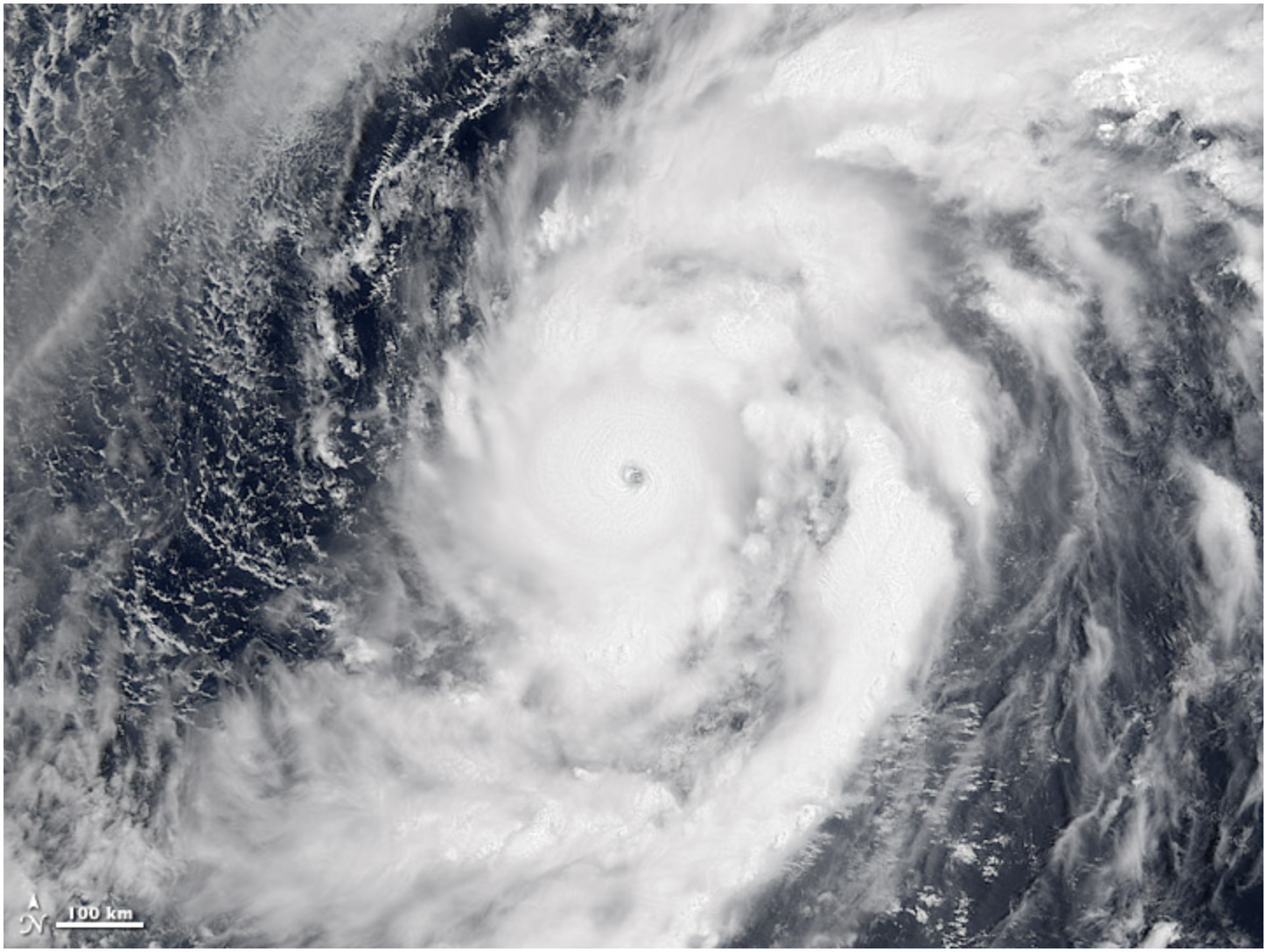

2000 2010

2000

JPEG

All

World of Change: Severe Storms

Atmosphere Land Water

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World Of Change

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Snowpack in the Sierra Nevada
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Arctic Sea Ice
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Coastline Change
Sprawling Shanghai
Antarctic Ozone Hole
Burn Recovery in Yellowstone
Shrinking Aral Sea
Padma River
Growing Deltas in Atchafalaya Bay
Recovery at Mt. St. Helens
Athabasca Oil Sands
Ice Loss in Glacier National Park
Mountaintop Mining, West Virginia
Development of Orlando, Florida
Amazon Deforestation
Fire in Etosha National Park
Green Seasons of Maine
Drought Cycles in Australia
Severe Storms
Seasons of the Indus River
Urbanization of Dubai
Seasons of Lake Tahoe
Solar Activity
Larsen-B Ice Shelf
Mesopotamia Marshes
El Niño, La Niña, and Rainfall
Global Biosphere

The series of eleven images above depicts the strongest hurricane, cyclone, or typhoon during each year, regardless of ocean basin. It includes storms both infamous and obscure. The judging is based on the storm with the highest wind speed, using lowest minimum pressure as a tie-breaker when needed. The images were all captured by the Moderate Resolution Imaging Spectroradiometer (MODIS) on NASA's Terra or Aqua satellites, and they are all shown at the same scale.

In the past 11 years, two of the most powerful storms were in the Atlantic/Caribbean basin, six were in the Western Pacific (and north of the equator), and three were in the South Pacific. Even without looking at the table below, you can distinguish Northern Hemisphere storms from Southern by examining the imagery. Northern cyclones rotate counterclockwise, while southern storms rotate clockwise (because of the Coriolis force). All storm categories are based on the Saffir-Simspon Hurricane Scale.

Storm	Date of image	Maximum Wind Speed km/h (mph)	Minimum Pressure millibars	Basin
Damrey	May 9, 2000	290 (180)	878	Western Pacific
Faxai	December 22, 2001	290 (180)	915	Western Pacific
Zoe	December 28, 2002	285 (177)	890	South Pacific
Maemi	September 10, 2003	280 (174)	910	Western Pacific
Chaba	August 23, 2004	290 (180)	879	Western Pacific
Wilma	October 18, 2005	295 (183)	882	Atlantic/Caribbean
Monica	April 24, 2006	285 (177)	905	South Pacific
Dean	August 18, 2007	280 (174)	907	Atlantic/Caribbean
Jangmi	September 27, 2008	260 (162)	905	Western Pacific
Rick	October 18, 2009	285 (127)	906	Eastern Pacific
Megi	October 18, 2010	295 (183)	885	Western Pacific

Many North Americans will recognize Hurricanes Dean (2007) and Wilma (2005). Wilma holds the record for the most intense Atlantic Basin storm on record (based on air pressure), and it made landfall on the island of Cozumel, the Yucatan Peninsula, and Florida. After cutting a devastating path through the Caribbean, Hurricane Dean made a rare Category 5-strength landfall in Mexico.

Residents around the Western Pacific Basin might not remember the names Damrey (2000) or Faxai (2001); both of these Category 5 super typhoons came and went through the remote Pacific without ever approaching land. But other storms inflicted great damage. Super Typhoon Maemi (2003) was the costliest typhoon ever to hit Korea, killing more than a hundred people. Super Typhoon Chaba (2004) pummeled both the Northern Marianas Islands and Honshu, Japan. Super Typhoon Jangmi (2008), which made landfall across northern Taiwan as a Category 3 storm, was not only the strongest storm of 2008, it was

also the only storm worldwide to reach Category 5 strength. Super Typhoon Megi (2010), which tied for the most intense winds in our series, caused extensive damage but thankfully low casualties across the Philippines and southeastern China.

Of the three South Pacific cyclones to appear in this collection, Monica (2006) and Zoe (2002) were nearly equal in terms of strength. Monica crossed the Cape York Peninsula of Australia as a Category 2 cyclone, but emerged over the warm waters of the Gulf of Carpentaria and intensified into a Category 5 storm before its second landfall on Northern Territory's Top End. Cyclone Zoe (2002) traced an erratic path through the Solomon Islands, avoiding major land masses, but the eye passed over the tiny, sparsely populated island of Tikopia at the height of the storm. The strongest storm of 2009 didn't arrive until October, when Category 5 Hurricane Rick formed in the eastern Pacific. Rick weakened significantly before coming ashore near Mazatlán, Mexico.

Data on maximum wind speed and minimum pressure for Atlantic Basin storms comes from the National Hurricane Center; for Western Pacific storms, from the Japanese Meteorological Agency; for South Pacific storms, the Australian Bureau of Meteorology.