

# Global Wind Hazard Final Run

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## **Abstract**

TAOS<sup>tm</sup> WX Global Analysis of wind hazards and economic impact estimates based the 20231120000000 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:GCC11:2023:307:1801, and includes wind hazards from tropical cyclones, winter storms, mid latitude cyclones, and other synoptic scale weather systems.

Report generated Tue Nov 21 12:44:51 PM UTC 2023 on cortex2 using GFS data downloaded on Mon Nov 20 09:32:11 PM UTC 2023.

# Contents

1	Impact Summary for 2023-11-20	4
2	Afghanistan impact summary for 2023-11-20	6
3	Argentina impact summary for 2023-11-20	7
4	Canada impact summary for 2023-11-20	8
5	Iran impact summary for 2023-11-20	9
6	Japan impact summary for 2023-11-20	11
7	Palestina impact summary for 2023-11-20	12
8	Russia impact summary for 2023-11-20	13
9	Syria impact summary for 2023-11-20	14
10	Turkmenistan impact summary for 2023-11-20	15
11	United States impact summary for 2023-11-20	16
12	Comparison of Forecast vs Hindcast Run	17
13	Technical Notes	18

# List of Tables

1.1	Global Economic Impacts for 2023-11-20 . . . . .	4
1.2	Countries with over 100 thousand USD in impacts . . . . .	4
2.1	Overall summary for Afghanistan . . . . .	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 Canada . . . . .	8
4.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	8
5.1	Overall summary for Iran . . . . .	9
5.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	10
6.1	Overall summary for Japan . . . . .	11
6.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	11
7.1	Overall summary for Palestina . . . . .	12
7.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	12
8.1	Overall summary for Russia . . . . .	13
8.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	13
9.1	Overall summary for Syria . . . . .	14
9.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	14
10.1	Overall summary for Turkmenistan . . . . .	15
10.2	Summary by Level 1 Admin Area with loss over 1000 USD . .	15
11.1	Overall summary for United States . . . . .	16

11.2 Summary by Level 1 Admin Area with loss over 1000 USD . .	16
12.1 Forecast Comparison with Hindcast Run . . . . .	17

# List of Figures

1.1	GFS Wind Hindcast . . . . .	5
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# Chapter 1

## Impact Summary for 2023-11-20

Table 1.1: Global Economic Impacts for 2023-11-20

<i>scenario</i>	<i>exposures</i>	<i>economic_impact</i>
hindcast_20231120	681574	8.44 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	20907	.17 Million USD
Argentina	498805	3.75 Million USD
Canada	10523	.36 Million USD
Iran	61759	2.42 Million USD
Japan	805	.12 Million USD
Palestina	1621	.14 Million USD
Russia	35254	.19 Million USD
Syria	10737	.51 Million USD
Turkmenistan	7162	.22 Million USD
United States	5880	.19 Million USD

### GFS Surface Winds for 2023-11-20 00:00.

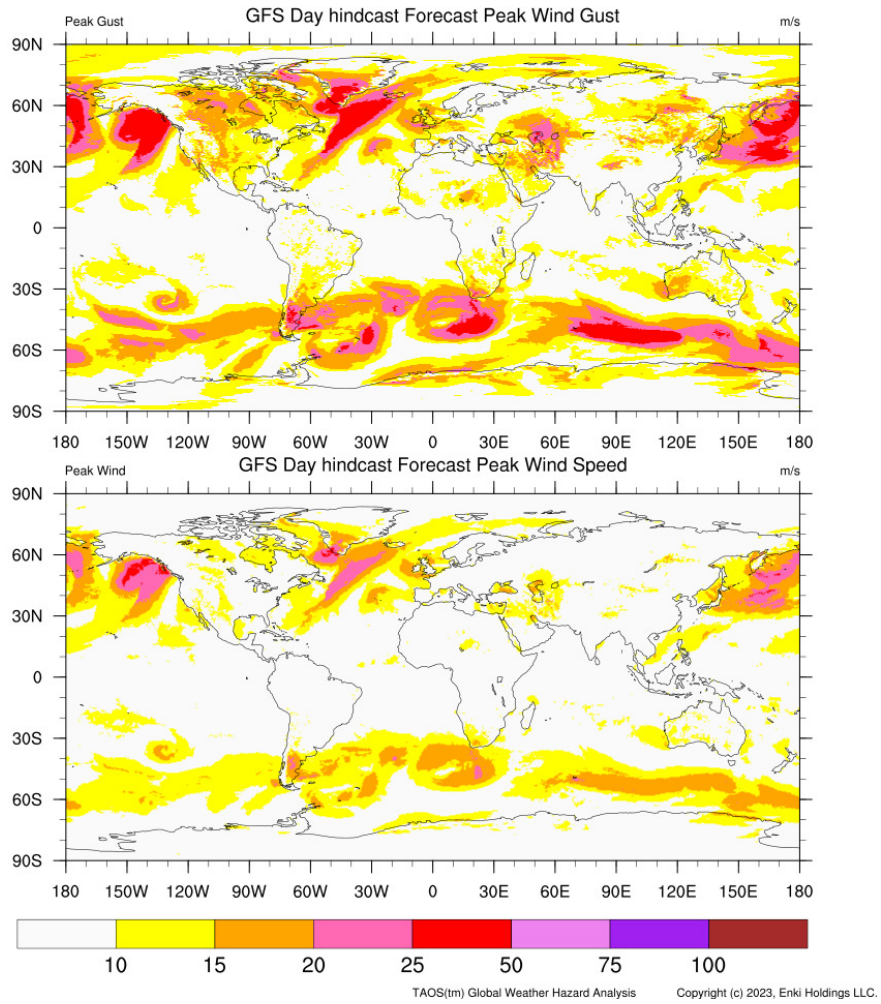


Figure 1.1: GFS Wind Hindcast



## Chapter 2

# Afghanistan impact summary for 2023-11-20

Table 2.1: Overall summary for Afghanistan

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Afghanistan	20907	.17 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>
Hirat	20907	173,830.43 USD

## Chapter 3

# Argentina impact summary for 2023-11-20

Table 3.1: Overall summary for Argentina

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Argentina	498805	3.75 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	244687	1,612,286.91 USD
La Pampa	4441	10,936.97 USD
Mendoza	3889	12,222.69 USD
Neuquén	41444	586,590.59 USD
Río Negro	187064	1,486,183.92 USD
Santa Cruz	17187	37,389.98 USD

# Chapter 4

## Canada impact summary for 2023-11-20

Table 4.1: Overall summary for Canada

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Canada	10523	.36 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>
British Columbia	10138	364,248.80 USD

# Chapter 5

## Iran impact summary for 2023-11-20

Table 5.1: Overall summary for Iran

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Iran	61759	2.42 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>
Chahar Mahall and Bakhtiari	514	64,296.33 USD
Esfahan	1274	7,811.87 USD
Fars	5198	54,696.05 USD
Golestan	1533	69,987.95 USD
Kerman	3663	9,973.04 USD
Khuzestan	3041	18,984.72 USD
North Khorasan	10773	647,036.26 USD
Qom	1732	36,489.63 USD
Razavi Khorasan	28364	1,479,618.53 USD
Sistan and Baluchestan	1797	7,068.90 USD
Yazd	3679	20,468.81 USD

# Chapter 6

## Japan impact summary for 2023-11-20

Table 6.1: Overall summary for Japan

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Japan	805	.12 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>
Aomori	138	5,180.31 USD
Fukushima	293	92,226.08 USD
Miyagi	38	15,144.01 USD
Shizuoka	221	9,265.36 USD

# Chapter 7

## Palestina impact summary for 2023-11-20

Table 7.1: Overall summary for Palestina

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Palestina	1621	.14 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>
West Bank	1612	137,488.43 USD

# Chapter 8

## Russia impact summary for 2023-11-20

Table 8.1: Overall summary for Russia

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Russia	35254	.19 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>
Chukot	1381	2,838.84 USD
Crimea	242	1,253.61 USD
Dagestan	112	5,853.06 USD
Irkutsk	6166	15,533.01 USD
Kamchatka	24428	151,606.82 USD
Sakhalin	2801	16,915.90 USD



## Chapter 9

# Syria impact summary for 2023-11-20

Table 9.1: Overall summary for Syria

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Syria	10737	.51 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>
As Suwayda'	2235	389,741.61 USD
Dar'a	131	2,263.95 USD
Hamah	598	2,810.19 USD
Hims	5732	95,383.54 USD
Lattakia	343	3,468.92 USD
Tartus	1004	14,700.63 USD

# Chapter 10

## Turkmenistan impact summary for 2023-11-20

Table 10.1: Overall summary for Turkmenistan

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Turkmenistan	7162	.22 Million USD

Table 10.2: Summary by Level 1 Admin Area with loss over 1000 USD

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Ahal	5784	206,016.32 USD
Balkan	1376	11,671.38 USD

# Chapter 11

## United States impact summary for 2023-11-20

Table 11.1: Overall summary for United States

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
United States	5880	.19 Million USD

Table 11.2: Summary by Level 1 Admin Area with loss over 1000 USD

<i>name</i>	<i>num_exposures</i>	<i>economic_impact</i>
Alaska	4921	183,174.87 USD
California	538	1,999.19 USD
Montana	228	1,153.35 USD

# Chapter 12

## Comparison of Forecast vs Hindcast Run

This tables shows what the forecast for 2023-11-20 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 12.1: Forecast Comparison with Hindcast Run

<i>scenario</i>	<i>economic_impact</i>
hindcast_20231120	8.44 Million USD
f001_20231120	7.50 Million USD
f002_20231119	5.66 Million USD
f003_20231118	4.64 Million USD
f004_20231117	10.07 Million USD
f005_20231116	7.61 Million USD

# Chapter 13

## 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.