

Weekly SAHF Forecasters' Forum #24

Date: 28 July 2022

Discussion Notes

<p>Realized Weather (22-28 July 2022)</p>	<ul style="list-style-type: none"> • 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 to strong monsoon currents, much of Pakistan observed scattered to fairly widespread rain/thundershowers with isolated heavy rain/thundershowers over some places. • Under the influence of south easterly wind flow up to mid-level 1.5 km, Bhutan and Nepal received scattered to widespread rain/thundershowers over most of the places with isolated places experiencing 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. • Under the influence of moderate south westerly winds over Myanmar, the country experienced scattered rain/thundershowers over most of the places with some places in the southern part of the country observing fairly widespread and isolated heavy rainfalls. • Under the influence of moderate south westerly and north westerly winds much of Sri Lanka and Maldives experienced scattered and isolated rain/thundershowers. • Low pressure systems formed over Sausastra/Kutch during the week. • A moderate to strong and moderate cross equatorial flow prevailed over Arabian sea and over Bay of Bengal respectively with offshore trough over west coast of India. A cyclonic circulation/low pressure system and monsoonal trough shifted to south from its normal position during the week.
<p>Salient synoptic features in the coming week</p>	<ul style="list-style-type: none"> • A westerly wave is expected over Afghanistan and Pakistan during the coming week. • Monsoon currents approaching to north and central parts of Pakistan. • Moderate south westerly winds likely to occur from Bay of Bengal to north-eastern region at lower levels. • Moderate monsoonal wind flow over Myanmar likely to continue during the coming week. • Moderate to strong monsoonal south westerly to westerly winds likely over Sri Lanka and Maldives. • Moderate cross equatorial wind flow in the region likely during the coming week.

Rainfall outlook	<ul style="list-style-type: none"> • 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 with heavy rainfalls over some areas. The rainfall activity likely to increase during the subsequent days over the coming week. • 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. • Maldives and Sri Lanka expected to experience gradual increase in rain/thundershowers over the coming week. 	Extended Range Outlook (until 10 August 2022) <ul style="list-style-type: none"> • Probability of rainfall (>25mm) likely over Bhutan, Nepal, Bangladesh, and Maldives, and most parts Myanmar, and Sri Lanka, and pockets of India, and Pakistan towards the week ending of 03 August 2022. • Probability of rainfall (>25mm) likely over Bhutan, Nepal, Bangladesh, Myanmar, Maldives, and most parts of central and western India, and isolated pockets of Sri Lanka towards the week ending of 10 August 2022.
Temperature outlook	<ul style="list-style-type: none"> • No significant anomalies 	Ocean Watch <i>Ocean Surface Forecast during past week</i> <ul style="list-style-type: none"> • Winds were higher in the Arabian sea (15-18 m/s) compared to Bay of Bengal (<15m/s). The southern tropical Indian Ocean observed wind speeds upto 17 m/s. • Waves were higher in the Arabian sea (3-4.5 m) compared to Bay of Bengal (< 3m). • High period swell waves (15-17 sec) propagated to Bay of Bengal from the southern Indian Ocean with varying swell wave heights (1.5-3.0 m). • Gyres and eddies observed in the southern Arabian sea. Strong coastal currents (upto 1.1 m/s) seen in the Bay of Bengal, the Arabian sea and the equatorial Indian ocean.

		<p>Forecast for coming week (21-27 July 2022)</p> <p>Wind Speed</p> <ul style="list-style-type: none"> • Wind speed in the Arabian sea likely to be between 16-17 m/s, and in central Indian ocean it is likely to be between 17-18m/s, in the Bay of Bengal it is likely be less (< 3m/s). <p>Wave Heights</p> <ul style="list-style-type: none"> • Wave heights in southern Indian ocean likely to be between 5.0-5.5 m, in the Bay of Bengal between 3.5-4.0 m, and in the Arabian sea less than 4.5 m. <p>Swell Waves</p> <ul style="list-style-type: none"> • With swell waves propagating from the south to the Bay of Bengal, the swell wave period in the Bay of Bengal is likely to be between 17-18 secs. In the rest of region, lesser swell wave period is likely. Also, the swell wave heights are likely to be normal in the Bay of Bengal as well as in the Arabian sea. <p>Sea Surface Temperature</p> <ul style="list-style-type: none"> • Sea surface temperature in the Bay of Bengal is likely to be ≤ 31 °C and in the Arabian sea it is likely to be ≤ 30°C.
<p>Monsoon watch</p>	<ul style="list-style-type: none"> • Currently monsoon is active and vigorous over Myanmar and Pakistan, and active over Bangladesh, Bhutan, Nepal and is moderate over Maldives and Sri Lanka. • The monsoon trough likely to shift gradually towards the foothills of the Himalayas into a brief “break like situation” until about 3 Aug 2022 after which active phase is likely to get revived. 	