

# Global Wind Hazard Final Run

TAOS<sup>™</sup> Real Time Operations System  
Kinetic Analysis Corporation  
Enki Research Computing Facility, Savannah, Georgia, USA

February 12, 2024

## **Abstract**

TAOS<sup>tm</sup> WX Global Analysis of wind hazards and economic impact estimates based the 20240211000000 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 24.1:ROCKY9:GCC11:2024:033:2146, and includes wind hazards from tropical cyclones, winter storms, mid latitude cyclones, and other synoptic scale weather systems.

Report generated Mon Feb 12 05:36:20 AM UTC 2024 on cortex2 using GFS data downloaded on Sun Feb 11 09:35:35 PM UTC 2024.

# Contents

1	Impact Summary for 2024-02-11	4
2	Algeria impact summary for 2024-02-11	6
3	Argentina impact summary for 2024-02-11	7
4	Bahrain impact summary for 2024-02-11	8
5	Greece impact summary for 2024-02-11	9
6	Mongolia impact summary for 2024-02-11	10
7	Spain impact summary for 2024-02-11	11
8	Comparison of Forecast vs Hindcast Run	12
9	Technical Notes	13

# List of Tables

1.1	Global Economic Impacts for 2024-02-11 . . . . .	4
1.2	Countries with over 100 thousand USD in impacts . . . . .	4
2.1	Overall summary for Algeria . . . . .	6
2.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	6
3.1	Overall summary for Argentina . . . . .	7
3.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	7
4.1	Overall summary for Bahrain . . . . .	8
4.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	8
5.1	Overall summary for Greece . . . . .	9
5.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	9
6.1	Overall summary for Mongolia . . . . .	10
6.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	10
7.1	Overall summary for Spain . . . . .	11
7.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	11
8.1	Forecast Comparison with Hindcast Run . . . . .	12

# List of Figures

1.1	GFS Wind Hindcast . . . . .	5
-----	-----------------------------	---

# Chapter 1

## Impact Summary for 2024-02-11

Table 1.1: Global Economic Impacts for 2024-02-11

<i>scenario</i>	<i>exposures</i>	<i>economic_impact</i>
hindcast_20240211	203457	3.84 Million USD

Table 1.2: Countries with over 100 thousand USD in impacts

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Algeria	14293	.25 Million USD
Argentina	109810	.45 Million USD
Bahrain	385	.28 Million USD
Greece	10360	.80 Million USD
Mongolia	28642	.19 Million USD
Spain	10024	1.48 Million USD

### GFS Surface Winds for 2024-02-11 00:00.

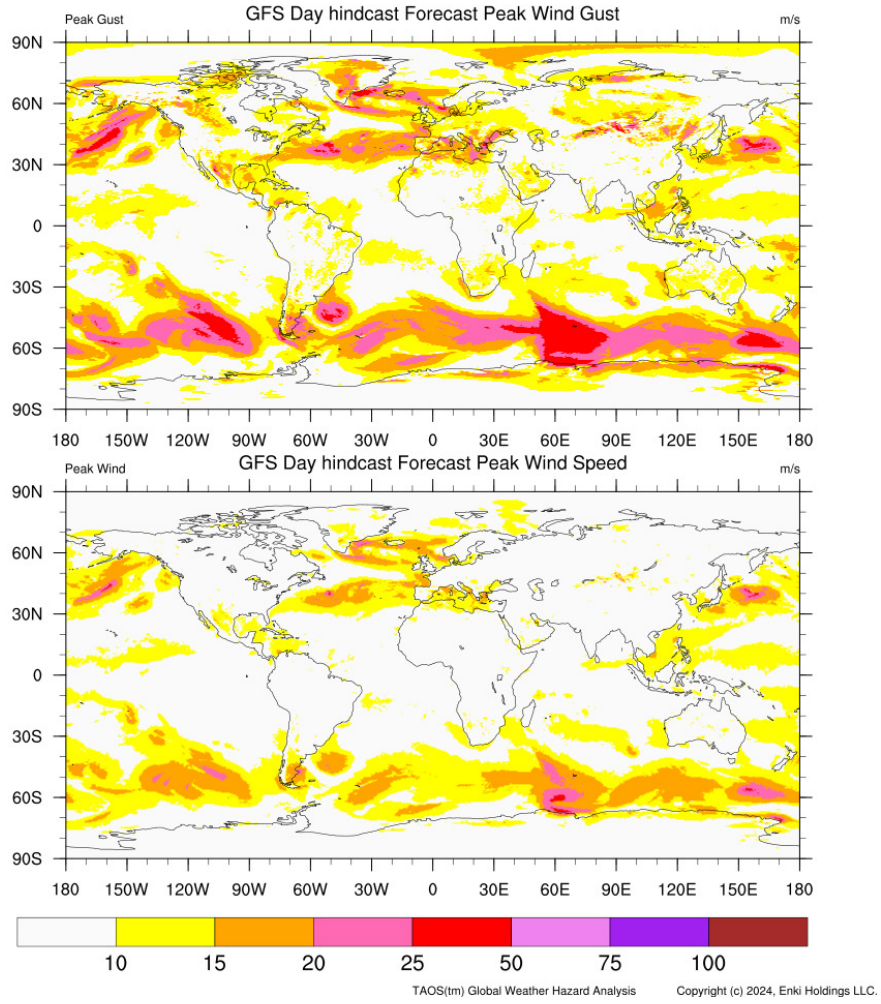


Figure 1.1: GFS Wind Hindcast

## Chapter 2

# Algeria impact summary for 2024-02-11

Table 2.1: Overall summary for Algeria

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Algeria	14293	.25 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>
Djelfa	8221	146,486.16 USD
Laghouat	3652	67,207.68 USD
M'Sila	833	6,971.18 USD
Tiaret	1439	23,491.22 USD
Tissemsilt	131	3,509.93 USD



# Chapter 3

## Argentina impact summary for 2024-02-11

Table 3.1: Overall summary for Argentina

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Argentina	109810	.45 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	51489	218,822.81 USD
La Pampa	913	1,215.77 USD
Santa Cruz	57408	226,181.70 USD

# Chapter 4

## Bahrain impact summary for 2024-02-11

Table 4.1: Overall summary for Bahrain

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Bahrain	385	.28 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>
Northern	3	19,731.62 USD
Southern	382	259,532.42 USD

# Chapter 5

## Greece impact summary for 2024-02-11

Table 5.1: Overall summary for Greece

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Greece	10360	.80 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>
Aegean	5747	491,648.58 USD
Athos	132	2,066.04 USD
Attica	393	9,121.52 USD
Macedonia and Thrace	1339	203,358.44 USD
Peloponnese, Western Greece and the Ionian Islands	1587	79,525.46 USD
Thessaly and Central Greece	1158	14,038.56 USD

# Chapter 6

## Mongolia impact summary for 2024-02-11

Table 6.1: Overall summary for Mongolia

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Mongolia	28642	.19 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>
Bayan-Ölgiy	5481	10,408.99 USD
Govi-Altay	4705	53,612.54 USD
Hovd	16656	116,603.11 USD
Uvs	1800	4,675.97 USD

# Chapter 7

## Spain impact summary for 2024-02-11

Table 7.1: Overall summary for Spain

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Spain	10024	1.48 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>
Aragón	1118	6,303.93 USD
Cataluña	5000	1,348,689.50 USD
Comunidad Valenciana	3322	110,577.36 USD
Islas Baleares	381	12,392.88 USD

# Chapter 8

## Comparison of Forecast vs Hindcast Run

This tables shows what the forecast for 2024-02-11 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

<i>scenario</i>	<i>economic_impact</i>
hindcast_20240211	3.84 Million USD
f001_20240211	3.05 Million USD
f002_20240210	2.79 Million USD
f003_20240209	3.74 Million USD
f004_20240208	2.88 Million USD
f005_20240207	13.63 Million USD

# Chapter 9

## Technical Notes

The TAOS<sup>tm</sup> WX Global Analysis (TAOS/WX) is part of the TAOS<sup>tm</sup> 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.