

Global Wind Hazard Final Run

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May 5, 2024

Abstract

TAOStm WX Global Analysis of wind hazards and economic impact estimates based the 20240504000000 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 Sun May 5 05:45:06 AM UTC 2024 on cortex2 using GFS data downloaded on Sat May 4 09:35:37 PM UTC 2024.

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Chapter 1

Impact Summary for 2024-05-04

Table 1.1: Global Economic Impacts for 2024-05-04

<i>scenario</i>	<i>exposures</i>	<i>economic_impact</i>
hindcast_20240504	361705	4.03 Million USD

Table 1.2: Countries with over 100 thousand USD in impacts

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Afghanistan	19087	.16 Million USD
Argentina	171243	.94 Million USD
Iran	12032	.12 Million USD
Syria	21639	.45 Million USD
Tanzania	1270	.14 Million USD
Turkmenistan	65366	.52 Million USD
United States	28258	.30 Million USD
Uzbekistan	36030	1.33 Million USD

GFS Surface Winds for 2024-05-04 00:00.

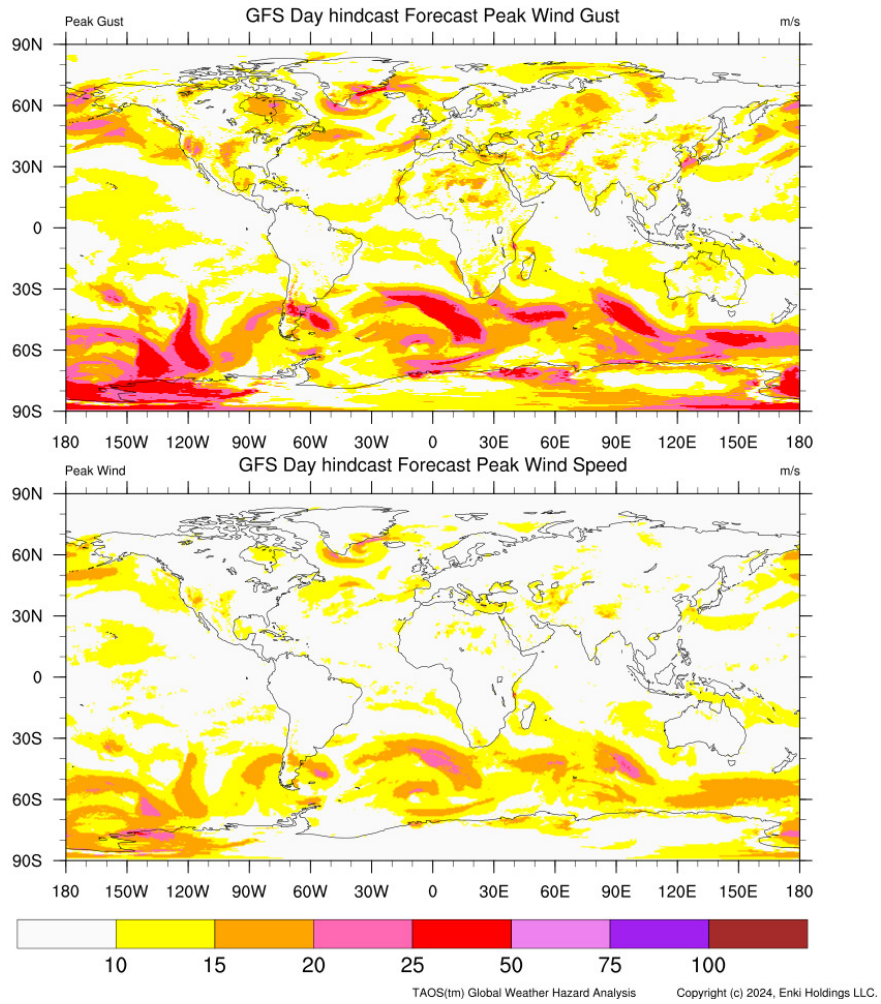


Figure 1.1: GFS Wind Hindcast

Chapter 2

Afghanistan impact summary for 2024-05-04

Table 2.1: Overall summary for Afghanistan

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Afghanistan	19087	.16 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>
Badghis	2916	20,544.39 USD
Faryab	3321	24,973.34 USD
Hirat	12850	115,370.91 USD

Chapter 3

Argentina impact summary for 2024-05-04

Table 3.1: Overall summary for Argentina

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Argentina	171243	.94 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>
Chubut	32762	137,249.32 USD
La Pampa	1007	5,153.48 USD
Mendoza	10018	68,413.85 USD
Neuquén	47183	503,428.36 USD
Río Negro	80221	225,784.03 USD

Chapter 4

Iran impact summary for 2024-05-04

Table 4.1: Overall summary for Iran

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Iran	12032	.12 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>
Fars	3249	13,447.04 USD
North Khorasan	529	1,123.95 USD
Razavi Khorasan	8058	109,391.86 USD

Chapter 5

Syria impact summary for 2024-05-04

Table 5.1: Overall summary for Syria

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Syria	21639	.45 Million USD

Table 5.2: Summary by Level 1 Admin Area with loss over 1000 USD

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Aleppo	6999	56,609.80 USD
As Suwayda'	2806	76,960.54 USD
Hamah	4034	133,550.54 USD
Hims	2259	68,436.24 USD
Idlib	1751	28,826.73 USD
Lattakia	1062	15,033.95 USD
Tartus	2086	66,397.33 USD

Chapter 6

Tanzania impact summary for 2024-05-04

Table 6.1: Overall summary for Tanzania

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Tanzania	1270	.14 Million USD

Table 6.2: Summary by Level 1 Admin Area with loss over 1000 USD

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Pemba North	470	2,096.91 USD
Pemba South	356	1,681.90 USD
Pwani	444	131,519.27 USD

Chapter 7

Turkmenistan impact summary for 2024-05-04

Table 7.1: Overall summary for Turkmenistan

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Turkmenistan	65366	.52 Million USD

Table 7.2: Summary by Level 1 Admin Area with loss over 1000 USD

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Ahal	5641	45,477.85 USD
Chardzhou	11592	86,189.55 USD
Mary	30693	325,702.36 USD
Tashauz	17440	57,791.92 USD

Chapter 8

United States impact summary for 2024-05-04

Table 8.1: Overall summary for United States

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
United States	28258	.30 Million USD

Table 8.2: Summary by Level 1 Admin Area with loss over 1000 USD

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Alaska	202	2,180.48 USD
California	380	1,402.48 USD
Colorado	8513	130,424.93 USD
Kansas	214	1,095.97 USD
Nebraska	1213	6,442.72 USD
Nevada	12608	117,179.28 USD
Texas	4583	42,376.06 USD

Chapter 9

Uzbekistan impact summary for 2024-05-04

Table 9.1: Overall summary for Uzbekistan

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Uzbekistan	36030	1.33 Million USD

Table 9.2: Summary by Level 1 Admin Area with loss over 1000 USD

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Jizzakh	766	15,266.02 USD
Karakalpakstan	5102	13,636.20 USD
Kashkadarya	14704	728,612.85 USD
Khorezm	6238	343,582.59 USD
Navoi	4564	150,832.39 USD
Samarkand	4656	80,107.58 USD

Chapter 10

Comparison of Forecast vs Hindcast Run

This tables shows what the forecast for 2024-05-04 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 10.1: Forecast Comparison with Hindcast Run

<i>scenario</i>	<i>economic_impact</i>
hindcast_20240504	4.03 Million USD
f001_20240504	6.41 Million USD
f002_20240503	6.24 Million USD
f003_20240502	6.45 Million USD
f004_20240501	5.53 Million USD
f005_20240430	3.46 Million USD

Chapter 11

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.