# DTN

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## WeatherOps for Ports and Terminals

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### Avoid Downtime and Protect Port Operations from Severe Weather

Downtime due to adverse weather conditions causes significant disruption to port and terminal operations. It is a safety risk for port personnel and can cause substantial damage to assets.

Accurate weather intelligence can help you reduce risk to personnel while improving your operational efficiency. DTN WeatherOps provides port authorities and operators with a powerful weather analysis solution. It helps reduce uncertainty and improve operational decisions for smooth daily port and terminal operations. With it, you can make better-informed decisions on the impact of weather, reduce risks for personnel, and keep your assets safe.

#### With WeatherOps for ports and terminals you can

- Plan for the impact of weather on the vast supply chain at port and individual facilities.
- Access accurate metocean conditions to plan port operational activities.
- React quickly and proportionally to severe weather such as lightning strikes, thunderstorms, and tropical cyclones
- Understand the effects of strong currents and adverse wind and wave conditions in the approach channel and port entrance
- Monitor for excessive vessel motion and suspend loading/unloading when needed

## Access the weather intelligence you need

Weather intelligence helps you determine the optimal protection from severe weather impacts on port operations. With early insight into weather conditions in and around the port, you can:

- Interpret the likely implications and take mitigating actions to ensure safe port arrivals
- Evaluate the characteristic vessel variables and the results of the wave or current threshold analyses
- Assess available weather windows and ensure reliable port operations
- Use our data to help evaluate costs related to shuttle barge downtime

Our accurate offshore-onshore weather forecast system offers significant benefits for coastal zones, with an extensive shallow foreshore to limit dredging costs. We help you find the most cost-effective solutions for specific downtime scenarios, with guidance tailored to conditions in your location.



#### Plan, position, and profit: the benefits of a single platform

Each port is unique. DTN WeatherOps for ports and terminals is a single platform to help you address your specific weather challenges. Whether you're dealing with tides, waves, wind, currents, squalls, lightning, or tropical storms, we provide the data to make the right decisions.

#### WeatherOps for ports and terminals

#### **Marine and Continental Planning Forecast**

Get a 7-Day forecast in 6-hour time steps for 10/50 meter wind direction and speed, wind wave, primary surface swell, significant wave, max wave, visibility, air temperature, and precipitation and thunderstorm probability.

#### **Tropical Weather Suite**

The active storm advisory gives you time to take action. Our initial tropical storm forecasts issue, on average, 50 hours before the National Hurricane Center began forecasting.

#### **Tropical Threat Report**

While listing storm specifics, the forecast guidance table details expected wind arrival times and "worst-case" scenarios. It gives you a direct assessment of potential tropical cyclone/ typhoon impacts on your assets including storm surge.

#### Weather safety at ports

#### Lightning and Severe Weather Alerts

DTN systems provide real-time lightning proximity alerting including "all-clear" notifications for point and areal locations.

#### **Fog Forecasting**

These reports provide the forecast for fog using advanced forecasting techniques and data acquisition to provide verifiable and accurate results with several days of lead time.

#### **Tropical Daily Planner**

WeatherOps issues twice-daily summaries of active tropical systems and invest areas showing direction/movement with a defined track, and location/movement of tropical waves.

#### Tropical 8-15-day outlook

Twice weekly, during the Atlantic tropical season, WeatherOps issues an 8-15 day outlook for tropical cyclone development potential for subregions in the Atlantic basin. A detailed write-up describes the nature of potential threats.

#### **T-Time Risk and Response**

These reports provide a direct assessment of potential tropical cyclone impacts to specific assets, with precise timing of forecasted winds for each. T time reports focus on offshore marine assets, while risk & response reports serve land-based customers.

#### Squall alert services

Thunderstorms and squalls can develop very quickly. The DTN squall-forecast service for tropical latitudes uses high-resolution satellite imagery to identify and track the development of these convective systems, alerting you to any threats.





#### The DTN advantage

We can help you improve your operational confidence, communications, and decision-making before and during weather impacts. We provide organizations with actionable weather analytics and decision support. DTN expert meteorologists monitor assets and provide live, personal consulting – anywhere on the globe.

DTN WeatherOps forecasts give you the actionable insights you need to make smart, informed decisions. You'll anticipate potential areas of impact, plan to reduce weather-related downtime, and mitigate risks to personnel and assets. "Because of the information in WeatherOps daily tropical planners, active storm advisories, and the direct consultation with the WeatherOps team, we were able to stay open at our Port Aransas facility longer, shut down properly, and get back to work faster."

Russ Miller/ HSSE Emergency Preparedness Manager Plains All American Pipeline

