



METEOROLOGICAL SERVICE NETHERLANDS ANTILLES AND ARUBA.

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Effects of Hurricane Omar on the ABC and SSS Islands

ABC Islands

During the morning of Monday, October 13, tropical depression Fifteen developed with its center near 14.8 degrees north and 69.6 degrees west or about 325 kilometers north of Curaçao. Since strong southwesterly winds were expected, resulting in rough seas in our south and west coastal areas, a cautionary statement was issued earlier that morning for owners of small craft and coastal facilities.

Initially, this system was forecast to drift toward the northwest and, after about a day, it would turn toward the northeast while accelerating its forward speed. Instead, it became stationary and started to drift slightly that evening toward the southeast. This development resulted in a further increase of cloudiness, (thunder)shower activity and "moderate" to "strong" southwesterly winds with gusts to "tropical storm" force over the ABC Islands. Because of the increased winds and seas, the cautionary statement was upgraded by the Meteorological Service to a Small Craft Warning during the early hours of Tuesday morning.

The tropical depression was upgraded to Tropical Storm Omar on Tuesday morning (October 14). The closest point of approach to the ABC Islands occurred during the early afternoon, when the center of Omar was located about 180 kilometers north of Curaçao. The official meteorological stations in the ABC Islands recorded wind speeds to mainly "fresh" to "near gale" and "tropical storm" force were recorded only in wind gusts. These strong southwesterly winds generated large waves which caused beach erosion and significant damage to coastal facilities. On all three islands a considerable number of houses experienced roof damage, while several trees were uprooted because of the "near gale" southwesterly winds.

Several periods with steady rain of light to moderate intensity combined with occasional (heavy) thunderstorm activity resulted in large amounts of rain in the ABC Islands. Especially sections of Aruba experienced significant flooding.

Omar finally started to move toward the northeast during the afternoon. The strong winds over the ABC Islands however continued to blow through the early morning of Wednesday.

SSS Islands

A Tropical Storm Warning and a Hurricane Watch were issued for the SSS Islands during the late afternoon of Tuesday. Omar became a hurricane during the early evening and the Hurricane Watch was upgraded to a Hurricane Warning later at 11 P.M. It continued to intensify on the next day as it was moving toward the northeast at an increasing forward speed. It reached Category Two intensity during the early evening of Wednesday, October 15, as it started to approach the Northeastern Caribbean. A large area with rain reached the SSS Islands during the afternoon. As Omar was approaching the SSS Islands, it rapidly strengthened to Category Three intensity later that same evening.

The winds in the SSS Islands actually started to pick-up from the east on Wednesday after 10 P.M. As the eye of Omar moved west of these islands, the wind speed continued to increase gradually to tropical storm force while the direction shifted to the west. Wind speeds to hurricane intensity at St. Maarten's Juliana Airport were observed only in gusts between 3 and 4 A.M. on Thursday. The strong southwesterly winds caused high waves and a storm surge which resulted in damaging coastal flooding over sections of the SSS Islands. During the passing of category three Omar, the center remained well away from the islands, so that mainly "tropical storm" conditions were experienced, while the islands remained outside the area of hurricane winds. Nevertheless, widespread damage was experienced to coastal facilities, buildings and infrastructure. The heaviest rain in St. Maarten was recorded between

Thursday midnight and 2 A.M. and in Statia between midnight and 1 A.M. After 4 A.M., no more rain was observed in the islands during that morning.

Table 1: Omar in Numbers

	Aruba	Curaçao	Bonaire
Max Mean Wind Speed (kts)*	31	31	34
Max Wind Gust (kts)*	39	39	50
Date/Time	14/6:13 AM	14/12:26 PM	15/3:23 AM
Distance of the center (km)	ne 180	north 180	nnw 180
Date/Time	14/2:00 PM	14/2:00 PM	14/2:00 PM
24h rains in mm (date) at airport	101.6 (15)	43.2 (14)	40.6 (14)

	Saba	St. Eustatius	St. Maarten
Max Mean Wind Speed (kts)*	NA	36	46
Max Wind Gust (kts)*	NA	50	66
Date/Time	NA	16/1:25 AM	16/3:10 AM
Distance of the center (km)	wnw115	wnw 145	wnw 105
Date/Time	16/2:00 AM	16/2:00 AM	16/3:00 AM
24h rains in mm (date) at airport	NA	102.0 (16)	139.4 (16)

* over one-minute NA = information not available

Table 2: Wind Speed Description

Force	Description	knots	mph	km/h
4	moderate	11 - 16	13 - 18	20 - 28
5	fresh	17 - 21	19 - 24	29 - 38
6	strong	22 - 27	25 - 31	39 - 49
7	near gale	28 - 33	32 - 38	50 - 61
8 - 11	tropical storm	34 - 63	39 - 72	62 - 117
12	hurricane	≥ 64	≥ 73	≥ 118

Radar Image taken on October 14, 2008 at 7:45 hours

