



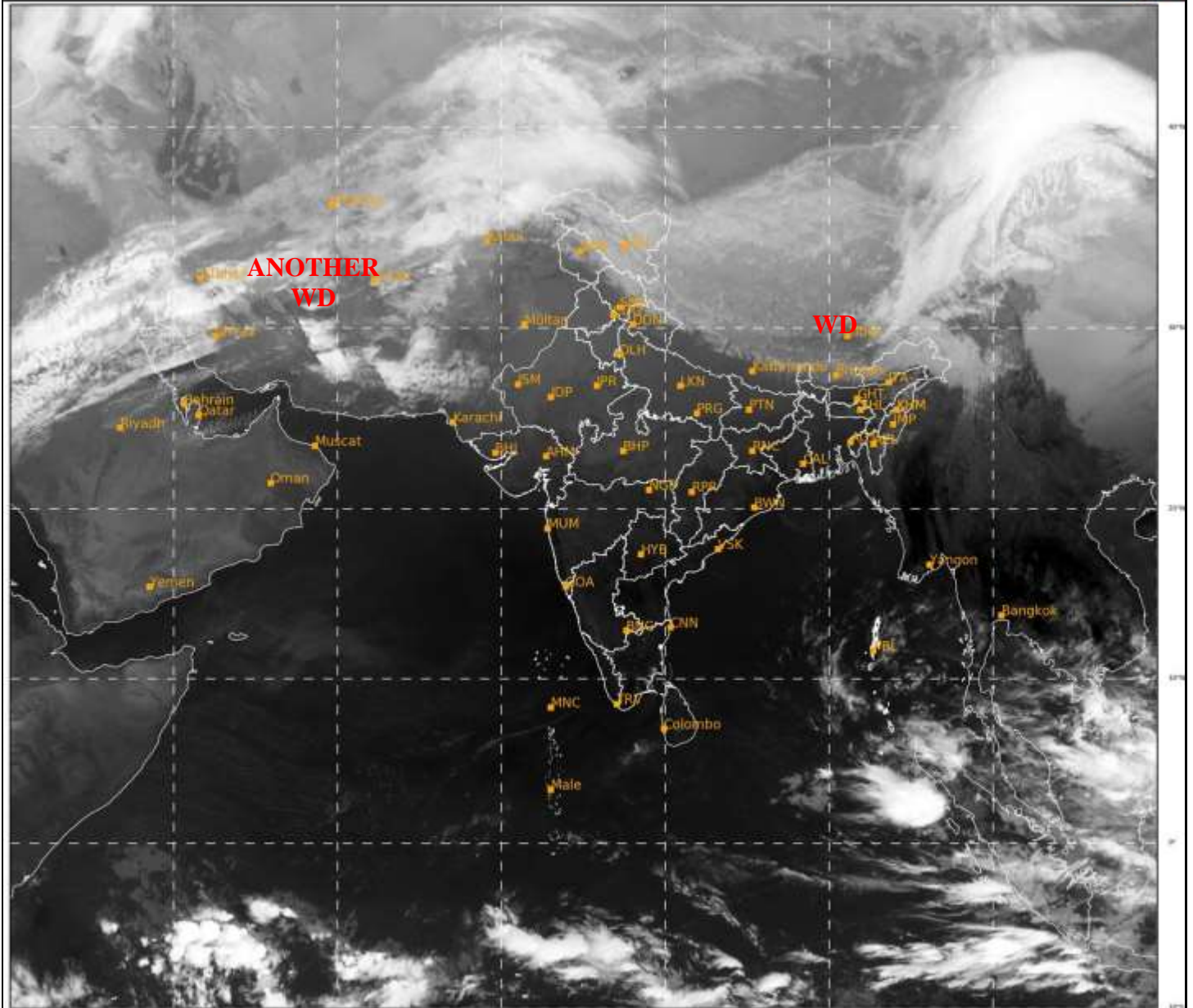
भारत मौसम विज्ञान विभाग  
पृथ्वी विज्ञान मंत्रालय  
India Meteorological Department  
Ministry of Earth Sciences



**SATELLITE BULLETIN BASED ON SATELLITE  
IMAGERIES AND PRODUCTS**  
**13.02.2023 TIME 0300 UTC**

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

13-02-2023/(0300 to 0326) GMT  
13-02-2023/(0830 to 0856) IST



476

925

IMD, DELHI

TCIN50 DEMS 130300

SATELLITE BULLETIN BASED ON INSAT-3D PIC OF 130300 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 ARUPR E TIBET ADJ CHINA IN ASSW **WD** OVER THE AREA (.)

SCT MULTILAYERED CLOUDS OVER IRAN AFGAN AND N/HOOD IN ASSW **ANOTHER WD** OVER THE AREA (.)



INSAT-3D 13-FEB-2023 03:00 WV IMG

WATER VAPOUR WIND

(1Kt = 0.5 m/s)

10 Kt

15 Kt

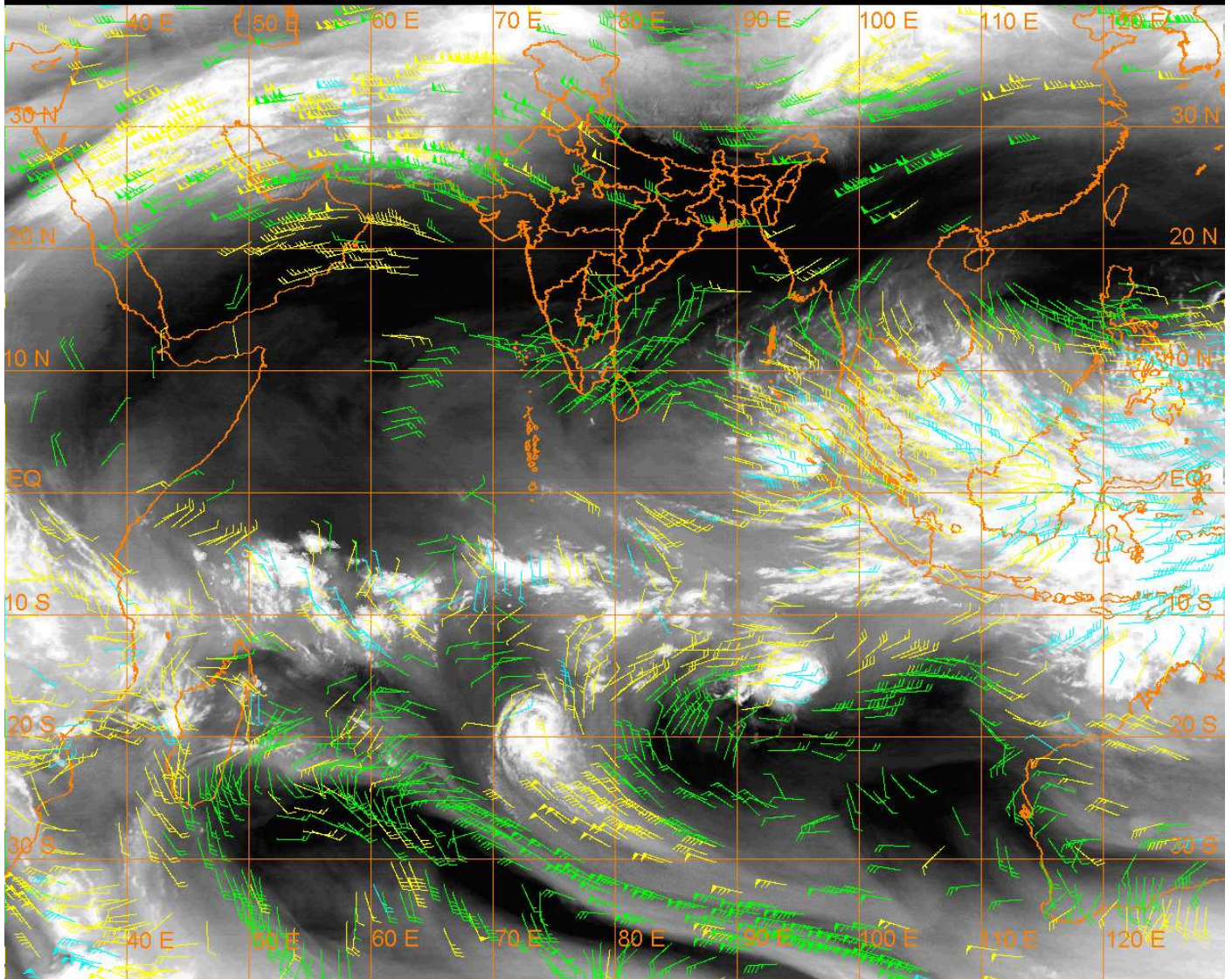
20 Kt

50 Kt

100-250 hPa

251-350 hPa

351-500 hPa



**CLOUDS DESCRIPTION WITHIN INDIA:-**

**NORTH:-**

SCT LOW/MED CLOUDS WITH EMBDD ISOL MOD TO INT CONVTN OVER NW LADAKH AND ISOL WK TO MOD CONVTN OVER REST LADAKH J&K N HP N UTRKND (.)

**EAST:-**

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

**WEST:-**

SCT LOW/MED CLOUDS WITH EMBDD WK CONVTN OVER EXT SW RAJ (.)

**SOUTH:-**

SCT LOW/MED CLOUDS WITH EMBDD ISOL WK TO MOD CONVTN OVER SE TN NICOBAR ILS (.) ISOL TO SCT LOW/MED CLOUDS OVER EXT S COTL KRNTK N COTL AP KER REST TN ANDAMAN ILS (.)

**ARABIAN SEA:-**

SCT LOW/MED CLOUDS WITH EMBDD WK TO MOD CONVTN OVER SOUTH PARTS OF COMORIN AREA (.) SCT LOW/MED CLOUDS OVER WC & SOUTH ARSEA (.)

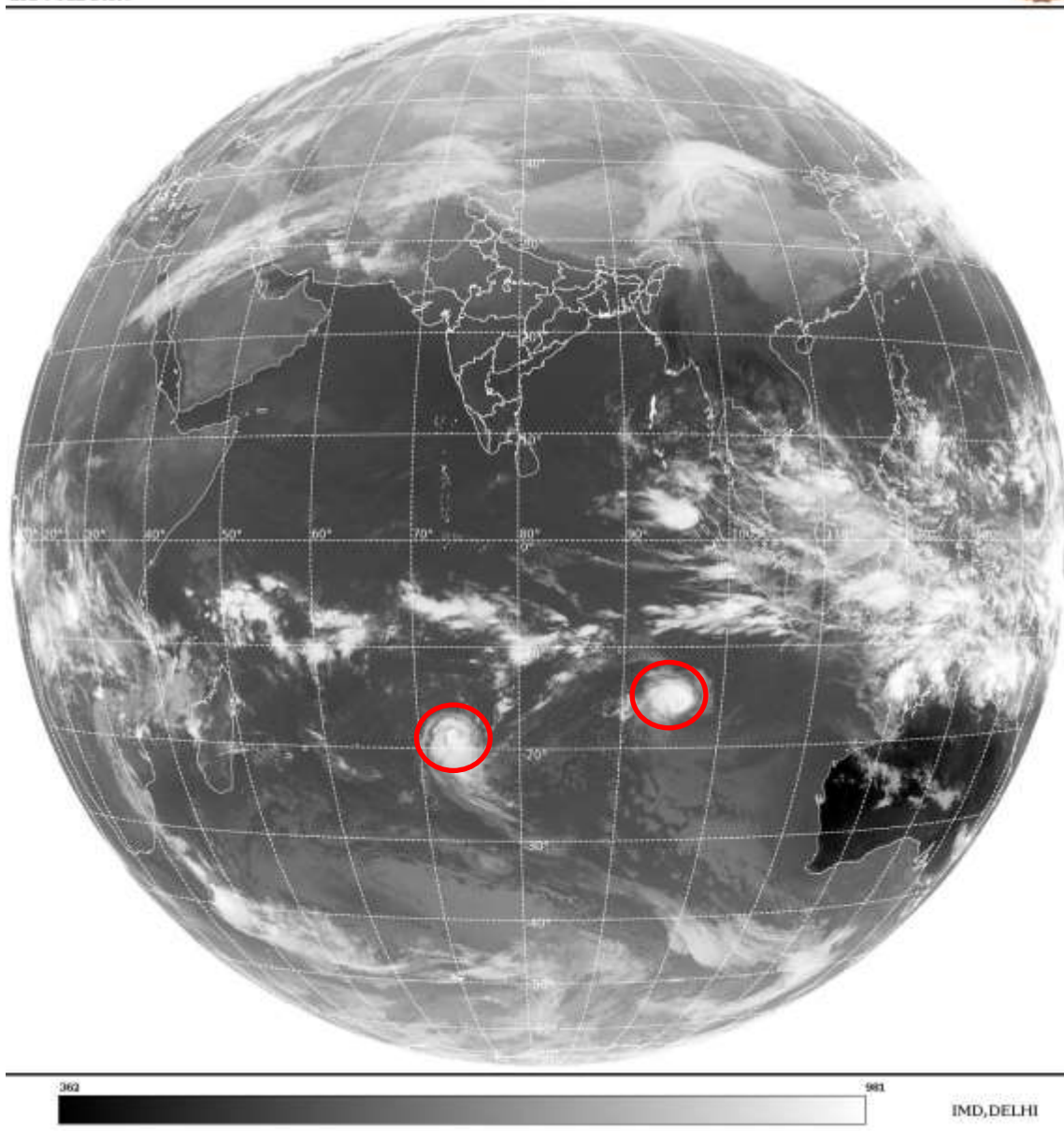
**BAY OF BENGAL & ANDAMAN SEA:-**

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

**CLOUDS DESCRIPTION OUTSIDE INDIA:-**

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

13-02-2023/(0300 to 0326) GMT  
13-02-2023/(0830 to 0856) IST



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

VORTEX (**FREDDY**) OVER SOUTH INDIAN OCEAN (**AREA-G25**) CENTERED NEAR **15.1S / 96.2E** (.) INTENSITY **T5.0/5.5** (.) CORRESPONDING MAXIMUM SUSTAINED WINDS OF **90-119 KTS** (.) ASSTD BKN LOW/MED CLOUDS WITH EMBDD INT TO V INT CONVTN OVER AREA BET LAT 13.0S TO 17.0S LONG 92.5E TO 97.0E (.)

**ANOTHER VORTEX (DINGANI) OVER SOUTH INDIAN OCEAN:-**

ANOTHER VORTEX (**DINGANI**) OVER SOUTH INDIAN OCEAN (**AREA-E80**) CENTERED NEAR **18.7S / 73.7E** (.) INTENSITY **T4.5/4.5** (.) CORRESPONDING MAXIMUM SUSTAINED WINDS OF **64-89 KTS** (.) ASSTD BKN LOW/MED CLOUDS WITH EMBDD INT TO V INT CONVTN OVER AREA BET LAT 17.0S TO 23.0S LONG 70.0E TO 76.0E (.)

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER TIBET 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 SULU SEA MADAGASCAR MOZAMBIQUE CHANNEL AND OVER INDIAN OCEAN BET LAT 3.0S TO 25.0S LONG 40.0E TO 80.0E AND BET LAT 5.0N TO 18.0S LONG 80.0E TO 110.0E (.)

TOO 13/0940 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</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>