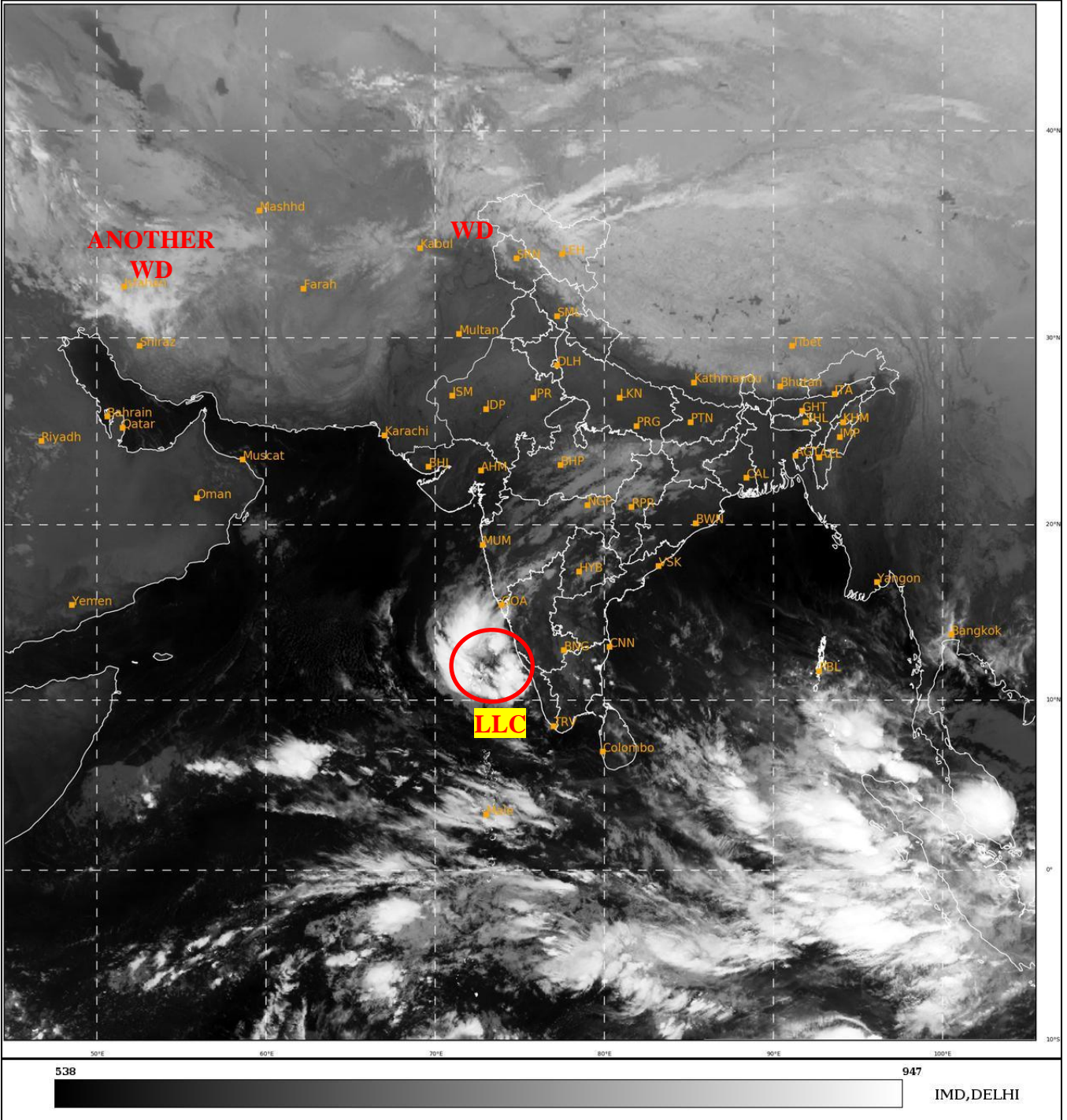




**SATELLITE BULLETIN BASED ON SATELLITE  
IMAGERIES AND PRODUCTS**  
**13.12.2022 TIME 0000 UTC**

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

13-12-2022/(0000 to 0026) GMT  
13-12-2022/(0530 to 0556) IST



TCIN50 DEMS 130000

SATELLITE BULLETIN BASED ON INSAT-3D PIC OF 130000 UTC (.)

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

**SALIENT FEATURES:-**

**LLC OVER SE ADJ EC ARSEA OFF N KER-KRNTK COASTS:-**

LOW LEVEL CIRCULATION (LLC) OVER SE ADJ EC ARSEA OFF N KER-KRNTK COASTS (.)  
ASSTD SCT TO BKN LOW/MED CLOUDS WITH EMBDD INTENSE TO VERY INTENSE  
CONVECTION OVER SE ADJ EC ARSEA LKSDP ILS AREA (.) MINIMUM CTT **MINUS 93 DEG CEL**  
(.)

**WESTERN DISTURBANCE (WD):-**

SCT MULTILAYERED CLOUDS OVER E AFGAN EXT N PAK J&K LADAKH AND N/HOOD IN  
ASSW **WD** OVER THE AREA (.)

**SCT MULTILAYERED CLOUDS OVER S CASPIAN SEA W IRAN AND N/HOOD IN ASSW  
ANOTHER WD OVER THE AREA (.)**

**FOG / LOW CLOUDS:-**

**NIGHT MICROPHYSICS IMAGERY OF INSAT-3DR AT 0015 UTC INDICATES FOG / LOW CLOUDS  
OVER NE UP NW BHR & COTL ORS (.)**

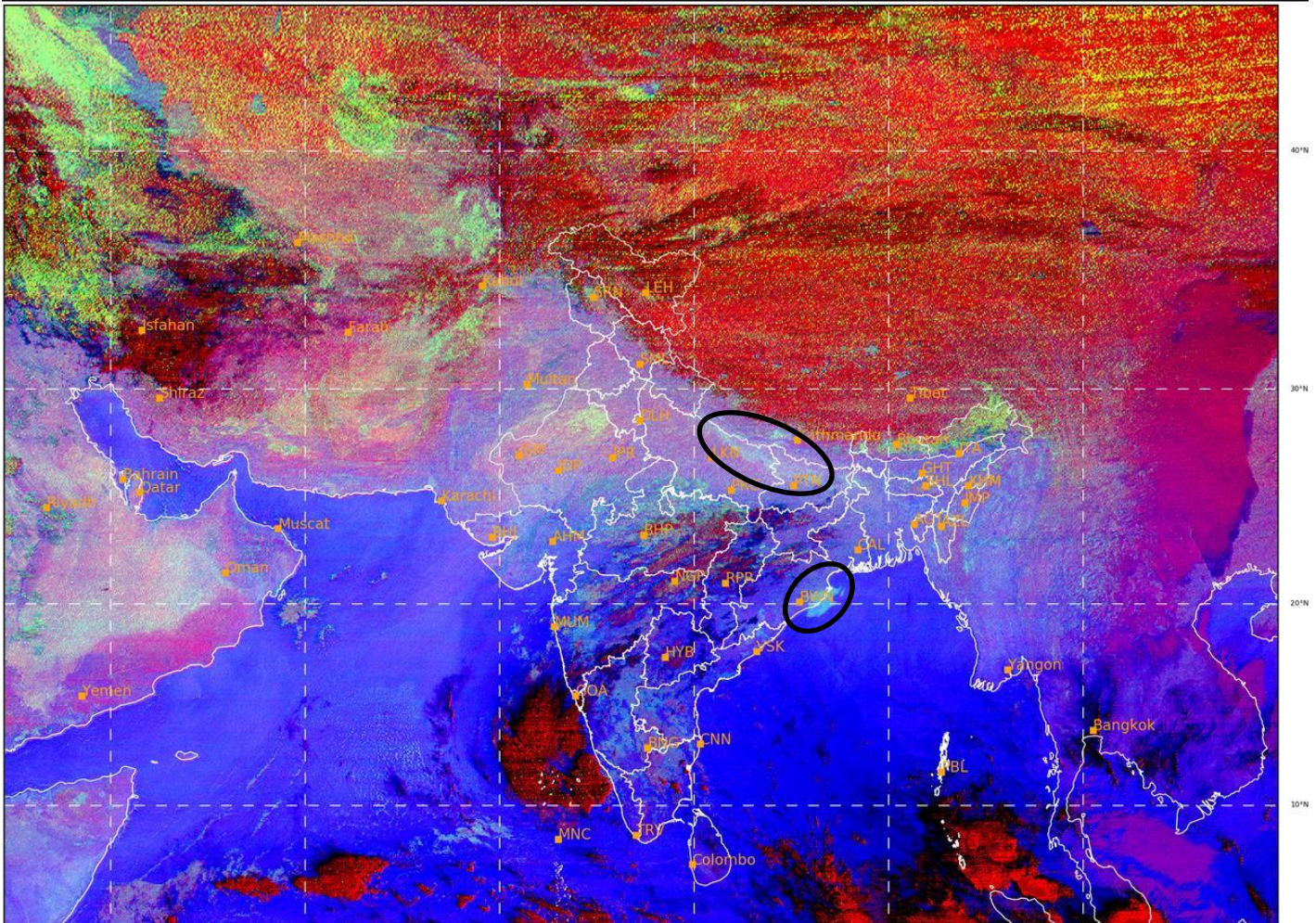
SAT : INSAT-3DR IMG

13-12-2022/(0015 to 0042) GMT

Night Microphysics: TIR2\_BT-TIR1\_BT (R), TIR1\_BT-MIR\_BT (G), TIR1\_BT (B)

L1C Mercator

13-12-2022/(0545 to 0612) IST



INSAT-3D 13-DEC-2022 00:00 WV IMG

WATER VAPOUR WIND

(1Kt = 0.5 m/s)

10 Kt

15 Kt

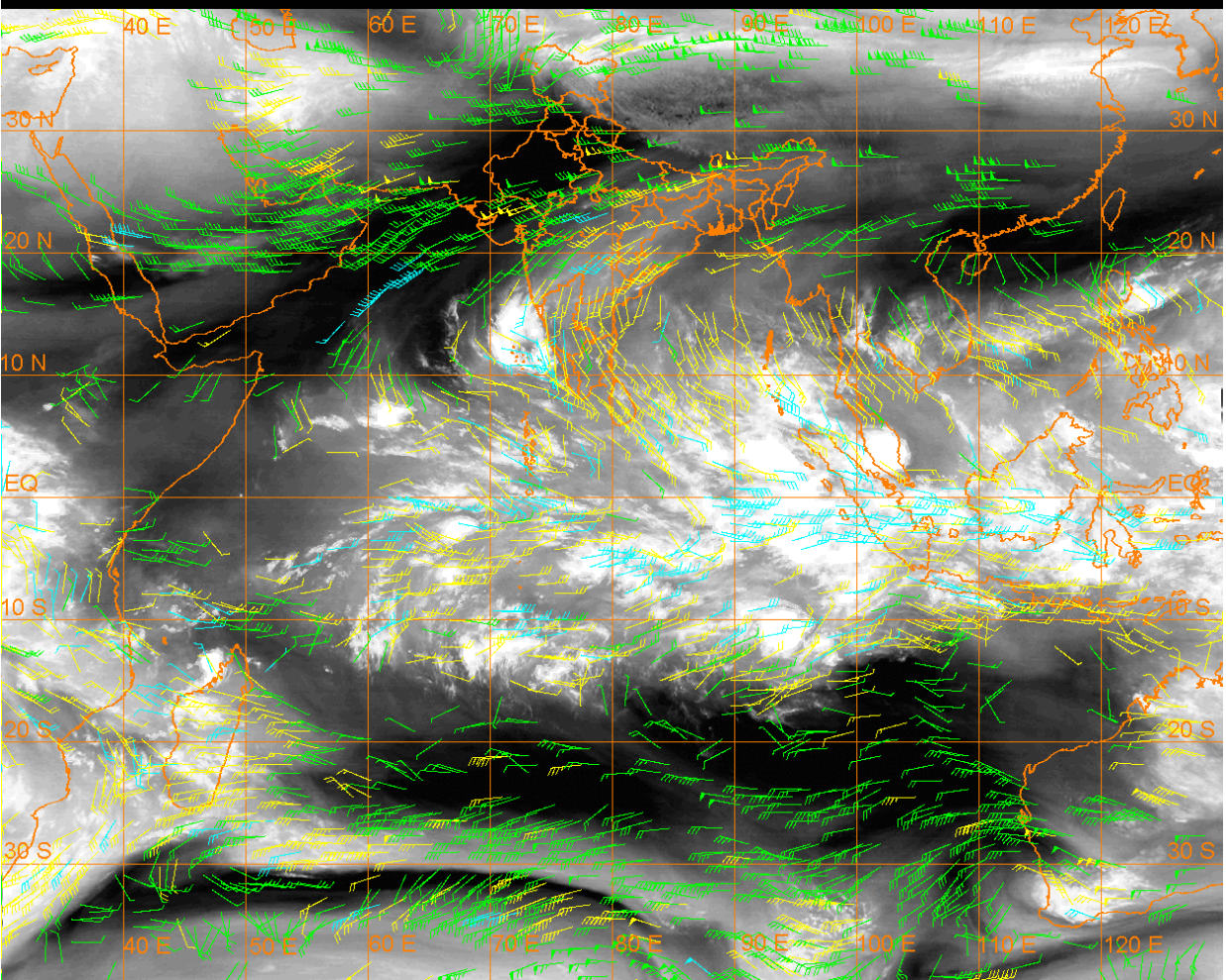
20 Kt

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 LADAKH (.) SCT LOW/MED CLOUDS WITH EMBDD WK TO MOD CONVTN OVER J&K N HP N UTRKND EXT SE UP (.) SCT LOW/MED CLOUDS OVER REST S UP (.)

**EAST:-**

SCT LOW/MED CLOUDS WITH EMBDD WK TO MOD CONVTN OVER SW & E BHR JHRKND CHTGH W ORS WC GWB SKM ARUPR EXT E ASSAM NAGA (.) ISOL TO SCT LOW/MED CLOUDS OVER E ORS N SHWB REST NE STATES (.)

**WEST:-**

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER GOA (.) SCT LOW/MED CLOUDS WITH EMBDD WK TO MOD CONVTN OVER MP MAHA (.) SCT LOW/MED CLOUDS OVER SE RAJ GUJ (.)

**SOUTH:-**

SCT TO BKN LOW/MED CLOUDS WITH EMBDD INT TO V INT CONVTN OVER LKSDP ILS (MINIMUM CTT **MINUS 80 DEG CEL**) NICOBAR ILS (MINIMUM CTT **MINUS 93 DEG CEL**) (.) SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER NE TN (.) SCT LOW/MED CLOUDS WITH EMBDD WK TO MOD CONVTN OVER KRNTK TLNGN RYLSM COTL AP KER REST TN ANDAMAN ILS (.)

**ARABIAN SEA:-**

SCT TO BKN LOW/MED CLOUDS WITH EMBDD INT TO V INT CONVTN OVER EC ARSEA SOUTH ARSEA AND LKSDP ILS AREA (.) SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER COMORIN AREA (.)

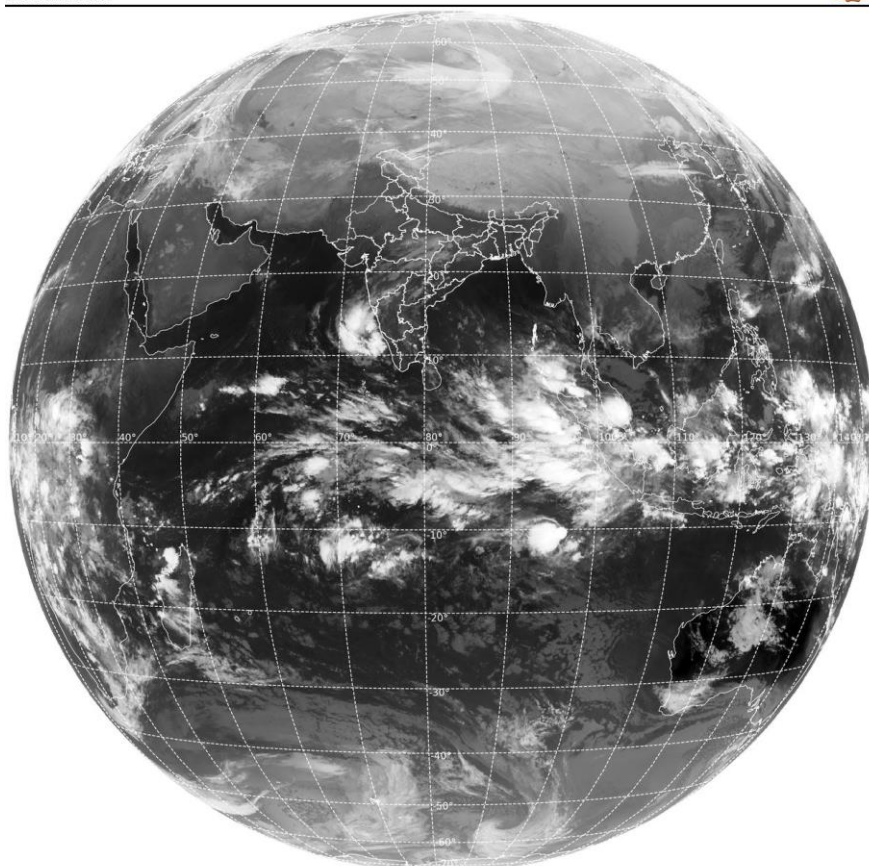
**BAY OF BENGAL & ANDAMAN SEA:-**

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

**CLOUDS DESCRIPTION OUTSIDE INDIA:-**

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

13-12-2022/(0000 to 0026) GMT  
13-12-2022/(0530 to 0556) IST



478

973

IMD, DELHI

**SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER SRI LANKA MALDIVES CHINA YELLOW SEA EXT S MYANMAR S THAILAND GULF OF THAILAND CAMBODIA S VIETNAM SUMATRA STR OF MALACCA MALAYSIA BORNEO SOUTH CHINA SEA JAVA ILS & SEA CELEBES ILS & SEA PHILIPPINES MADAGASCAR MOZAMBIQUE CHANNEL AND OVER INDIAN OCEAN BET LAT 5.0N TO 16.0S LONG 40.0E TO 112.0E (.)**

**TOO 13/0720 HRS IST=**

**NNNN**

**LEGEND:-**

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

<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>UTRKN D</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>