

Global Wind Hazard Final Run

TAOS[™] Real Time Operations System
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Abstract

TAOStm WX Global Analysis of wind hazards and economic impact estimates based the 20240502000000 GFS short term integrations, and is the recommended simulation for settlement purposes for impacts for this date. This analysis was run using proc:gfs TAOS Version 25.01:ROCKY9:GCC11:2024:106:1435, and includes wind hazards from tropical cyclones, winter storms, mid latitude cyclones, and other synoptic scale weather systems.

Report generated Fri May 3 05:41:09 AM UTC 2024 on cortex2 using GFS data downloaded on Thu May 2 09:37:24 PM UTC 2024.

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Chapter 1

Impact Summary for 2024-05-02

Table 1.1: Global Economic Impacts for 2024-05-02

<i>scenario</i>	<i>exposures</i>	<i>economic_impact</i>
hindcast_20240502	82697	1.11 Million USD

Table 1.2: Countries with over 100 thousand USD in impacts

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Bangladesh	2973	.26 Million USD
Myanmar	1261	.15 Million USD
United States	24725	.46 Million USD

GFS Surface Winds for 2024-05-02 00:00.

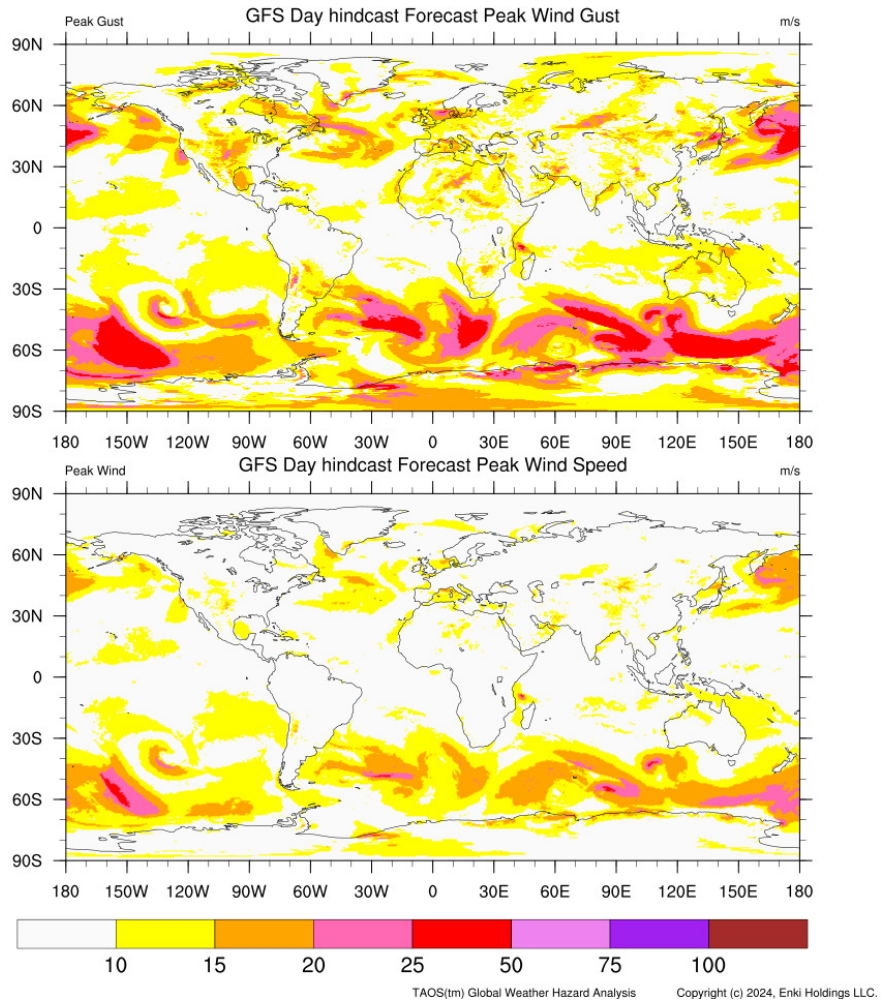


Figure 1.1: GFS Wind Hindcast

Chapter 2

Bangladesh impact summary for 2024-05-02

Table 2.1: Overall summary for Bangladesh

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Bangladesh	2973	.26 Million USD

Table 2.2: Summary by Level 1 Admin Area with loss over 1000 USD

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Barisal	1768	186,567.06 USD
Chittagong	1205	71,528.88 USD

Chapter 3

Myanmar impact summary for 2024-05-02

Table 3.1: Overall summary for Myanmar

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Myanmar	1261	.15 Million USD

Table 3.2: Summary by Level 1 Admin Area with loss over 1000 USD

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Magway	608	144,558.57 USD
Mandalay	653	3,535.01 USD

Chapter 4

United States impact summary for 2024-05-02

Table 4.1: Overall summary for United States

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
United States	24725	.46 Million USD

Table 4.2: Summary by Level 1 Admin Area with loss over 1000 USD

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Alaska	327	1,274.40 USD
Kansas	441	1,332.46 USD
Oklahoma	6121	51,709.76 USD
Texas	17637	405,779.72 USD

Chapter 5

Comparison of Forecast vs Hindcast Run

This tables shows what the forecast for 2024-05-02 was for the same day (00z forecast for the rest of the day) as well as the forecast from the simulation in each of the previous four days.

Table 5.1: Forecast Comparison with Hindcast Run

<i>scenario</i>	<i>economic_impact</i>
hindcast_20240502	1.11 Million USD
f001_20240502	.89 Million USD
f002_20240501	7.33 Million USD
f003_20240430	1.01 Million USD
f004_20240429	2.94 Million USD
f005_20240428	4.22 Million USD

Chapter 6

Technical Notes

The TAOStm WX Global Analysis (TAOS/WX) is part of the TAOStm storm hazard modeling system. TAOS/WX ingests global or regional weather models and, using the same graphical processing systems, statistical methodologies, exposure, and damage models as the tropical cyclone (TAOS/TC) and earthquake (TAOS/EQ) packages, generates estimates of weather hazards and the economic impact of weather hazards on those exposures.