



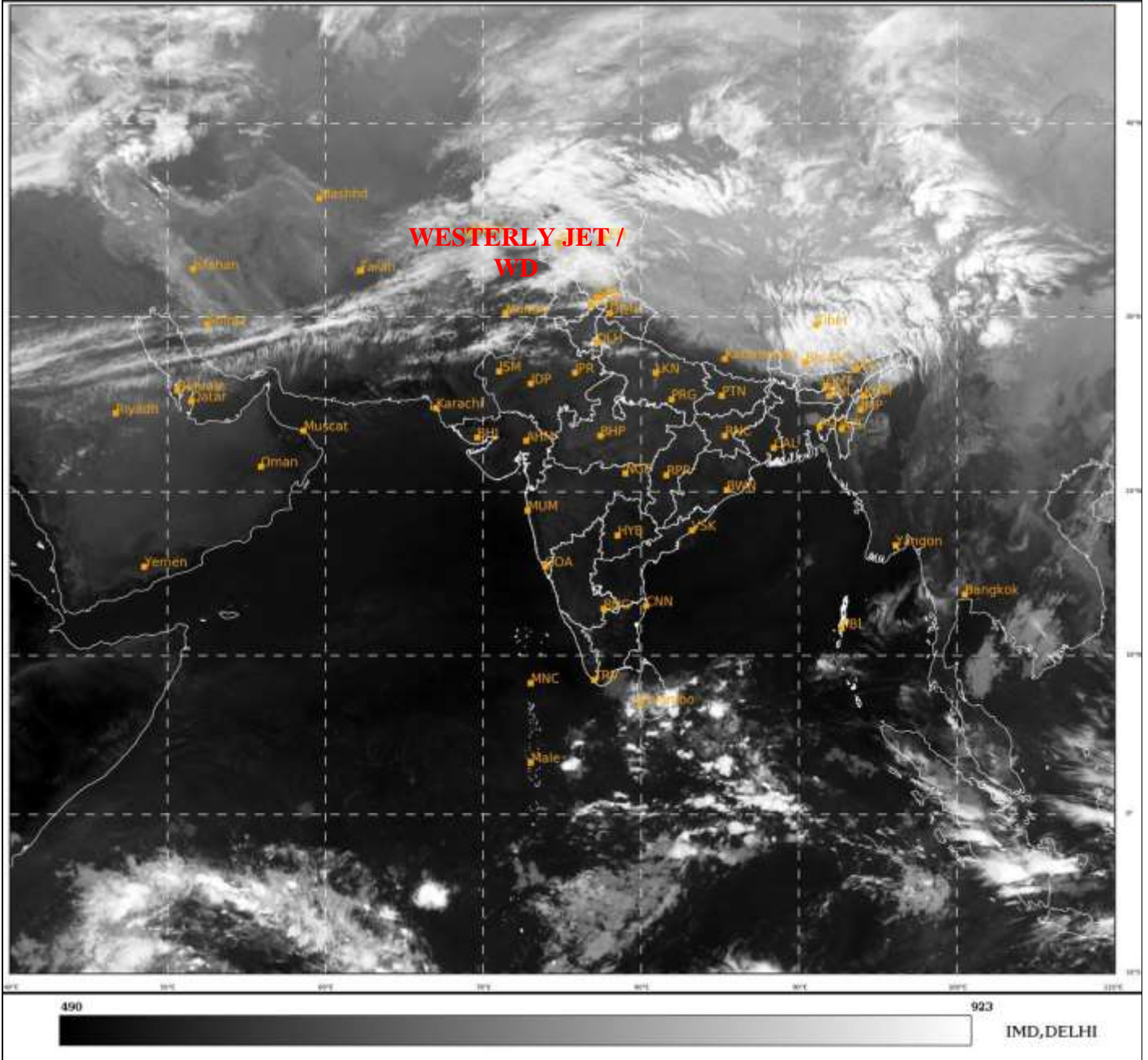
भारत मौसम विज्ञान विभाग  
पृथ्वी विज्ञान मंत्रालय  
India Meteorological Department  
Ministry of Earth Sciences



**SATELLITE BULLETIN BASED ON SATELLITE  
IMAGERIES AND PRODUCTS**  
**19.02.2023 TIME 1500 UTC**

SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
LIC Mercator

19-02-2023/(1500 to 1526) GMT  
19-02-2023/(2030 to 2056) IST



TCIN50 DEMS 191500

SATELLITE BULLETIN BASED ON INSAT-3D PIC OF 191500 UTC (.)

REGION COVERED BETWEEN LAT 50.0°N TO 35.0°S AND LONG 40.0°E TO 125.0°E (.)

**SALIENT FEATURES:-**

**WESTERN DISTURBANCE (WD):-**

SCT MULTILAYERED CLOUDS OVER E IRAN AFGAN PAK J&K LADAKH HP PJB NW RAJ HARY  
DLH NW UP AND N/HOOD IN ASSW **WESTERLY JET STREAM / WD** OVER THE AREA (.)



INSAT-3D 19-FEB-2023 15:00 WV IMG

WATER VAPOUR WIND

(1Kt = 0.5 m/s)

10 Kt

15 Kt

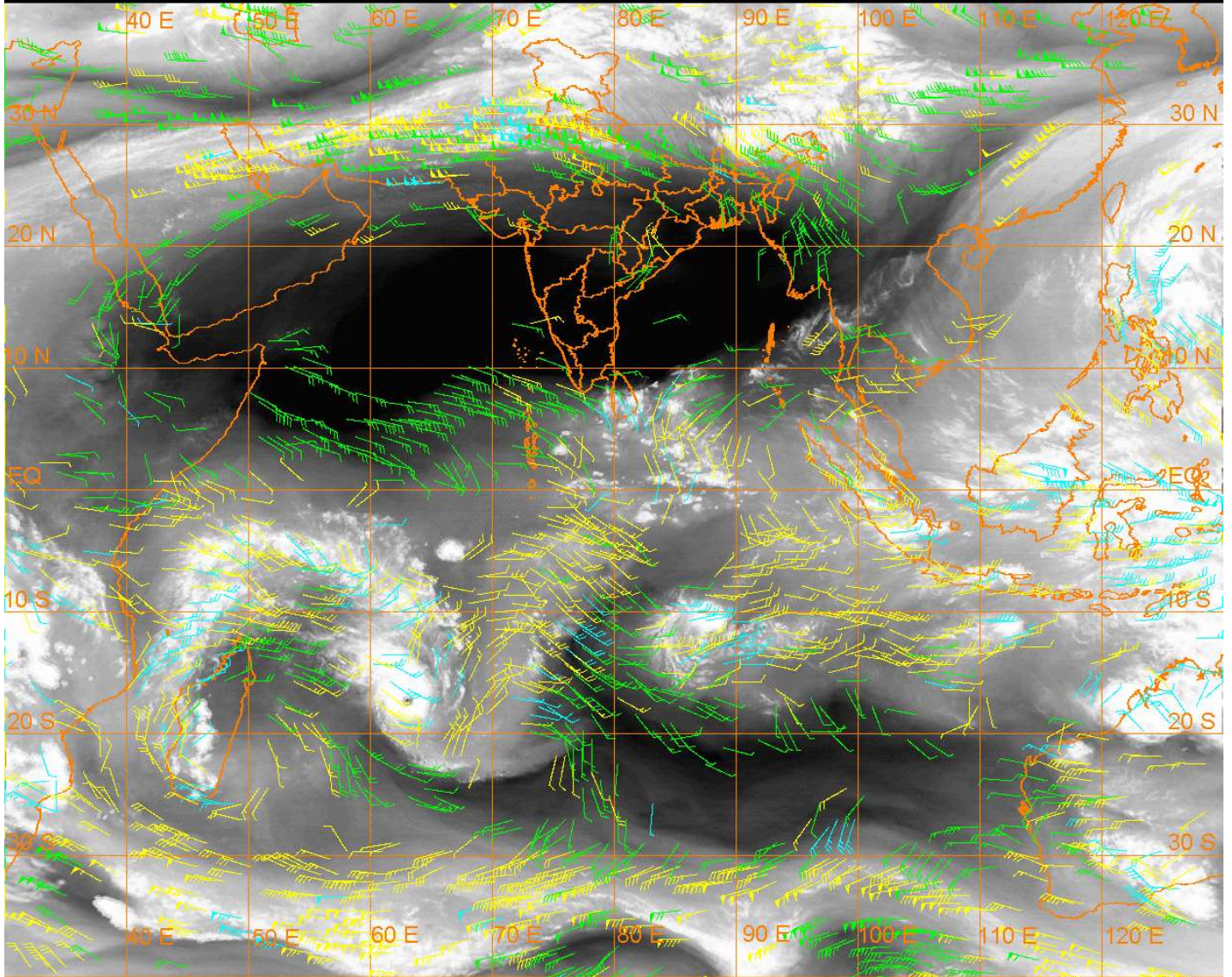
20 Kt

50 Kt

100-250 hPa

251-350 hPa

351-500 hPa



**CLOUDS DESCRIPTION WITHIN INDIA:-**

**NORTH:-**

SCT TO BKN LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER LADAKH J&K HP  
(.) SCT LOW/MED CLOUDS WITH EMBDD WK TO MOD CONVTN OVER N UTRKND PJB NW & S  
HARY DLH NW UP (.) ISOL LOW/MED CLOUDS OVER S UTRKND C UP (.)

**EAST:-**

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER ARUPR (.) SCT LOW/MED  
WITH EMBDD WK TO MOD CONVTN OVER SKM N ASSAM NAGA (.) SCT LOW/MED CLOUDS  
OVER ORS CHTGH N SHWB REST NE STATES (.)

**WEST:-**

SCT LOW/MED WITH EMBDD ISOL WK TO MOD CONVTN OVER NW RAJ (.)

**SOUTH:-**

ISOL TO SCT LOW/MED CLOUDS OVER N COTL AP SIK KER TN NICOBAR ILS (.)

**ARABIAN SEA:-**

SCT LOW/MED CLOUDS WITH EMBDD ISOL MOD TO INT CONVTN OVER COMORIN AREA (.)

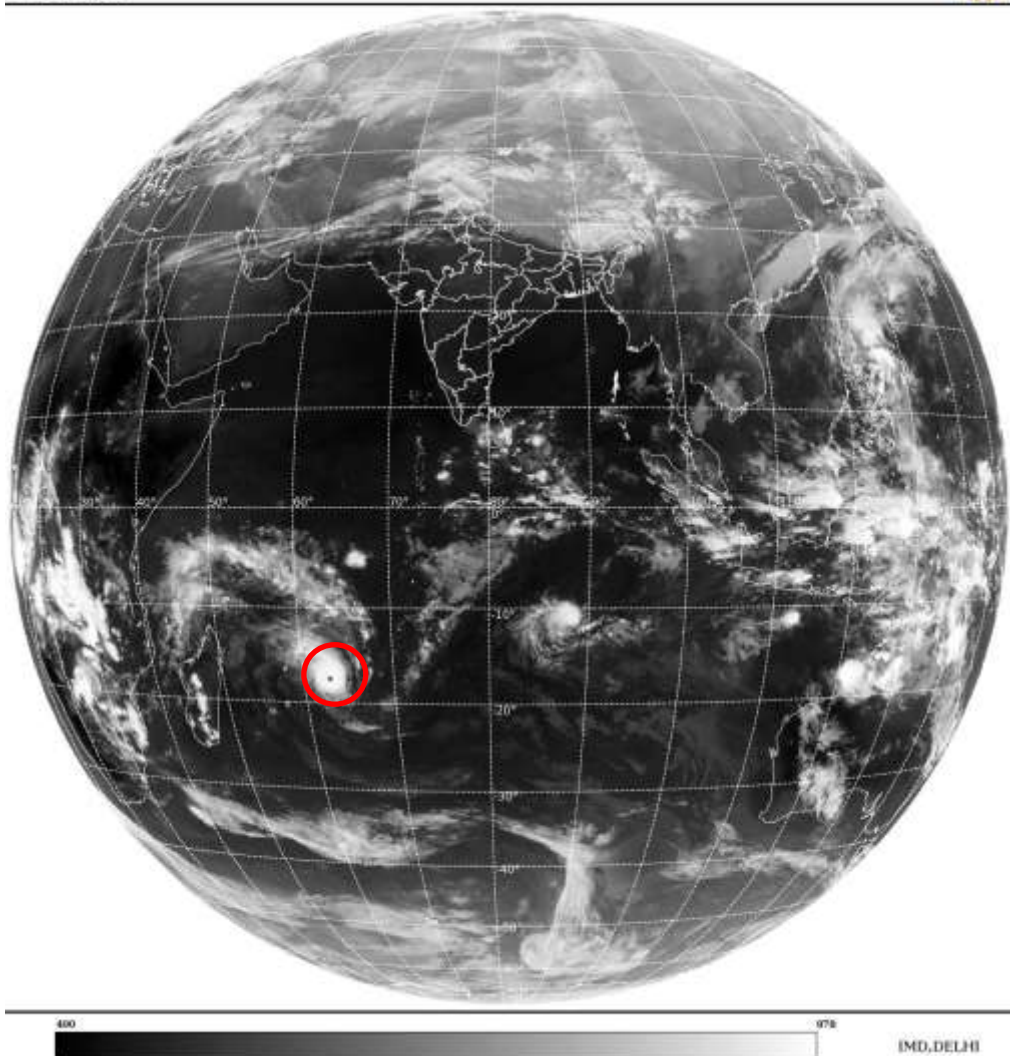
**BAY OF BENGAL & ANDAMAN SEA:-**

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER SW BAY AND ISOL WK TO  
MOD CONVTN OVER SE BAY ANDAMAN SEA (.)

**CLOUDS DESCRIPTION OUTSIDE INDIA:-**

SAT : INSAT-3D IMG  
Thermal Infrared1 Count 10.8 um  
L1B FULL DISK

19-02-2023/(1500 to 1526) GMT  
19-02-2023/(2030 to 2056) IST



**VORTEX (FREDDY) OVER SOUTH INDIAN OCEAN:-**

VORTEX (**FREDDY**) OVER SOUTH INDIAN OCEAN (**AREA D60 ADJ D40**) CENTERED NEAR **17.4S / 63.2E** (.) INTENSITY **T7.0/7.0** (.) CORRESPONDING MAXIMUM SUSTAINED WINDS OF **120 KTS & ABOVE** (.) ASSTD BKN LOW/MED CLOUDS WITH EMBDD INT TO V INT CONVTN OVER AREA BET LAT 14.0S TO 19.0S LONG 61.0E TO 65.0E (.)

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER S SRI LANKA PAK TIBET CHINA BHUTAN TAIWAN GULF OF THAILAND CAMBODIA SUMATRA STR OF MALACCA MALAYSIA BORNEO SOUTH CHINA SEA JAVA ILS & SEA CELEBES ILS & SEA PHILIPPINES SULU SEA E CHINA SEA MADAGASCAR MOZAMBIQUE CHANNEL AND OVER INDIAN OCEAN BET EQ TO LAT 20.0S LONG 45.0E TO 70.0E AND BET LAT 5.0N TO 13.0S LONG 70.0E TO 114.0E (.)

TOO 19/2130 HRS IST=

NNNN

**LEGEND:-**

REGION	NORTH	J&K HP PJB HARY DLH UP UTRKND
	EAST	BHR JHRKND CHTGH OR WB SKM NORTH- EAST STATES
	WEST	RAJ MP GUJ MAHA GOA
	SOUTH	TLNGN AP KRNTK KER TN LKSDP ANDAMAN & NICOBAR ILS

<b>CLOUD DISTRIBUTION</b>	<b>ISOL</b>	<b>ISOLATED (LESS THAN 25%)</b>	
	<b>SCT</b>	<b>SCATTERED (25 TO 50%)</b>	
	<b>BKN</b>	<b>BROKEN (51 TO 75%)</b>	
	<b>SLD</b>	<b>SOLID (GREATER THAN 75%)</b>	
<b>CLOUDS TOP TEMPERATURE</b>	<b>CTT</b>	<b>CLOUD TOP TEMPERATURE</b>	
<b>CONVECTION</b>	<b>WK CONVTN</b>	<b>WEAK CONVECTION (CTT GREATER THAN -25°C)</b>	
	<b>MOD CONVTN</b>	<b>MODERATE CONVECTION (CTT BETWEEN -25°C TO -40°C)</b>	
	<b>INT CONVTN</b>	<b>INTENSE CONVECTION (CTT BETWEEN -41°C TO -70°C)</b>	
	<b>V INT CONVTN</b>	<b>VERY INTENSE CONVECTION (CTT LESS THAN -70°C)</b>	
<b>METEOROLOGICAL SUB-DIVISIONS, STATES &amp; UNION TERRITORIES</b>	<b>ARUPR</b>	<b>ARUNACHAL PRADESH</b>	
	<b>BHR</b>	<b>BIHAR</b>	
	<b>CHTGH</b>	<b>CHHATTISGARH</b>	
	<b>COTL AP</b>	<b>COASTAL ANDHRA PRADESH</b>	
	<b>COTL KRNTK</b>	<b>COASTAL KARNATAKA</b>	
	<b>COTL ORS</b>	<b>COASTAL ORISSA</b>	
	<b>GUJ</b>	<b>GUJARAT</b>	
	<b>GWB</b>	<b>GANGETIC WEST BENGAL</b>	
	<b>HARY</b>	<b>HARYANA</b>	
	<b>DLH</b>	<b>DELHI</b>	
	<b>HP</b>	<b>HIMACHAL PRADESH</b>	
	<b>J&amp;K</b>	<b>JAMMU AND KASHMIR</b>	
	<b>JHRKND</b>	<b>JHARKHAND</b>	
	<b>KER</b>	<b>KERALA</b>	
	<b>KKN</b>	<b>KONKAN</b>	
	<b>LKSDP</b>	<b>LAKSHADWEEP</b>	
	<b>M MAHA</b>	<b>MADHYA MAHARASHTRA</b>	
	<b>MAHA</b>	<b>MAHARASHTRA</b>	
	<b>MANI</b>	<b>MANIPUR</b>	
	<b>MEGHA</b>	<b>MEGHALAYA</b>	
	<b>MIZO</b>	<b>MIZORAM</b>	
	<b>MP</b>	<b>MADHYA PRADESH</b>	
		<b>MRTHWD</b>	<b>MARATHWADA</b>
		<b>NAGA</b>	<b>NAGALAND</b>
<b>N COTL AP</b>		<b>NORTH COASTAL ANDHRA PRADESH</b>	
<b>NIK</b>		<b>NORTH INTERIOR KARNATAKA</b>	
<b>ORS</b>		<b>ORISSA</b>	
<b>PJB</b>		<b>PUNJAB</b>	
<b>RAJ</b>		<b>RAJASTHAN</b>	
<b>RYLSM</b>		<b>RAYALASEEMA</b>	
<b>SAU &amp; KUTCH</b>		<b>SAURASHTRA &amp; KUTCH</b>	
<b>SHWB</b>		<b>SUB-HIMALAYAN WEST BENGAL</b>	
<b>SIK</b>		<b>SOUTH INTERIOR KARNATAKA</b>	
<b>SKM</b>		<b>SIKKIM</b>	

	<b>TLNGN</b>	<b>TELANGANA</b>
	<b>TN</b>	<b>TAMIL NADU</b>
	<b>TRP</b>	<b>TRIPURA</b>
	<b>UP</b>	<b>UTTAR PRADESH</b>
	<b>UTRKND</b>	<b>UTTARAKHAND</b>
	<b>VID</b>	<b>VIDHARBHA</b>
	<b>SHWB</b>	<b>SUB HIMALAYAN WEST BENGAL</b>
	<b>GWB</b>	<b>GANGETIC WEST BENGAL</b>
	<b>ARSEA</b>	<b>ARABIAN SEA</b>
	<b>ILS</b>	<b>ISLANDS</b>
<b>MISCELLANEOUS</b>	<b>ASSW</b>	<b>IN ASSOCIATION WITH</b>
	<b>ASSTD</b>	<b>ASSOCIATED</b>
	<b>LLC</b>	<b>LOW LEVEL CIRCULATION</b>
	<b>EMBDD</b>	<b>EMBEDDED</b>
	<b>N/HOOD</b>	<b>NEIGHBOURHOOD</b>
	<b>EXT</b>	<b>EXTREME</b>