



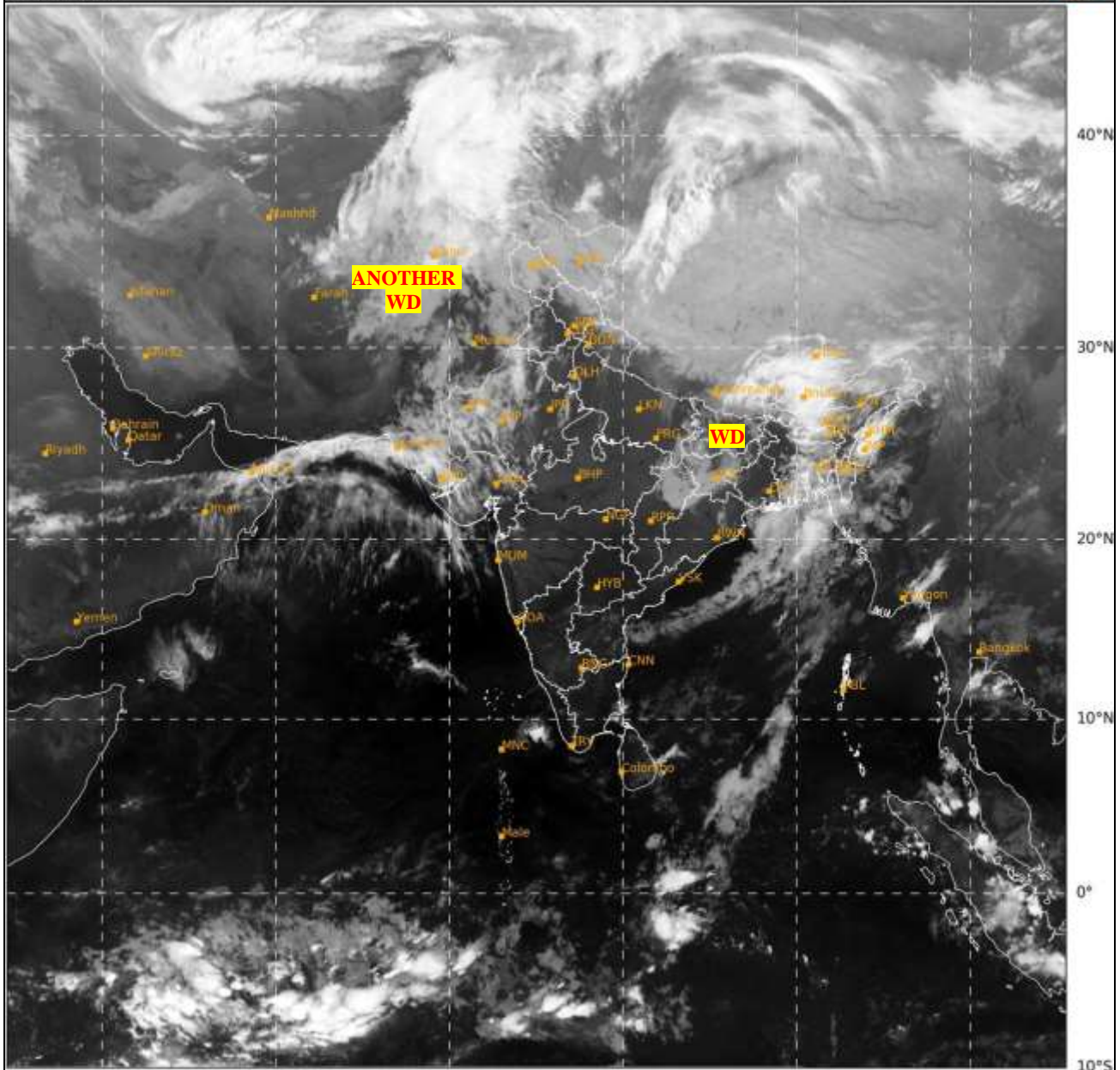
भारत मौसम विज्ञान विभाग  
पृथ्वी विज्ञान मंत्रालय  
India Meteorological Department  
Ministry of Earth Sciences



**SATELLITE BULLETIN BASED ON SATELLITE  
IMAGERIES AND PRODUCTS**  
**21.03.2024 TIME 0000 UTC**

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

21-03-2024/(0000 to 0026) GMT  
21-03-2024/(0530 to 0556) IST



526

922  
IMD, DELHI

TCIN50 DEMS 210000

SATELLITE BULLETIN BASED ON INSAT-3D PIC OF 210000 UTC (.)

REGION COVERED BETWEEN LAT 50.0°N TO 35.0°S AND LONG 30.0°E TO 125.0°E (.)

**SALIENT FEATURES:-**

**WESTERN DISTURBANCE:-**

SCT TO BKN MULTILAYERED CLOUDS OVER E UP E MP CHTGH ORS GWB SHWB SKM NE STATES BD NEPAL BHUTAN TIBET ADJ CHINA IN ASSW **WD** OVER THE AREA (.)

SCT TO BKN MULTILAYERED CLOUDS OVER E IRAN AFGAN PAK NW LADAKH J&K W PJB W RAJ AND N/HOOD IN ASSW **ANOTHER WD** OVER THE AREA (.)





INSAT-3D 21-MAR-2024 00:00 WV IMG

WATER VAPOUR WIND

(1Kt = 0.5 m/s)

10 Kt

15 Kt

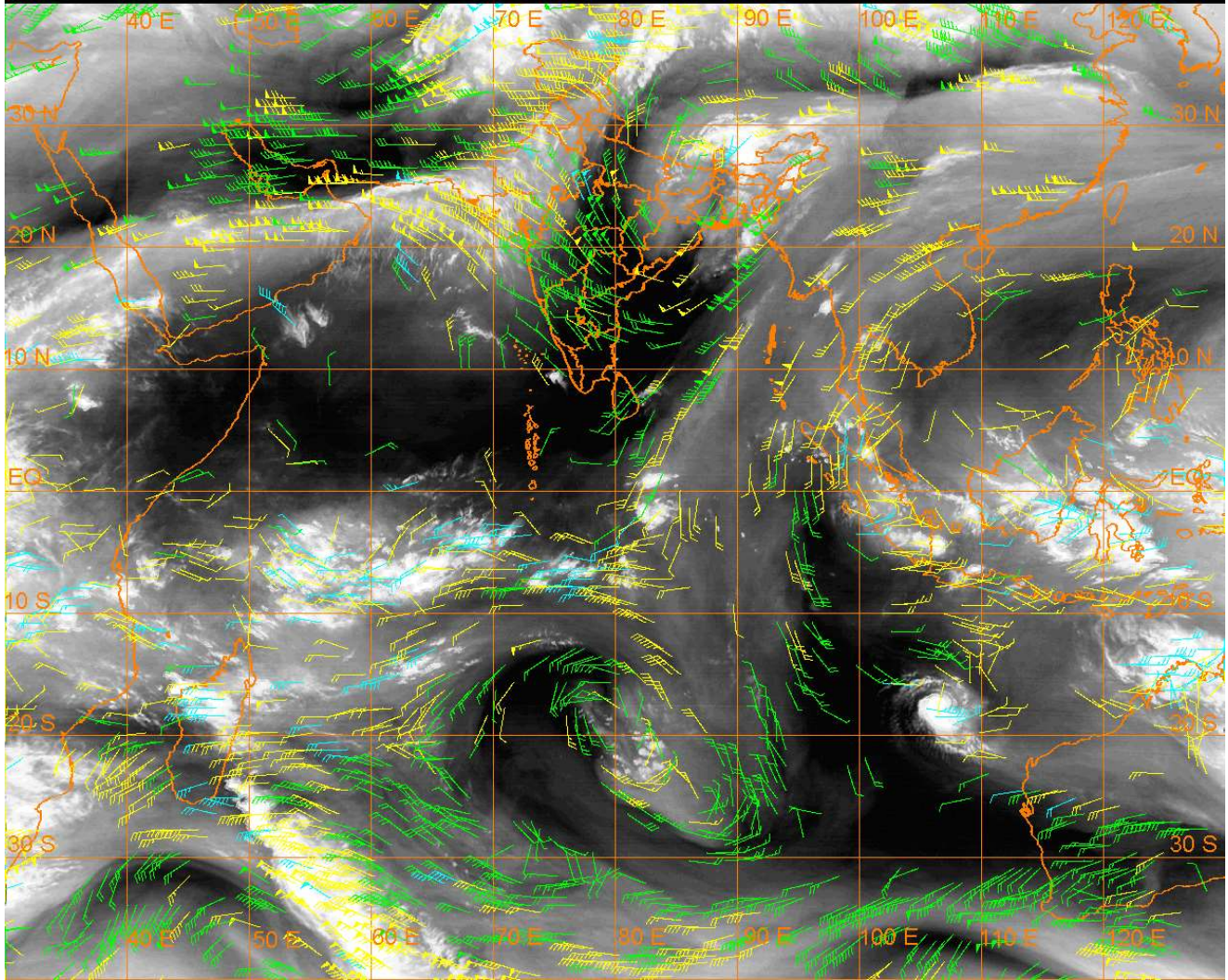
20 Kt

50 Kt

100-250 hPa

251-350 hPa

351-500 hPa



**CLOUDS DESCRIPTION WITHIN INDIA:-**

**NORTH:-**

SCT LOW/MED CLOUDS WITH EMBDD ISOL WK TO MOD CONVTN OVER LADAKH J&K N HP N UTRKND W PJB SW HARY EXT E UP (.) ISOL LOW/MED CLOUDS OVER S UTRKND E PJB REST HARY W UP (.)

**EAST:-**

SCT TO BKN LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER SKM N ASSAM ARUPR NAGA MANI & BD (.)SCT LOW/MED CLOUDS WITH EMBDD ISOL WK TO MOD CONVTN OVERS BHR JHRKND N CHTGH N ORS S GWB NORTH SHWB REST NE STATES (.)

**WEST:-**

SCT LOW/MED CLOUDS WITH EMBDD WK TO MOD CONVTN OVER RAJ GUJ (.) SCT LOW/MED CLOUDS OVER N MP KKN (.)

**SOUTH:-**

SCT LOW/MED CLOUDS OVER SIK RYLSM S COTL AP KER TN ANDAMAN ILS (.)

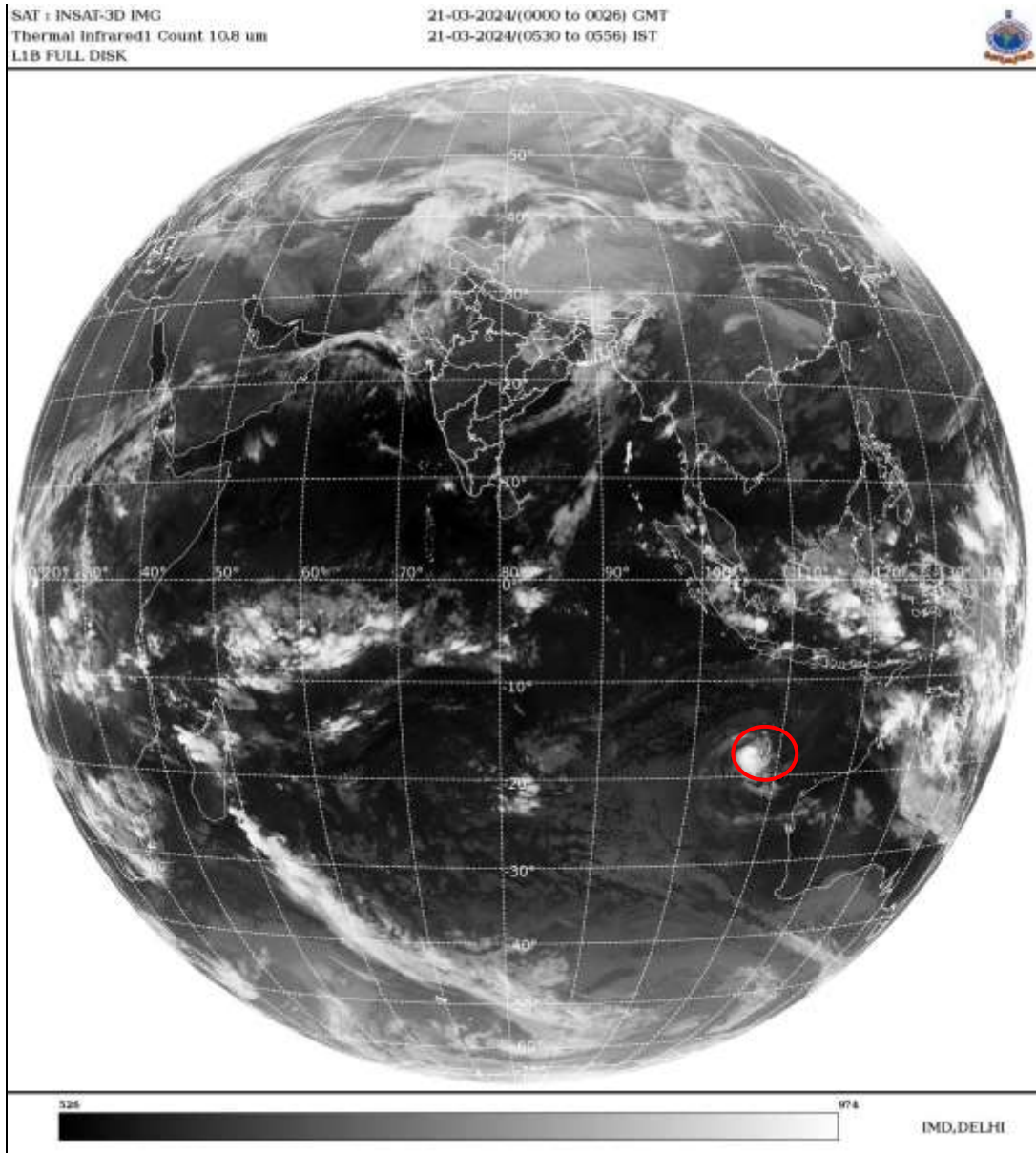
**ARABIAN SEA:-**

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER NORTH ARSEA SE ARSEA ADJ KER COAST AND ISOL WK TO MOD CONVTN OVER GULF OF KUTCH GULF OF CAMBAY (.)

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

SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER NORTH BAY (.) SCT LOW/MED CLOUDS WITH EMBDD ISOL WK TO MOD CONVTN OVER REST BAY & S ANDAMAN SEA (.)

**CLOUDS DESCRIPTION OUTSIDE INDIA:-**



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

**VORTEX (NEVILLE) OVER SOUTH INDIAN OCEAN (AREA G30) CENTERED NEAR 17.7S / 106.8E (.) INTENSITY T4.5/4.5 (.) ASSOCIATED MAXIMUM SUSTAINED WINDS OF 64-89 KTS (.) ASSTD SCT TO BKN LOW/MED CLOUDS WITH EMBDD INT TO V INT CONVTN OVER AREA BET LAT 15.0S TO 21.0S LONG 105.0E TO 110.0E (.)**

**SCT LOW/MED CLOUDS WITH EMBDD MOD TO INT CONVTN OVER PAK NEPAL BHUTAN TIBET CHINA EAST CHINA SEA MYANMAR THAILAND GULF OF THAILAND CAMBODIA LAOS N VIETNAM GULF OF TONKIN SUMATRA STR OF MALACCA MALAYSIA BORNEO JAVA ILS & SEA CELEBES ILS & SEA S PHILIPPINES SULU SEA MADAGASCAR MOZAMBIQUE CHANNEL AND OVER INDIAN OCEAN BET EQ TO LAT 25.0S LONG 40.0E TO 90.0E (.)**

**TOO 21/0725 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 ORS 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<br/>(CTT GREATER THAN -25°C)</b>         |                   |
|  | <b>MOD CONVTN</b>   | <b>MODERATE CONVECTION<br/>(CTT BETWEEN -25°C TO -40°C)</b> |                   |
|  | <b>INT CONVTN</b>   | <b>INTENSE CONVECTION<br/>(CTT BETWEEN -41°C TO -70°C)</b>  |                   |
|  | <b>V INT CONVTN</b> | <b>VERY INTENSE CONVECTION<br/>(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>                   |