Global Wind Hazard Final Run

TAOS^{tm} Real Time Operations System
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Abstract

TAOS^{tm} WX Global Analysis of wind hazards and economic impact estimates based the 20240501000000 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 Thu May 2 05:38:56 AM UTC 2024 on cortex2 using GFS data downloaded on Wed May 1 09:37:29 PM UTC 2024.

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Chapter 1

Impact Summary for 2024-05-01

Table 1.1: Global Economic Impacts for 2024-05-01

scenario	*exposures*	*economic_impact*
hindcast_20240501	286334	6.36 Million USD

Table 1.2: Countries with over 100 thousand USD in impacts

name	*num_exposures*	*economic_impact*
Argentina	97736	.67 Million USD
China	110936	.32 Million USD
Russia	7168	.15 Million USD
Saudi Arabia	33685	.93 Million USD
United Arab Emirates	8701	.17 Million USD
United States	12317	4.05 Million USD

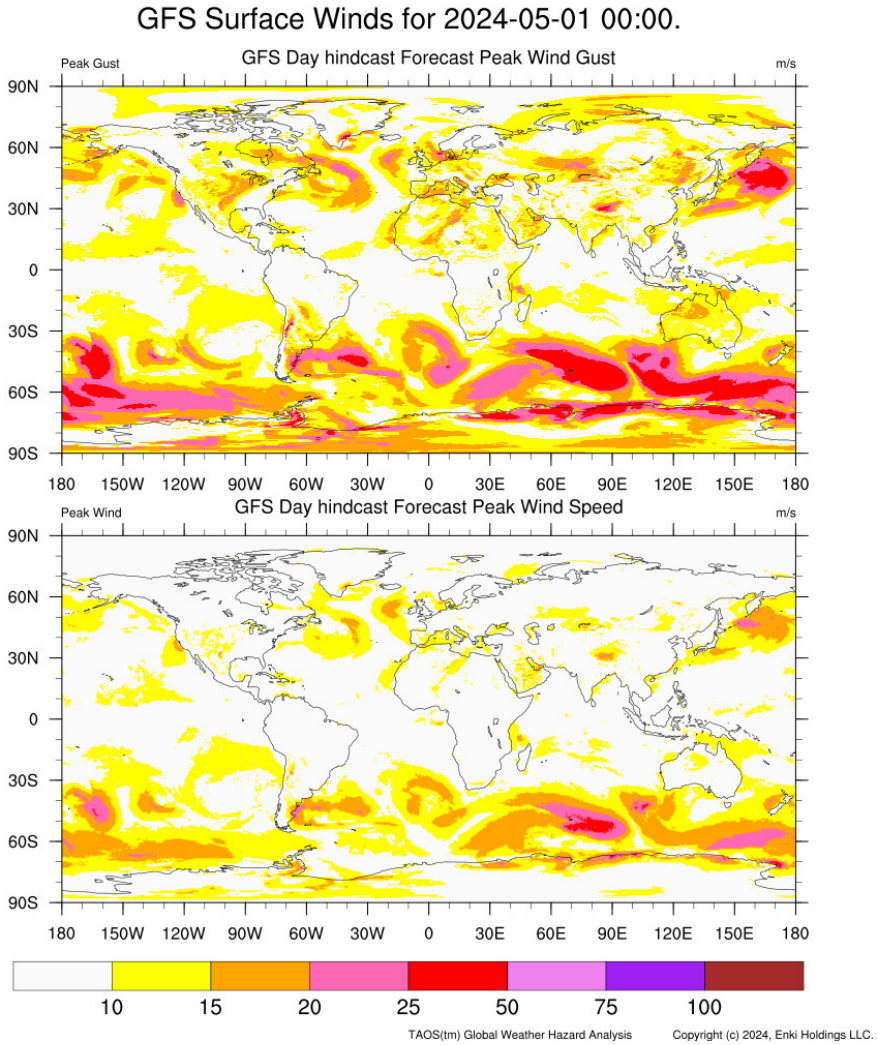

Figure 1.1: GFS Wind Hindcast

Chapter 2

Argentina impact summary for 2024-05-01

Table 2.1: Overall summary for Argentina

name	*num_exposures*	*economic_impact*
Argentina	97736	.67 Million USD

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

name	*num_exposures*	*economic_impact*
Catamarca	23195	185,025.55 USD
Chubut	50199	398,941.78 USD
Jujuy	1119	5,026.61 USD
La Rioja	1590	6,985.27 USD
Río Negro	4780	18,708.20 USD
Salta	6455	25,313.82 USD
San Juan	1040	4,008.99 USD
Santa Cruz	9358	26,683.48 USD

Chapter 3

China impact summary for 2024-05-01

Table 3.1: Overall summary for China

name	*num_exposures*	*economic_impact*
China	110936	.32 Million USD

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

name	*num_exposures*	*economic_impact*
Xinjiang Uygur	8011	42,619.36 USD
Xizang	102925	280,164.07 USD

Chapter 4

Russia impact summary for 2024-05-01

Table 4.1: Overall summary for Russia

name	*num_exposures*	*economic_impact*
Russia	7168	.15 Million USD

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

name	*num_exposures*	*economic_impact*
Kamchatka	565	1,658.83 USD
Sakha	2385	4,193.55 USD
Sakhalin	4203	139,645.62 USD

Chapter 5

Saudi Arabia impact summary for 2024-05-01

Table 5.1: Overall summary for Saudi Arabia

name	*num_exposures*	*economic_impact*
Saudi Arabia	33685	.93 Million USD

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

name	*num_exposures*	*economic_impact*
Al Quassim	2743	37,254.60 USD
Ar Riyad	10391	447,999.95 USD
Ash Sharqiyah	19401	439,348.51 USD
Ha'il	284	5,492.22 USD
Najran	866	2,684.79 USD

Chapter 6

United Arab Emirates impact summary for 2024-05-01

Table 6.1: Overall summary for United Arab Emirates

name	*num_exposures*	*economic_impact*
United Arab Emirates	8701	.17 Million USD

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

name	*num_exposures*	*economic_impact*
Abu Dhabi	8510	142,481.98 USD
Dubai	191	23,314.84 USD

Chapter 7

United States impact summary for 2024-05-01

Table 7.1: Overall summary for United States

name	*num_exposures*	*economic_impact*
United States	12317	4.05 Million USD

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

name	*num_exposures*	*economic_impact*
California	160	1,984.97 USD
Texas	12064	4,043,902.97 USD

Chapter 8

Comparison of Forecast vs Hindcast Run

This tables shows what the forecast for 2024-05-01 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 8.1: Forecast Comparison with Hindcast Run

scenario	*economic_impact*
hindcast_20240501	6.36 Million USD
f001_20240501	3.71 Million USD
f002_20240430	4.11 Million USD
f003_20240429	4.86 Million USD
f004_20240428	7.01 Million USD
f005_20240427	3.56 Million USD

Chapter 9

Technical Notes

The TAOS^{tm} WX Global Analysis (TAOS/WX) is part of the TAOS^{tm} 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.