

# Pacific Islands - Ocean and Climate Outlook Forum (OCOF) No. 178

Country: Fiji

## Part 1: Recent climate

**TABLE 1: Monthly Rainfall**

Station (include data period)	Apr-2022	May-2022	Jun-2022				Rank
			Total (mm)	33%tile	67%tile	Median	
	Total (mm)	Rainfall (mm)					
<b>Western Division</b>							
Penang Mill (1910-2022)	257.4	120.5	49.6	45.3	97.5	59.9	46/113
Lautoka Mill (1900-2022)	264.9	56.9	57.6	33.5	75.8	48.1	71/123
Nadi Airport (1942-2022)	155.1	80.1	75.0	26.8	72.5	52.6	57/81
<b>Central Division</b>							
Laucala Bay (Suva) (1942-2022)	316.8	233.2	65.4	101.2	208.4	137.1	16/81
Nausori Airport (1957-2022)	159.7	264.2	48.9	93.3	198.3	142.5	8/66
Tokotoko (Navua) (1945-2022)	263.0	258.5	113.5	130.6	235.7	163.0	16/78
<b>Eastern Division</b>							
Lakeba (1950-2022)	258.1	38.3	26.3	52.7	126.2	81.7	14/73
Vunisea (Kadavu) (1931-2022)	146.2	165.4	27.0	85.6	144.3	115.9	6/86
Ono-i-Lau (1943-2022)	290.4	71.5	10.0	63.9	110.9	81.0	2/75
<b>Northern Division</b>							
Labasa Airport (1946-2022)	221.4	108.3	33.5	28.7	80.7	44.4	26/66
Savusavu Airfield (1956-2022)	270.7	136.0	102.2	62.2	136.0	107.9	31/63
Udu Point (1946-2022)	153.6	130.5	88.2	75.5	150.7	105.4	29/74
Rotuma (1912-2022)	131.0	230.1	190.8	201.7	303.5	245.8	34/108

**NB: The X LEPS % score has been categorised as follows:**

Very Low:  $X < 0.0$

Low:  $0 \leq X < 5$

Moderate  $5 \leq X < 10$

Good:  $10 \leq X < 15$

High:  $15 \leq X < 25$

Very High:  $25 \leq X < 35$  Exceptional:  $X \geq 35$

**TABLE 2: Three-month Total Rainfall for April to June 2022**

Station	Three-month Total	33%tile	67%tile	Median	Rank	
	Rainfall (mm)					
<b>Western Division</b>						
Penang Mill (1910-2022)	427.5	Normal	373.5	550.8	459.8	58/112
Lautoka Mill (1900-2022)	379.4	Normal	264.2	412.6	347.6	76/123
Nadi Airport (1942-2022)	310.2	Normal	254.0	375.0	314.4	39/80
<b>Central Division</b>						
Laucala Bay (Suva) (1942-2022)	615.4	Below normal	686.4	846.7	733.9	22/81
Nausori Airport (1957-2022)	472.8	Below normal	646.3	799.5	710.1	9/66
Tokotoko (Navua) (1945-2022)	635.0	Below normal	745.0	1000.3	869.1	15/78
<b>Eastern Division</b>						
Lakeba (1950-2022)	322.7	Below normal	358.8	509.7	439.7	20/70
Vunisea (Kadavu) (1931-2022)	338.6	Below normal	487.5	633.1	550.8	19/86
Ono-i-Lau (1943-2022)	371.9	Normal	320.7	478.3	426.0	30/72
<b>Northern Division</b>						
Labasa Airport (1947-2022)	363.2	Normal	332.8	448.6	410.0	26/66
Savusavu Airfield (1957-2022)	508.9	Normal	398.0	629.3	506.7	32/62
Udu Point (1946-2022)	372.3	Below normal	451.7	666.8	537.2	14/73
Rotuma (1912-2022)	551.9	Below normal	744.4	919.1	836.7	<b>10/108</b>

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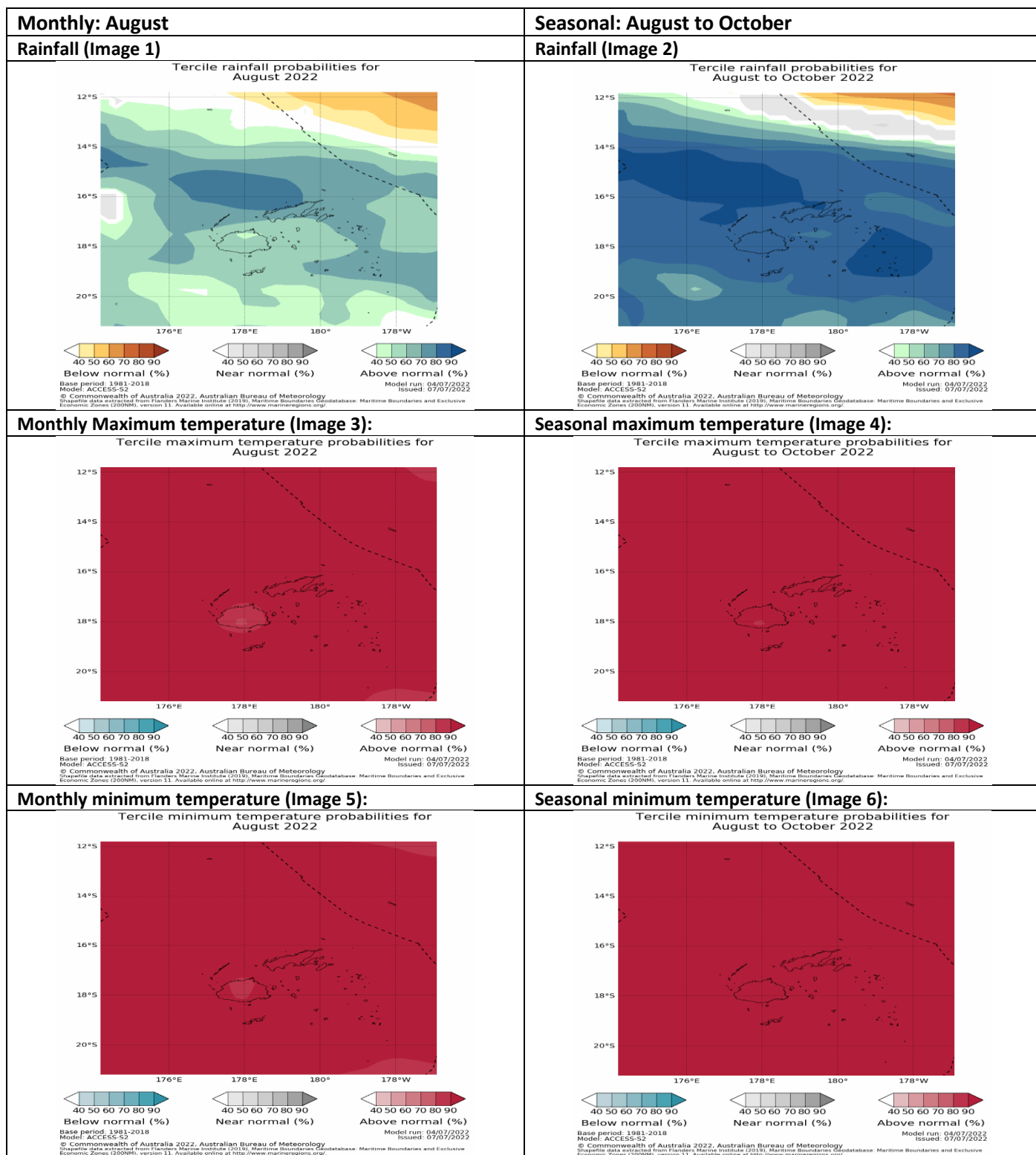
Moderate  $5 \leq X < 10$

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# Part 1i. Monthly and Seasonal Outlooks for August and August to October 2022

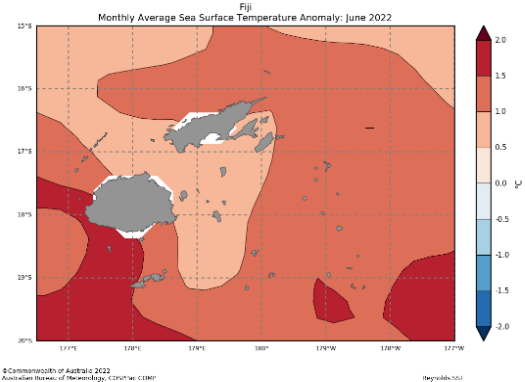
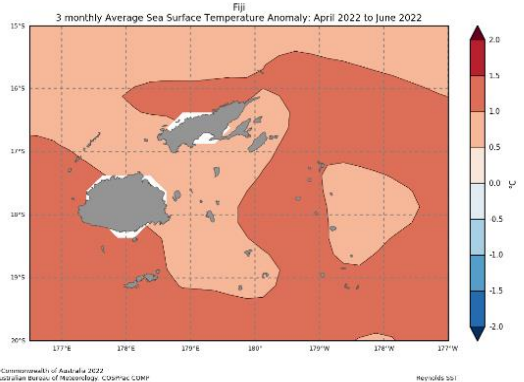
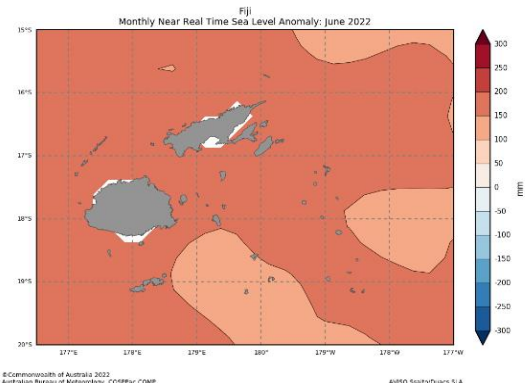

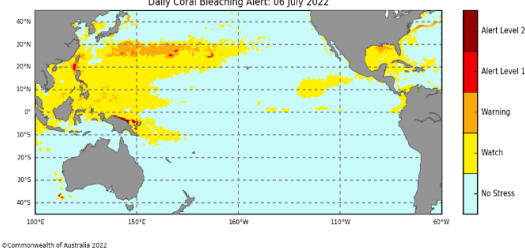
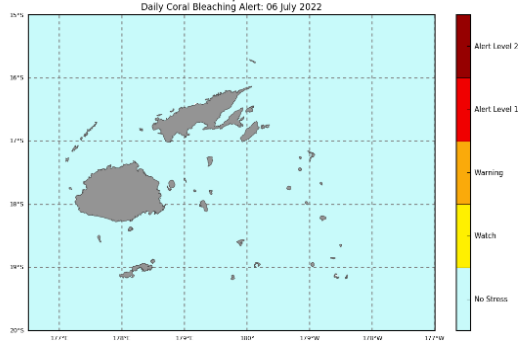


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# Part 2: Recent Ocean observations

## Monthly: June 2022

<p><b>Monthly: June</b></p>	<p><b>Last three months: April to June 2022:</b></p>
<p><b>Sea Surface Temperature (Image 1):</b></p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSIPac COMP MetUnibh 551</p>	<p><b>Sea Surface Temperature (Image 4):</b></p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSIPac COMP MetUnibh 551</p>
<p><b>Sea level (Image 2):</b></p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSIPac COMP AVRSO SeaHQ/Duacs SLA</p>	
<p><b>Daily coral bleaching alert (Image 3):</b></p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSIPac COMP NOAA Coral Reef Watch</p>	<p><b>Daily coral bleaching alert (Image 4):</b></p>  <p>©Commonwealth of Australia 2022 Australian Bureau of Meteorology, COSIPac COMP NOAA Coral Reef Watch</p>

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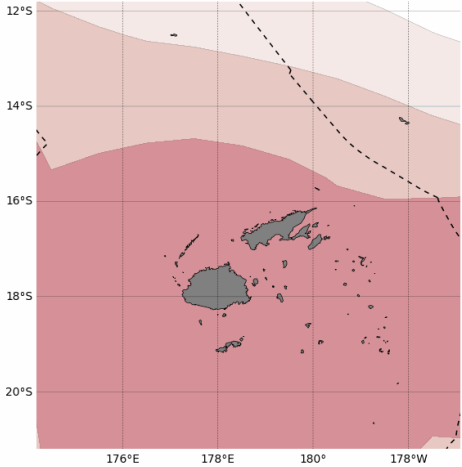
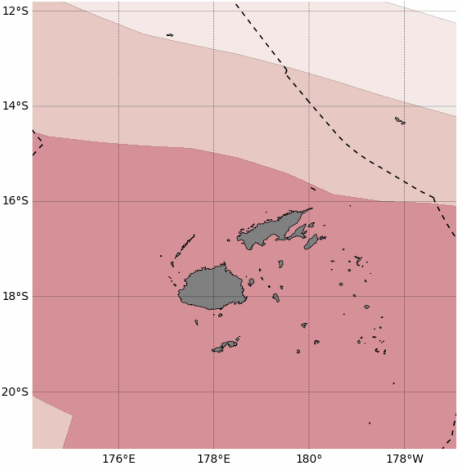
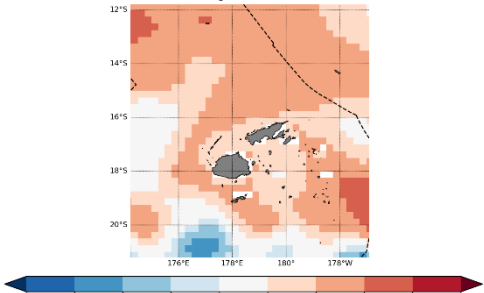
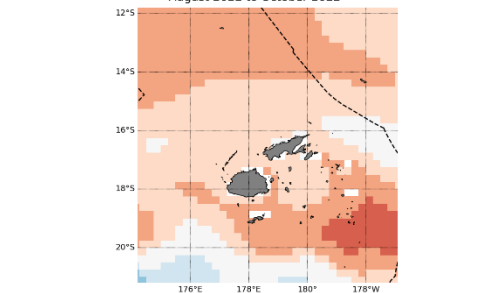
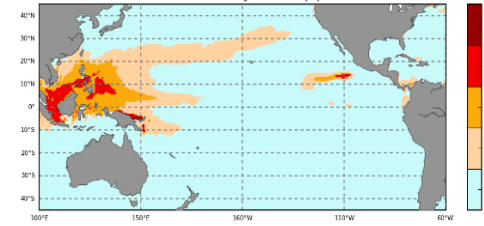
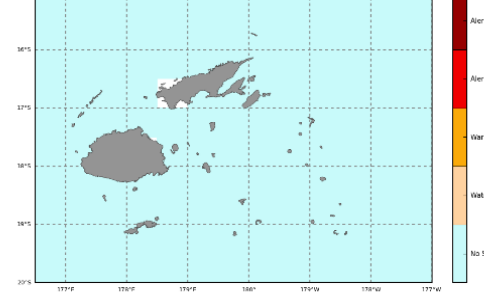
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## Part 2i. Monthly and Seasonal Outlooks for August and August to October 2022

Monthly: August	Seasonal: August to October
<p><b>Monthly sea surface temperature (Image 5):</b></p> <p>Difference from average sea surface temperature forecast for August 2022</p>  <p>Difference from average (°C)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (20NM), version 1.1. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a> Model run: 16/07/2022 Issued: 18/07/2022</p>	<p><b>Seasonal sea surface temperature (Image 6):</b></p> <p>Difference from average sea surface temperature forecast for August to October 2022</p>  <p>Difference from average (°C)</p> <p>Base period: 1981-2018 Model: ACCESS-S2 © Commonwealth of Australia 2022, Australian Bureau of Meteorology Shapefile data extracted from Flanders Marine Institute (2019), Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (20NM), version 1.1. Available online at <a href="http://www.maritimerregions.org/">http://www.maritimerregions.org/</a> Model run: 16/07/2022 Issued: 18/07/2022</p>
<p><b>Monthly sea level (Image 7):</b></p> <p>Difference from average sea surface height forecast for August 2022</p>  <p>Difference from average (mm)</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology Model: ACCESS-S2 Base Period: 1981-2018 Model Run: 28/06/2022 Issued: 12/07/2022</p>	<p><b>Seasonal sea level (Image 8):</b></p> <p>Difference from average sea surface height forecast for August 2022 to October 2022</p>  <p>Difference from average (mm)</p> <p>© Commonwealth of Australia 2022 Bureau of Meteorology Model: ACCESS-S2 Base Period: 1981-2018 Model Run: 28/06/2022 Issued: 12/07/2022</p>
<p><b>4-week Coral Bleaching (Image 9):</b></p> <p>Pacific Ocean 4 Weeks Coral Bleaching Outlook: 03 July 2022</p>  <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COGPPac CORP NOAA Coral Reef Watch</p>	<p>Fiji 4 Weeks Coral Bleaching Outlook: 03 July 2022</p>  <p>Alert Level 2 Alert Level 1 Warning Watch No Stress</p> <p>© Commonwealth of Australia 2022 Australian Bureau of Meteorology, COGPPac CORP NOAA Coral Reef Watch</p>

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## Summary Statement

### Monthly and last three months: June 2022/April to June 2022 statement (Highly significant changes)

For June 2022, *above normal* rainfall was recorded at Nadi Airport. *Near normal* rainfall was registered across Northern Division, Penang Mill and Lautoka Mill. *Below normal* rainfall was recorded across Central Division, Eastern Division and Rotuma. Ono-i-Lau recorded its second driest June in 75 years of record, while Vunisea (Kadavu) recorded its sixth driest June in 86 years of record.

For April to June 2022, *near normal* to *below normal* rainfall was recorded across Fiji. Rotuma recorded its tenth driest April to June period in 108 years of record.

## Part 1i. Monthly and Seasonal Outlooks for August and August to October 2022

Fiji's August rainfall is likely to be *above normal*.

Fiji's rainfall for August to October 2022 is very likely to be *above normal*. *Above normal* rainfall is likely for Rotuma.

Both maximum and minimum temperatures for Fiji for August and August to October 2022 are very likely to be *above normal*.

## Part 2: Recent Ocean summary statement

### Monthly and last three months: June/April to June 2022 (Highly significant changes)

Most of the Fiji Waters experienced above average SST in June 2022. Significant warm SSTs of more than 1.5°C above average were experienced around Western Viti Levu, Mamanuca Group, Vatulele and southern Lau Group.

For the April to June 2022 period, above average SSTs were experienced in most of the Fiji Waters, while significant warmer SSTs of 1.0 to 1.5°C above average were experienced around western Viti Levu, Kadavu, northern parts of Vanua Levu and parts of the southern Lau Group.

The sea level anomaly across Fiji in June 2022 was significantly higher than normal, with waters around Viti Levu, Vanua Levu, Lomaiviti Group, Taveuni, northern and southern Lau Group and Kadavu in the range of 150 to 200 mm above average.

Coral bleaching alert reveals no thermal stress.

## Part 2i. Monthly and Seasonal Outlooks for August and August to October 2022

### Ocean Variable statement (Highly significant changes)

The monthly and seasonal SST outlook for August and August to October shows a significant temperature difference of 1.2-2.0°C *above normal* for majority of Viti Levu.

The monthly sea level outlook for August reveals significant sea surface height differences of 60mm to 100mm above normal surrounding Fiji, however the difference of 30mm to 60mm is forecasted over Vanua Levu and Viti Levu. Similar

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sea level forecasted for seasonal outlook with significant sea level differences of 100mm to 200mm above normal over southern Lau group.

Coral bleaching outlook for the next four weeks reveals no thermal stress.

**TABLE 3: Stakeholder Engagement- Evaluations of how effective NMS engage with stakeholders**

Product	Date: June 2022	Stakeholder	Total Number of Participants	Number of male	Number of female
Fiji Climate Summary	07/06/22	General Public	140	106	34
EAR Watch	14/06/22	Humanitarian partners	122	96	26
Fiji Climate Outlook	30/06/22	General public	124	93	31
Climate Outlook for Monasavu	30/06/22	Energy Fiji Limited	13	13	-
Fiji Ocean Outlook	20/06/22	A number of key ocean related stakeholders	36	29	7
Meteorological Data Request	01/06/22 to 30/06/22	A range of stakeholders	36	31	5
<b>Total</b>			<b>471</b>	<b>368</b>	<b>103</b>

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