

= Cyclone Keila =

Cyclonic Storm Keila (IMD designation : ARB 02 , JTWC designation : 03A) was the first named storm of the 2011 North Indian Ocean cyclone season . A weak system for much of its duration , Keila developed in the western Arabian Sea in late October 2011 , amid an area of marginally favorable conditions . On November 2 , it briefly organized enough to be classified as a cyclonic storm , which has maximum sustained winds of at least 65 km / h (40 mph) . Given the name Keila by the India Meteorological Department (IMD) , the storm quickly moved ashore southern Oman near Salalah , and weakened while meandering over the country . The remnants soon after moved offshore , dissipating on November 4 .

The storm brought heavy rainfall to Oman , reaching just over 700 mm (28 in) in the mountains near Salalah . Moisture from the storm spread across most of the country , causing flash flooding near the capital Muscat . Floods from the storm killed 14 people , injured over 200 , washed away hundreds of cars , and damaged many buildings . Two hospitals were damaged , forcing 60 patients to be evacuated elsewhere by helicopter . Overall damage was estimated at US \$ 80 million (2011 USD) . Offshore , Keila capsized a boat originating from India , killing five of the crew and leaving another nine missing ; six sailors were rescued by the Omani Coast Guard .

= = Meteorological history = =

The Intertropical Convergence Zone produced an area of convection in the southeastern Arabian Sea toward the end of October 2011 . The overall system moved west @-@ northwestward , developing a distinct low pressure area on October 27 . By that time , the thunderstorm activity was still disorganized and associated with a weak circulation . Environmental conditions were unfavorable initially , consisting of strong wind shear and dry air . An anticyclone over the system caused the shear to decrease by October 28 , amid warm water temperatures of 29 ° C (84 ° F) , both more favorable conditions . By that time the circulation became well @-@ defined , although still elongated , and the convection was still scattered . On October 29 , the India Meteorological Department (IMD) designated the system as Depression ARB 02 about 885 km (550 mi) east of the Yemeni island of Socotra .

Convection continued to organize and deepen as the nascent depression continued west @-@ northwestward , steered by a ridge to the north . However , dry air from the Arabian Peninsula and cooler waters proved deleterious to the system , and the circulation became more disorganized on October 30 . Despite the marginally favorable conditions , the overall structure improved on November 1 , with pronounced outflow developing along the western periphery . A nearby buoy reported a barometric pressure of 998 mbar (29 @.@ 5 inHg) , which confirmed the increasing organization . At 03 : 00 UTC on November 1 , the IMD upgraded the depression to a deep depression , and 24 hours later to Cyclonic Storm Keila . By that time , the agency estimated peak 3 minute sustained winds of 65 km / h (40 mph) while the storm was just 150 km (95 mi) southeast of Oman . The American @-@ based Joint Typhoon Warning Center (JTWC) also designated the system as Tropical Cyclone 03A at 03 : 00 UTC on November 2 .

With cool waters and an unfavorable phase of the Madden ? Julian oscillation , Keila failed to intensify significantly as it approached the southeastern Arabian Peninsula . An irregular central dense overcast developed over the circulation , consisting of shallow convection . A passing trough weakened the ridge to the north , steering Keila toward the north . After weakening to a deep depression again , Keila made landfall near Salalah , Oman around 18 : 00 UTC on November 2 . Around that time , the JTWC discontinued advisories , once the storm was weakening rapidly over land . With a ridge to the north and east , Keila followed the track of the anticyclone aloft , which brought it back offshore Oman on November 3 . Such looping near the coast was considered rare by the IMD . According to the agency , the system continued eastward and dissipated on November 4 . However , the JTWC tracked the system further in a post @-@ season analysis , estimating that Keila intensified once offshore and attained peak winds of 100 km / h (65 mph) on November 3 . The agency assessed that the storm turned to the southwest and weakened , only to turn back to

the northwest and dissipate over extreme eastern Yemen on November 5 .

= = Preparations and impact = =

There was confusion in the country over Keila 's intensity ; the IMD classified it as a cyclonic storm , while officials in Oman designated it as a deep depression , based on available observations . Officials warned residents of the potential for heavy rainfall . The Pakistani government also warned fishermen not to venture to the open seas , due to the uncertain effects of the storm .

While Keila was offshore and still in its developmental stages , it brought winds of 41 km / h (25 mph) to Salalah International Airport , and at the time of landfall , the station reported slightly stronger winds of 43 km / h (26 mph) . However , the storm 's most severe effects were related to the heavy rainfall it produced over Oman , which peaked at just over 700 mm (28 in) in the mountains near Salalah . In southern Oman , Keila dropped 50 to 100 mm (2 @ . @ 0 to 3 @ . @ 9 in) of rainfall at Salalah , the equivalent of a year 's worth of precipitation . Moisture from the storm coalesced over the Al Hajar Mountains in northern Oman , producing severe thunderstorms that led to flash flooding . Across southern Oman where the storm crossed , there were no deaths ; all of the deaths occurred due to the flash floods in northern Oman , where 14 people lost their lives . Three people were killed due to electrocutions , another two were crushed to death by large objects , and nine drowned . Overall damage was estimated at US \$ 80 million , and over 200 people were injured nationwide .

The rains caused wadis ? typically dry riverbeds ? to accumulate with floodwaters , washing away hundreds of cars and disrupting traffic . Police officers helped rescue victims who were stranded in flooded wadis . Some drivers rode out the floods on the roofs of their cars . The deluge also damaged crops and farm buildings elsewhere in the country . Damage was heaviest near the capital city Muscat , where houses and businesses were damaged by the floods , and there were many traffic accidents . A school bus was swept away in Wadi Kabir , although the students were soon after rescued by local authorities . Several buildings collapsed in Sur due to the rains . In the valley near Al @ - @ Rustaq , floodwaters swept away cars , dead animals , and property , with water levels reaching 1 @ . @ 8 m (5 @ . @ 9 ft) high in some places . The floods damaged two hospitals in northern Oman ; police helicopters transferred 60 patients after the facilities were closed for maintenance , and other patients were moved to other local hospitals . Just days after Keila dissipated , another deep depression threatened Oman and brought additional rainfall .

Sailing from the Indian state of Gujarat to Dubai , a ship with the call sign MSV Shiv Sagar MNV 2169 encountered Keila offshore southern Oman . The storm 's high winds caused the boat to capsize , killing five of the sailors , and leaving nine others missing . Six of the crew were rescued by the Omani Coast Guard .