



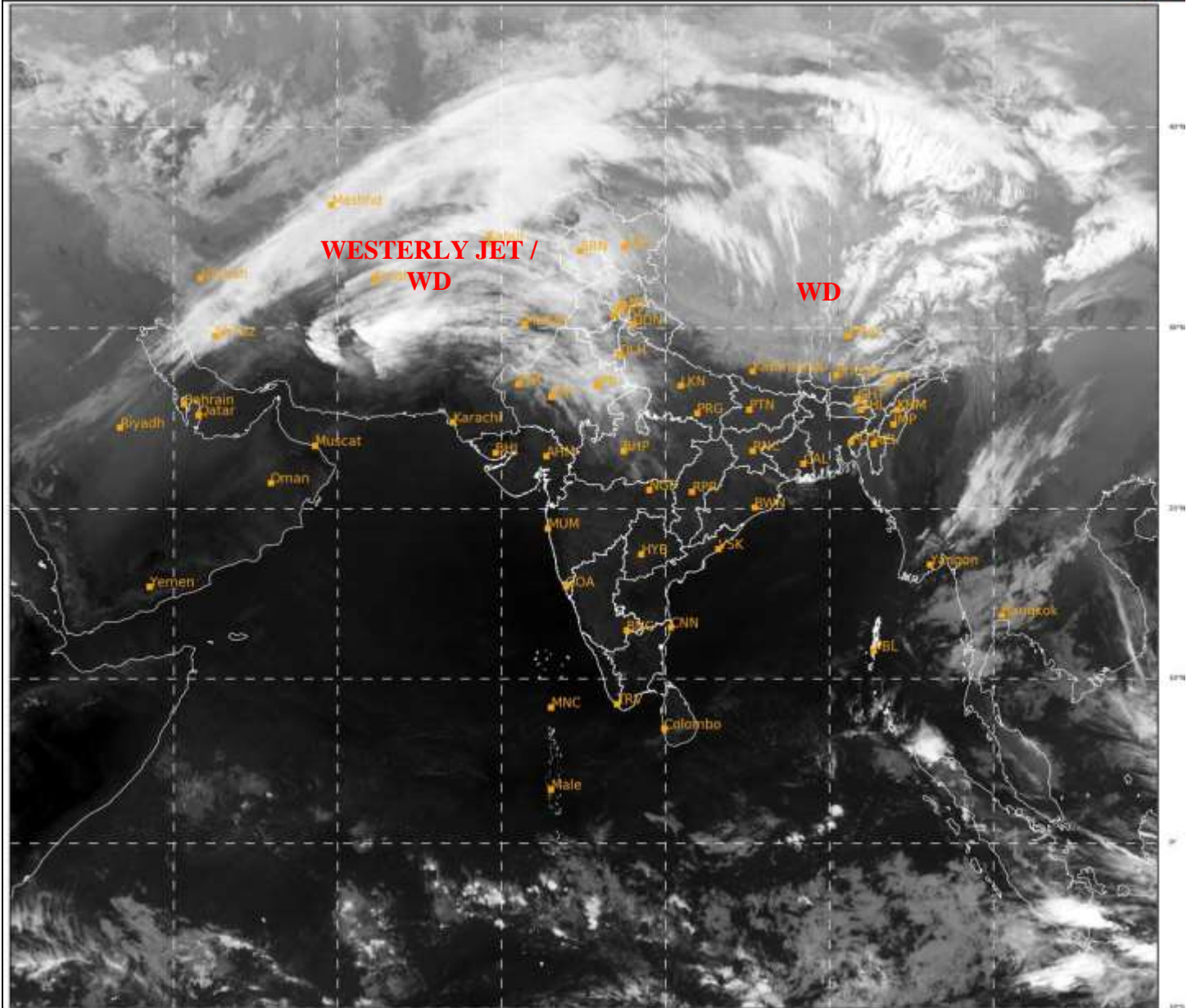
भारत मौसम विज्ञान विभाग  
पृथ्वी विज्ञान मंत्रालय  
India Meteorological Department  
Ministry of Earth Sciences



**SATELLITE BULLETIN BASED ON SATELLITE  
IMAGERIES AND PRODUCTS**  
**16.02.2023 TIME 1500 UTC**

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

16-02-2023/(1500 to 1526) GMT  
16-02-2023/(2030 to 2056) IST



501

944

IMD, DELHI

TCIN50 DEMS 161500

SATELLITE BULLETIN BASED ON INSAT-3D PIC OF 161500 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 TO BKN MULTILAYERED CLOUDS OVER IRAN AFGAN PAK J&K LADAKH HP PJB HARY RAJ AND N/HOOD IN ASSW **WESTERLY JET STREAM / WD** OVER THE AREA (.)

SCT MULTILAYERED CLOUDS OVER TIBET ADJ CHINA IN ASSW **WD** OVER THE AREA (.)



INSAT-3D 16-FEB-2023 15:00 WV IMG

WATER VAPOUR WIND

(1Kt = 0.5 m/s)

10 Kt /

15 Kt //

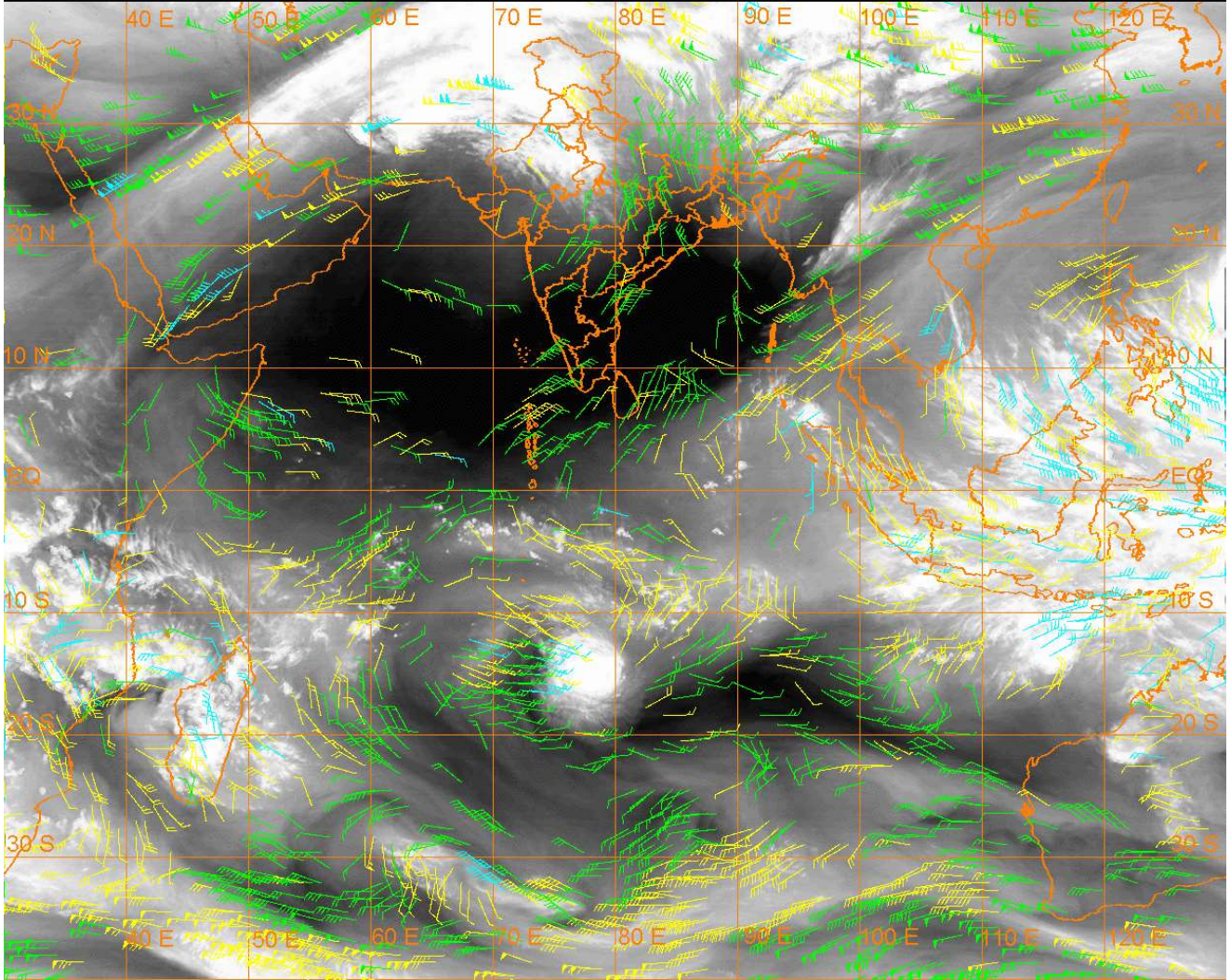
20 Kt ///

50 Kt ▲

100-250 hPa

251-350 hPa

351-500 hPa



**CLOUDS DESCRIPTION WITHIN INDIA:-**

**NORTH:-**

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER W LADAKH J&K NW HP W PJB (.) SCT LOW/MED CLOUDS WITH EMBDD WK TO MOD CONVTN OVER E LADAKH REST HP N UTRKND E PJB HARY W UP (.) SCT LOW/MED CLOUDS WITH EMBDD ISOL WK CONVTN OVER S UTRKND DLH (.) SCT LOW/MED CLOUDS OVER WEST PARTS OF E UP (.)

**EAST:-**

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER ARUPR ADJ NE ASSAM (.) SCT LOW/MED CLOUDS WITH EMBDD WK TO MOD CONVTN OVER SKM NC ASSAM N NAGA (.) SCT LOW/MED CLOUDS OVER NE ORS S GWB N SHWB REST ASSAM MEGHA S NAGA MANI MIZO (.)

**WEST:-**

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER NE RAJ AND WK TO MOD CONVTN OVER REST RAJ NW MP (.) ISOL TO SCT LOW/MED CLOUDS OVER REST MP (.)

**SOUTH:-**

SCT LOW/MED CLOUDS WITH EMBDD ISOL WK CONVTN OVER NICOBAR ILS (.) ISOL TO SCT LOW/MED CLOUDS OVER KER TN ANDAMAN ILS (.)

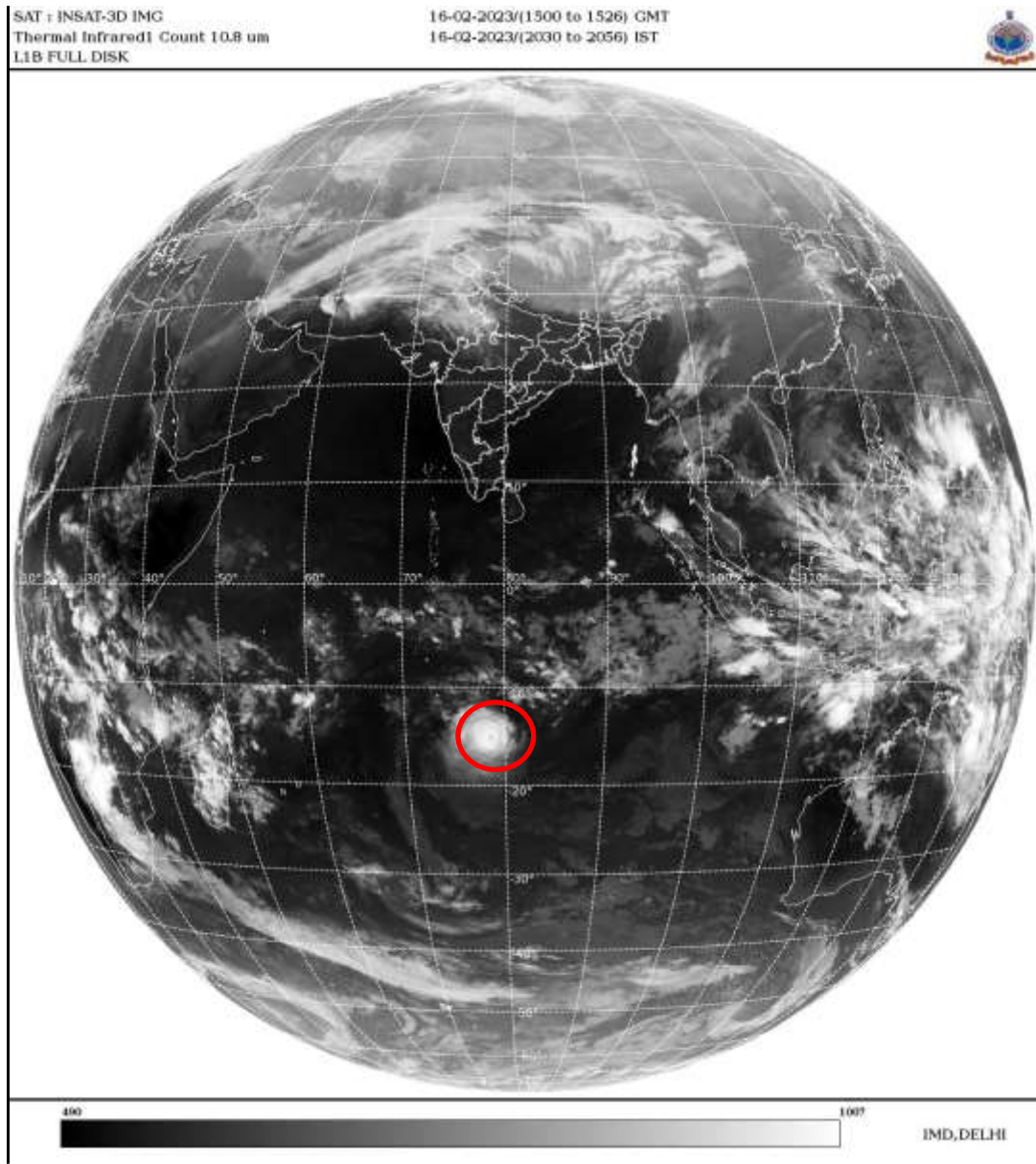
**ARABIAN SEA:-**

NO SIGNIFICANT CLOUDS OVER THE REGION (.)

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

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

**CLOUDS DESCRIPTION OUTSIDE INDIA:-**



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

**VORTEX (FREDDY) OVER SOUTH INDIAN OCEAN (AREA E80 ADJ E85) CENTERED NEAR 14.9S / 79.0E (.) INTENSITY T5.5/6.0 (.) CORRESPONDING MAXIMUM SUSTAINED WINDS OF 90-119 KTS (.) ASSTD BKN LOW/MED CLOUDS WITH EMBDD INT TO V INT CONVTN OVER AREA BET LAT 12.0S TO 17.0S LONG 75.0E TO 81.0E (.)**

**SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER PAK E NEPAL BHUTAN TIBET CHINA YELLOW SEA MYANMAR THAILAND GULF OF THAILAND CAMBODIA LAOS VIETNAM SUMATRA STR OF MALACCA MALAYSIA BORNEO SOUTH CHINA SEA JAVA ILS & SEA CELEBES ILS & SEA PHILIPPINES SULU SEA MADAGASCAR MOZAMBIQUE CHANNEL AND OVER INDIAN OCEAN BET EQ TO LAT 20.0S LONG 40.0E TO 125.0E (.)**

**TOO 16/2140 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>