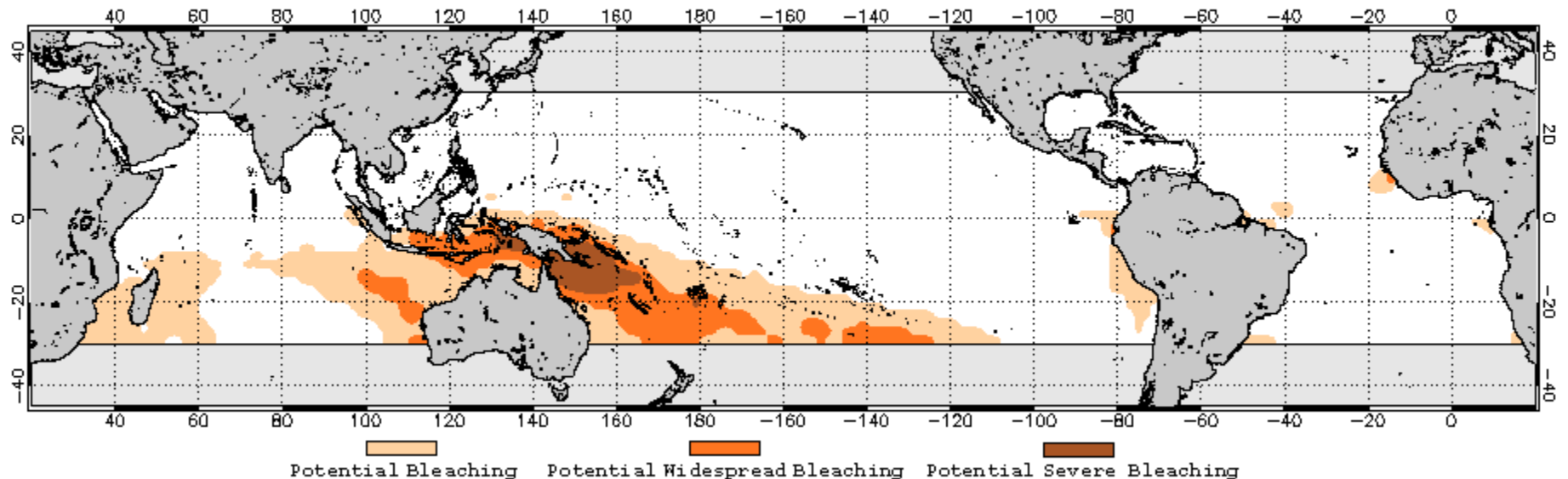


NOAA Coral Reef Watch
Seasonal Coral Bleaching Thermal Stress Outlook
(Experimental product, 2x2 degree spatial resolution)

November 2008 NOAA Coral Reef Watch Bleaching Outlook Through February 2009

The NOAA Coral Reef Watch bleaching prediction product indicates that the greatest chance of bleaching during the upcoming austral summer will be in the region bounded by Papua New Guinea, the Solomon Islands, and the northern Great Barrier Reef (GBR). Currently, the forecast system suggests that thermal stress with the potential for severe bleaching is a possibility in that region with milder thermal stress in a band stretching from the Coral Triangle region southeast to Fiji and perhaps French Polynesia. The following figure shows the most recent global 15-week Coral Bleaching Outlook from 25 November 2008.

2008 Nov 25 NOAA Coral Reef Watch Coral Bleaching Thermal Stress Outlook for Nov 08–Feb 09

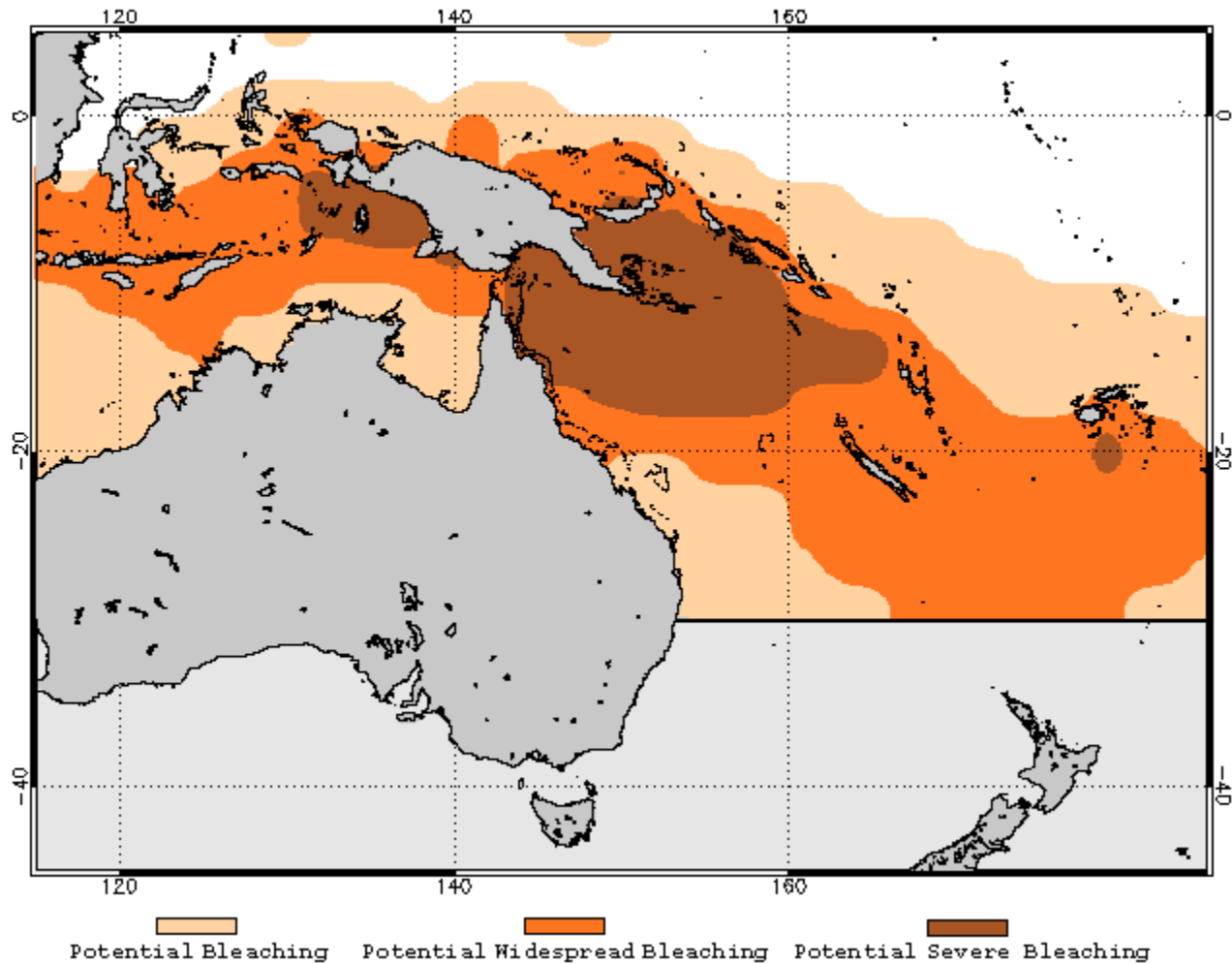


In a normal year, the model forecasts no potential for bleaching. When sea surface temperatures are forecast to exceed bleaching thresholds over a long enough period to cause bleaching, the outlook maps display the bleaching potential. Actual conditions may vary due to subsequent changes in climatic conditions, extreme localized variability, or weather patterns.

Indo-Pacific Bleaching Outlook:

The area most likely to suffer thermal stress with the potential for severe bleaching during the next 15 weeks is a region spanning Papua New Guinea, the Solomon Islands, and the Far Northern section of the GBR. Less severe thermal stress is expected in a broader region including all of the Cairns section of the GBR. To the west, the model currently predicts a threat of moderate levels of thermal stress from southern Borneo across through Timor-Leste to southern Papua New Guinea and Torres Strait. This level of potential stress then picks up in the central GBR and east extending across Vanuatu and New Caledonia to the east-southeast of Fiji. Some mild stress may be seen around Madagascar. The greatest warming is expected to begin from late January through February.

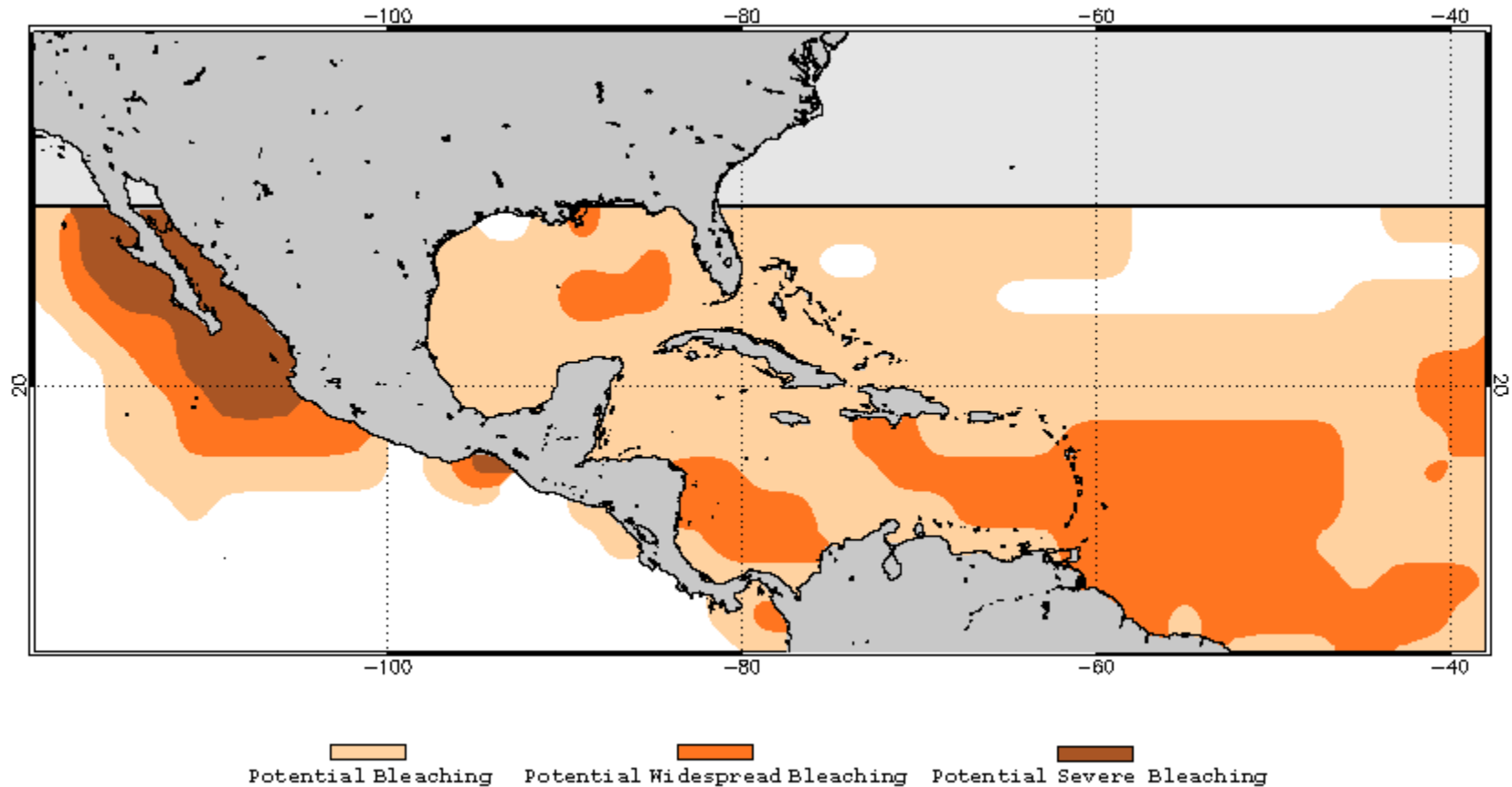
2008 Nov 25 NOAA Coral Reef Watch Coral Bleaching Thermal Stress Outlook for Nov 08–Feb 09



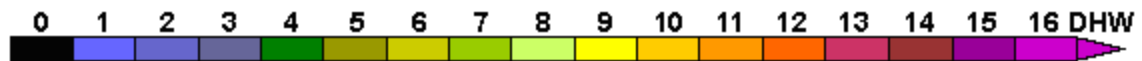
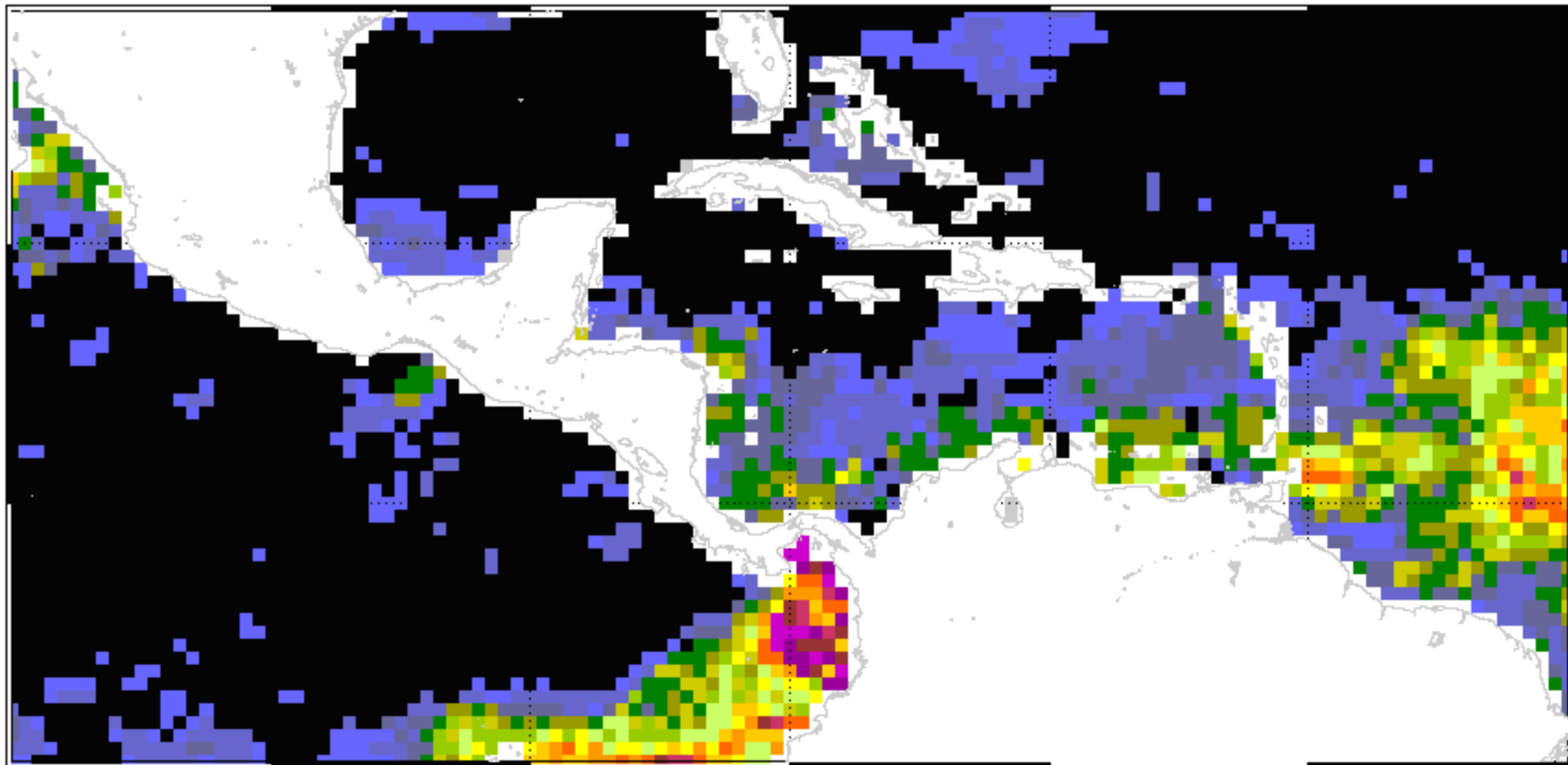
Caribbean / Americas 2008 Bleaching Season Retrospective:

The 2008 boreal bleaching season has passed its peak and almost all of this year's anomalous temperatures have disappeared in the southern Caribbean. In its inaugural year the forecast system did well in predicting the general patterns of thermal stress in the Caribbean in 2008. The figures below compare the outlook issued in August with the maximum thermal stress maximum experienced so far in the Caribbean during 2008. The forecast of sudden warming around Baja California was especially successful. The forecast system over-predicted bleaching in outlook updates late in the season and we are working to correct that problem.

2008 Aug 12 NOAA Coral Reef Watch Coral Bleaching Thermal Stress Outlook for Aug–Nov 2008



NOAA Coral Reef Watch Satellite Maximum Coral Bleaching Degree Heating Weeks
2008 Jan 01–2008 Nov 14



NOAA Coral Reef Watch Satellite Maximum Coral Bleaching HotSpots
2008 Jan 01–2008 Nov 14

