# Global Wind Hazard Final Run

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July 27, 2024

**Abstract**

TAOS$^{tm}$ WX Global Analysis of wind hazards and economic impact estimates based the 20240726000000 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:GCC11:2024:192:1225, and includes wind hazards from tropical cyclones, winter storms, mid latitude cyclones, and other synoptic scale weather systems.

Report generated Sat Jul 27 05:26:12 UTC 2024 on cortex2 using GFS data downloaded on Fri Jul 26 21:38:25 UTC 2024.

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# Chapter 1

# Impact Summary for 2024-07-26

Table 1.1: Global Economic Impacts for 2024-07-26

| *scenario* | *exposures* | *economic_impact* |
|---|---|---|
| hindcast_20240726 | 368537 | 8.15 Million USD |

Table 1.2: Countries with over 100 thousand USD in impacts

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| Afghanistan | 30889 | .19 Million USD |
| Argentina | 160832 | .78 Million USD |
| China | 7364 | 5.60 Million USD |
| India | 27804 | .64 Million USD |
| Pakistan | 5530 | .14 Million USD |
| United States | 10363 | .22 Million USD |

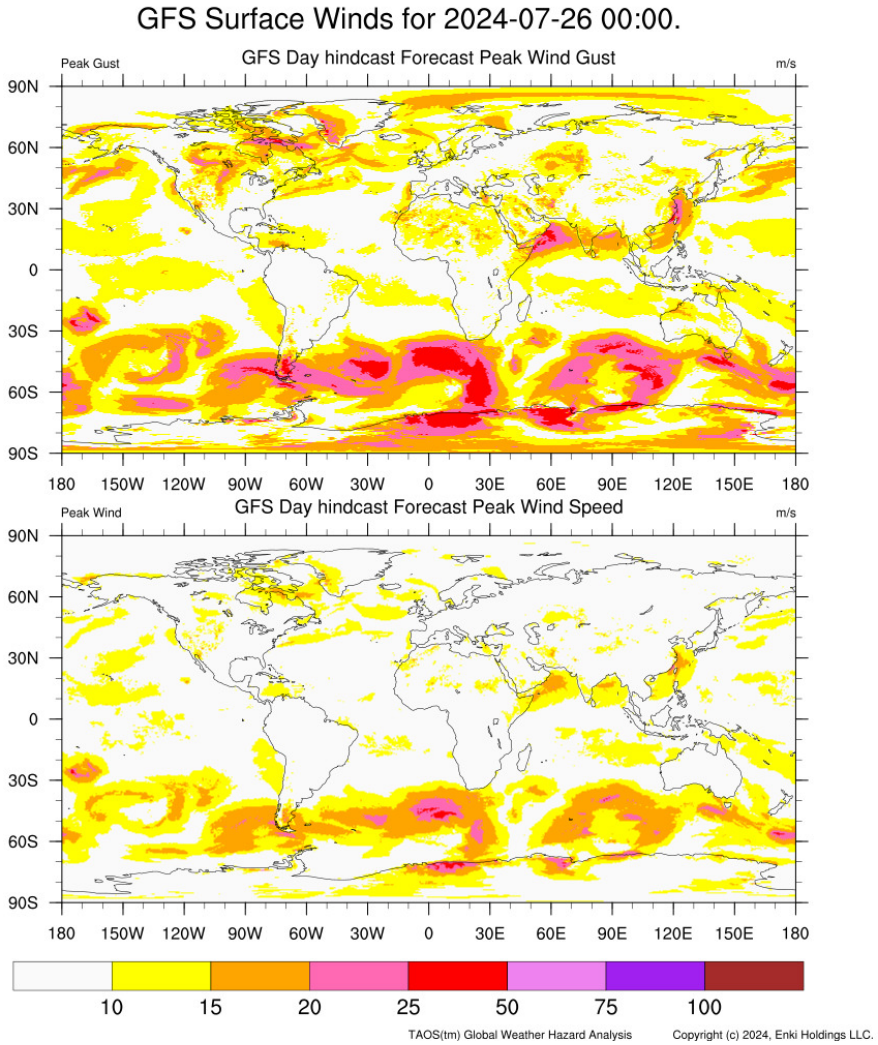


Figure 1.1: GFS Wind Hindcast

# Chapter 2

# Afghanistan impact summary for 2024-07-26

Table 2.1: Overall summary for Afghanistan

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| Afghanistan | 30889 | .19 Million USD |

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

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| Farah | 9620 | 37,300.14 USD |
| Hirat | 21234 | 147,743.03 USD |

# Chapter 3

# Argentina impact summary for 2024-07-26

Table 3.1: Overall summary for Argentina

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| Argentina | 160832 | .78 Million USD |

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

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| Chubut | 54849 | 300,970.83 USD |
| Santa Cruz | 105983 | 480,554.22 USD |

# Chapter 4

# China impact summary for 2024-07-26

Table 4.1: Overall summary for China

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| China | 7364 | 5.60 Million USD |

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

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| Fujian | 586 | 3,831,187.53 USD |
| Jiangsu | 1137 | 294,918.67 USD |
| Shanghai | 1510 | 580,932.99 USD |
| Xinjiang Uygur | 376 | 1,610.80 USD |
| Zhejiang | 3742 | 893,438.21 USD |

# Chapter 5

# India impact summary for 2024-07-26

Table 5.1: Overall summary for India

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| India | 27804 | .64 Million USD |

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

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| Andhra Pradesh | 13204 | 313,700.43 USD |
| Karnataka | 14083 | 324,710.16 USD |
| Maharashtra | 419 | 2,789.62 USD |

# Chapter 6

# Pakistan impact summary for 2024-07-26

Table 6.1: Overall summary for Pakistan

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| Pakistan | 5530 | .14 Million USD |

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

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| Punjab | 5530 | 143,634.07 USD |

# Chapter 7

# United States impact summary for 2024-07-26

Table 7.1: Overall summary for United States

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| United States | 10363 | .22 Million USD |

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

| *name* | *num_exposures* | *economic_impact* |
|---|---|---|
| Arizona | 4232 | 125,076.80 USD |
| Colorado | 919 | 4,353.29 USD |
| Idaho | 299 | 4,107.39 USD |
| Nevada | 556 | 14,900.35 USD |
| New Mexico | 260 | 1,417.51 USD |
| South Dakota | 2400 | 33,573.52 USD |
| Wyoming | 1606 | 36,133.04 USD |

# Chapter 8

# Comparison of Forecast vs Hindcast Run

This tables shows what the forecast for 2024-07-26 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 8.1: Forecast Comparison with Hindcast Run

| *scenario* | *economic_impact* |
|---|---|
| hindcast_20240726 | 8.15 Million USD |
| f001_20240726 | 303.97 Million USD |
| f002_20240725 | 1,482.79 Million USD |
| f003_20240724 | 728.31 Million USD |
| f005_20240722 | 330.84 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.