



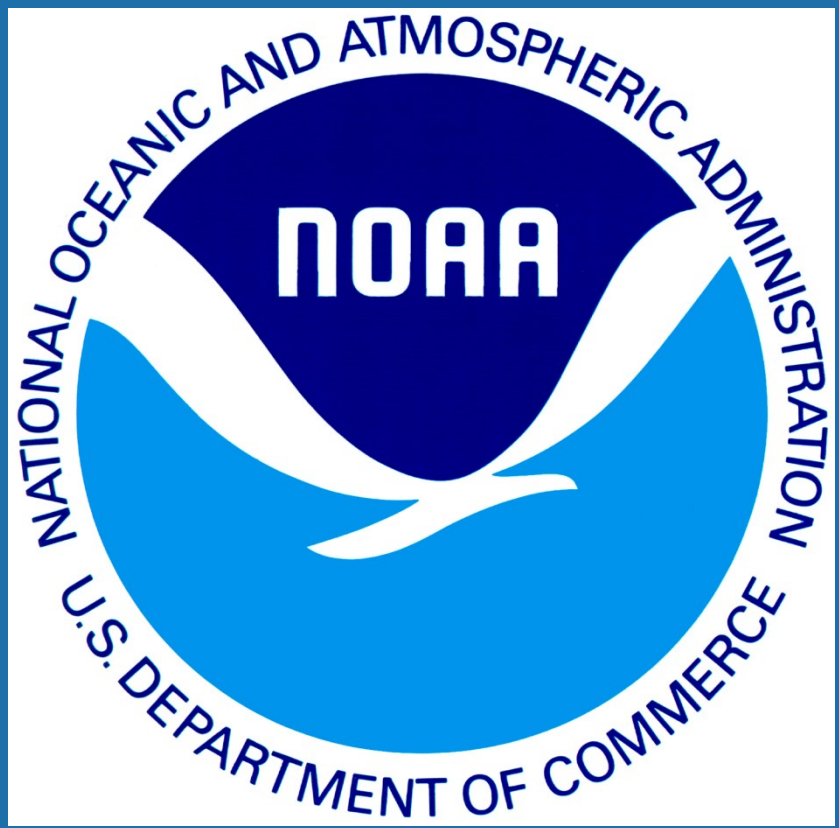
Outreach to Children – A unique opportunity to excite weather interest in hospitalized children

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BACKGROUND

Nicklaus Children's Hospital in Miami, Florida participates in **Radio Lollipop, an International children's charity providing care, comfort, play, and entertainment to children of all ages (a few days old to 21 years old) in hospitals.** The Radio Lollipop station at Nicklaus Children's Hospital performs live shows three nights per week. Each show includes:

- a volunteer DJ,
- a unique theme accompanied by a craft and on-air trivia questions,
- a team of volunteers to visit 120 patient rooms encouraging participation in the activity, and
- 25 winners announced on-air and awarded a donated toy.

Using Radio Lollipop as a platform, the authors educated patients and their families about weather phenomena and motivated interest in weather through activities and trivia.



ACTIVITY PLANNING

The authors organized a **Hurricane Preparedness** themed night, which is of particular importance to South Florida residents. Our craft allowed children and their families to make hurricanes using the following materials:

- Florida state shapes
- Cotton balls
- Blue tissue paper
- Paper plates
- Crayons and glue (Provided by Radio Lollipop)

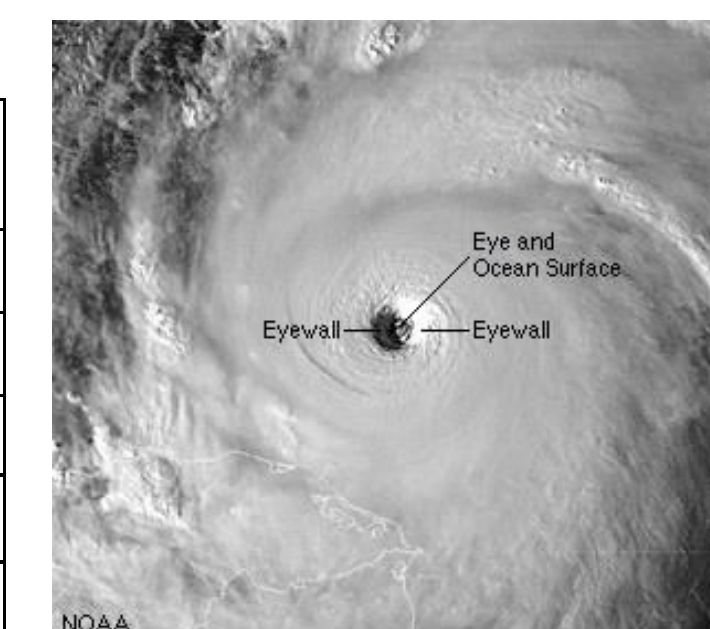
In addition, a supplement worksheet providing background information about hurricane structure, intensity measurements, and safety guidelines was distributed. The backside of the worksheet included an activity to plot the track of hurricane Andrew (1992) as it made landfall in South Florida. On-air trivia questions were asked based on the worksheet provided.

WORKSHEET

HURRICANES 101

Hurricanes (also called *tropical cyclones*) are rapidly rotating storm systems characterized by a low-pressure center, strong winds, and a spiral arrangement of thunderstorms that produce heavy rain. Hurricanes are classified by the Saffir-Simpson scale (below; left), which assigns a number from 1-5 that corresponds to the maximum sustained winds. Tropical cyclones with winds less than 74 mph are called *tropical storms*. The strongest hurricanes have a clear area in the center of the storm, commonly referred to as an "eye" (below; right). These strong hurricanes have destructive winds, heavy rain concentrated in the eyewall, and may cause extreme flooding when making landfall.

Category	Wind Speed (mph)	Damage at Landfall	Storm Surge (feet)
1	74-95	Minimal	4-5
2	96-110	Moderate	6-8
3	111-130	Extensive	9-12
4	131-155	Extreme	13-18
5	> 155	Catastrophic	19+



HURRICANE SAFETY

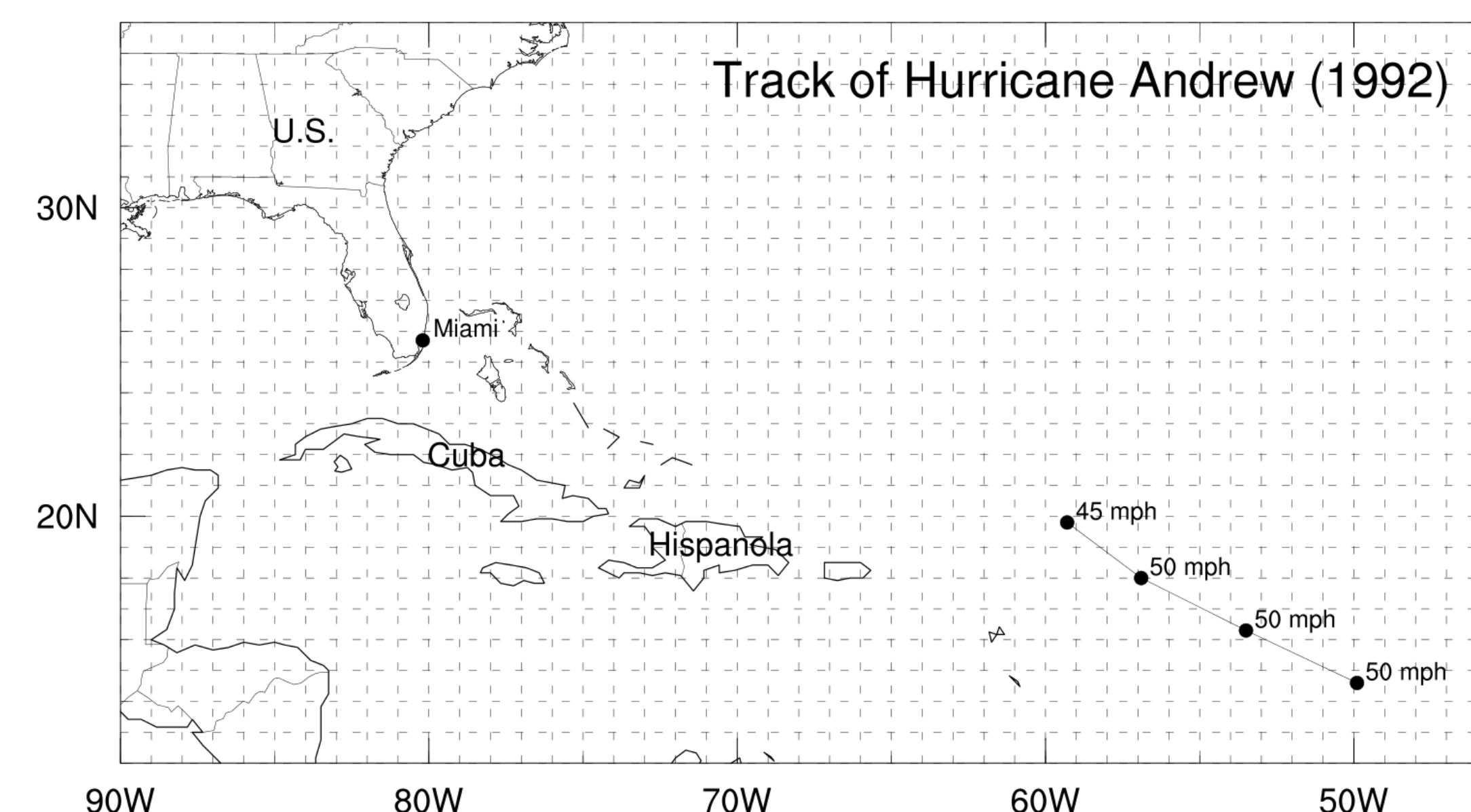
Hurricanes are dangerous, so it is important to take the necessary precautions to ensure that you are safe. Please always listen to public safety officials. Some safety tips include:

- You should build an emergency kit and make a family communications plan. See: www.ready.gov/kit
- Consult www.ready.gov/hurricanes and www.hurricanes.gov for hurricane safety information, official watches/warnings, and the latest forecasts.
- Learn the elevation level of your property and whether the land is flood-prone.
- The #1 cause of death in hurricanes is drowning, so avoid flood waters at all costs.
- Identify levees and dams in your area and determine whether they pose a hazard to you.
- Determine your hurricane evacuation routes and how to find higher ground.
- Cover all of your home's windows. Permanent storm shutters offer the best protection for windows. Tape does not prevent windows from breaking.

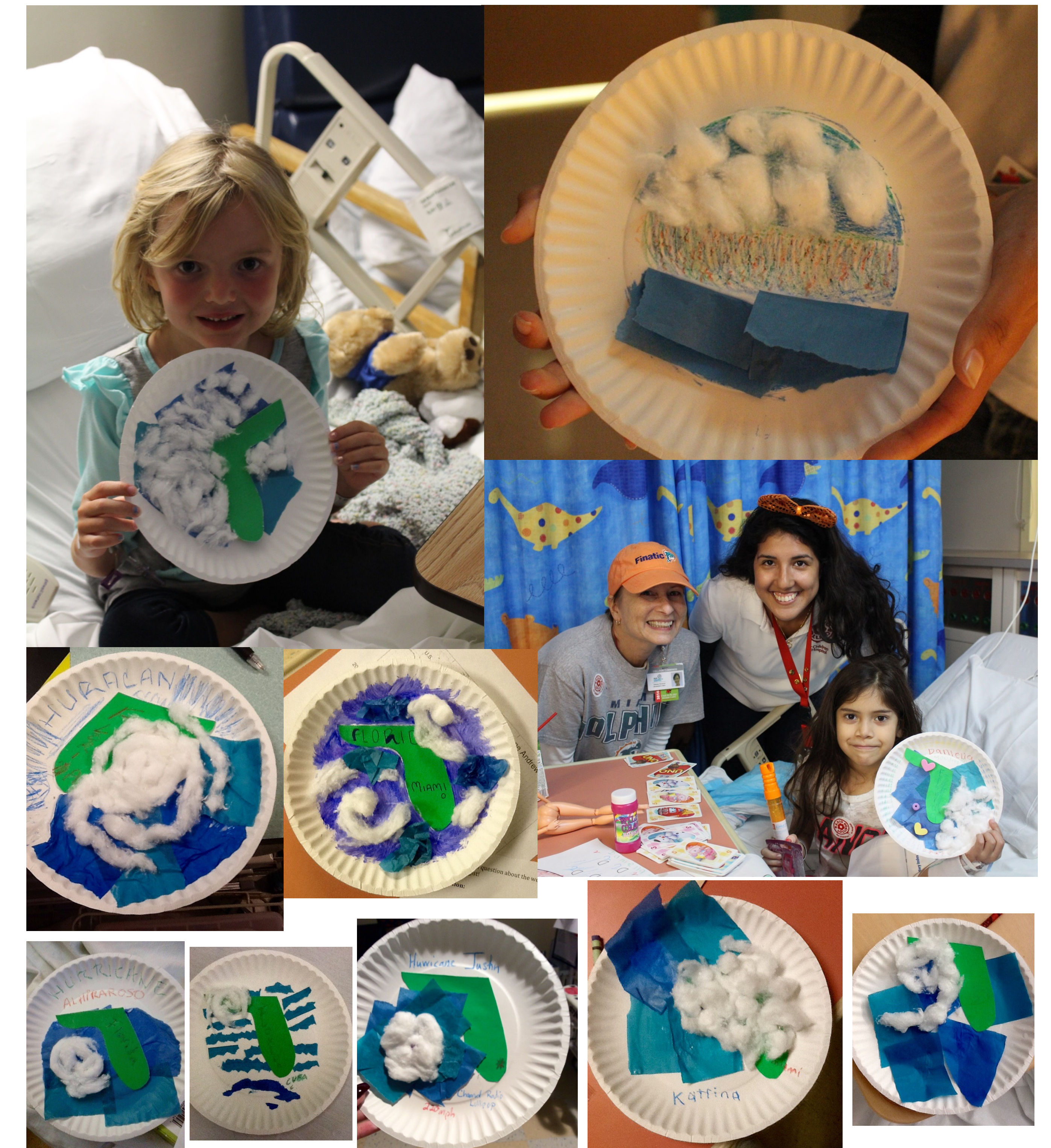
TRACK HURRICANE ANDREW!

Plot the geographic coordinates below on the provided map to retrace Hurricane Andrew's path from the open Atlantic into southern Florida in August, 1992. You may wish to write the maximum wind speed next to each point to get an idea of how quickly Andrew gained strength. The first four points are plotted as an example. Have fun!

DATE	LAT	Lon	MAX WIND
12pm, Aug. 20, 1992	21.7°N	60.7°W	45 mph
12am, Aug. 21, 1992	23.2°N	62.4°W	50 mph
12pm, Aug. 21, 1992	24.4°N	64.2°W	55 mph
12am, Aug. 22, 1992	25.3°N	65.9°W	65 mph
12pm, Aug. 22, 1992	25.8°N	68.3°W	90 mph
12am, Aug. 23, 1992	25.6°N	71.1°W	125 mph
12pm, Aug. 23, 1992	25.4°N	74.2°W	165 mph
12am, Aug. 24, 1992	25.4°N	77.5°W	145 mph
09am, Aug. 24, 1992	25.5°N	80.3°W	165 mph



CRAFTS



QUESTIONS

Throughout the night, kids were encouraged to ask weather-related questions that were answered bedside or via email afterwards. Some highlighted questions we received include:

- When is hurricane season? Does the Bermuda Triangle really exist? (*Ana, age 14*)
- How do hurricanes get their names? (*Patrick, age 16*)
- Why do hurricanes frequently form by the west coast of Africa? (*Walter, age 19*)

CONCLUSIONS

This study highlights the role that patient-volunteer interactions can have in the education of weather. Given that South Florida has not been hit by a hurricane since 2005, the authors found this to be a useful activity in helping remind families of the potential dangers while encouraging knowledge and scientific curiosity.