

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 20240427000000 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 Apr 28 05:39:42 AM UTC 2024 on cortex2 using GFS data downloaded on Sat Apr 27 09:34:33 PM UTC 2024.

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Chapter 1

Impact Summary for 2024-04-27

Table 1.1: Global Economic Impacts for 2024-04-27

<i>scenario</i>	<i>exposures</i>	<i>economic_impact</i>
hindcast_20240427	455439	8.55 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	283185	4.35 Million USD
Chile	46545	.22 Million USD
France	876	.11 Million USD
India	5799	2.39 Million USD
Saudi Arabia	37339	1.13 Million USD

GFS Surface Winds for 2024-04-27 00:00.

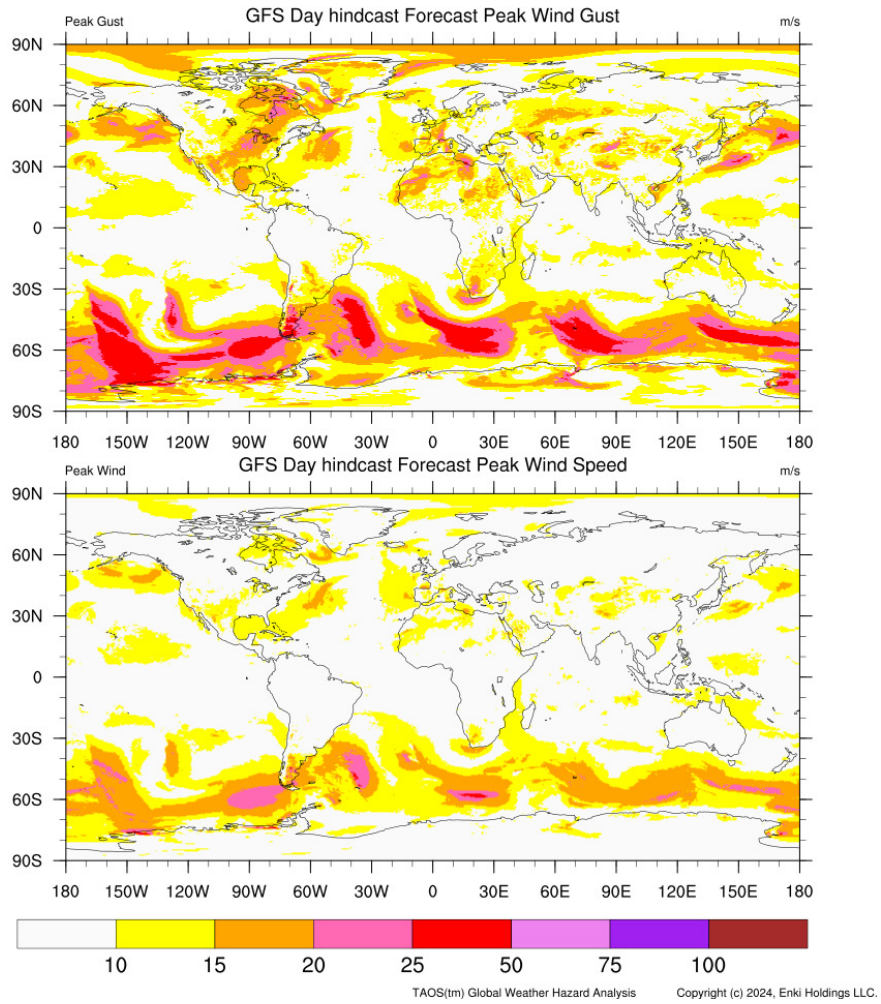


Figure 1.1: GFS Wind Hindcast

Chapter 2

Argentina impact summary for 2024-04-27

Table 2.1: Overall summary for Argentina

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Argentina	283185	4.35 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	126249	3,336,948.33 USD
La Rioja	2776	36,810.57 USD
Neuquén	7298	59,983.12 USD
Río Negro	27590	88,077.80 USD
Santa Cruz	118403	823,371.55 USD
Tierra del Fuego	600	1,637.39 USD

Chapter 3

Chile impact summary for 2024-04-27

Table 3.1: Overall summary for Chile

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Chile	46545	.22 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>
Magallanes y Antártica Chilena	46545	220,409.60 USD

Chapter 4

France impact summary for 2024-04-27

Table 4.1: Overall summary for France

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
France	876	.11 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>
Occitanie	523	4,097.35 USD
Provence-Alpes-Côte d'Azur	353	102,319.01 USD

Chapter 5

India impact summary for 2024-04-27

Table 5.1: Overall summary for India

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
India	5799	2.39 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>
Madhya Pradesh	5799	2,392,329.38 USD

Chapter 6

Saudi Arabia impact summary for 2024-04-27

Table 6.1: Overall summary for Saudi Arabia

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Saudi Arabia	37339	1.13 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>
Al Jawf	458	2,821.30 USD
Al Madinah	7326	617,719.61 USD
Ar Riyad	11556	123,301.36 USD
'Asir	7979	204,815.46 USD
Ha'il	2337	7,910.58 USD
Makkah	7683	169,418.98 USD

Chapter 7

Comparison of Forecast vs Hindcast Run

This tables shows what the forecast for 2024-04-27 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 7.1: Forecast Comparison with Hindcast Run

<i>scenario</i>	<i>economic_impact</i>
hindcast_20240427	8.55 Million USD
f001_20240427	8.98 Million USD
f002_20240426	6.95 Million USD
f003_20240425	7.22 Million USD
f004_20240424	7.88 Million USD
f005_20240423	4.07 Million USD

Chapter 8

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.