

Foreign, Commonwealth & Development Office



Weekly SAHF Forecasters' Forum #25

Date: 04 August 2022

Discussion Notes

Realized Weather (29 July 22-04 August 22)	 Under the influence of shallow westerly waves, the northern parts of Afghanistan experienced scattered to fairly widespread rain/thundershowers with rest of places experiencing dry and hot weather. Under the influence of moderate monsoon currents and a cyclonic circulation, much of Pakistan observed scattered to fairly widespread rain/thundershowers with isolated heavy rain/thundershowers over some places. Places like Muzaffarabad, Takht Bai, Murree and Okara received more than 180 mm of rainfall causing low to medium riverine floods and landslides. With the monsoon trough lying close to foothills, Bhutan and Nepal observed light to moderate rainfall with isolated places in these countries experiencing heavy to very heavy rainfall. Due to persistence of moderate south westerly wind flow from Bay of Bengal and adjoining areas, Bangladesh experienced scattered to fairly widespread rainfall over much of the country with isolated places experiencing heavy rainfall. Bangladesh observed its record low rainfall since 1981 in July 2022 with the month's rainfall less than 57% of the normal. Under the influence of moderate south westerly winds over Myanmar, the country experienced scattered rain/thundershowers. Central parts of Sri Lanka and Maldives experienced scattered and isolated rain/thundershowers. Central parts of Sri Lanka received rainfall >200mm for two consecutive days causing floods and landslides. A moderate to strong and moderate cross equatorial flow prevailed over Arabian sea and over Bay of Bengal respectively. Monsoonal trough shifted to its normal position during the week.
Salient synoptic features in the coming week	 A westerly wave is expected over Afghanistan and Pakistan during the coming week. Monsoon currents likely to approach south and central parts of Pakistan. Moderate south westerly winds likely to occur from Bay of Bengal to north-eastern region at lower levels. Moderate to strong south westerly winds likely over Myanmar during the coming week. Moderate to strong south westerly to westerly winds likely over Sri Lanka and Maldives. Moderate cross equatorial wind flow in the region likely during the coming week. Low pressure likely to form off north Odessa coast and adjoining Bay of Bengal areas around 07 August 2022.

Rainfall outlook	 Isolated and scattered rain/ thundershowers likely over northern parts of Afghanistan with much of the areas likely to experience hot and dry weather. With the monsoon currents becoming active, Pakistan is likely to experience scattered to widespread rain/thundershowers over central and northern areas. The rainfall activity likely to increase over the southern areas from 10 August 2022. Bhutan and Nepal likely to experience scattered and fairly widespread rain/thundershowers with gradual increase in rainfall expected during the coming week. Bangladesh and Myanmar likely to experience scattered and fairly widespread rain/thundershowers over the coming week with some places expected to receive isolated heavy rainfalls. Rainfall activity over Maldives and Sri Lanka likely to decrease during the coming week. 	 Extended Range Outlook (until 17 August 2022) Probability of rainfall (>25mm) likely over Bhutan, Nepal, Bangladesh, Myanmar, and most parts of central and western India, and isolated pockets of Sri Lanka and Maldives towards the week ending of 10 August 2022. Probability of rainfall (>25mm) likely over Bhutan, Nepal, Bangladesh, and Myanmar, northern, western, and central parts of India towards the week ending of 17 August 2022.
Temperature outlook	No significant anomalies.	 Ocean Watch Ocean Surface Forecast briefing during past week (21-27 July 2022) High wind warnings and alerts were issued for West Coast of India. Winds were higher in the Arabian sea (15-17 m/s) compared to Bay of Bengal (<12m/s). The southern tropical Indian Ocean observed wind speeds up to 16 m/s. Waves were higher in the Arabian sea (3.0-4.0 m) compared to Bay of Bengal (< 3m). High period swell waves (15-18 sec) propagated to Bay of Bengal from the southern Indian Ocean with varying swell wave heights (1.5-2.5 m). Gyres and eddies observed in the southwest Arabian sea. Coastal currents were normal in the Bay of Bengal and southern Indian ocean. Western Arabian Sea and southern

		 tropical Indian ocean showed cooling in temperature by upwelling. Forecast for coming week (04-10 August 2022) Wind Speed Wind speed in the Arabian sea likely to be around 14-15 m/s, and in central Indian ocean it is likely to be around 13-14m/s, in the Bay of Bengal it is likely be around 17-18 m/s. Wave Heights Wave heights in southern Indian ocean likely to be around 4.5 m, in the Bay of Bengal between 5.0-5.6 m, and in the Arabian sea likely to be between 4.0-5.0 m. Swell Waves Swell wave periods likely to be within normal over Bay of Bengal, Arabian sea, and the southern Indian ocean. Swell wave heights likely to be around 2.5-3.0 m in the Arabian sea, up to 3.5 m in the Bay of Bengal and in the southern Indian ocean around 2.5-3.0m. Sea Surface Temperature Sea surface temperature in the Bay of Bengal is likely to be around 30-31 °C and in the Arabian sea it is likely to be around 29-30°C.
Monsoon watch	 Currently monsoon is active over Myanmar, Pakistan, Bangladesh, Bhutan, Nepal and is moderate over Maldives and Sri Lanka. The monsoon trough likely to remain in its normal position. 	