A-Team Weather Briefing ☀️🌩️💨

Each Race Leg will be split into smaller Sectors, depending on the climatic zones and meteorological conditions.

Each Crewmember helping to create the Weather Briefing will be allocated a Sector and therefore be responsible to research Weather and Current Data.

Additionally most Sectors will require additional research on specific Weather Phenomena. Please gather information on those conditions as listed under „Specials“, provide a structured Summary and, if possible, add Weather Charts, Diagrams or Satellite Pictures to outline your „Speciality“.

Two Crewmembers will solely work on Drift Ice. These Crewmembers will provide Drift Ice Information for their entire Leg and therefore not only for a particular Sector.

Attached you will find an Excel, which I am asking you to fill out for your designated sector.

Please note, the requested „Dates“ of each Sector are for reference only. It would be ideal, if you could gather Information about your Sector in weekly intervals. Although, if this is not possible, try to find 10-day or bi-weekly intervals close to the suggested dates.

Your Sector will not have a definite Coordinate for your Research. Please try to integrate your values as best as possible. If you do find that your region is varying in data too much, please create smaller sections of your area.

Once you have finished your research, please return your results back to me. These results should be complete and include:

Filled excel of your sector,

Valuable charts/satellites of your sector,

Summary of Specials-Report,

Sources you have used.

Please state your Leg and Sector when returning your research, as this will help sorting your data.

Deadline for Research: **23.06.2025** !!!!

Please make sure you hand in your assignments on time, as all data will have to be organized, cross checked and processed.

If you are unable to hand in your assignment, please let me know well ahead of time and I will reassign the Sector to another Crewmember.

For Each Sector, I would like you to research the following data:

Weather	*Climatic average (10 years) of:*		
	Windspeed 10m	At 10m height	Preferably in knots, otherwise m/s
	Winddirection 10m	At 10m height	Direction in True North
	Windspeed 600hPa	At 600hPa	Preferably in knots, otherwise m/s
	Winddirection. 600hPa	At 600hPa	Preferably in knots, otherwise m/s
	Surface Air Temperature (SAT)	At Sealevel	In Celsius
	Mean Sea Level Pressure		In hPa
	Precipitation		mm/hr

Currents	*Climatic Average (10 years) of:*	
	Current Direction	Direction in True North
	Current Speed	Velocity in knots, otherwise m/s
	Sea Surface Temperature SST	In Celsius
	Significant Wave Period	In S
	Significant Wave Height	In m

Some Sectors will include additional Special Phenomena, which I would like you to Research and briefly present. These phenomena will explicitly be described in each sector.

Drift ICE Information (*Leg 3 & 8 only)*

Sea ICE Edge	Satellite Imagery monthly past 2 Years
Sea ICE Drift (Vectors)	Direction in True North
Sea ICE Concentration	In %
ICE Thickness	In m

If, at any time during your research, you do find additional phenomena, hazards or specialties – please let me know!

Sources / Research Platforms

Attached you will find a selection of websites to use for your research.

You may use other websites, but please do make sure that the dataset is using a valid source.

Also, please note that very often NetCDF formats will be displayed. In order to encrypt these formats, which are very often being used to portray scientific data such as weather, climatology or oceanography a conversion tool will be required.

Such tools are accessible via:

Panoply (NASA) – https://giss.nasa.gov/tools/panoply

Java Script will be required for the software to run

QGIS – Geodata Software – https://qgis.org

Access for Weather Data on the Web:

NOAA National Data Buoy Center (NDBC) – https://www.ndbc.noaa.gov

NOAA Climate Data Online (CDO) – https://www.ncei.noaa.gov

NOAA Charts – https://ocean.weather.gov

NOAA Hurricane Archive – https://coast.noaa.gov/hurricanes

Open Meteo Historical Weather API – https://open-meteo.com

ECMWF ERA5 Reanalysis – https://www.ecwmf.int

Copernicus Marine Environment Monitoring Service CMEMS - Https://cds.climate.copernicus.eu

EMODnet European Marine Oberservation and Data Network

WindSat / Remote Sensing Systems – https://remss.com

The Weather Window (Met Office Charts) – https://weather.mainsail.com

US Pilot Charts – https://msi.nga.mil

Brazilian Surface Analysis – https://marinha.mil.nbr

South African Met Office https://weathersa.co.za

Global Current Info https://podaac.jpl.nasa.gov/dataacess (& choose „SOTO by Worldview“)

Australian Bureau of Meteorology- https://bom.gov.au/australia/charts

Access for Weather Data on the Web:

New Zealand Met Services (Tasman Sea) – https://metservice.com/maps-radar/maps/tasman-sea-nz

China Meteorological Administration – https://cma.gov.cn/en

Japanese Coast Guard – https://www1.kaiho.mlit.go.jp

Japan Meteorological Agency – https://www.jma.go.jp

PredictWind – https://www.predictwind.com

Drift ICE:

Corpernicus Marine Service CMEMS – https://marine.corpernicus.eu

Arctic Data Center / National Snow and Ice Data Center NSIDC – https://nsdic.org

EUMETSAT OSI SAF Ocean and Sea Ice Satellite Application Facility – https://osi-saf.eumesat.net

Polar View / Arctic ROOS – https://polarview.org

Deutscher Wetterdienst DWD/Bundessmt für Schiffahrt und Hydrographie BSH – https://dwd.de https://bsh.de (German Language only)

Please be advised, the above mentioned websites can – at times – feel unorganized and it may at first be difficult to find your requested data. Keep digging and you will find everything you need! Also, feel free to contact your Leg's Crewmate and help each other – a complete Overview of our Weather Team will be attached.

Of course, if you do feel like you are stuck – you may contact me and I will be happy to help ☺

Crew Overview – Assignments

	Name	Race Legs	Email
Leg 1			
Sector 1	Damien Payne	1	Damienpayne05@yahoo.co.uk
Sector 2	Sylvester Tomczyk	1	tomczyk.sylwester@gmail.com
Sector 3	Basil Bibi	1	basilbibi@hotmail.com
Sector 4	Amy Scott	1, 2	Scotals@gmail.com
Sector 5	Grant Porteous	1, 2, 3, 4	grant.porteous@gjgardner.co.nz
Leg 2			
Sector 1	Sidney Roerdinkveldboom	1, 2, 3	Sidney@roerdinkveldboom.nl
Sector 2	Rob Matti (Different leg, but CPT and Southern Ocean)	3, 4	matti@rogama.nl
Leg 3			
Sector 1	Nina Mukherjee	3	Nina.mukherjee@gmail.com
Sector 2	Rainer Basten	3	rainerbasten@yahoo.de
Drift ICE	Spencer Bashford	3	spencer@bashford.com
Leg 4			
Sector 1	Jacobus van Eeden	4	cobusve@gmail.com
Sector 2	Nigel Cave	4	nkcave@gmail.com
Leg 5			
Sector 1	Jason Tylor (Different Leg, but AUS Coast)	3, 4	fatdinosaur206@gmail.com
Sector 2	Kyle Vacca	5	kylevacca@hotmail.com
Sector 3	Jason Baris	5	jason@spectrum-live.co.uk
Sector 4	Todd Unterseher	RTW	todd.unterseher@gmail.com
Leg 6			
Sector 1	Quinn Edwards	1, 6, 7, 8	neil@edgecrossing.com
Sector 2	Reggie Acosta	6	reggie.acosta@gmail.com
Sector 3	Sarah Jane Robinson	6	Sjrobinson353@gmail.com
Sector 4	Philip Wilstrup	RTW	pw@wilstrup-immobilien.de

Leg 7

Sector 1	Diana Shaw	7	dianacshaw@hotmail.com
Sector 2	Geoff Orr	7	faroutorr@gmail.com
Sector 3	Katie Husband	7, 8	k.husband0@gmail.com
Sector 4	Nick Hodson	2, 7	nicholashodson8@gmail.com

Leg 8

Sector 1	Justin Golden	8	justin@thatppcguy.com
Sector 2	Mathieu Grainer	8	mathieu.s.grainger@gmail.com
Drift Ice	Kevin Woods	8	kevwoods_uk2000@yahoo.com

Leg 1 – 31.08.25 – Mid October 2025

This Leg is crossing many varying atmospheric conditions and is therefore divided into five Sectors.

Sector 1

Portsmouth, UK – approx. 35 Degree N (abeam Strait of Gibraltar)

Your Sector will cover the Northern european coastal regions starting in the UK, stretching past the Bay of Biscay towards the Iberian Coast. The major Pressure and Wind System will be the Prevailing Westerlies. The dominant oceanic current is the North Atlantic Drift.

Specials: Iberian Peninsular, Bay of Biscay (Topography, Wildlife Hazards)

Sector 2

Approx. 35 Degree N (abeam Strait of Gibraltar) – Canary Islands

Your Sector will cover the entrance of the Sub Tropical High Pressure Belt (Horse Latitudes) and be dominated by the Canary Current.

Specials: Canary Islands – Acceleration Zones, Calm Lee Zones, Kármán Vortices

Sector 3

Canary Islands – Equator

Your Sector will guide the Fleet through the North East Trade Winds down to the ITCZ. The major ocean currents will be the Atlantic North Equatorial Current and the Atlantic Equatorial Counter Current.

Specials: Tropical Waves caused by African Easterly Jet (AEJ) off the Coast off West Africa. Please research a Case Study of a strong tropical wave in this area for us to interpret.

Sector 4

ITC / Doldrums

As this Zone is quite special for itself, it did receive a section of ist own. The major current will be the Atlantic Equatorial Counter Current.

Specials: Please prepare a good overview of the specialities of the ITCZ / Doldrums and what Sailors may expect (Lull winds, heavy squalls…)

Although not directly linked to the ITCZ, in addition I would like to have an Overview of historic Routes Tropical Revolving Storms (TRS) have taken in the Atlantic (N and S) in late August/September/October.

Sector 5

Equator – Punta del Este, Uruguay

Leaving the ITCZ, we will encounter the South East Trade Winds and scratch the Sub Tropical High Pressure Belt again. Close to Uruguay's Coast, the major current will be the Brazillian and Malwina Current.

Specials: Pamperos (Cold fronts), Sudestada (Heat lows), Lee Behind Cabo Frio

Leg 1 Summay

	Pressure Belt	**Ocean Current**	**Specials**	**In charge**
Sector 1	Prevailing Westerlies	• North Atlantic Drift	• Iberian Peninsular • Bay of Biscay	Damien Payne
Sector 2	Sub Tropical High Pressure	• Canary Current	• Acceleration Zones • Calm Lee Zones • Kármán Vortices	Sylvester Tomczyk
Sector 3	North East Trade Winds	• Atlantic North Equatorial Current • Atlantic Equatorial Counter Current	• Tropical Waves (Case Study)	Basil Bibi
Sector 4	ITCZ / Doldrums	• Atlantic South Equatorial Current	• ITCZ • TRS	Amy Scott
Sector 5	South East Trade Winds	• Brazillian Current • Malwina Current	• Pampero • Sudestada • Cabo Frio Lee	Grant Porteous

Leg 2 – Mid October – Early November 2025

This Leg consists of two Sectors, as the Race Route takes us mostly through the Prevailing Westerlies. I have created a virtual separation of these two Sectors, by choosing Tristan da Cunha as an Island close to the longitude which marks the „middle“ of the route.

Sector 1

Punta del Este – Tristan da Cunha (S37‘14‘4 W012‘31‘0)

Leaving Uruguay this Sector will dive right into the Prevailing Westerlies whilst travelling West. The South Atlantic Current and the Antarctic Circumpolar Current will dominate this Sector.

Special: Specials: Pamperos (Cold fronts), Sudestada (Heat lows)

Sector 2

Tristan da Cunha (S37‘14‘4 W012‘31‘0) – Capetown

As we continue to cross the South Atlantic Ocean and close in on South Africa, the Benguela Current and Agulhas Current will be presenting themselves.

Specials: Coastal Lows, Southerly Busters

Leg 2 Summary

	Pressure Belt	**Ocean Current**	**Specials**	**In charge**
Sector 1	Prevailing Westerlies	• South Atlantic Current • Antarctic Curcumpolar Current	• Sudestada • Pamperos	Sidney Roerdinkveldboom
Sector 2	Prevailing Westerlies	• Benguela Current • Agulhas Current	• Coastal Lows • Southerly Busters	Rob Matti

Leg 3 – Mid November – Mid December 2025

Our third Leg is once again divided into two Sectors as we continue East in the Prevailing Westerlies. As this leg is diving into the roaring fourties, I would like us to not only prepare Weather and Current Data, but also to collect Drift Ice Information.

Sector 1

Capetown – île Amsterdam (S37‘50‘0 E077‘31‘0)

After Departing Capetown, the Fleet will enter the Indian and Southern Ocean. This Area is still associated with the Prevailing Westerlies. Initially the Agulhas Current will be of Interest, thereafter the South Indian Current and the Antarctic Circumpolar Current prevail.

Specials: Southern Ocean Lows, South Atlantic Highs (SAH) pushing from the Atlantic over the southern tip of Africa, affecting the East Coast of African Waters

Sector 2:

île Amsterdam (S37‘50‘0 E077‘31‘0) – Fremantle (Port not confirmed)

In order to create two segments of this Leg, I chose an Island, which is very close to the middle of this leg’s route.

The fleet continues in the Prevailing Westerlies, leaving the Antarctic Circumpolar Current and entering the West Australian Current.

Specials: Southern Indian Ocean High (SIH)

Leg 3 Summary

	Pressure Belt	**Ocean Current**	**Specials**	**In charge**
Sector 1	Prevailing Westerlies	• South Indian Current • Antarctic Circumpolar Current	• Southern Ocean Low • SAH	Nina Mukherjee
Sector 2	Prevailing Westerlies	• West Australian Current	• Southern Indian Ocean High	Rainer Basten
Drift Ice			• Satellite Imagery	Spencer Bashford

Leg 4 – Late December 2025 – Early January 2026

This Australian Coast-to-Coast Leg is divided into two Sectors. Leaving the West Coast of Australia back into the Southern Ocean will be one meteorological area, leaving Tasmania up to the Gold Coast will be the next.

Sector 1

Fremantle – Tasmania

This Sector will start back in the Prevailing Westerlies and the West Australian Current is the major ocean current. Depending on how far South our Yacht is heading, we may also encounter the Antarctic Circumpolar Current.

Specials: Topography of Tasmanian Seabed, Topography of South Tasman Rise

Sector 2

Tasmania – Gold Coast

With this Leg, we will leave the Prevailing Westerlies and reenter the Pressure Belt of the Subtropical Highs. The East Australian Current (EAC) and Tasman Current will push South along the eastern shores of Australia.

Specials: Southerly Busters (Effects on Sea State in Combination with the EAC), The Bass Strait

Leg 4 Summary

	Pressure Belt	**Ocean Current**	**Specials**	**In charge**
Sector 1	Prevailing Westerlies	• West Australian Current	• Tasmanian Seabed • South Tasman Rise	Jacobus van Eeden
Sector 2	Sub Tropical High Pressure	• East Australian Current • Tasman Current	• The Bass Strait • Southerly Busters	Nigel Cave

Leg 5 – Mid January – Late February 2026

This Leg is split into a few more sectors again, since we are expecting to cross several different atmospheric pressure belts and wind systems. The fleet is heading North and thus also crossing the Equator again into the Northern Hemisphere.

Sector 1

Gold Coast – Salomon Island

Heading North, our Yacht will leave the Sub Tropical High Pressure Belt and enter the South East Trade Winds. The East Australian Current will push South..

Specials: Tropical Cyclones – please prepare a summary of the last 5 years's occurrences and tracks for the time frame of January/February/March

El Niño/ El Niña – please prepare a short description of this phenomenon and create a summary of the last 10 years's occurrences in that region for January/February/March

Sector 2

Salomon Islands – Guam

Although we will most likely not head as far east as Guam, I chose this Island as a reference for latitude of this sector (Imagine the Ocean abeam Manila, Philipines).

During this Sector we will cross the Equator again and thus reenter the ITCZ as well as the Equatorial Low Pressure Belt. The Pacific N/S Equatorial Current as well as the Pacific Equatorial Counter Current will be present in this region.

Specials: ITCZ, Squall Lines

Sector 3

Guam – Shanghai

As mentioned above, please imagine Guam as a reference of latitude as we will most likely not be heading as far east. Leaving the ITCZ again, the race continues in the northern hemisphere in the North East Trade Winds. Closing in on China, the Kuroshio Current will be introduced.

Specials: NNE/NE Monsoon, Madden-Julian-Oscillation (MJO) – please prepare an overview of the last 10 years' occurrences and possible trigger of cyclone in this region.

Sector 4

Shanghai – Qingdao

This Sector is rather small, neverless the focus of the Kuroshio and Tsushima Current will be very interesting for us. This area is returning to the Sub Tropical High Pressure Belt.

Specials: NE Monsoon

Leg 5 Summary

	Pressure Belt	**Ocean Current**	**Specials**	**In charge**
Sector 1	South East Trade Winds	• East Australian Current	• Tropical Cyclones TC • El Niño / El Niña	Jason Tyler
Sector 2	ITCZ Equatorial Low Pressure Belt	• Pacific North Equatorial Current • Pacific Equatorial Current • Pacific South Equatorial Current	• ITCZ • Squall Lines	Kyle Vacca
Sector 3	North East Trade Winds	• Kuroshio Current	• NNE/NE Monsoon • Madden-Julian-Oscillation MJO	Jason Baris
Sector 4	Sub Tropical High Pressure Belt	• Kuroshio Current • Tsushima Current	• NE Monsoon	Todd Unterseher

Leg 6 – Early March – April 2026

Although this leg is only present in two climatic differing zones, the total nautical distance of this leg requires greater sectoring.

Sector 1

Qingdao – Tongyeong

The first sector will take place in the Sub Tropical High Pressure Belt, the Tsushima Current and Kuroshio Current will dominate.

Sector 2

Tongyeong – abeam Tokio

During this Sector we will leave South Korea and head around the southern tip of Japan. Atmospherically we are still in the Sub Tropical High Pressure Belt and the Kuroshio Current could excell us into the North Pacific Ocean.

Specials: Formation of Fog South of Japan

Sector 3:

Abeam Tokio – International Date Line (IDL)

Once we have entered the North Pacific Ocean, we will reenter the Prevailing Westerlies and the North Pacific Current is pushing east.

Sector 4

International Date Line (IDL) – Seattle

This last Sector is rather large, but should be manageable. Whilst continuing in the Prevailing Westerlies, we will leave the North Pacific Current close to the US Mainland and enter the California Current.

Specials: East Pacific (Blocking) High

Leg 6 Summary

	Pressure Belt	**Ocean Current**	**Specials**	**In charge**
Sector 1	Sub Tropical High Pressure Belt	• Tsushima Current • Kuroshio Current		Quinn Edwards
Sector 2	Sub Tropical High Pressure Belt	• Kuroshio Current	• Fog S of Japan	Reggie Acosta
Sector 3	Prevailing Westerlies	• North Pacific Current		Sarah Jane Robinson
Sector 4	Prevailing Westerlies	• North Pacific Current • California Current	• East Pacific (Blocking) High	Philip Wilstrup

Leg 7 – End of April – June 2026

As with every North-South heading leg, this Leg will encounter many varying climatic conditions, and therefore has been divided into four sectors.

Sector 1

Seattle – Colima

Leaving Seattle, this Sector starts in the Prevailing Westerlies and dives into the Sub Tropical High Pressure Belt. The California Current is pushing the Yacht south.

Specials: East Pacific High, Tropical Revolving Storms (TRS) – Research the occurrences and tracks of TRS (and Tropical Depressions) in this region of the past 10 years for April/May/June

Sector 2

Colima – Panama

Abeam Mexico we will enter the the North East Trades and Equatorial Low Pressure Belt. The Equatorial Counter Current could be of potential interest.

Specials: Inshore Effects of Topography: Tehuantecepecanos (katabatic Winds); Chubascos (squalls)

Sector 3

Panama – Cuba

After crossing the Panama Canal, the Fleet will return on a northerly heading towards the Caribbean. This Sector is close to the ITCZ, the Equatorial Low Pressure System and then reentering the North East Trade Winds. There will be the Carribean Current as well as the Guyana Current.

Specials: ITCZ, Tropical Waves

Sector 4

Cuba – Washington DC (Port not confirmed)

Leaving the Carribean, the Fleet is heading further north into the Sub Tropical High Pressure Belt. The Antilles Current and the Gulf Stream will become of greater interest.

Specials: Tropical Revolving Storms (TRS, Hurricanes) – please prepare an overview of the last 10 year's occurrences and tracks of TRS in this region during April/May/June

Leg 7 Summary

	Pressure Belt	**Ocean Current**	**Specials**	**In charge**
Sector 1	• Prevailing Westerlies • Sub Tropical High Pressure Belt	• California Current	• East Pacific High • Tropical Revolving Storms TRS	Diana Shaw
Sector 2	• North East Trade Winds • Equatorial Low Pressure Belt	• Equatorial Counter Current	• Tehuantecepecanos • Chubascos	Geoff Orr
Sector 3	• ITCZ • Equatorial Low Pressure Belt • North East Trade Winds	• Caribbean Current • Guyana Current	• ITCZ • Tropical Waves	Katie Husband
Sector 4	• Sub Tropical High Pressure Belt	• Gulf Stream • North Atlantic Equatorial Current	• TRS (Hurricanes)	Nick Hodson

Leg 8 – Mid June – Early August 2026

Although this Leg is once again quite long, I have decided on only two sectors due to the very similar meteological conditions. Additionally, a drift Ice Analysis is required due to the crossing for the Great Banks. The majority of this Leg will take place in the prevailing Westerlies.

Sector 1

Washington DC – St. John's

The Gulf Stream is pushing northbound, but the Labrador extension may create gyres. As the Fleet is heading very far North again, I would like a Drift Ice Analysis prepared for this sector.

Specials: Formation of Fog in the Grand Banks of Newfoundland

Sector 2

St. John's – Oban – Portsmouth

This Sector will bring the Yachts eastbound in the prevailing westerlies. The Gulf Stream as well as the Labrador Current have an influence in this sector, therefore a drift Ice Analysis would be helpful for this sector as well. Later, the Gulf Stream merges into the North Atlantic Current and our focus finishes in coastal waters.

Specials: Jet Stream Positions of past 5 years in this area for June/July/August

Leg 8 Summary

	Pressure Belt	**Ocean Current**	**Specials**	**In charge**
Sector 1	Prevailing Westerlies	• Gulf Stream	• Fog Newfoundland	Damien Payne
Sector 2	Prevailing Westerlies	• Labrador Current • Gulf Stream	• Jet Stream Positions	Sylvester Tomczyk
Drift ICE			• Satellite Imagery	Kevin Woods