

Central Pacific Hurricane Center

Tropical Cyclone Operations and Research Forum Briefing

March 03, 2021

Ashley D. Evans

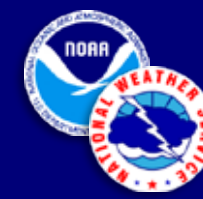
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2020 Hurricane Season – Outlook

Central Pacific: 2 to 6 Tropical Cyclones



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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Central Pacific Hurricane Center/Climate Prediction Center



2020 Central Pacific Season Outlook

2-6 Tropical Cyclones

75% chance of a near to below normal season

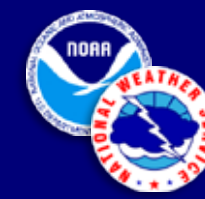
25% chance of an above normal season

- ENSO-Neutral through the summer; transition to La Niña
- Higher uncertainty → larger storm number range

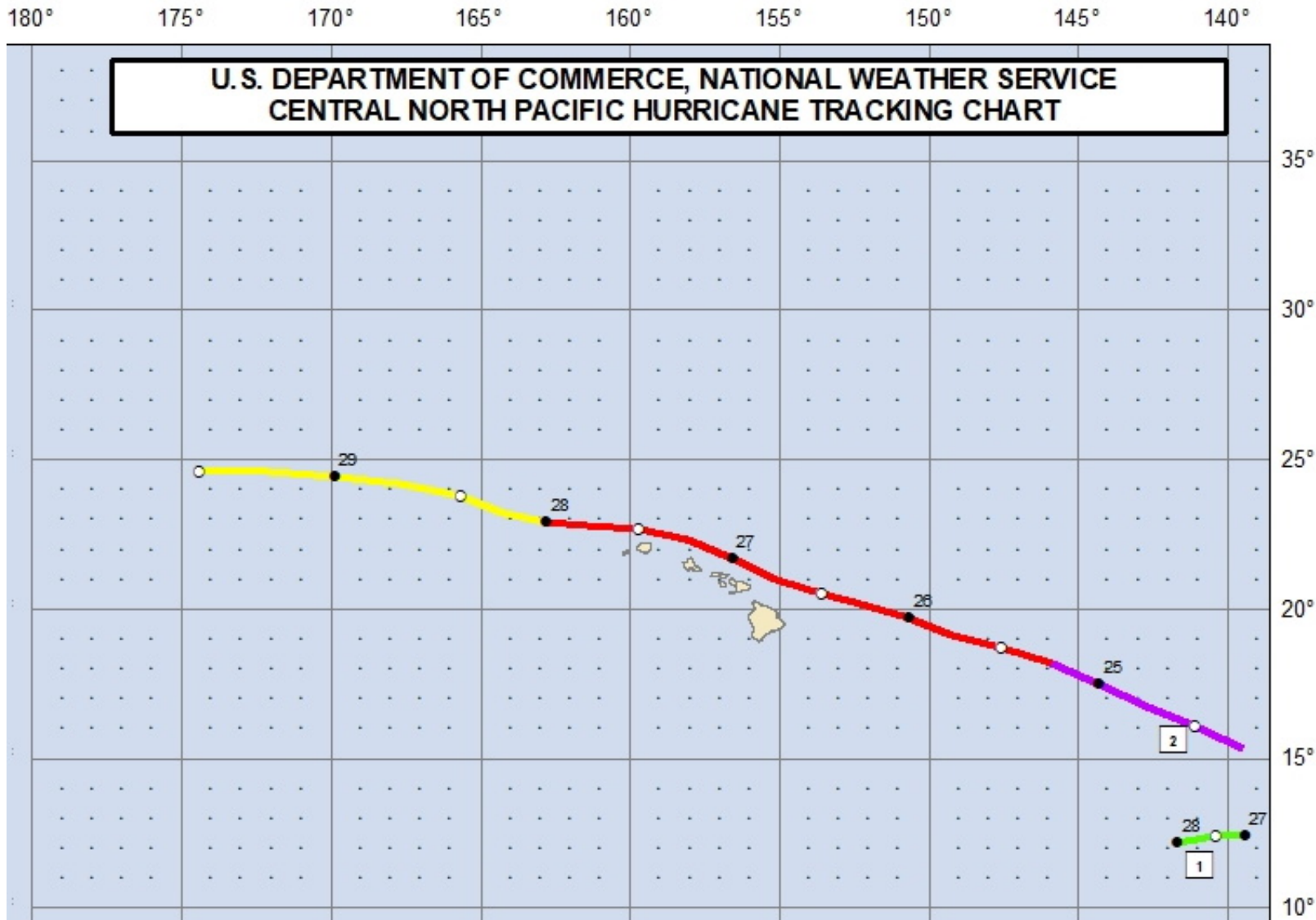
Weather Forecast Office Honolulu/Central Pacific Hurricane Center

2020 Hurricane Season

Two Tropical Cyclones

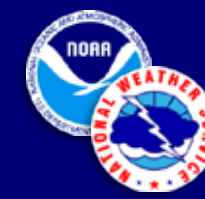


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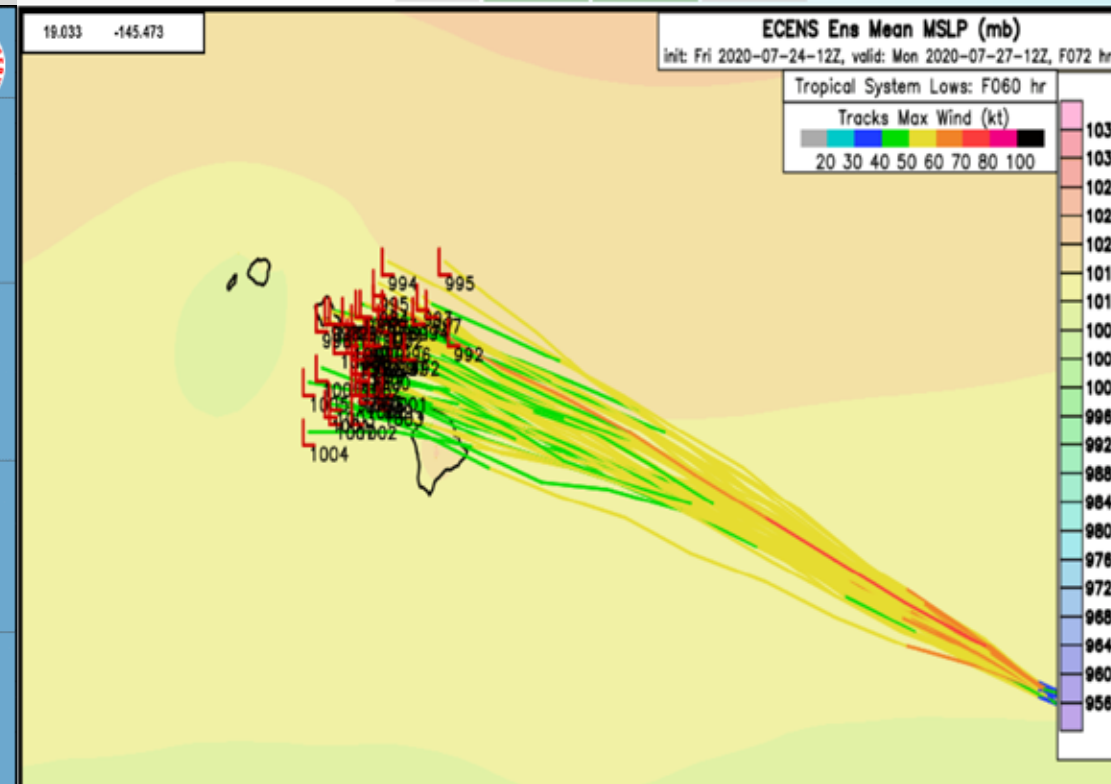
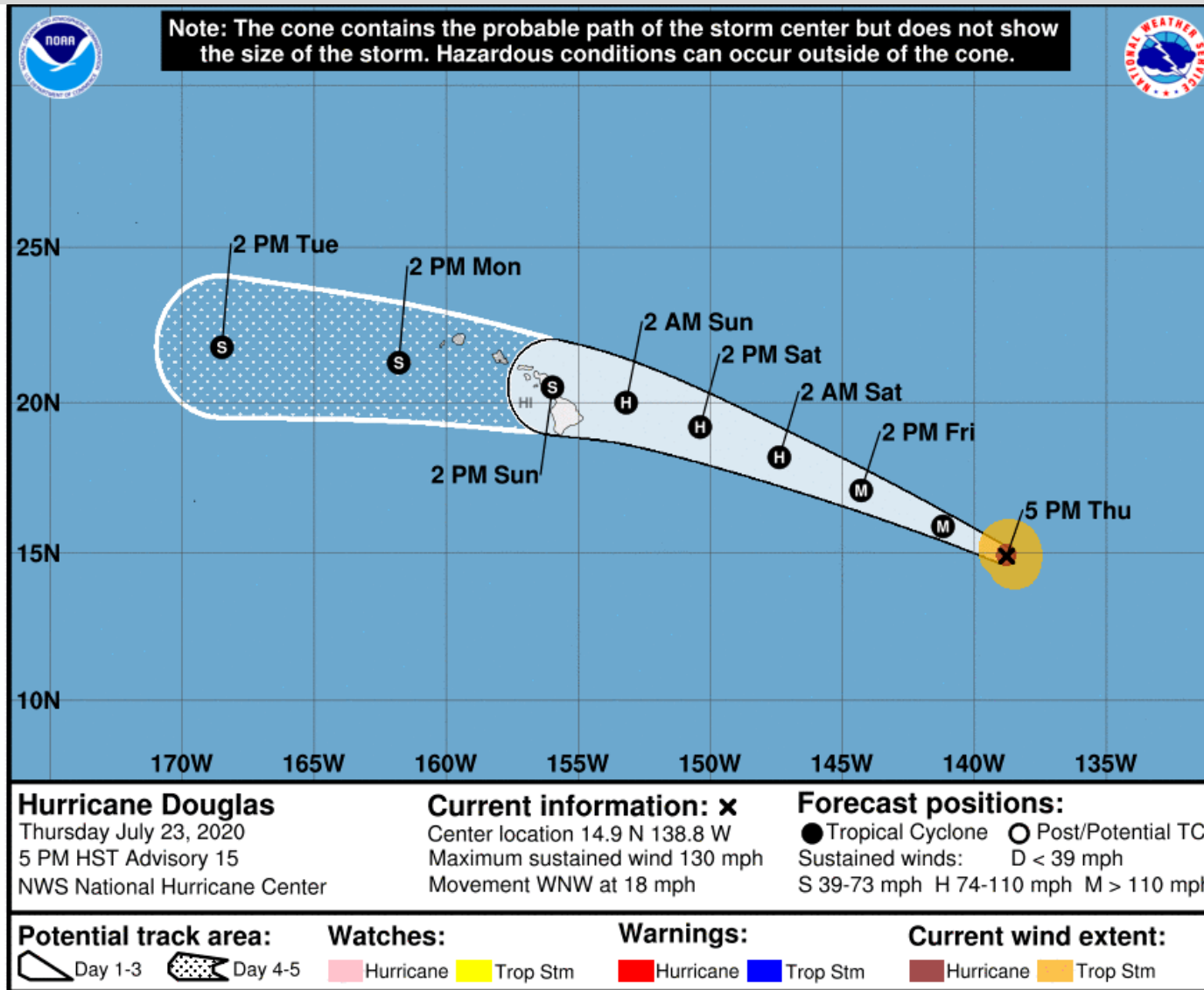


- 1. Boris**
Peak: Tropical Depression
Fri June 26 to Sat June 27
(06/27/20 to 06/28/20 UTC)
- 2. Douglas**
Peak: Category 4
Thu July 23 to Wed July 29
(07/24/20 to 07/29/20 UTC)

Hurricane Douglas Messaging Focus: Lead Time, Continuity and Consistency

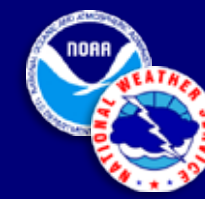


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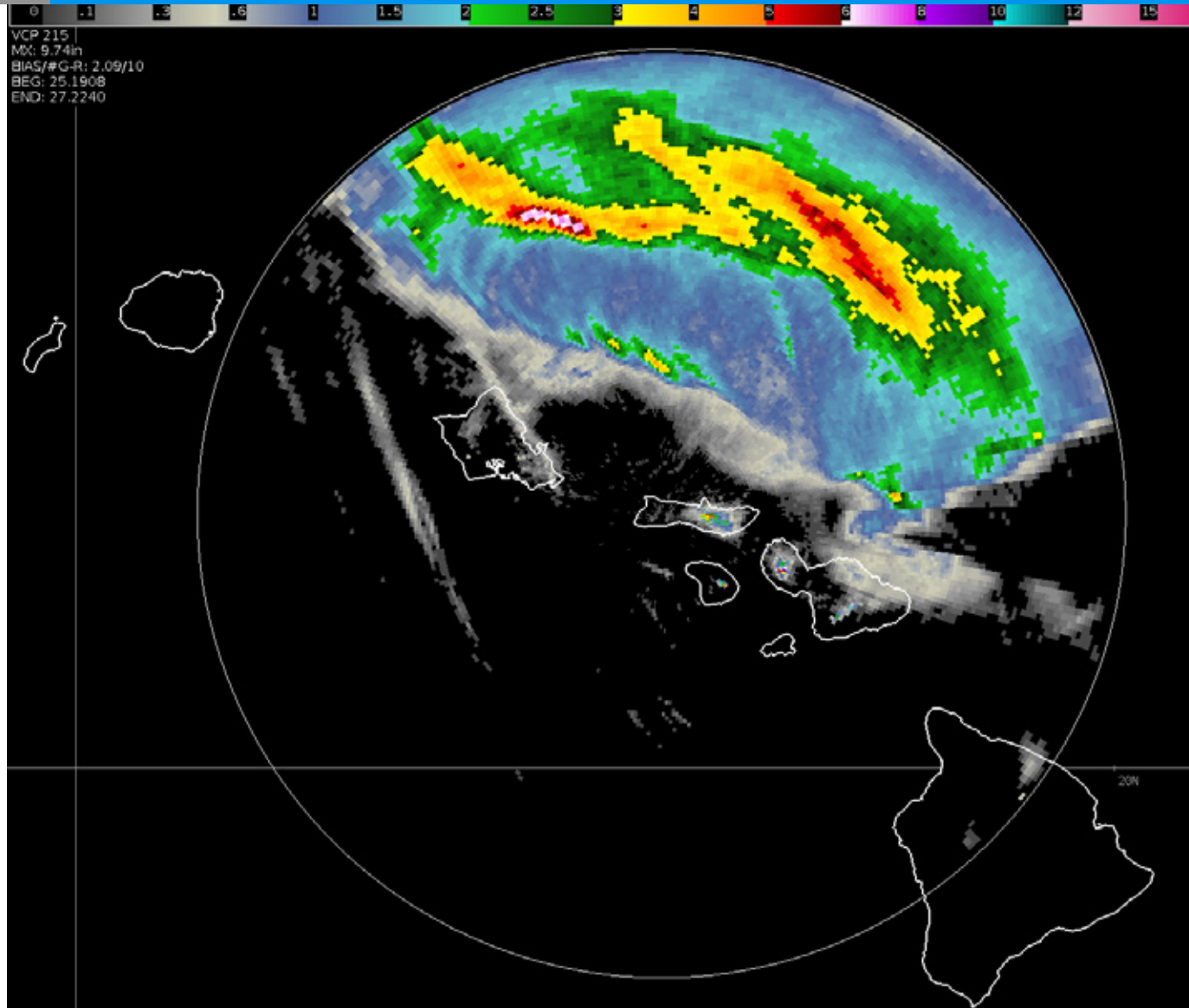
- 60 hour forecast 2 am Sun: 65 kt hurricane
- 72 hour forecast 2 pm Sun: 60 kt tropical storm

Hurricane Douglas – Radar Rainfall



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Too close for comfort



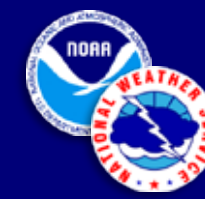
- **Peak Rainfall**

48 hour rainfall 6 pm Sat 7/25
through 6 pm Mon 7/27:

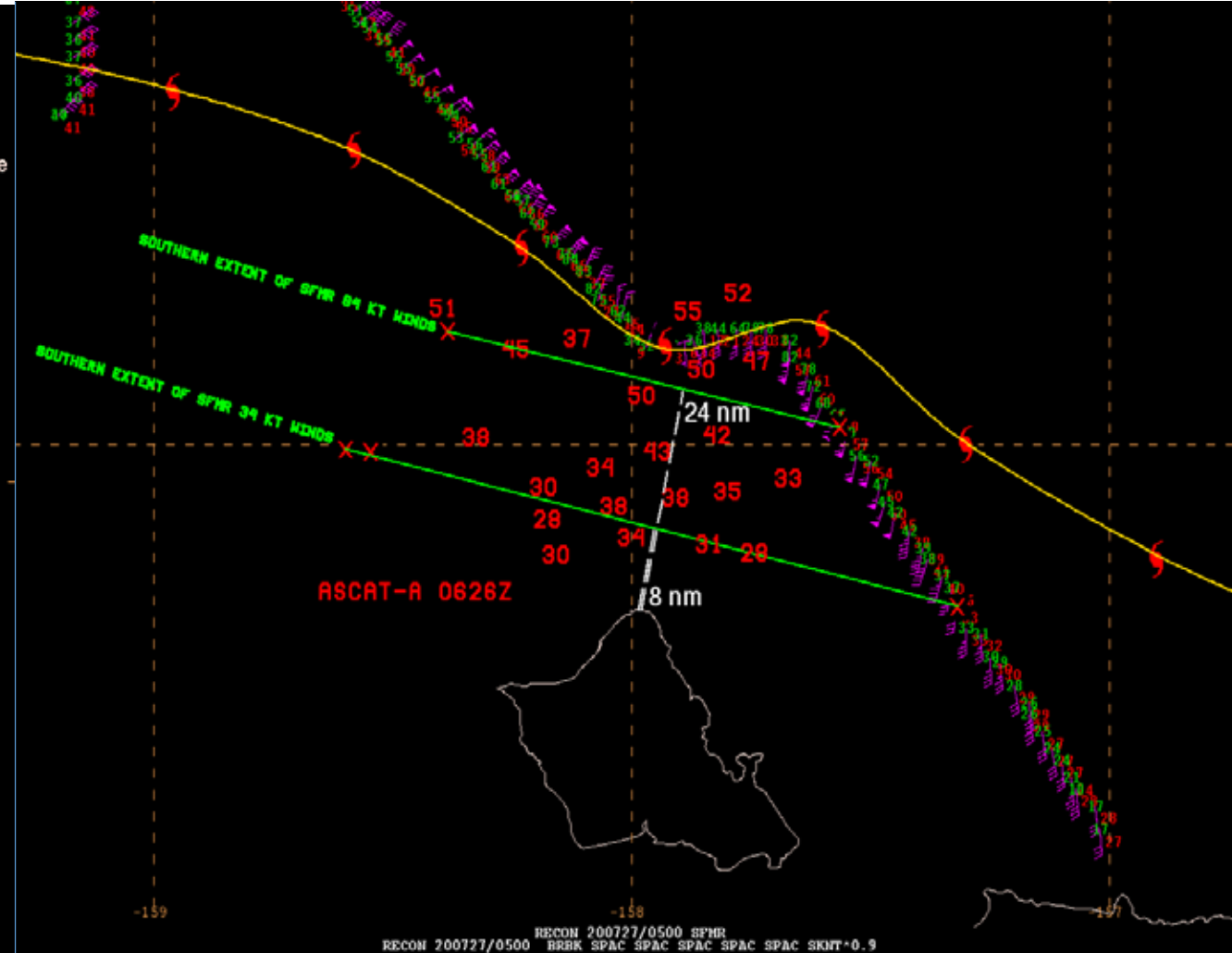
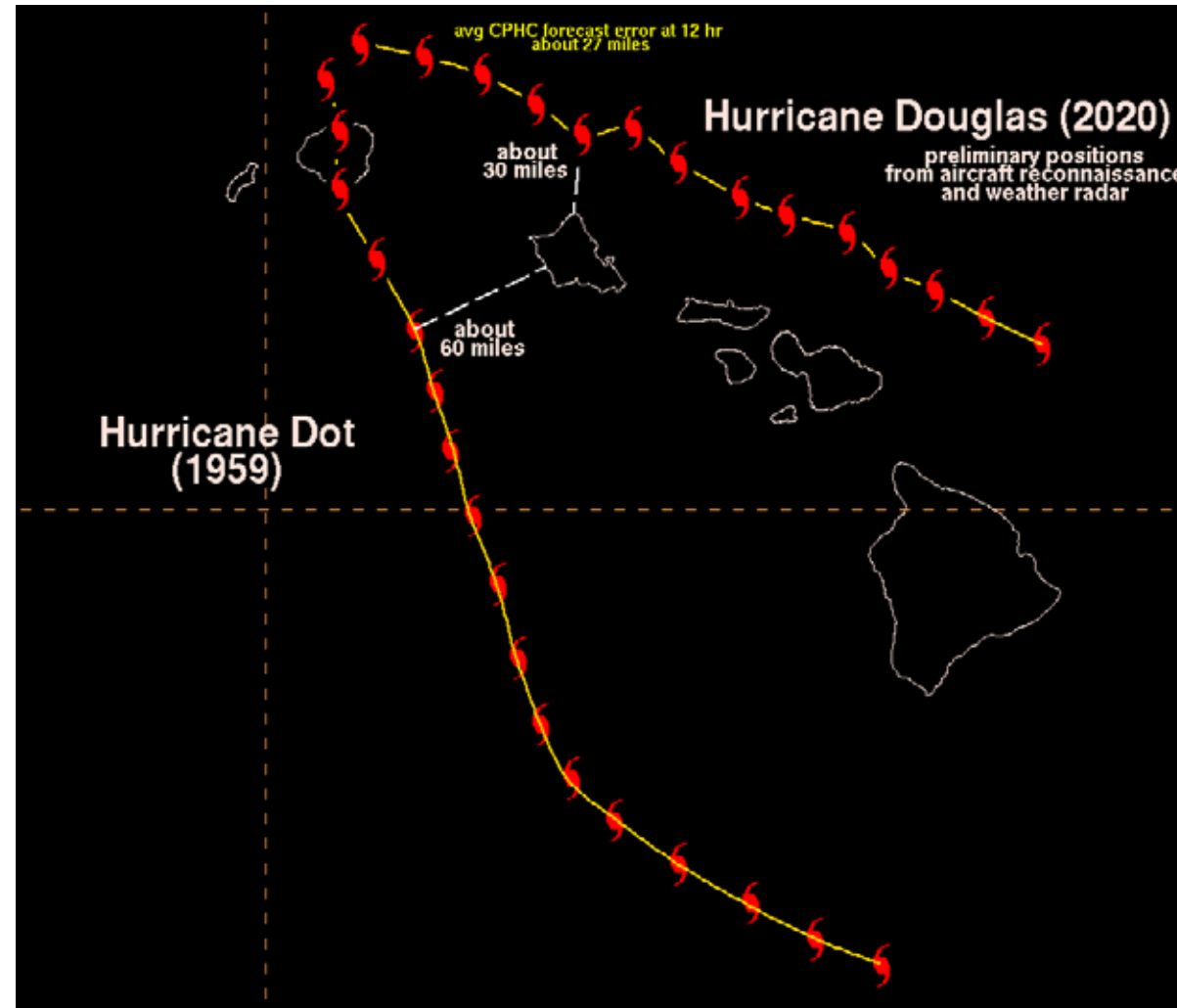
- **Kauai County:**
Mount Waialeale **6.35"**
- **Honolulu County:**
Kahuku **2.18"**
- **Maui County:**
Puu Kukui **5.20"**
- **Hawaii County:**
Kawainui Stream **3.39"**

Hurricane Douglas – Just how close

Closest approach to Oahu (population center) in modern records

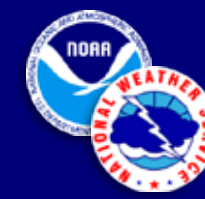


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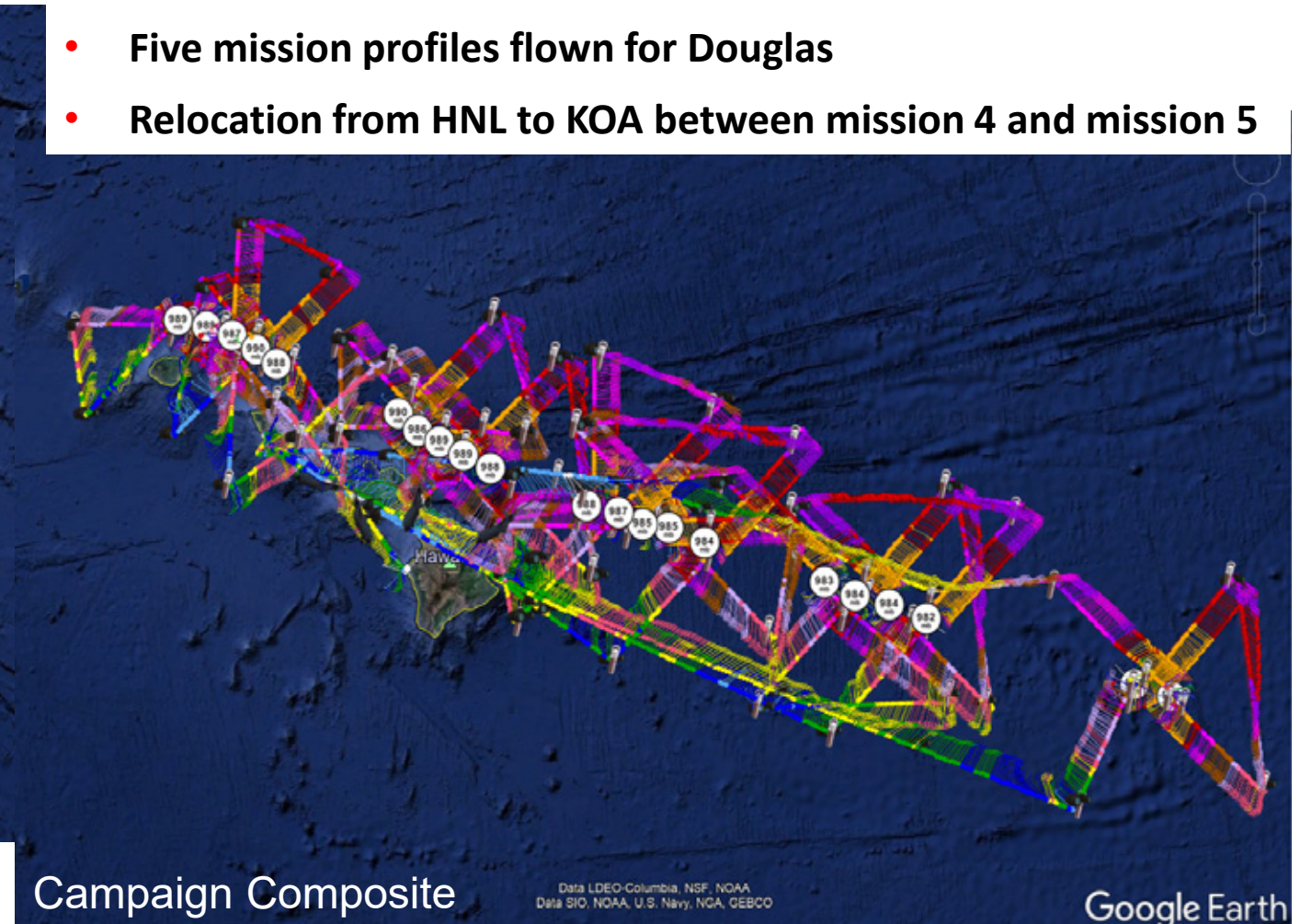
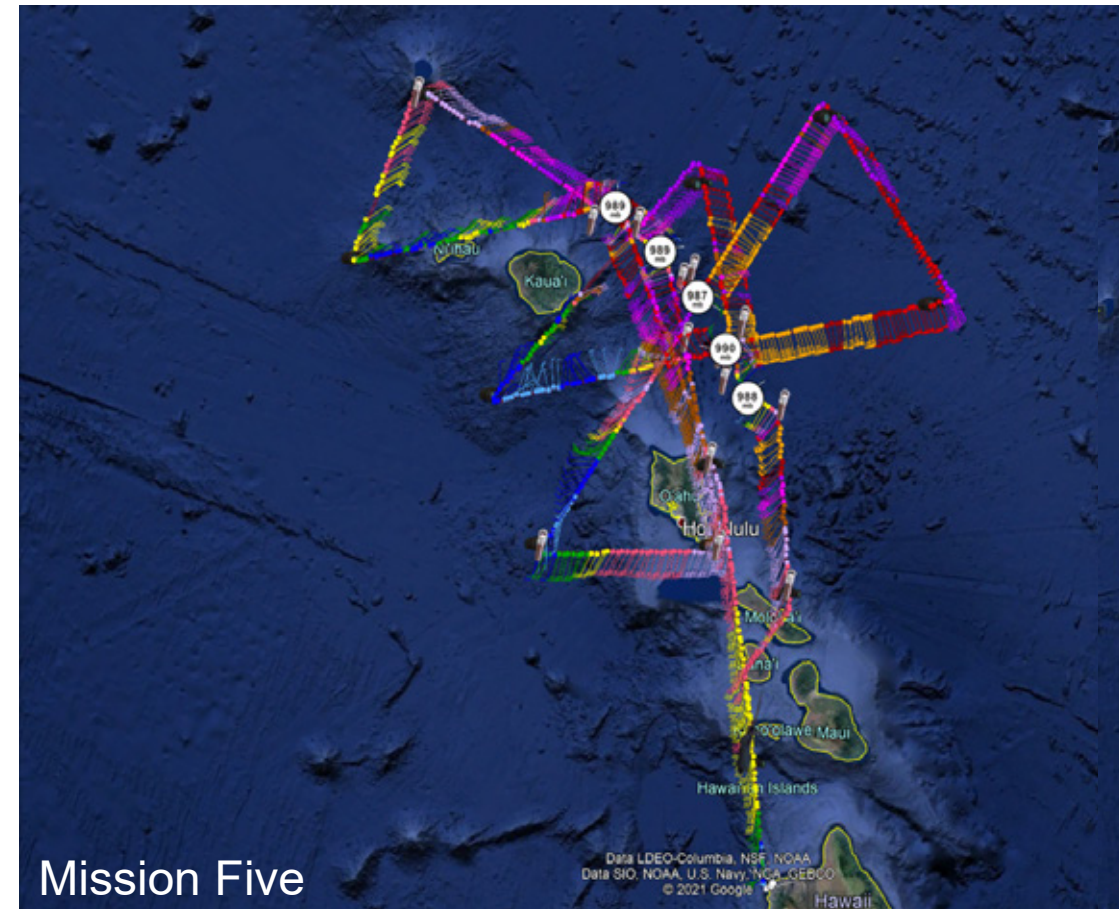
Hurricane Douglas – RECON

The RECON support to CPHC for Douglas was awesome.



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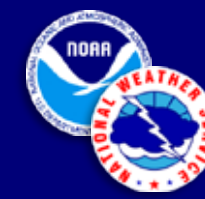
- Coordination was steady and consistent
- Five mission profiles flown for Douglas
- Relocation from HNL to KOA between mission 4 and mission 5



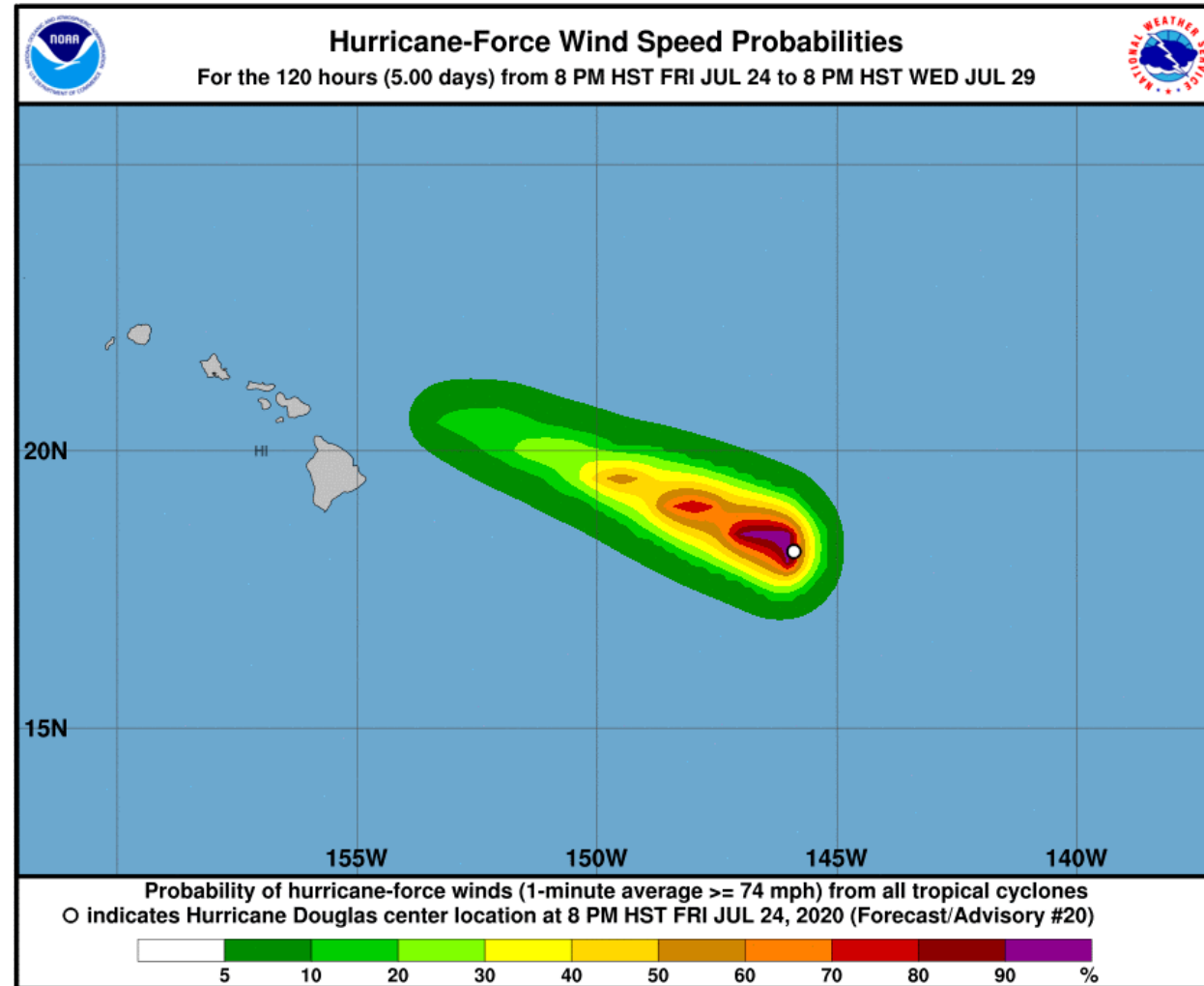
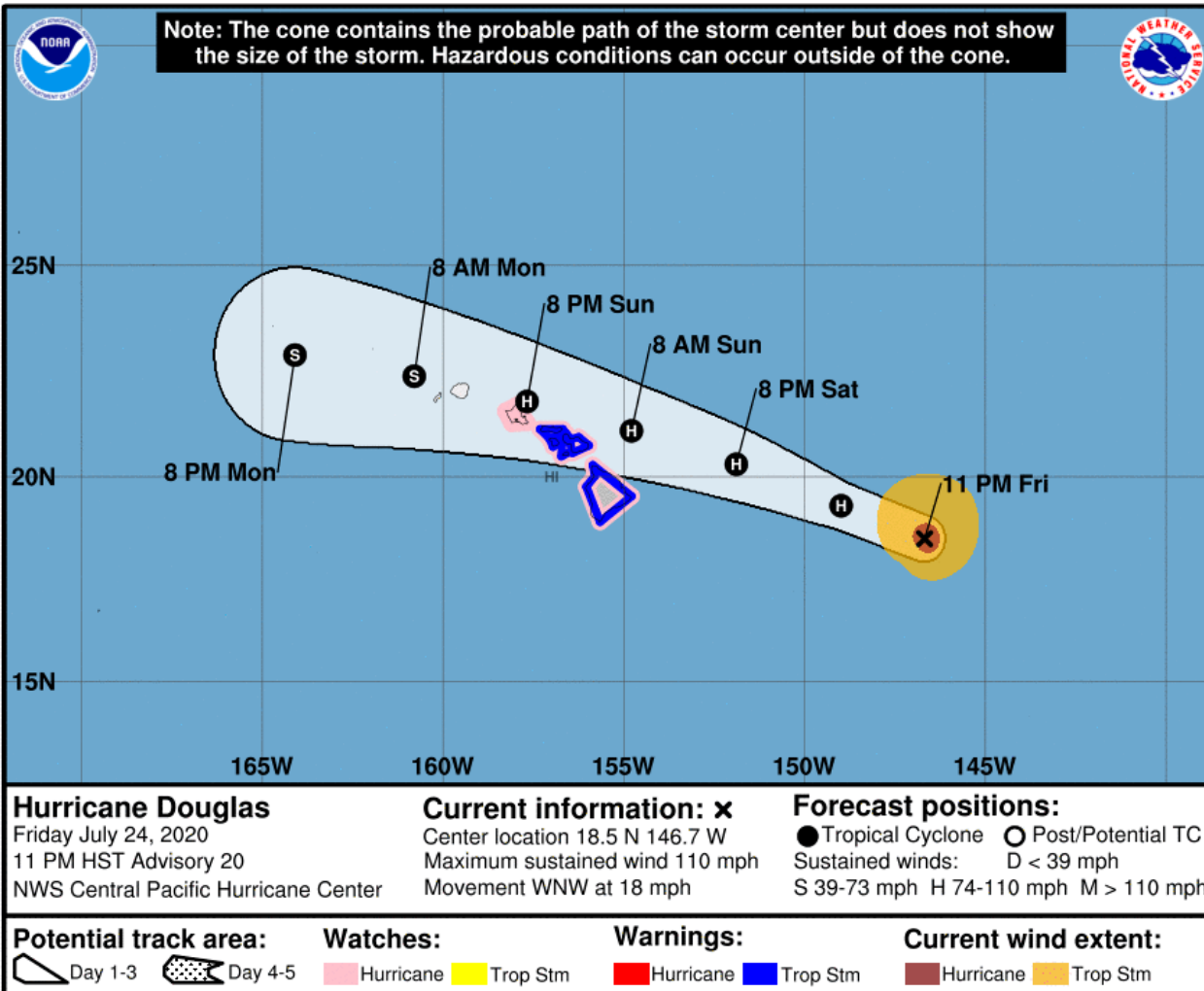
Images created using mission data and displayed with Google Earth

Problem with 2020 Change to WSP

Error with the wind radii scaling → 64 kt WSP too low

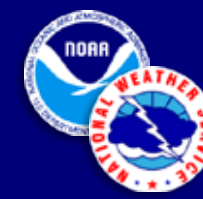


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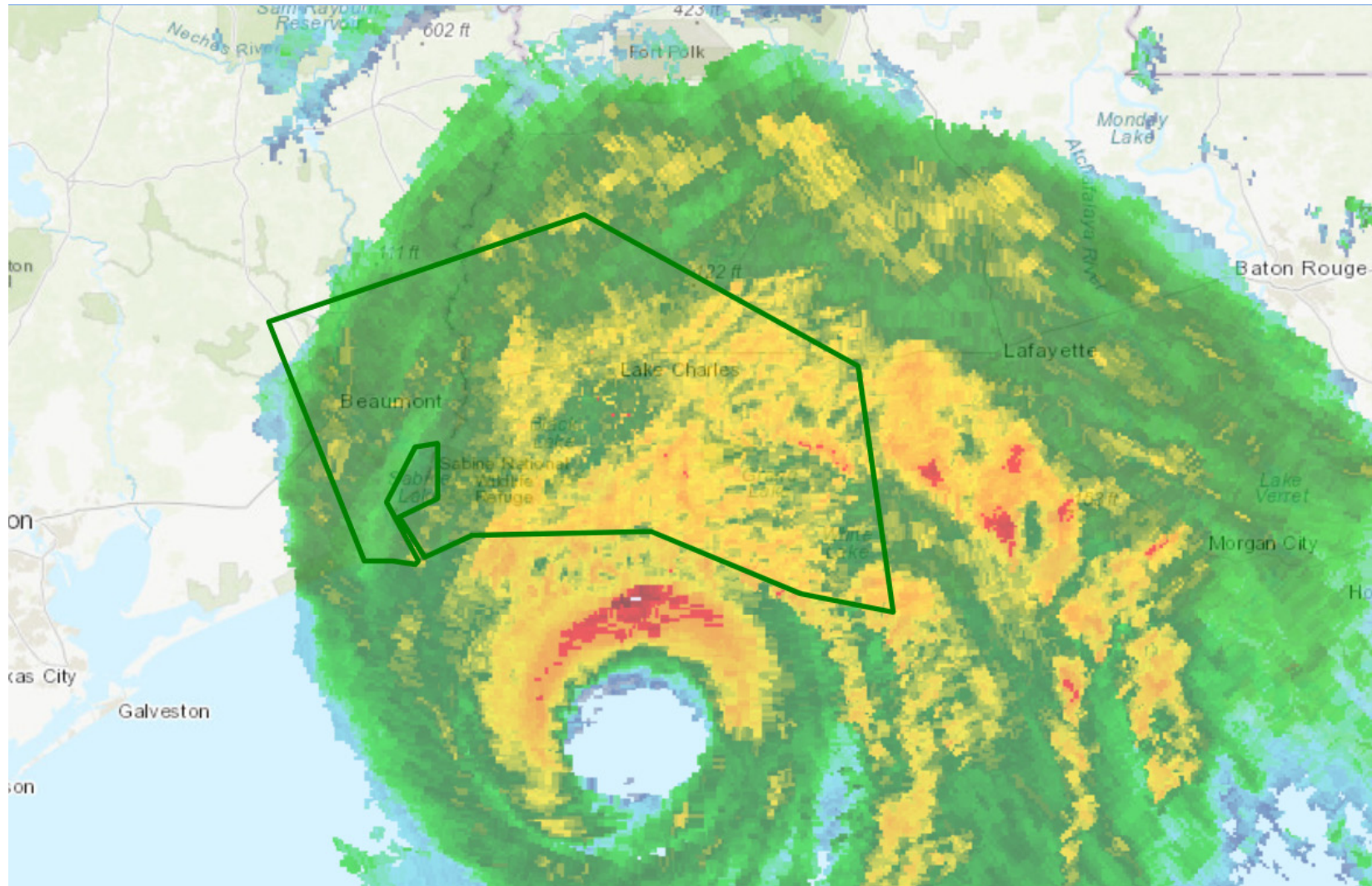


Extreme Wind Warning

Implementation for Hawaii for the 2021 season



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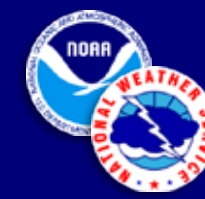


Extreme Wind Warning example from Hurricane Laura

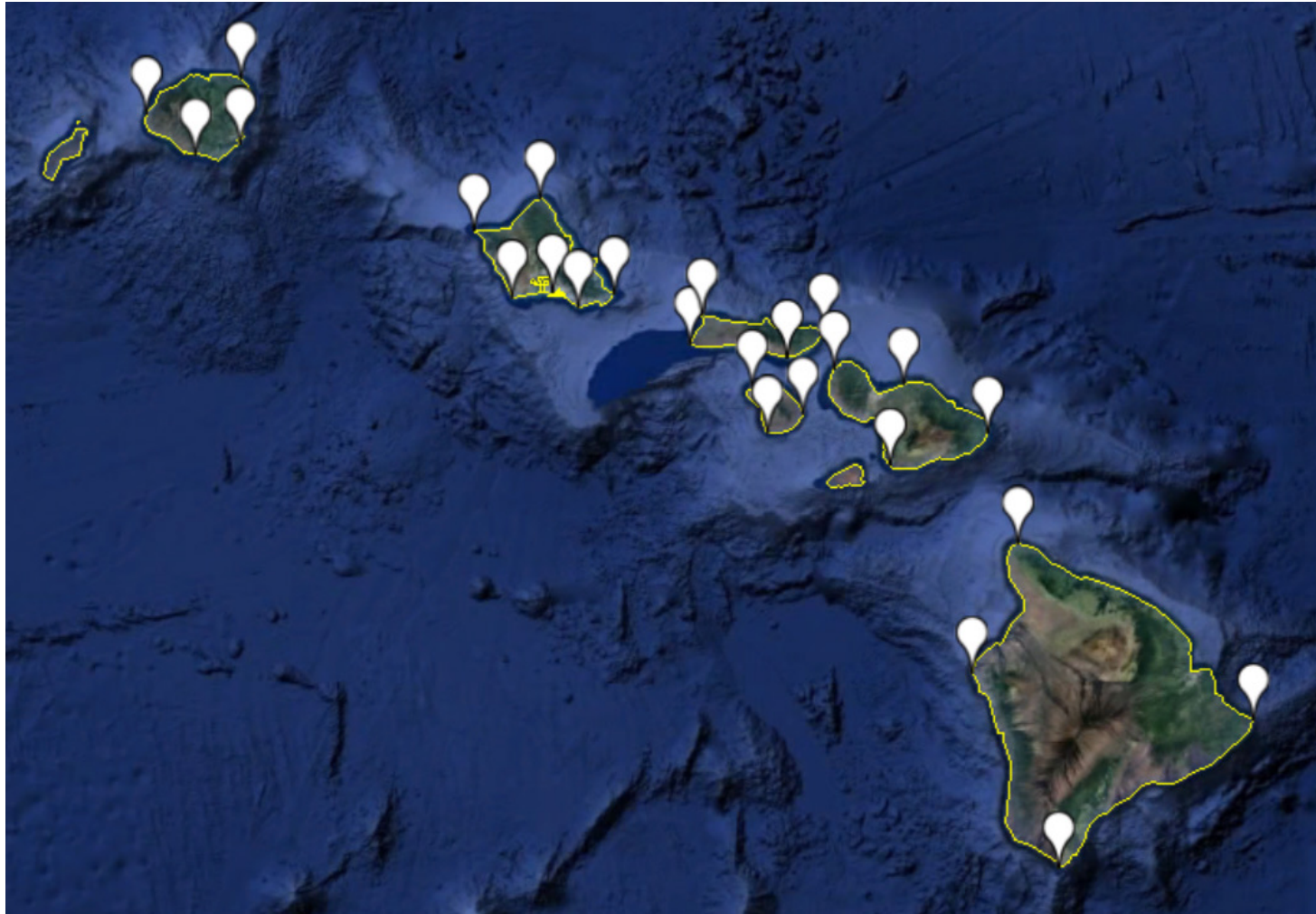
- Extreme wind warning (EWW)
- Short-fused warning (2 hours or less) for a major hurricane eyewall landfall
- EAS/WEA activation

Storm Surge Watch/Warning for Hawaii

Delayed Development and Implementation - time (TBD)



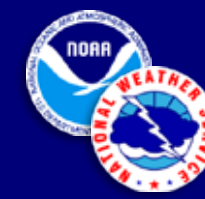
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Proposed storm surge communication points

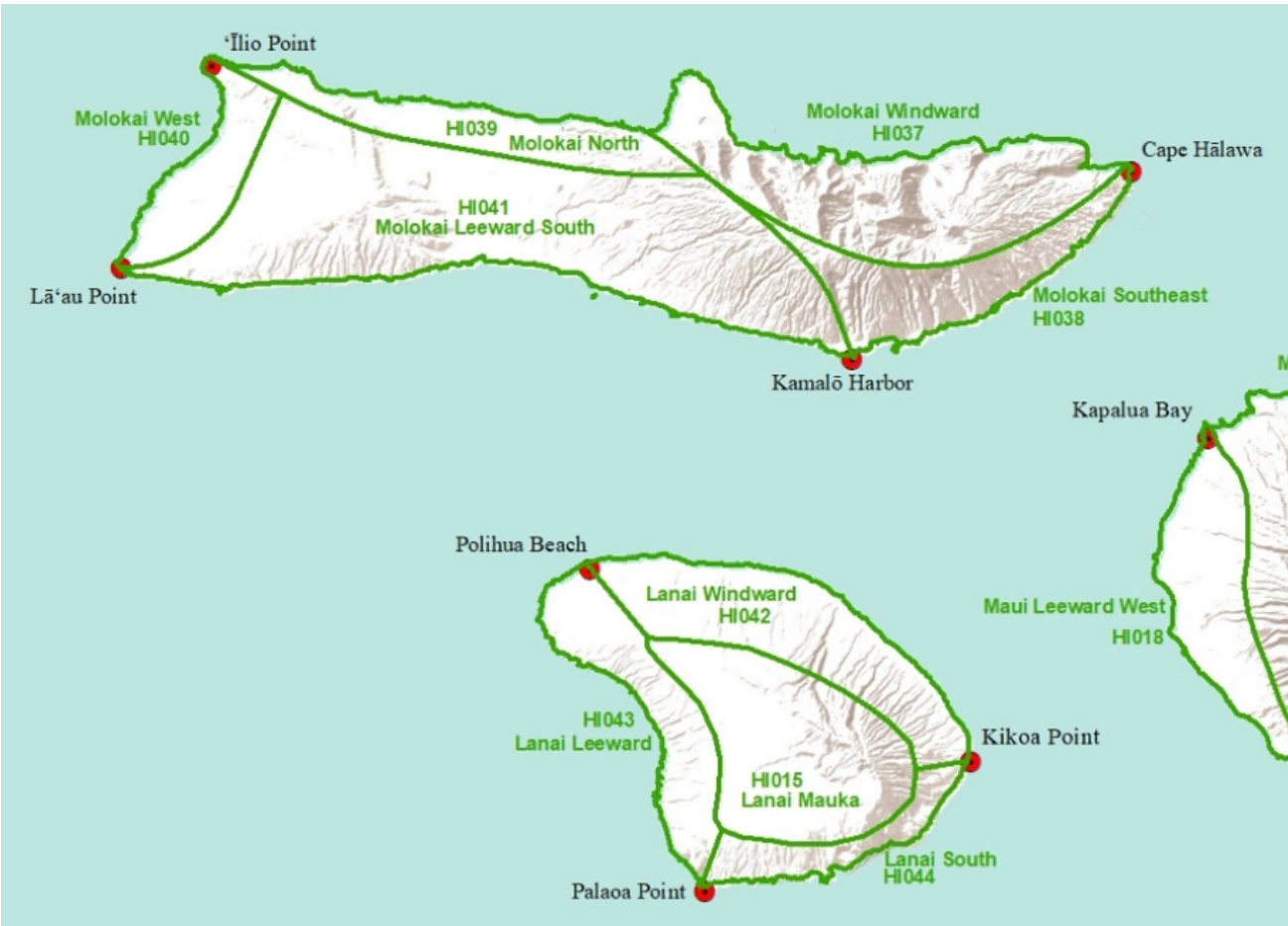
- Started in the Atlantic in 2017
- Separate watch/ warning for storm surge
 - Delayed for Hawaii until (TBD)
 - Re-scoping requirement for storm surge program for Pacific Region
- Necessary associated zone changes will take place in March 2021

Forecast Zone Changes – March 2021



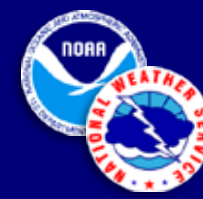
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Changes needed to properly communicate storm surge threat



- **New zones will better align with marine hazards**
 - 26 new zones created from 11 existing ones
 - 5 zones will have new boundaries
- **Service Change Notice sent in mid December**
- **Change will be implemented at WFO Honolulu/CPHC 30 March 2021**

Interactive map: <https://arcg.is/1PCPGP>



Questions?

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