



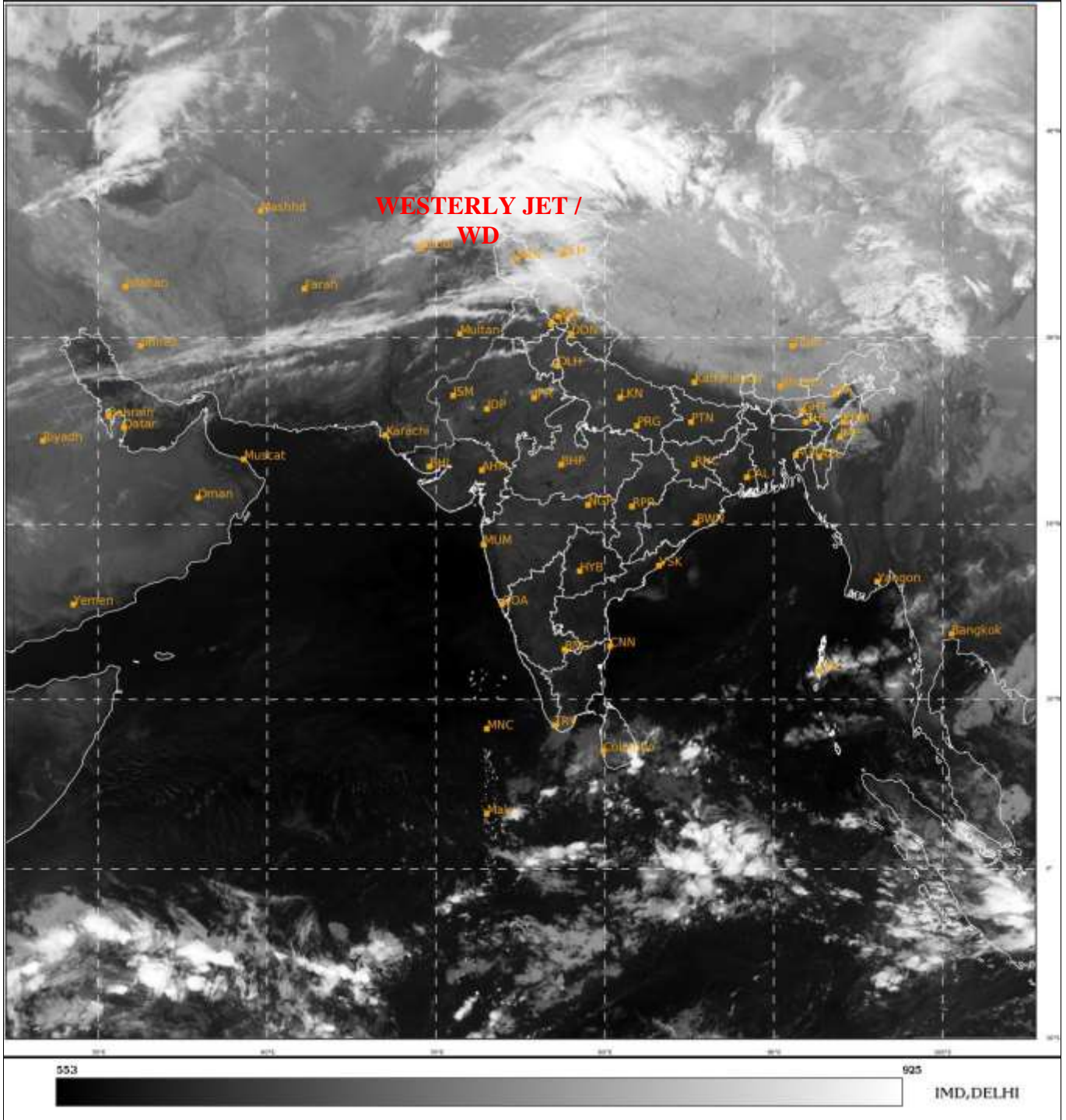
भारत मौसम विज्ञान विभाग  
पृथ्वी विज्ञान मंत्रालय  
India Meteorological Department  
Ministry of Earth Sciences



**SATELLITE BULLETIN BASED ON SATELLITE  
IMAGERIES AND PRODUCTS**  
**19.02.2023 TIME 2100 UTC**

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

19-02-2023/(2100 to 2126) GMT  
20-02-2023/(0230 to 0256) IST



TCIN50 DEMS 192100

SATELLITE BULLETIN BASED ON INSAT-3D PIC OF 192100 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 LADAKH J&K HP UTRKND PJB NW  
RAJ HARY NW UP IN ASSW **WESTERLY JET STREAM / WD** OVER THE AREA (.)



INSAT-3D 19-FEB-2023 22:00 WV IMG

WATER VAPOUR WIND

(1Kt = 0.5 m/s)

10 Kt

15 Kt

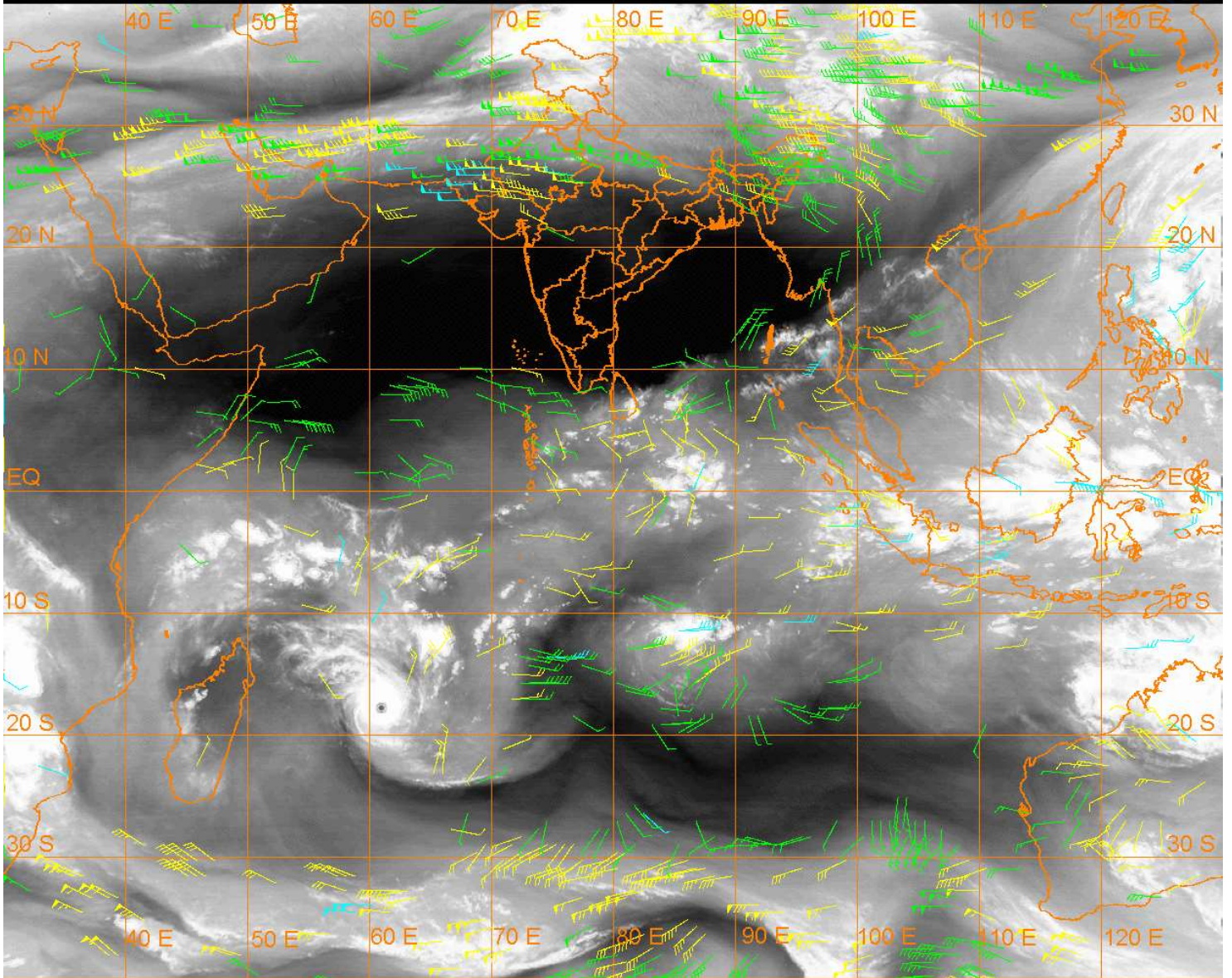
20 Kt

50 Kt

100-250 hPa

251-350 hPa

351-500 hPa



### CLLOUDS 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 ISOL WK TO MOD CONVTN OVER N UTRKND N PJB  
NW HARY (.) SCT LOW/MED CLOUDS OVER S UTRKND S PJB REST HARY DLH NW UP (.)

#### EAST:-

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

#### WEST:-

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

#### SOUTH:-

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

#### ARABIAN SEA:-

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

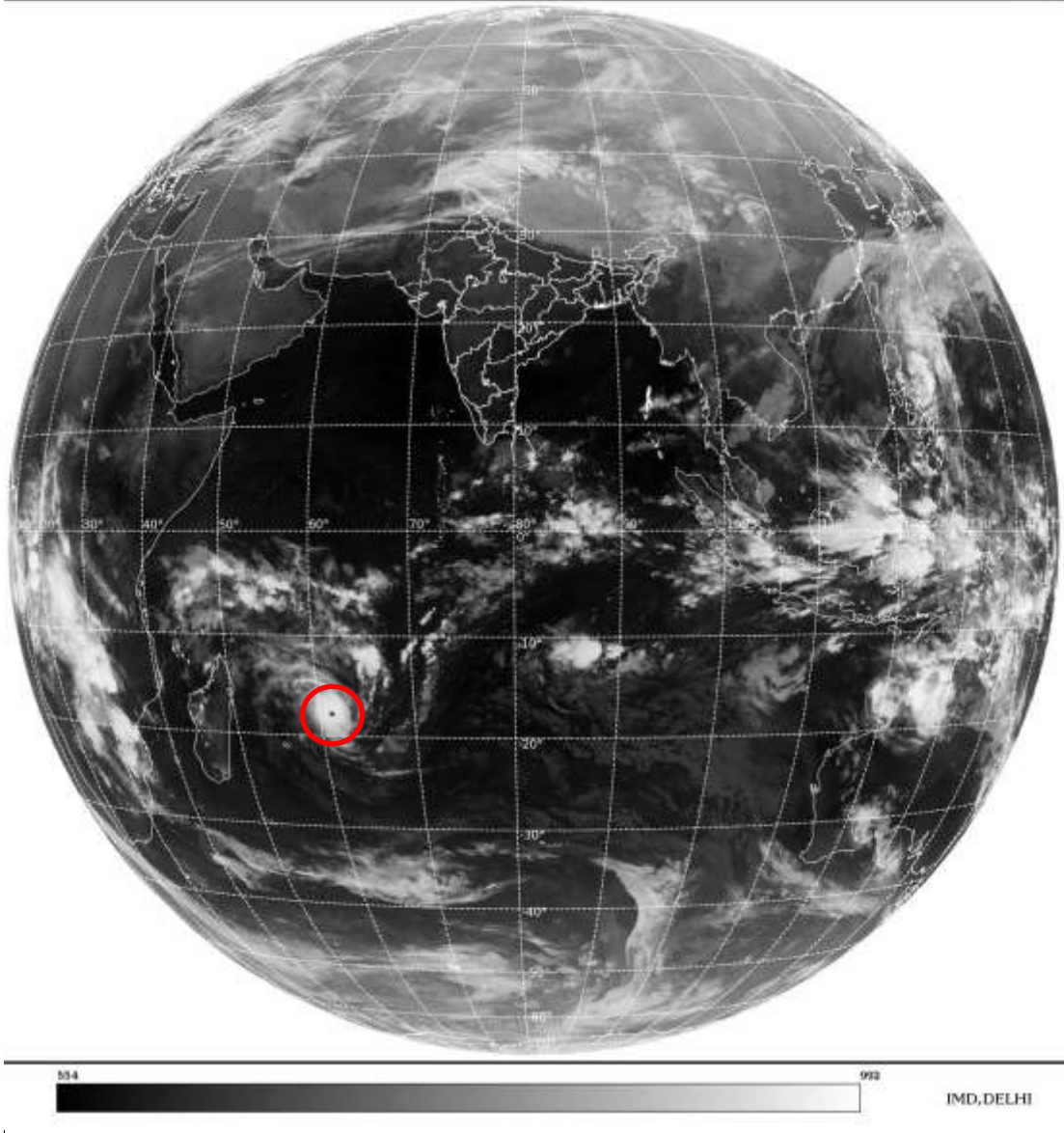
#### BAY OF BENGAL & ANDAMAN SEA:-

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER SW BAY S SRILANKA 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/(2100 to 2126) GMT  
20-02-2023/(0230 to 0256) IST



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

VORTEX (**FREDDY**) OVER SOUTH INDIAN OCEAN (**AREA D60**) CENTERED NEAR **17.7S / 61.5E** (.) INTENSITY **T7.0/7.0** (.) EYE VISISBE (.) CORRESPONDING MAXIMUM SUSTAINED WINDS OF **120 KTS & ABOVE** (.) ASSTD BKN LOW/MED CLOUDS WITH EMBDD INT TO V INT CONVTN OVER AREA BET LAT 15.5S TO 20.0S LONG 59.0E TO 63.5E (.)

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER S SRI LANKA PAK TIBET CHINA BHUTAN 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 LAT 2.0S TO 20.0S LONG 45.0E TO 70.0E AND BET LAT 5.0N TO 13.0S LONG 70.0E TO 114.0E (.)

TOO 20/0430 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

	<b>SOUTH</b>	<b>TLNGN AP KRNTK KER TN LKSDP ANDAMAN &amp; NICOBAR ILS</b>
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<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>