

Global Wind Hazard Final Run

TAOStm Real Time Operations System

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Abstract

TAOStm WX Global Analysis of wind hazards and economic impact estimates based the 20240426000000 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 Sat Apr 27 05:41:41 AM UTC 2024 on cortex2 using GFS data downloaded on Fri Apr 26 09:34:16 PM UTC 2024.

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Chapter 1

Impact Summary for 2024-04-26

Table 1.1: Global Economic Impacts for 2024-04-26

<i>scenario</i>	<i>exposures</i>	<i>economic_impact</i>
hindcast_20240426	236365	8.48 Million USD

Table 1.2: Countries with over 100 thousand USD in impacts

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Argentina	103678	.47 Million USD
India	32054	3.50 Million USD
Pakistan	28163	3.94 Million USD
Saudi Arabia	17245	.30 Million USD

GFS Surface Winds for 2024-04-26 00:00.

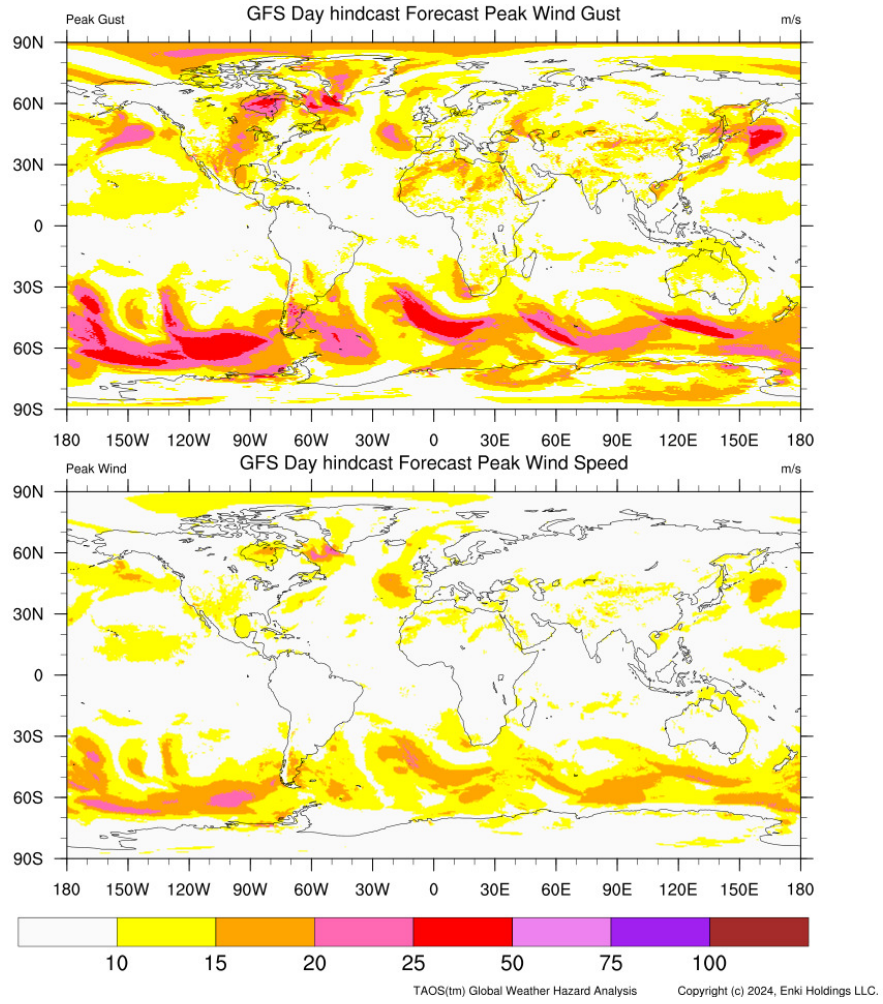


Figure 1.1: GFS Wind Hindcast

Chapter 2

Argentina impact summary for 2024-04-26

Table 2.1: Overall summary for Argentina

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Argentina	103678	.47 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>
Chubut	35166	131,303.62 USD
La Rioja	1838	19,670.73 USD
Mendoza	1770	4,128.14 USD
Neuquén	27866	198,904.15 USD
Río Negro	25327	90,773.70 USD
Santa Cruz	11711	28,236.80 USD

Chapter 3

India impact summary for 2024-04-26

Table 3.1: Overall summary for India

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
India	32054	3.50 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>
Madhya Pradesh	22761	2,596,940.10 USD
Maharashtra	847	11,444.33 USD
Punjab	765	8,366.68 USD
Rajasthan	3713	480,573.06 USD
Uttar Pradesh	3968	406,807.89 USD

Chapter 4

Pakistan impact summary for 2024-04-26

Table 4.1: Overall summary for Pakistan

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Pakistan	28163	3.94 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>
Baluchistan	2885	16,520.94 USD
N.W.F.P.	3021	45,379.04 USD
Punjab	22254	3,874,042.96 USD

Chapter 5

Saudi Arabia impact summary for 2024-04-26

Table 5.1: Overall summary for Saudi Arabia

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Saudi Arabia	17245	.30 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>
Al Jawf	2808	100,507.75 USD
Al Madinah	870	4,445.46 USD
Al Quassim	809	4,438.89 USD
Ar Riyad	1222	2,566.54 USD
‘Asir	1848	81,482.95 USD
Ha’il	1749	18,777.13 USD
Makkah	6587	68,462.09 USD
Tabuk	1352	17,042.10 USD

Chapter 6

Comparison of Forecast vs Hindcast Run

This tables shows what the forecast for 2024-04-26 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 6.1: Forecast Comparison with Hindcast Run

<i>scenario</i>	<i>economic_impact</i>
hindcast_20240426	8.48 Million USD
f001_20240426	36.34 Million USD
f002_20240425	10.48 Million USD
f003_20240424	6.47 Million USD
f004_20240423	8.19 Million USD
f005_20240422	6.19 Million USD

Chapter 7

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.