



**GREPECAS Programmes and Projects Committee (PPRC) Fourth Virtual Meeting
 (ePPRC/04)
 Online, 21 – 22 April 2022**

Agenda Item 2: Follow-up on the CAR/SAM Planning and Implementation Regional Group (GREPECAS) Programmes and Projects

2.2 Other Emerging ANS Topics

GRAPHICAL FORECASTS FOR AVIATION (GFA)

(Presented by United States)

EXECUTIVE SUMMARY	
Overall description and guidance for utilizing the GFA for the Pacific Ocean	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"> ● Air Navigation Capacity and Efficiency ● Economic Development of Air Transport
<i>References:</i>	<ul style="list-style-type: none"> ● Webinar on mechanisms to improve the coordination of information concerning en-route weather phenomena and updates from the Volcanic Ash Advisory Center (VAAC) (VAAC/COORD/Webinar) Online, 7 December 2021 (VACC/COORD (icao.int))

1. Introduction

1.1 The United States National Weather Service (NWS) has operationally expanded the GFA tool across the Pacific Ocean, similar to the earlier expansion over the Caribbean Sea. GFA includes a set of web-based displays that provide automated aviation forecast model data in addition to a suite of observational data. While the tool is tailored for aviation users, public and marine users will also see benefits.

2. Discussion

2.1 The GFA provides users with timely and consistent data. It's a comprehensive suite of models, observations (METAR, PIREP, satellite, radar), and map options to increase situational awareness. The GFA expansion across the Pacific Ocean, particularly in the low levels, will aid the aviation community with safety and decision making, especially since the vast oceanic areas have little to no aviation forecasts and observations.

2.2 The “Map Options” menu enables the user to customize the display, including the base map selection, specific data displayed, and map opacity, scales, and density. Overlays include airports, Flight Information Region (FIR) boundaries, and additional map features. More detail is also revealed with progressive zooming and individual layers can be turned on or off independently.

2.3 The GFA combines Open Layers displays of multiple weather parameters on a single webpage, with the additional option to view static imagery. The Open Layers environment also offers more core functionality and support for mobile devices. The product covers the conterminous United States (CONUS) and the Gulf of Mexico, Caribbean, and portions of the Atlantic Ocean from the surface up to Flight Level 480 (FL480) or approximately 48,000 ft. above Mean Sea Level (MSL). The newest expansion covers Hawaii, portions of the Pacific Ocean from Midway to the Aleutians to the coastal waters of Central and northern South America (see Fig. 1).

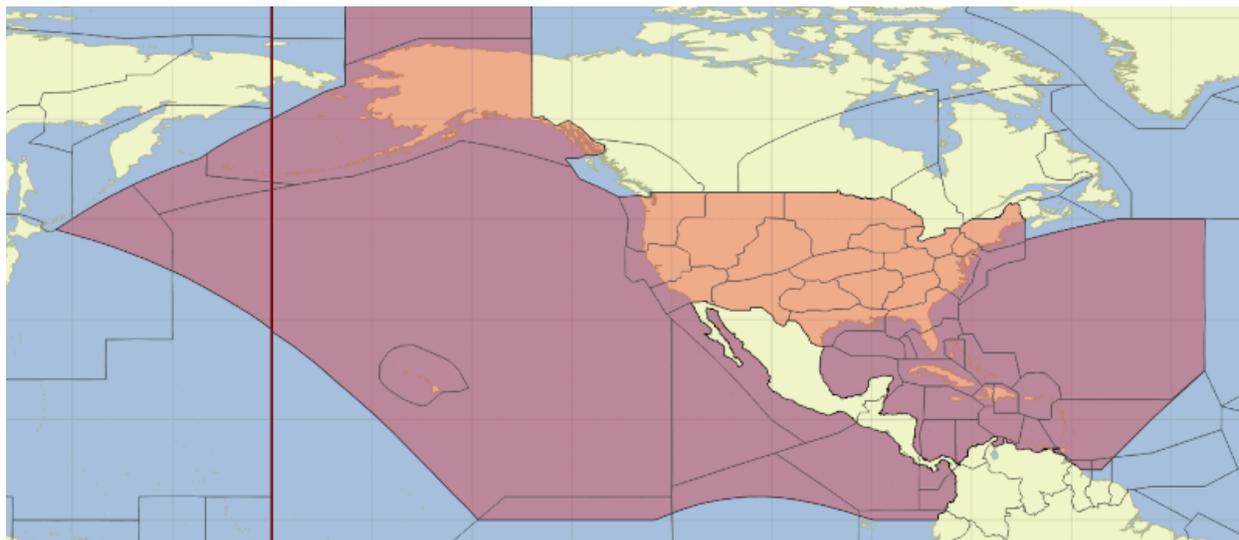


Fig. 1. Domain of the operational GFA (orange and purple fill areas). The expansion (green fill area) covers Hawaii and portions of the Pacific Ocean from Midway to the Aleutians to the coastal waters of Central and northern South America.

2.4 A tutorial is available at <https://www.AviationWeather.gov/gfa/help?page=tutorial>

2.5 The GFA is available at <https://www.AviationWeather.gov/gfa>