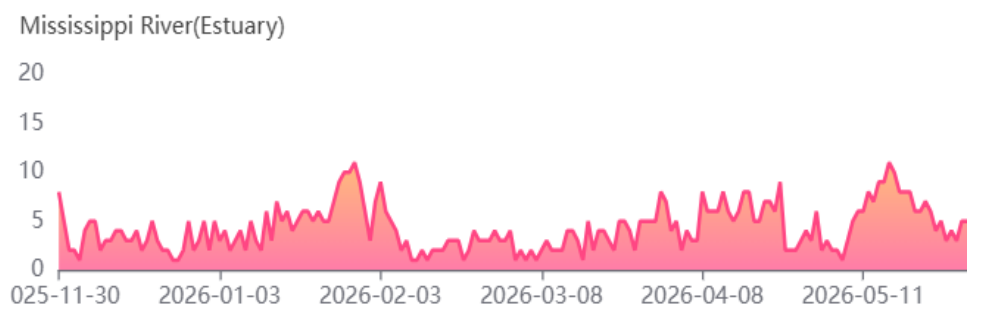
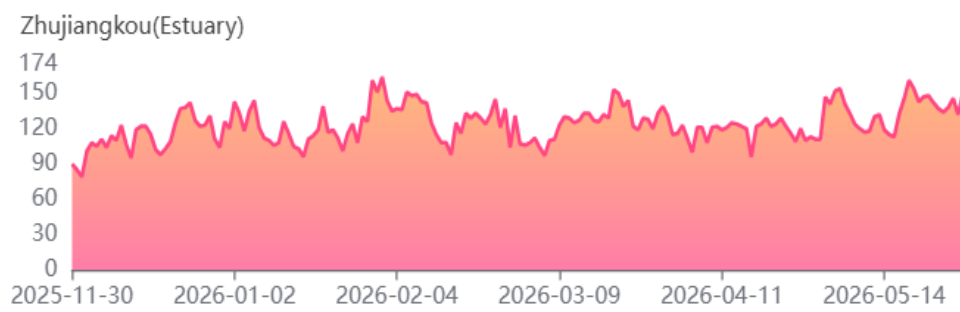
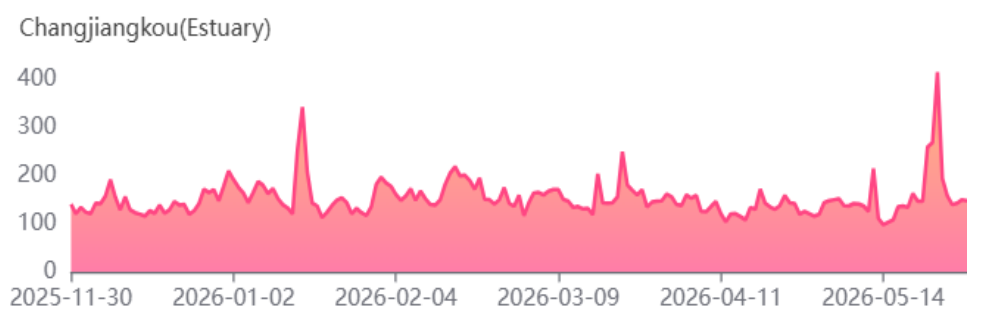
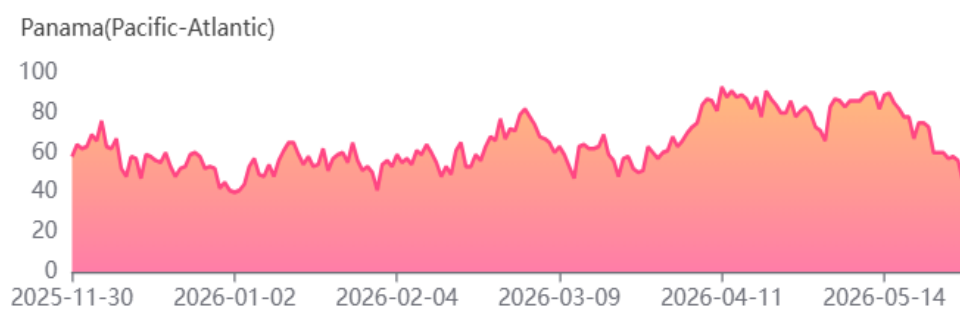
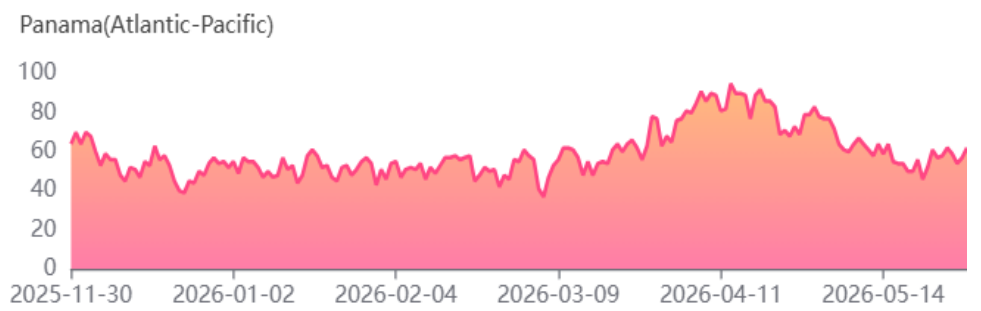
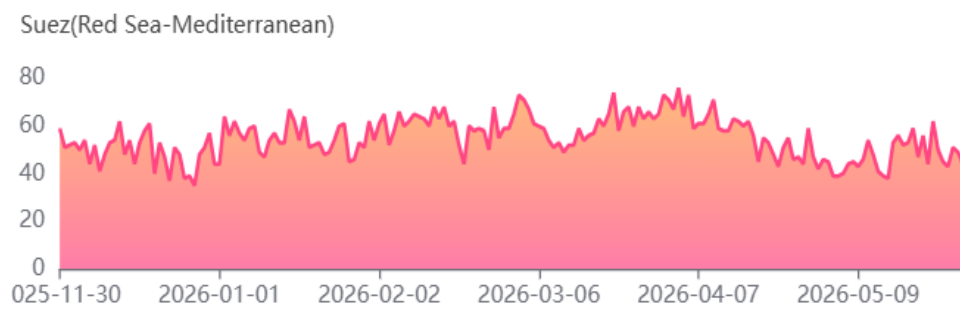
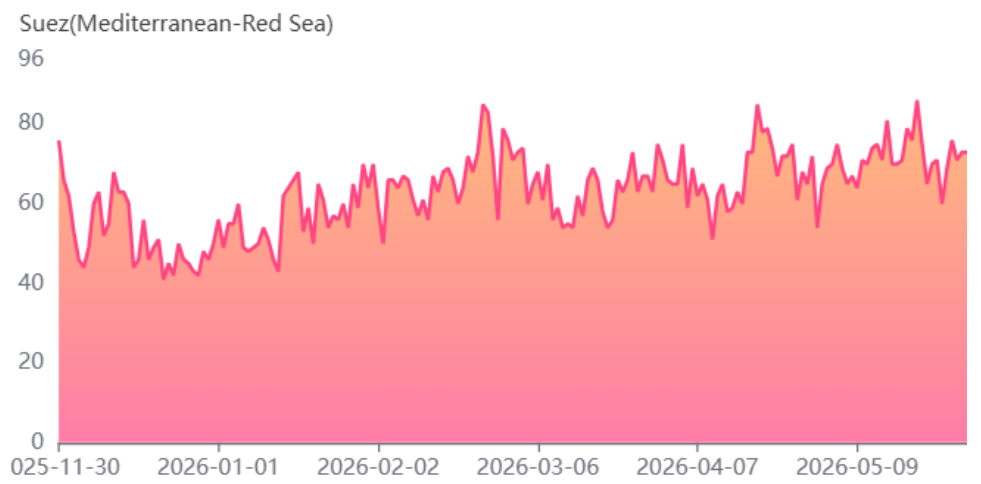
本报告数据截止时间为2026年5月31日北京时间17点；所有数据和或观点仅供参考，在任何情况下本公司及其员工不承担任何风险。The data deadline for this report is Beijing time 17 hours on May 31st of 2026; All data and/or opinions are for reference only and under no circumstances do the Company and its employees assume any risk.

第二部分 航运数据 SHIPPING DATA

最近一周船舶运河/河口锚地等待数量

Latest Week Update Vessel Waiting Numbers Information in Anchorages of Canals and Rivers

Canal/Riv.	P.N.	M.N.	WoW	MoM
Suez.Red	35	1360	-50	-234
Miss.Riv.	5	157	-24	12
CJK	148	4647	226	791
Pa.Atlan.	62	1722	47	-662
Colum.Riv.	4	201	-11	15
Suez.Med.	73	2076	-29	140
Pa.Pac.	51	2187	-141	-206
ZJK	107	3925	-86	455

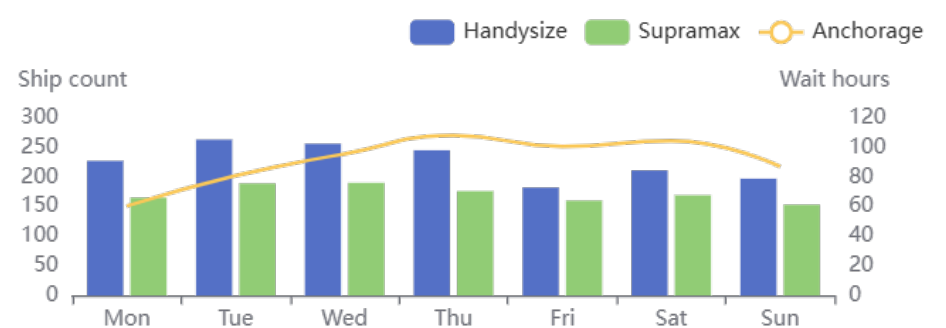


(P.N.-Present Number; M.N.-Month Number; WoW-Week on Week; MoM-Month on Month)

最近一周中国区域超大灵便型散货船和灵便型散货船舶锚泊数量和平均锚泊时长

Latest Week Update for Supra and Handy Num. and Waiting Time Information in Anchorages of China

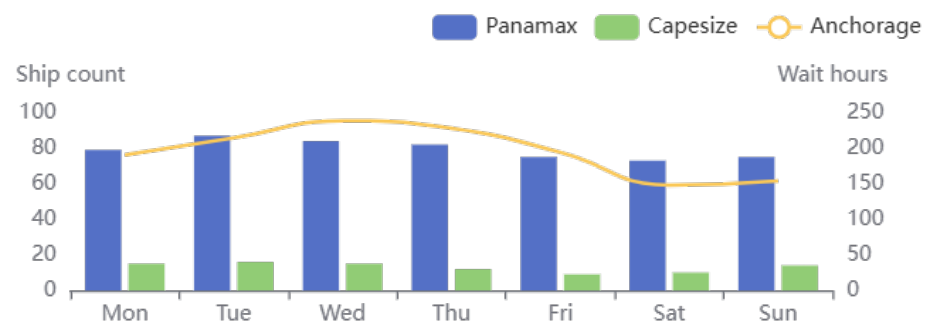
Type	M	T	W	Th	F	Sat	Sun
HDY	227	263	256	245	182	211	197
SMX	165	189	190	176	160	169	153
WT.h.	60.4	80.8	95.6	108	100.55	104.5	87



最近一周巴西区域好望角型和巴拿马型散货船舶锚泊数量和平均锚泊时长

Latest Week Update for Capesize and Panamax Num. and Waiting Time Information in Anchorages of Brazil

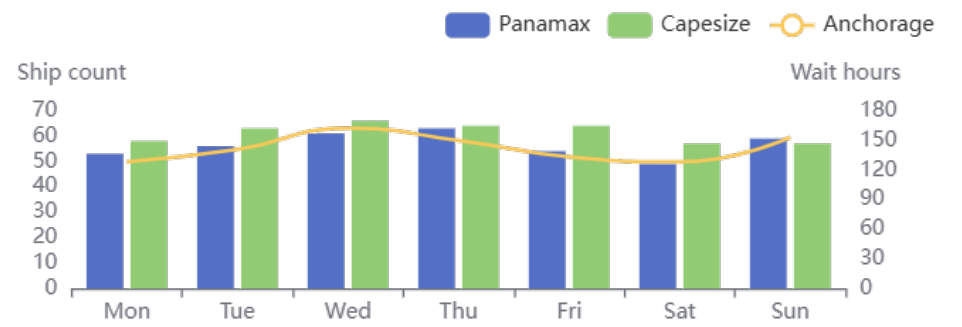
Type	M	T	W	Th	F	Sat	Sun
Pan.	79	87	84	82	75	73	75
Cap	15	16	15	12	9	10	14
WT.h.	190.5	214.5	238.5	228	194.2	148.2	154



最近一周澳大利亚区域好望角型和巴拿马型散货船舶锚泊数量和平均锚泊时长

Latest Week Update for Capesize and Panamax Num. and Waiting Time Information in Anchorages of Australia

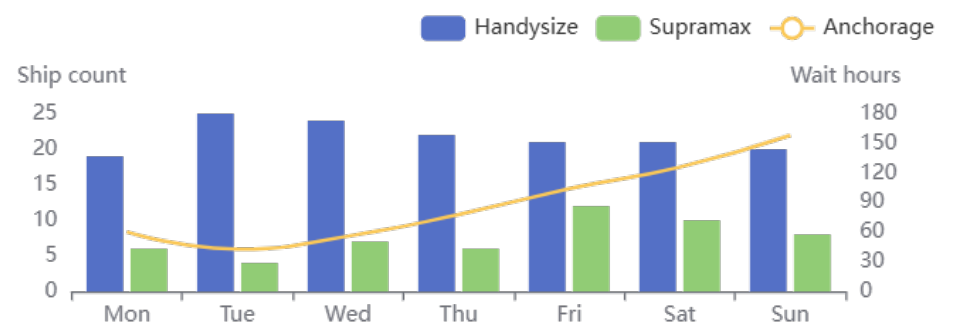
Type	M	T	W	Th	F	Sat	Sun
Pan.	53	56	61	63	54	49	59
Cap	58	63	66	64	64	57	57
WT.h.	128.2	140.8	162.3	149.7	133.3	128	153



最近一周黑海区域超大灵便型散货船和灵便型散货船舶锚泊数量和平均锚泊时长

Latest Week Update for Supra & Handy Num. and Waiting Time Information in Anchorages of Black Sea

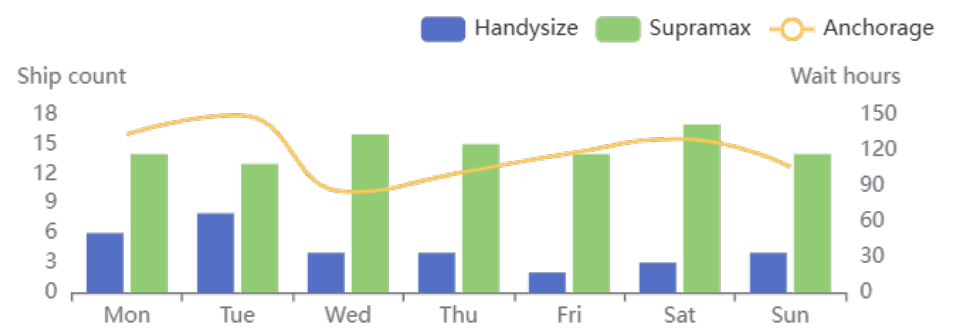
Type	M	T	W	Th	F	Sat	Sun
HDY	19	25	24	22	21	21	20
SMX	6	4	7	6	12	10	8
WT.h.	60.3	42.8	56	77.8	104	125.8	158



最近一周美湾区域超大灵便型散货船和灵便型散货船舶锚泊数量和平均锚泊时长

Latest Week Update for Supra and Handy Num. and Waiting Time Information in Anchorages of US Gulf

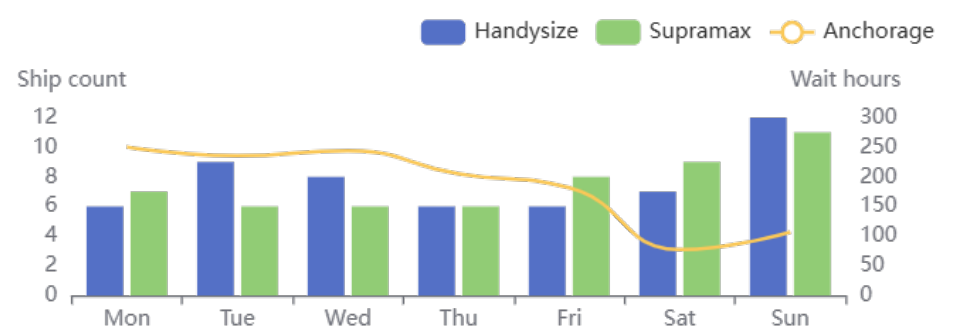
Type	M	T	W	Th	F	Sat	Sun
HDY	6	8	4	4	2	3	4
SMX	14	13	16	15	14	17	14
WT.h.	133.4	149.6	84.8	100.7	117.3	129.5	106



最近一周拉普拉特河区域超大型散货船和灵便型散货船舶锚泊数量和平均锚泊时长

Latest Week Update for Supra and Handy Num. and Waiting Time Information in Anchorages of Plate River

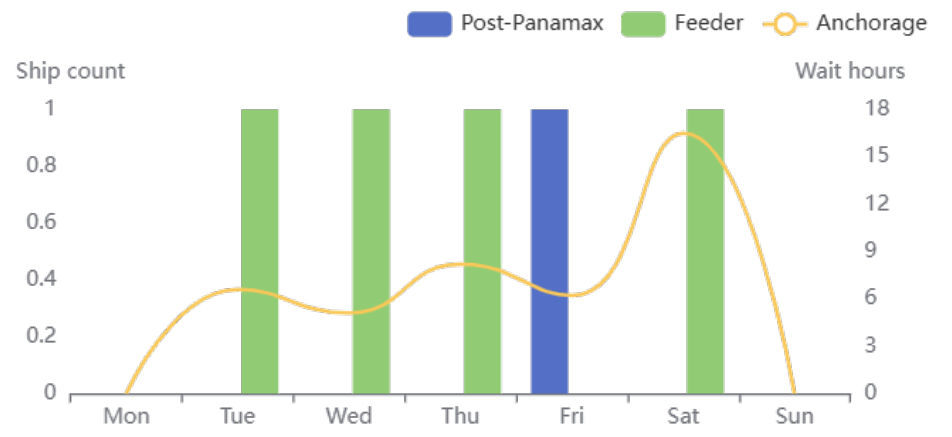
Type	M	T	W	Th	F	Sat	Sun
HDY	6	9	8	6	6	7	12
SMX	7	6	6	6	8	9	11
WT.h.	250.5	235.6	244.3	205	181.75	77.2	107



最近一周香港区域集装箱船锚泊数量和平均等待时长

Latest Week Update for Container Vessels Num. and Waiting Time Information on Anchorages of HongKong

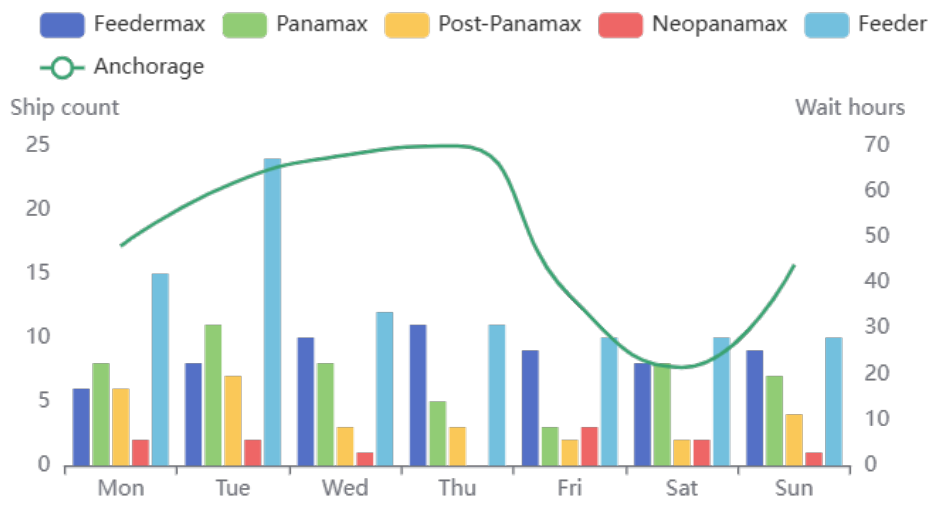
Type	M	T	W	Th	F	Sat	Sun
F.ma.	0	0	0	0	0	0	0
Pan.	0	0	0	0	0	0	0
PPx	0	0	0	0	1	0	0
NPx	0	0	0	0	0	0	0
Fd	0	1	1	1	0	1	0
WT.h.	0.0	6.6	5.1	8.2	6.2	16.5	0.0
UlcV	0	0	0	0	0	0	0



最近一周上海区域集装箱船锚泊数量和平均等待时长

Latest Week Update for Container Vessels Num. and Waiting Time Information in Anchorages of Shanghai

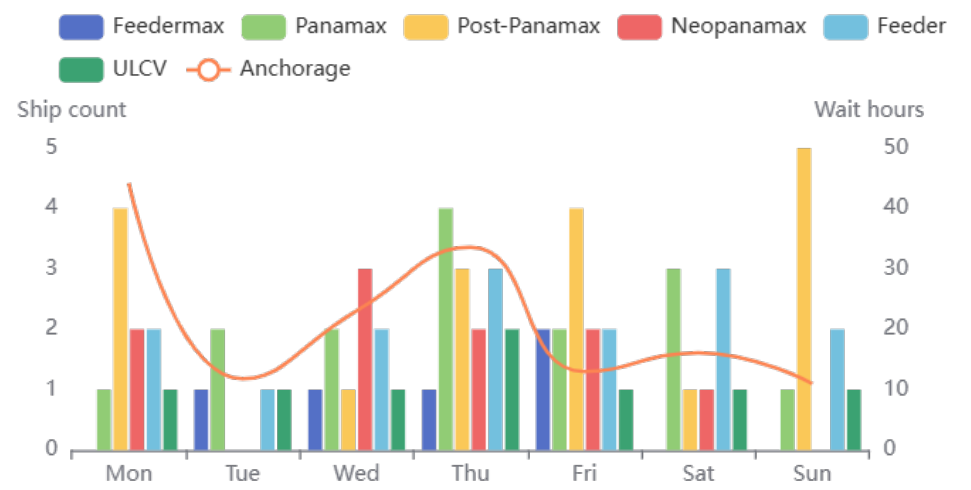
Type	M	T	W	Th	F	Sat	Sun
F.ma.	6	8	10	11	9	8	9
Pan.	8	11	8	5	3	8	7
PPx	6	7	3	3	2	2	4
NPx	2	2	1	0	3	2	1
Fd	15	24	12	11	10	10	10
UlcV	0	0	0	0	0	0	0
WT.h.	48.1	61.9	68	70	37.2	21.5	44



最近一周新加坡区域集装箱船锚泊数量和平均锚泊时长

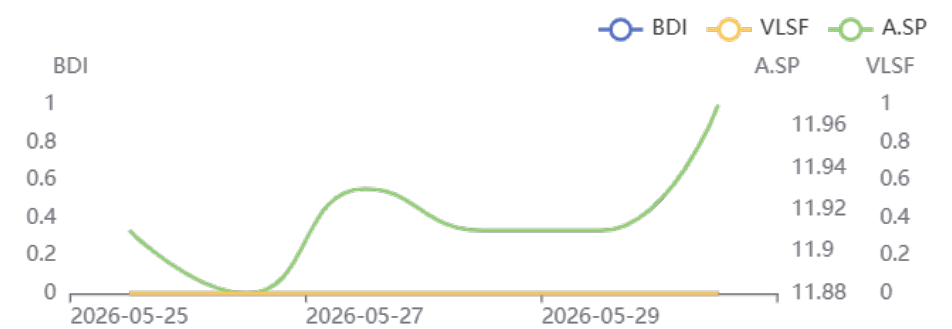
Latest Week Update for Container Vessels Num. and Waiting Time Information in Anchorages of Singapore

Type	M	T	W	Th	F	Sat	Sun
F.ma.	0	1	1	1	2	0	0
Pan.	1	2	2	4	2	3	1
PPx	4	0	1	3	4	1	5
NPx	2	0	3	2	2	1	0
Fd	2	1	2	3	2	3	2
UlcV	1	1	1	2	1	1	1
WT.h.	44.2	11.8	23.05	33.6	13	16.1	11



最近一周空载散货船平均航速 Latest Weekly Average Speed for Bulkers during Ballast Voyage

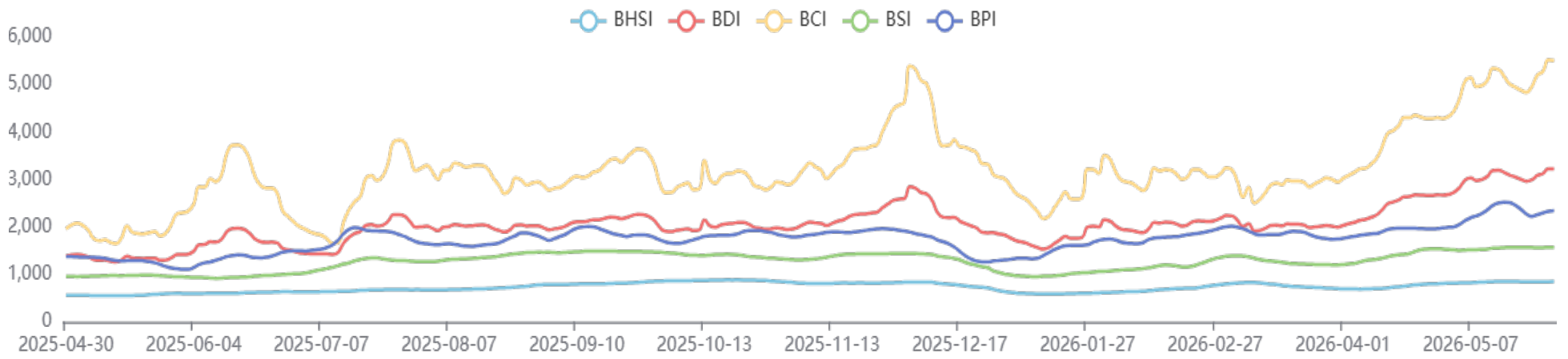
Type	M	T	W	Th	F	Sat	Sun
BDI	0	0	0	0	0	0	0
VLSF	0	0	0	0	0	0	0
A.SP	11.91	11.88	11.93	11.91	11.91	11.97	



第三部分 航运市场 SHIPPING MARKET

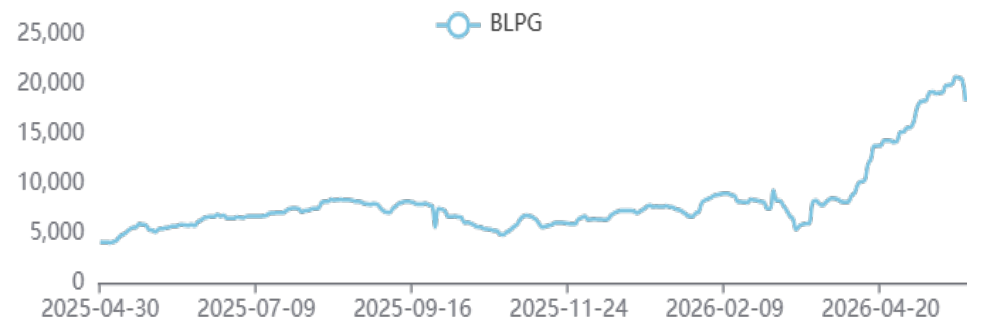
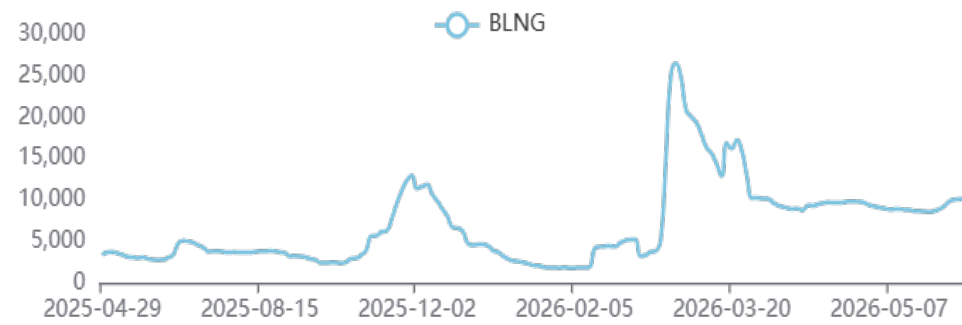
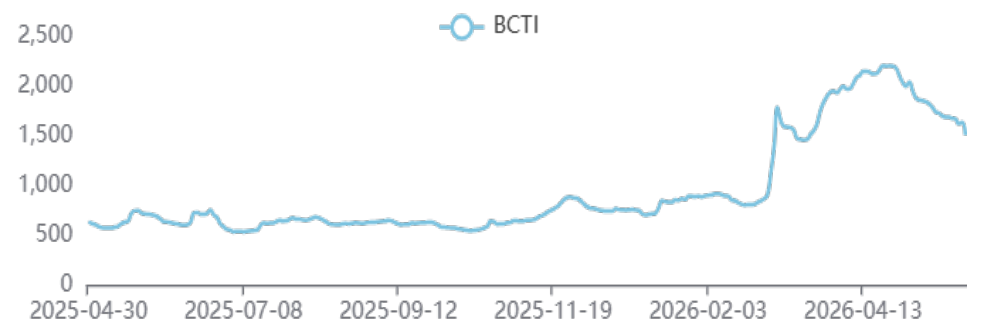
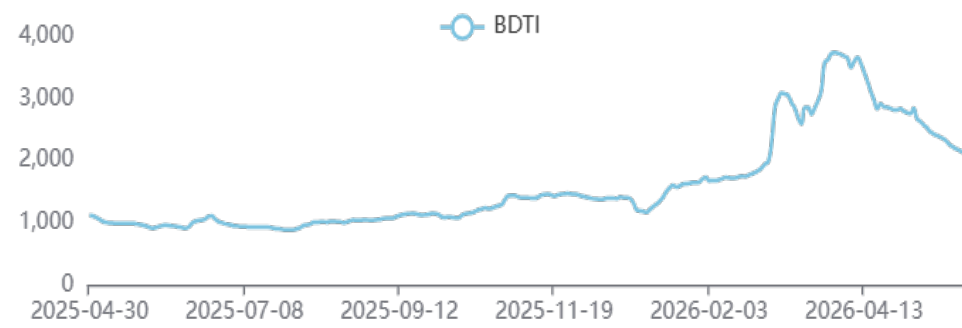
波罗的海干散货指数Baltic Dry Index

Type	PI	WoW	W%	M%	y%
BDI	3224	233.0	7.79	18.1	138.29
BCI	5503	549.0	11.08	23.75	167.27
BPI	2343	120.0	5.4	17.03	106.07
BSI	1569	2.0	0.13	3.22	64.12
BHSI	851	8.0	0.95	4.42	41.83



能源运价指数Energy Shipping Index

Type	PI	WoW	W%	M%	y%
BDTI	2068	-117.0	-5.35	-24.85	127.25
BCTI	1504	-164.0	-9.83	-26.2	112.73
BLNG	10080	733.0	7.84	9.17	247.59
BLPG	18262	-2409.0	-11.65	16.97	235.88



第四部分 运力分布 SUPPLY DISTRIBUTION

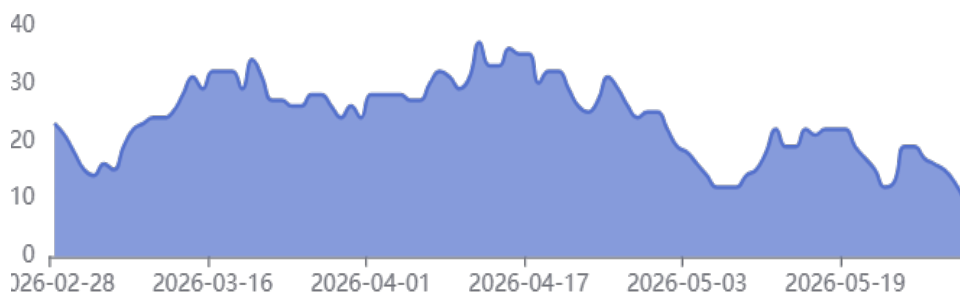


好望角型散货船 Capesize

区域：巴西，最近一周好望角型散货船准备装货船舶数量

Area: Brazil, The latest week update number for Capesize with cargo loading intention.

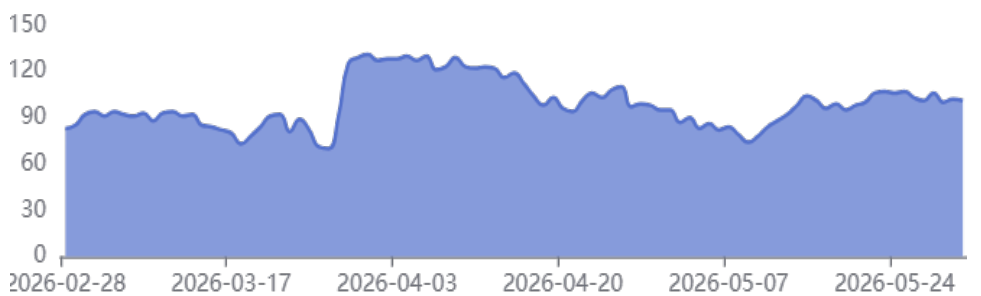
Type	M	T	W	Th	F	Sat	Sun
Cape	19	19	17	16	15	13	10



区域：澳大利亚。最近一周好望角型散货船准备装货船舶数量。

Area: Australia. The latest week update number for Capesize with cargo loading intention.

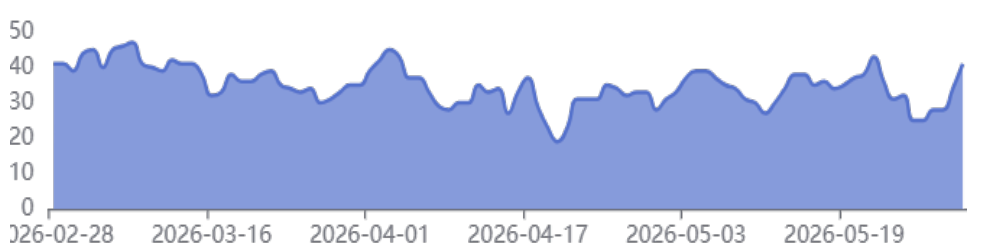
Type	M	T	W	Th	F	Sat	Sun
Cape	107	103	101	106	100	102	101



区域：南非，最近一周好望角型散货船准备装货船舶数量

Area: South Africa, The latest week update number for Capesize with cargo loading intention.

Type	M	T	W	Th	F	Sat	Sun
Cape	32	25	25	28	28	34	41

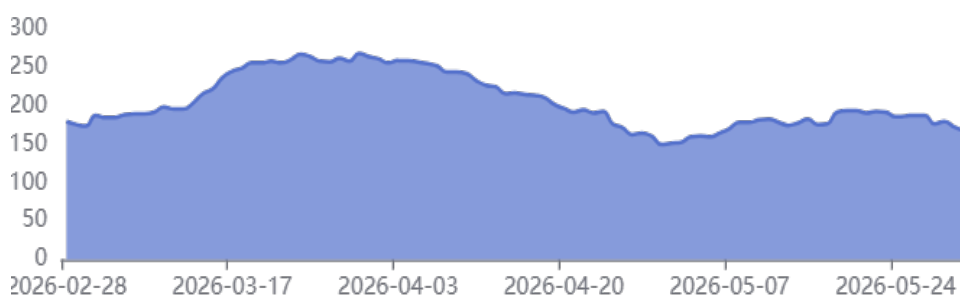


巴拿马型散货船 PANAMAX

区域：南美北部和东部。最近一周巴拿马型散货船准备装货船舶数量。

Area: South America. The latest week update number for Panamax with cargo loading intention.

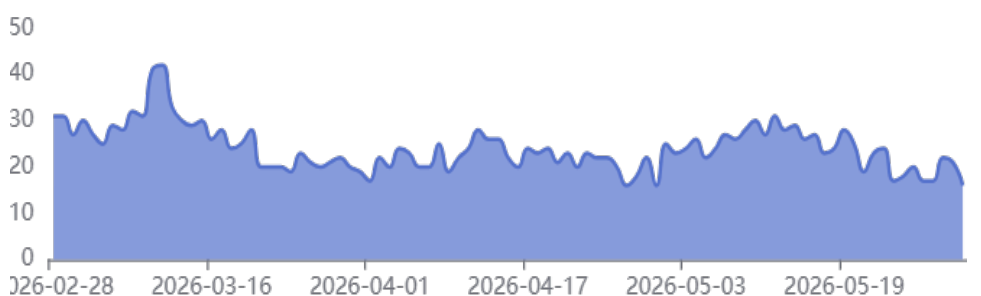
Type	M	T	W	Th	F	Sat	Sun
Pan.	186	187	187	176	179	172	167



区域：黑海。最近一周巴拿马型散货船准备装货船舶数量。

Area: Black Sea. The latest week update number for Panamax with cargo loading intention.

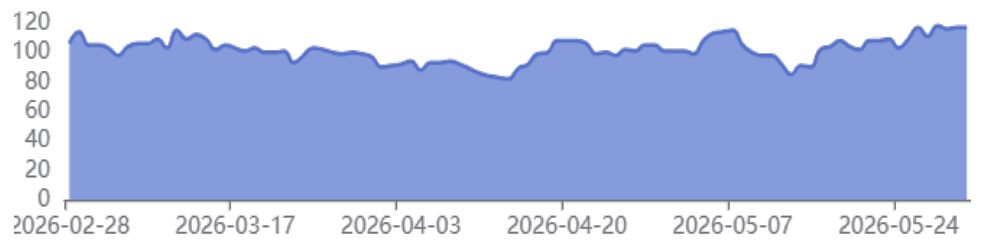
Type	M	T	W	Th	F	Sat	Sun
Pan.	10	11	13	10	8	7	7



区域：澳大利亚。最近一周巴拿马型散货船准备装货船舶数量。

Area: Australia. The latest week update number for Panamax with cargo loading intention.

Type	M	T	W	Th	F	Sat	Sun
Pan.	109	117	111	118	116	117	117

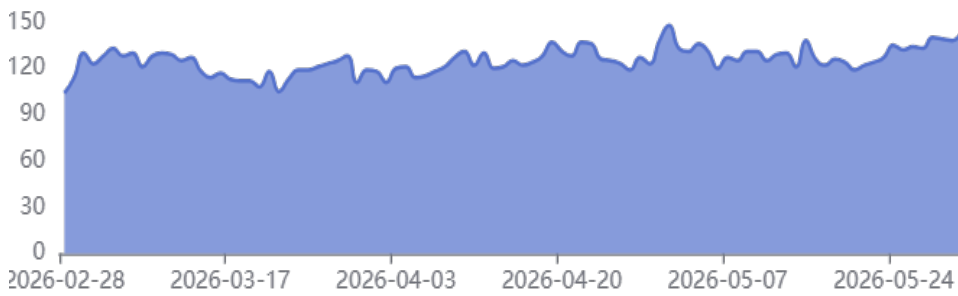


超大灵便型散货 SUPRAMAX

区域：北中国。最近一周超大灵便型散货船准备装货船舶数量。

Area: North China. The latest week update number for Supramax with cargo loading intention.

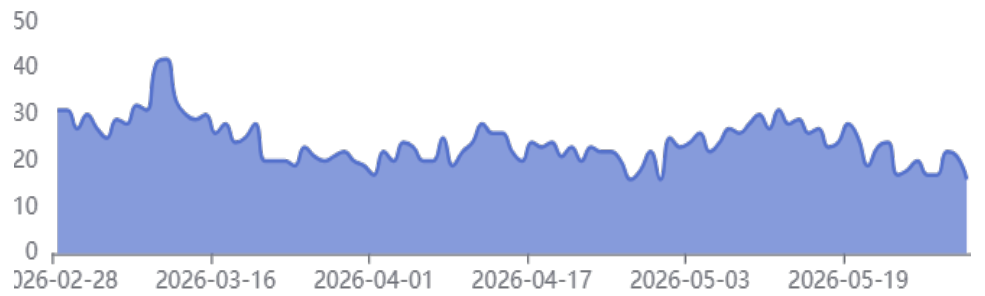
Type	M	T	W	Th	F	Sat	Sun
SMX	132	134	133	140	139	138	144



区域：黑海。最近一周巴拿马型散货船准备装货船舶数量。

Area: Black Sea. The latest week update number for Panamax with cargo loading intention.

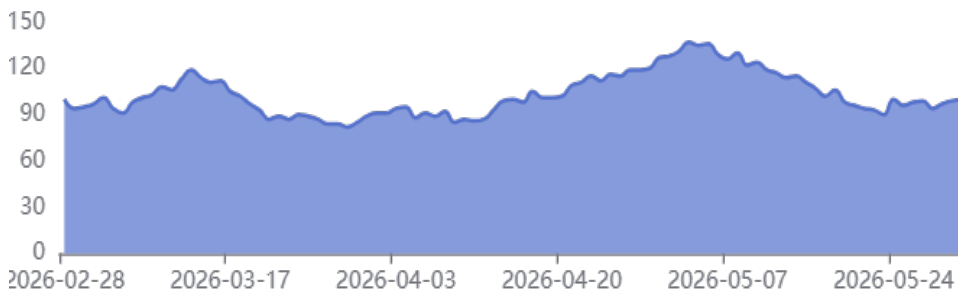
Type	M	T	W	Th	F	Sat	Sun
SMX	18	20	17	17	22	21	16



区域：美湾。最近一周超大灵便型散货船准备装货船舶数量。

Area: US Gulf. The latest week update number for Supramax with cargo loading intention.

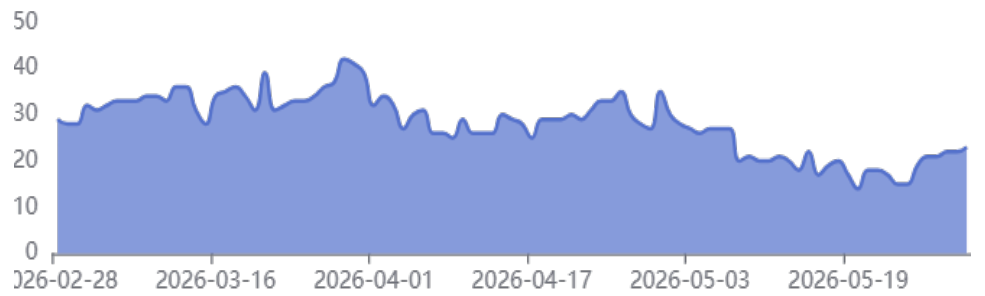
Type	M	T	W	Th	F	Sat	Sun
SMX	15	19	21	21	22	22	23



区域：南美的北部和东部。最近一周超大灵便型散货船准备装货船舶数量。

Area: South America. The latest week update number for Supramax with cargo loading intention.

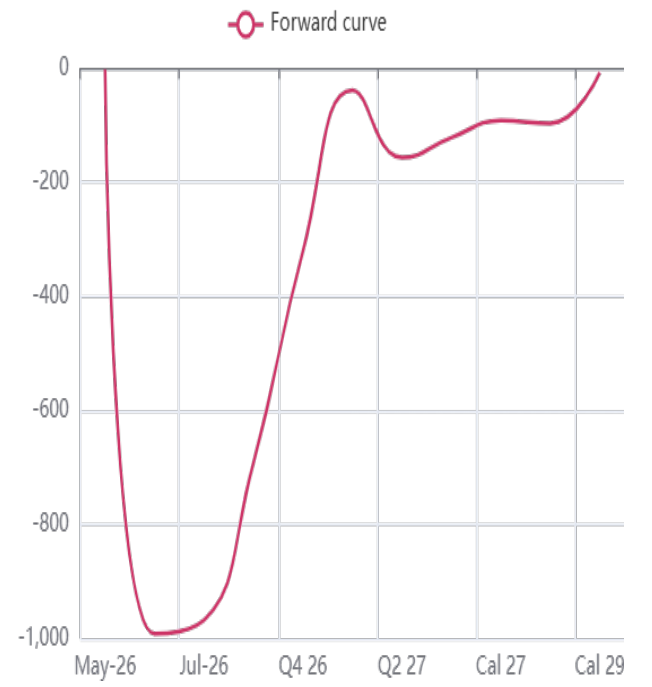
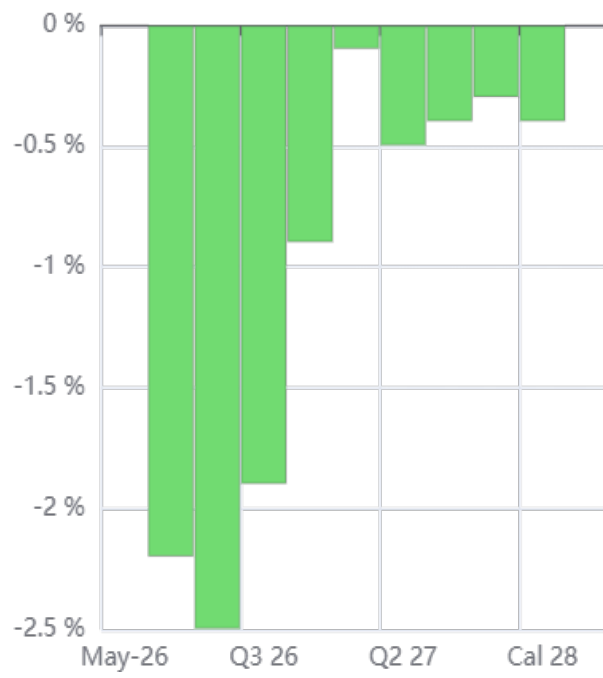
Type	M	T	W	Th	F	Sat	Sun
SMX	96	98	99	94	97	99	100



第五部分 远期运价协议 FFA

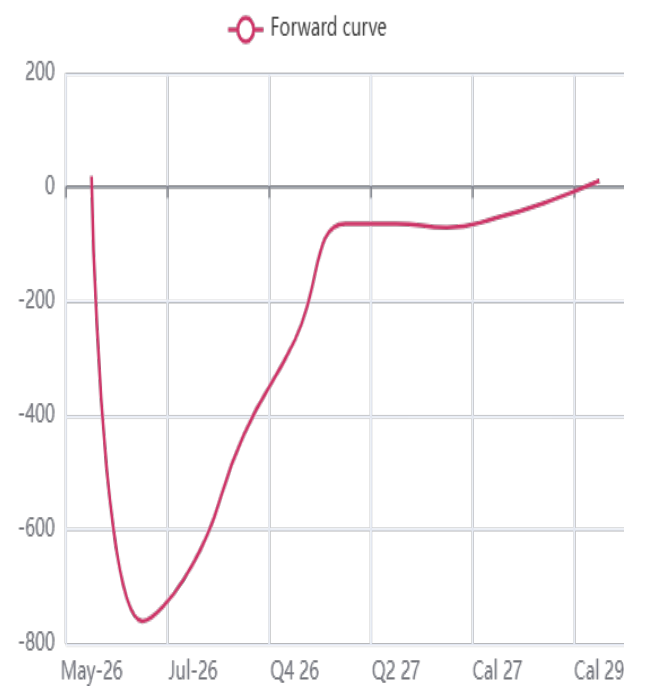
好望角型散货船Capesize

5TC	\$/day	WoW	
May-26	45,978.00	-2.0	0.0 %
Jun-26	43,732.00	-992.0	-2.2 %
Jul-26	37,485.00	-968.0	-2.5 %
Q3 26	35,930.33	-691.67	-1.9 %
Q4 26	35,003.00	-321.0	-0.9 %
Q1 27	26,485.00	-39.0	-0.1 %
Q2 27	31,871.00	-157.0	-0.5 %
Q3 27	31,042.00	-122.0	-0.4 %
Cal 27	30,106.50	-92.0	-0.3 %
Cal 28	26,410.00	-97.0	-0.4 %
Cal 29	25,424.00	-8.0	0.0 %



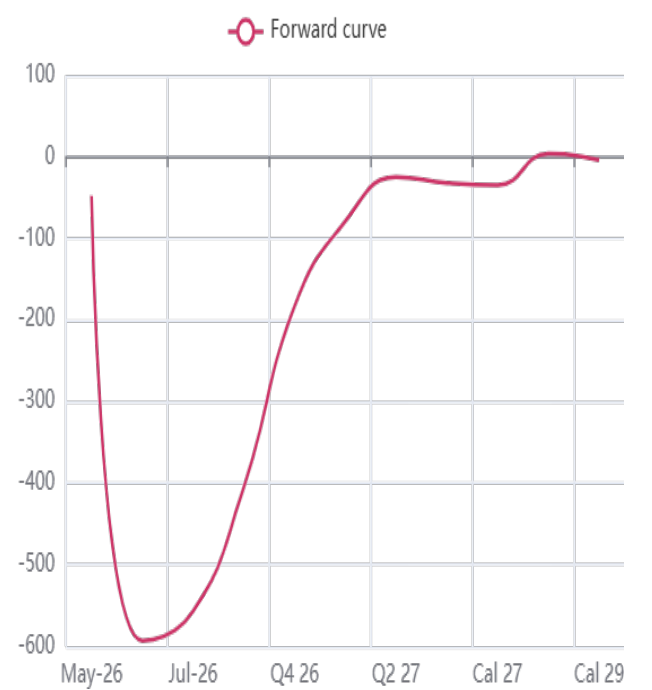
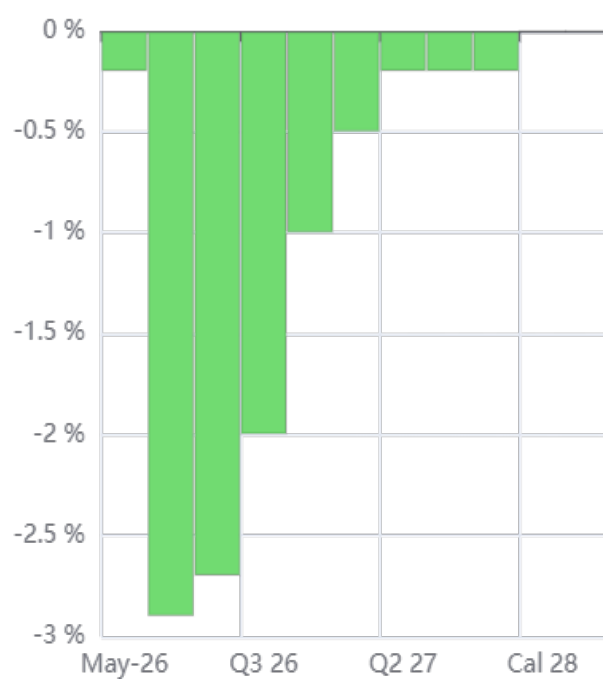
巴拿马型散货船Panamax

4TC	\$/day	WoW	
May-26	20,751.00	19.0	0.1 %
Jun-26	21,421.00	-761.0	-3.4 %
Jul-26	21,579.00	-660.0	-3.0 %
Q3 26	20,821.67	-434.33	-2.0 %
Q4 26	19,130.67	-269.0	-1.4 %
Q1 27	14,925.00	-64.0	-0.4 %
Q2 27	16,200.00	-64.0	-0.4 %
Q3 27	15,593.00	-71.0	-0.5 %
Cal 27	15,446.50	-53.25	-0.3 %
Cal 28	14,332.00	-25.0	-0.2 %
Cal 29	13,854.00	11.0	0.1 %



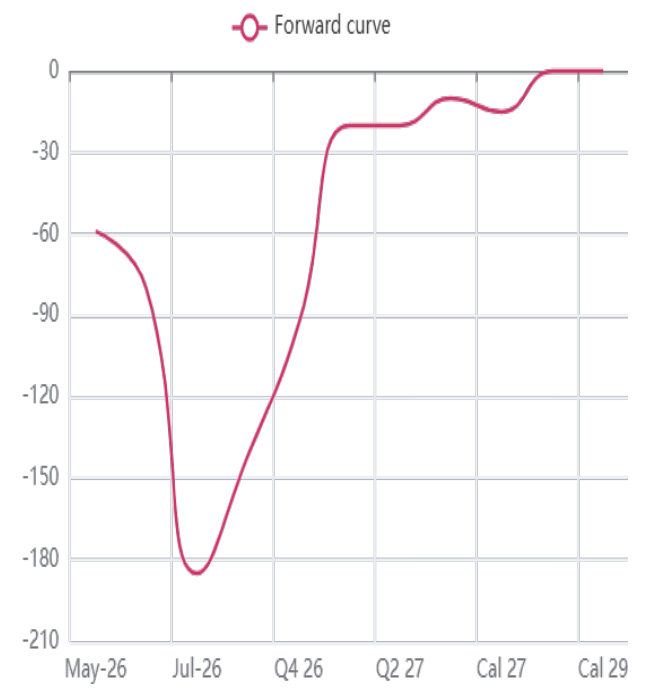
超大灵便型散货船Supramax

10TC	\$/day	WoW	
May-26	19,577.00	-48.0	-0.2 %
Jun-26	20,198.00	-593.0	-2.9 %
Jul-26	20,420.00	-557.0	-2.7 %
Q3 26	20,047.33	-404.67	-2.0 %
Q4 26	18,907.67	-183.0	-1.0 %
Q1 27	14,641.00	-79.0	-0.5 %
Q2 27	16,398.00	-25.0	-0.2 %
Q3 27	15,663.00	-32.0	-0.2 %
15,516.25	Cal 27	-34.75	-0.2 %
Cal 28	14,409.00	4.0	0.0 %
Cal 29	14,059.00	-4.0	0.0 %



灵便型散货船Handysize

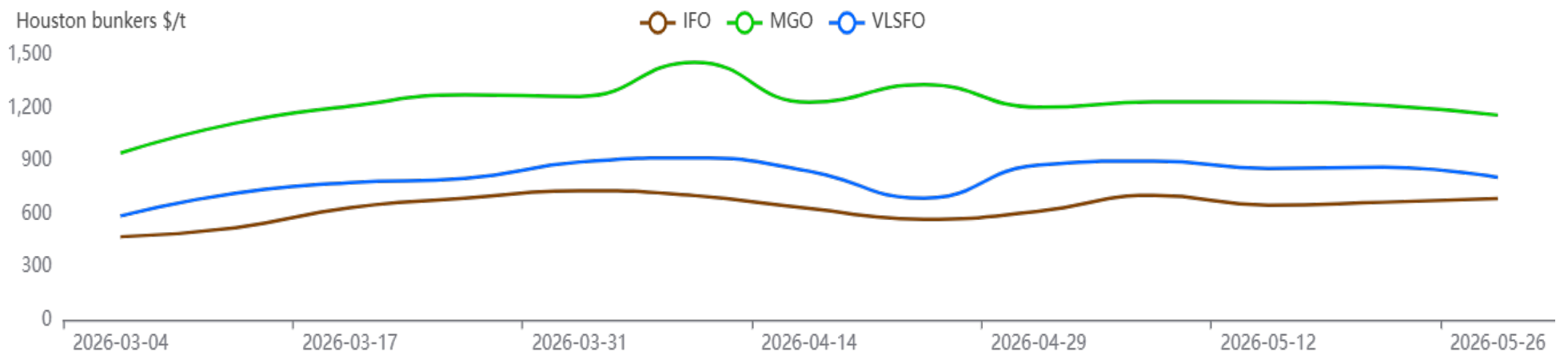
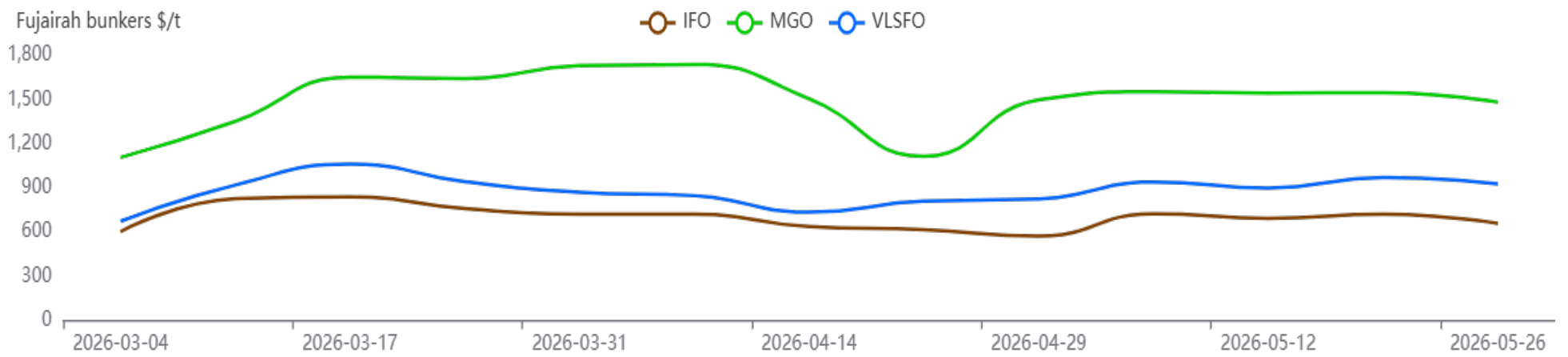
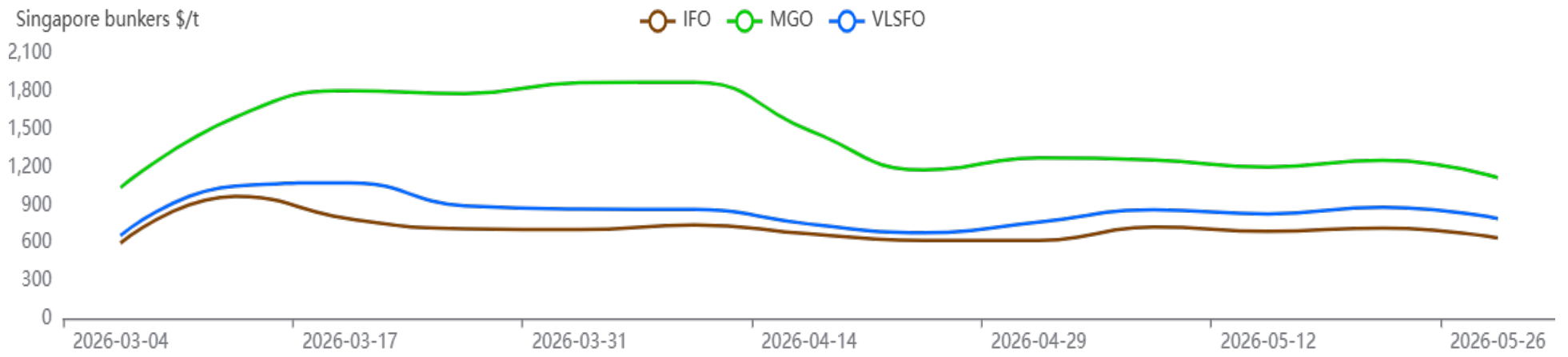
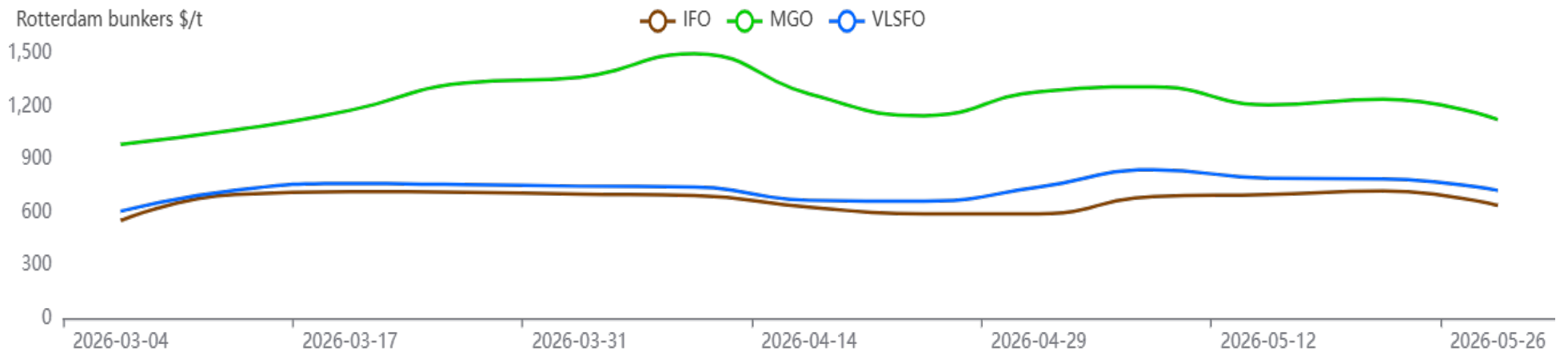
7TC	\$/day	WoW	
May-26	15,130.00	-59.0	-0.4 %
Jun-26	15,730.00	-80.0	-0.5 %
Jul-26	15,770.00	-185.0	-1.2 %
Q3 26	15,423.33	-141.67	-0.9 %
Q4 26	14,566.67	-93.33	-0.6 %
Q1 27	11,495.00	-20.0	-0.2 %
Q2 27	13,420.00	-20.0	-20.0
Q3 27	12,980.00	-10.0	-0.1 %
Cal 27	12,583.75	-15.0	-0.1 %
Cal 28	11,740.00	0.0	0.0 %
Cal 29	11,560.00	0.0	0.0 %



第六部分 燃油价格 BUNKER PRICE

MP	LO	HO	MO	SP	WoW	W%	M%
zhoushan	777.0	646.0	1166.0	131.0	10.0	8.26	72.37
Singapore	793.5	638.5	1116.5	155.0	-9.5	-5.78	6.9
Rotterdam	725.0	639.5	1127.0	85.5	17.5	25.74	-43.93
Fujairah	927.5	658.0	1482.0	269.5	20.0	8.02	6.31
Houston	807.5	688.5	1161.0	119.0	-80.0	-40.2	-54.67

(MP-Bunkering Main Ports; LO-Heavy Low Sulphur Fuel Oil; HO-Heavy High Sulphur Fuel Oil; MO-MGO; SP-Spread;)



第七部分 最新商品价格 LATEST COMMODITIES PRICE

Grains and Oilseeds		Index	+/-	Weekly	Monthly	YTD
Wheat		212.0	-5.0	-2.3	-1.4	4.95
Maize		231.0	-4.0	-1.7	-2.53	0.0
Soybeans		230.0	0.0	0.0	1.77	11.65
Rice		169.0	2.0	1.2	4.32	-2.87
Barley		248.0	-3.0	-1.2	0.4	7.36
Energy		Index	+/-	Weekly	Monthly	YTD
Crude Oil	USD/Bbl	87.71	-12.73	-12.67	-19.44	43.06
Brent	USD/Bbl	91.43	-15.44	-14.45	-18.95	41.64
Natural Gas	USD/MMBtu	3.31	0.26	8.52	25.38	1.53
Gasoline	USD/Gal	3.07	-0.42	-12.03	-15.43	45.5
Heating Oil	USD/Gal	3.53	-0.42	-10.63	-15.75	68.9
Ethanol	USD/Gal	2.02	0.02	1.0	-1.94	12.22
Naphtha	USD/T	735.21	-108.4	-12.85	-21.46	34.6
Propane	USD/Gal	0.87	0.01	1.16	7.41	16.0
Uranium	USD/Lbs	85.2	0.7	0.83	-2.07	19.08
Methanol	CNY/T	3019.0	-50.0	-1.63	-5.33	34.72
TTF Gas	EUR/MWh	47.17	-2.11	-4.28	-0.49	28.21
UK Gas	GBP/thm	114.18	-6.78	-5.61	-1.35	30.1
Industrial		Index	+/-	Weekly	Monthly	YTD
Copper	USD/Lbs	6.36	0.1	1.6	7.61	34.46
Coal	USD/T	137.5	5.05	3.81	2.88	36.95
Steel	CNY/T	3177.0	12.0	0.38	0.89	4.75
Iron Ore	USD/T	109.04	-0.75	-0.68	1.76	9.25
Aluminum	USD/T	3657.5	18.2	0.5	5.06	49.16
Lithium	CNY/T	177500.0	-4500.0	-2.47	1.72	186.29
Metals		Index	+/-	Weekly	Monthly	YTD
Gold	USD/t.oz	4526.48	9.01	0.2	-0.8	36.9
Silver	USD/t.oz	75.42	-0.42	-0.55	4.42	128.13
Platium	null	1921.4	-43.9	-2.23	0.38	78.32
Currencies		Index	+/-	Weekly	Monthly	YTD
EUR/USD		1.16	0.0	0.0	-0.85	2.65
USD/CNY		6.77	-0.03	-0.44	-1.02	-5.84

第八部分 本周话题 WEEKLY TOPIC



无人船舶的发展

2026年5月21日，国际海事组织（IMO）在伦敦海上安全委员会会议上，正式敲定《海上无人水面船舶安全规则》（MASS Code- the International Code of Safety for Maritime Autonomous Surface Ships），该规则预计2028年起强制执行。此规则历经多年制定，为减员或无人船舶的设计、建造与运营设立统一框架，要求其安全标准与传统有人船舶保持一致，为全球无人船舶规模化商用扫清核心监管障碍。

智能航运未来发展阶段，按无人化程度和商业化进程进行分析整理。试点验证期（2026—2028），MASS规则落地试运行，沿海和内河短途航线开展远程操控、减员航行试点；船岸协同、智能感知、避碰系统逐步成熟，积累运行数据与监管经验。规模推广期（2028—2032），MASS规则全面强制生效，近洋和支线运输批量应用半无人船舶；智慧港口、智能航道与无人船舶深度协同，商业模式与成本优势显现。深度融合期（2032—2035+），远洋干线出现高等级无人船舶，AI无人决策、远程集群管控成为主流；形成全链路智能航运体系，无人船与传统船混航、协同作业常态化。

无人船舶对航运市场的主要影响有哪些。成本与效率方面，无人船舶大幅降低船员、排班、食宿等人力成本，优化航线与航速，燃油消耗下降5%—10%。突破船员休息时长限制，实现

24小时连续作业，港口周转与航行效率显著提升。安全与风险方面，无人船舶减少人为失误导致的碰撞、搁浅等事故，海上安全水平整体提升。新增网络安全、系统冗余、远程应急处置等新型风险，监管与技术门槛提高。市场格局与产业链方面，无人船舶将会首先在头部船公司逐步实现，科技企业与船级社主导标准与技术，行业集中度提升，中小船东面临转型压力。催生智能航行系统、船岸通信、AI运维等新赛道，造船、航运、港口、科技深度融合。航运业就业与合规方面，船上岗位减少，岸基管控、数据运维、网络安全等岗位需求上升，船员技能结构重构。全球统一监管落地，船舶认证、保险、责任界定更清晰，跨国运营合规成本降低。绿色低碳方面，无人船舶的航行与新能源（电动、氨、氢）协同，航线与能耗最优匹配，助力航运碳减排目标达成。

随着通信和人工智能的迭代发展，市场已经看到智能汽车驾驶的蓬勃发展，那无人船舶的爆发应该不会太久。

On May 21, 2026, at the London Maritime Safety Committee meeting, the International Maritime Organization (IMO) officially adopted the "Maritime Autonomous Surface Ships Safety Code" (MASS Code - the International Code of Safety for Maritime Autonomous Surface Ships). This code is expected to come into mandatory effect starting from 2028. After years of development, this code has established a unified framework for the design, construction, and operation of unmanned ships, requiring its safety standards to be consistent with those of traditional manned ships, thereby clearing the core regulatory obstacles for the large-scale commercial use of unmanned ships worldwide.

In the future development stage of intelligent shipping, it is analyzed and sorted based on the degree of automation and the commercialization process. The pilot verification period (2026 - 2028) sees the implementation and trial operation of the MASS rules, with remote control and reduced crew operation trials conducted on coastal and inland short-haul routes; ship-shore collaboration, intelligent perception, and collision avoidance systems gradually mature, and operational data and regulatory experience are accumulated. The scale promotion period (2028 - 2032) sees the full mandatory implementation of the MASS rules, with batch application of semi-automated ships in near-sea and feeder transportation; intelligent ports, intelligent waterways, and unmanned ships deeply collaborate, and business models and cost advantages emerge. The deep integration period (2032 - 2035+) sees the emergence of high-level unmanned ships on ocean routes, with AI unmanned decision-making and remote cluster control becoming the mainstream; a full-chain intelligent shipping system is formed, and unmanned ships and traditional ships operate together and collaborate on a regular basis.

What are the main impacts of unmanned ships on the shipping market? In terms of cost and efficiency, unmanned ships significantly reduce labor costs such as crew, shift scheduling, food and accommodation, optimize routes and speeds, and reduce fuel consumption by 5% to 10%. They break through the restrictions on crew rest time, enabling 24-hour continuous operation, significantly improving port turnover and navigation efficiency. In terms of safety and risks, unmanned ships reduce accidents caused by human errors such as collisions and grounding, and overall improve maritime safety levels. New types of risks such as cybersecurity, system redundancy, and remote emergency response have emerged, raising regulatory and technical thresholds. In terms of market structure and industry chain, unmanned ships will first be gradually implemented by leading shipping companies. Technology enterprises and classification societies will lead the standards and technologies, leading to an increase in industry concentration and putting smaller shipowners under pressure to transform. This will give rise to new sectors such as intelligent navigation systems, ship-shore communication, and AI operation and maintenance. The integration of shipbuilding, shipping, ports, and technology will be deepened. In terms of employment and compliance in the shipping industry, there will be fewer positions on ships, while the demand for onshore control, data operation, and cybersecurity positions will increase, and the skill structure of crew members will be restructured. Global unified regulation will be implemented, making ship certifications, insurance, and liability definitions clearer, and reducing compliance costs for cross-border operations. In terms of green and low-carbon aspects, the navigation of unmanned ships and the synergy of new energy sources (electricity, ammonia, hydrogen) will optimize routes and energy consumption, helping to achieve the carbon reduction goals of the shipping industry.

With the continuous advancement of communication and artificial intelligence, the market has witnessed the vigorous development of intelligent car driving. Therefore, the mature of unmanned ships should not be far behind.

