



**WORLD METEOROLOGICAL  
ORGANISATION**



**GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCE  
INDIA METEOROLOGICAL DEPARTMENT**

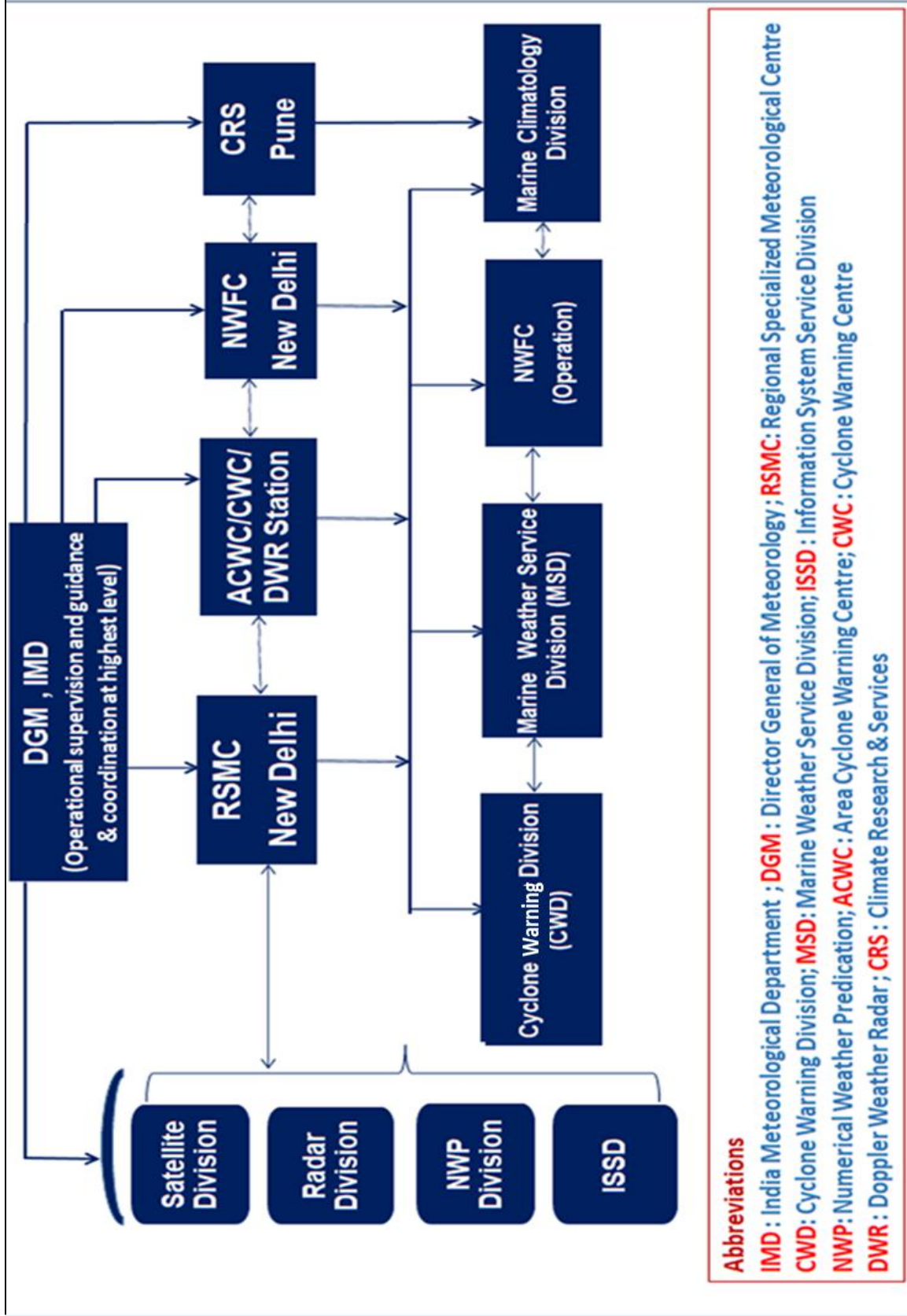
**DUTY CHARTER**  
**OF**  
**MARINE WEATHER**  
**&**  
**CYCLONE WARNING**  
**SERVICES**

**DECEMBER, 2023**

**INDIA METEOROLOGICAL DEPARTMENT  
NEW DELHI**

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#### Abbreviations

**IMD** : India Meteorological Department ; **DGM** : Director General of Meteorology ; **RSMC**: Regional Specialized Meteorological Centre  
**CWD**: Cyclone Warning Division; **MSD**: Marine Weather Service Division; **ISSD** : Information System Service Division  
**NWP**: Numerical Weather Prediction; **ACWC** : Area Cyclone Warning Centre; **CWC** : Cyclone Warning Centre  
**DWR** : Doppler Weather Radar ; **CRS** : Climate Research & Services

# Duty Charter of Head, Regional Specialised Meteorological Centre (RSMC), New Delhi

- Overall supervision of operational work pertaining to cyclone warning and marine weather services and supervise the work of Cyclone Warning Division (CWD) and Marine Service Division (MSD)
- Coordination with various divisions in HQs like NWP, ISSD, Satellite, RADAR for real-time operation and monitoring of products on RSMC and Severe Weather Forecast websites.
- Co-ordination with CWC/ACWC/CWD/MSD and NWFC for smooth daily operation
- Coordination with the stakeholders at central and state level including media from both Government and non-Government agencies
- Research & Development work
- Bringing out publications and annual RSMC report.
- Training and Capacity building
- Co-ordination with international organisations like WMO, IMO, ICAO, NDMA, SDMA, PTC, etc
- Works related to the project on Up-gradation of weather forecast decision support system
- Coordination with GIS-based visualisation team
- Interaction with media during the time of the cyclone

## Abbreviations

**IMD** : India Meteorological Department ; **DGM** : Director General of Meteorology ;  
**RSMC**: Regional Specialized Meteorological Centre  
**NWFC** : National Weather Forecasting Centre ;  
**PTC** : Panel of Tropical Cyclone  
**CWD**: Cyclone Warning Division; **MSD**: Marine Weather Service Division;  
**ISSD** : Information System Service Division  
**NWP**: Numerical Weather Prediction; **ACWC** : Area Cyclone Warning Centre;  
**CWC** : Cyclone Warning Centre; **DWR** : Doppler Weather Radar;  
**IMO** : International Maritime Organization ; **ICAO**: International civil Aviation Organization  
**NDMA** : National Disaster Management Authority  
**SDMA** : State Disaster Management Authority  
**GIS** : Geographical Information system

## Duty Charter of Cyclone Warning Division (CWD)

### CWD



#### **Duty Officer (I & II) :**

- i. Monitoring of tropical weather system over North Indian Ocean through- Monitoring and analysis of satellite products, synoptic charts, change/tendency charts, upper air observation, radar etc.
- ii. Finalisation of inference of the current situation
- iii. Monitoring of dynamical and thermodynamical parameters
- iv. Preparation of diagnosis
- v. Analysis of NWP model products and identification of weather system by each model. About 10 NWP models are examined every day.
- vi. Comparison of model analysis with the observed analysis.
- vii. Analysis of best model, performance of historically best model and Multi-Model ensemble (MME)
- viii. Verification of each model for past 24 hour forecast and preparation of consensus forecast from the models.
- ix. Development of subjective consensus through exchange of knowledge, experiences through video conference among the forecasters.
- x. Determination of probability of cyclogenesis for Day 1 to Day 7
- xi. Finalisation of forecast for Tropical Weather Outlook (TWO) in normal days for 13 countries
- xii. Special TWO (STWO) in case of Depression/Deep Depression in every 3/6 hourly for 13 countries.
- xiii. Tropical Cyclone Advisory/4 stages warning bulletin in case of Tropical Cyclone and for 13 countries.
- xiv. In case of the cyclonic disturbances in addition to weather parameters monitoring and analysis of weather hazards viz., Heavy rainfall, strong wind, storm surge and significant wave height are carried out and information in both textual and graphical format.
- xv. Preparation of National Bulletins/ RSMC bulletin/TCAC (textual & graphics)/TC vital message/Press release and other specialised bulletins at the time of depression and cyclones.
- xvi. Preparation of Impact Based Forecasts and suggested actions at different stages of the cyclone
- xvii. Preparation of post-landfall outlook before the landfall.
- xviii. Formulation of warning messages for social media as per the format.

#### **Duty Officer (III & IV) :**

- i. Analysis of hourly surface observation/plots, satellite images & bulletin, Radar imagery and bulletin.
- ii. Preparation of **hourly bulletins** about 16 hours before the landfall of cyclone. The bulletin contains landfall point, landfall time and maximum sustained wind at the time of landfall and also the current observations in the coastal districts near the landfall location.

**Duty Officer (V )**

- i. Monitoring of severe weather (Heavy rainfall, strong wind, storm surge and wave) over the extended region of South Asia through-  
Monitoring of satellite products, synoptic charts, change/tendency charts, upper air observations, radar inputs etc.
- ii. Finalisation of inference of the current situation
- iii. Monitoring of dynamical and thermodynamical parameters
- iv. Preparation of diagnosis
- v. Analysis of NWP model products and identification of weather system by each model. About 10 NWP models are examined every day.
- vi. Comparison of model analysis with the observed analysis.
- vii. Analysis of best model, performance of historically best model and Multi-Model ensemble (MME)
- viii. Verification of each model for past 24 hour forecast and preparation of consensus forecast from the models.
- ix. Development of subjective consensus through exchange of knowledge, experiences through video conference among the forecasters.
- x. Preparation of guidance products in tabular and graphical format for severe weather (Heavy rainfall, strong wind, storm surge and wave) for 5 days for 9 countries of south Asia.**
- xi. Coordination with Global Centres, other Regional centres and national centres
- xii. Verification of severe weather guidance products
- xiii. Preparation of weekly extended range outlook for cyclogenesis over NIO
- xiv. Collection of feedbacks
- xv. Policy planning

**Scientist (I & II) :**

- Research & Development
- Implementation of new tools for marine forecasts
- Training and Capacity building
- Verification & Documentation

**WORKS FOR DOs DURING NON CYCLONE PERIOD**

- i. All Technical coordination and preparation of related inputs
- ii. Preparation of cabinet Summary inputs
- iii. All preliminary documentation
- iv. Developmental work related to automation of various bulletins
- v. Preparation for PTC (ATR & presentations)  
Finalisation of TCP-21
- vi. Co-ordination with GIS group for GIS based track display  
Completion of all preliminary reports of systems (depressions & cyclonic storms).
- vii. Implementation of re-vamped RSMC website related work
- viii. File related work
- ix. Web-DCRA/DSS related familiarisation.
- x. Training and Capacity building
- xi. Coordination with media during severe weather
- xii. All other works as assigned by Head RSMC & DGM

**Duty Assistant (I) :**

- i. Compilation of all inputs (Synoptic observation including past weather, Satellite, Radar, NWP model guidance and required for Tropical Weather Outlook (TWO) and providing support to the Duty Officer for the finalisation of TWO.
- ii. The TWO bulletins are disseminated through email and also uploaded in RSMC website.

**Duty Assistant (II & III) :**

- i. Preparation of Severe Weather Forecast Project (SWFP) guidance of rainfall, winds, sea wave height and storm surge for NIO region valid for next 5 days utilizing the observation and forecast models provided from IMD, NCMRWF and IITM.
- ii. The SWFP guidance products both in Table and graphics formats are prepared for uploading in SWFP website.

**Duty Assistant (IV) :**

- i. Checking and updating of RSMC/SWFP/IMD's old and new websites on Regular basis.
- ii. Modification, Maintenance and troubleshooting of above mentioned websites with the help of ISSD and outsourcing agencies to ensure smooth functioning and updated information.

**Duty Assistant (V and VI) :**

- i. Computation of Tropical Cyclone data for A) Best Track B) Evaluation purpose C) Running of Clipper Model. D) Preparation of Statistics E) Error Computation.
- ii. Verification of TC intensity, rainfall, frequency of landfalling cyclones-SCS and above
- iii. Updating of Climatological data for Cyclonic disturbances over NIO.

**Duty Assistant (VII, VIII and IX) :**

- i. Development works on the automation of different bulletins such as Impact based SWFP Bulletin, RSMC & National Bulletin and DGH bulletin.
- ii. Preparation of reports such as Preliminary Reports for all cyclonic disturbances, Annual RSMC Report, FDP Implementation Report etc.
- iii. Updating of TCP-21 and SOP annually
- iv. Updating the compilation of ACR AMR recommendations
- v. Technical support in organisation of Pre-cyclone exercise held in September & April and RSMC training.
- vi. Verification of "Extended Range Outlook for Cyclogenesis" probabilistic forecast.

**During Cyclone : Duty Assistant (I to VIII)**

**During the Tropical Cyclone 2 Duty Assistants work in a batch in 24-hour roster (6 hr'ly with 4 batches) for**

- i.** Preparation of various types of graphics (TC track, TC intensity, cone of uncertainty, Quadrant wind, TCAC Graphic every three hours during cyclone period utilizing decision support system on GIS platform
- ii.** Gathering of observation and forecast data for TC vital message, ADRR, TCAC text etc.
- iii.** After finalisation by the duty officer prompt dissemination of all the bulletins and textual messages to various agencies through various communication channels like email, Fax, GTS, FTP, SMS etc.
- iv.** Updating all bulletins and products on various websites (RSMC/IMD)
- v.** Uploading of formulated warning messages for social media like Facebook, WhatsApp, X (formerly Twitter), YouTube etc



## Duty Charter of Marine Warning Services

### **Duty Officer (I & II) :**

- i. Monitoring of satellite observation and products including scatterometer wind, Ships & Buoy observations, Radar observation.
- ii. Analysis of charts and products to identify synoptic weather systems for the marine forecast products such as Sea State & Significant wave heights.
- iii. Finalisation of inference of the current situation
- iv. Monitoring of dynamical and thermodynamical parameters
- v. Preparation of diagnosis
- vi. Analysis of NWP model products and identification of weather system by each model. About 10 NWP models are examined every day.
- vii. Comparison of model analysis with the observed analysis.
- viii. Analysis of best model, the performance of the historically best model and Multi-Model ensemble (MME)
- ix. Verification of each model for the past 24-hour forecast and preparation of consensus forecast from the models.
- x. Development of subjective consensus through the exchange of knowledge, and experiences through video conference among the forecasters.
- xi. Preparation of Fleet forecast for the Indian Navy
- xii. Preparation of GMDSS bulletin
- xiii. Finalisation of fisherman warning (text & graphics) containing maximum sustained wind and probability of exceedance of different thresholds hazard on GIS platform.
- xiv. **During depression/cyclone frequency of each bulletin increases (every six to three hours).**
- xv. **Checking and Finalisation of DGH (Director General of Hydrocarbon) Bulletins for offshore Exploration & production (E & P) operators**

### **Duty Assistant (I, II & III) :**

- i. Plotting of wind, rainfall, visibility and wave height on the GIS platform for the RSMC domain and south Indian Ocean region
- ii. Identification of different areas based on different thresholds for the above-mentioned parameters Fleet Domain for India Navy, Sea areas and Met-area VIII for GMDSS bulletin.
- iii. Colour coding based on multi-hazards scenarios.
- iv. Preparation of fisherman graphics based on MME forecast
- v. Dissemination of all marine bulletins through email, website and other channels with the help of ISSD.
- vi. Preparation of tables and graphics for the DGH bulletin
- vii. To support the Duty officer in other works.

### **Scientist (I and II) :**

- Research & Development
- Implementation of new tools for marine forecasts
- Verification
- Documentation
- Preparation of Standard Operating Procedure (SOP)
- Preparation of Forecast Demonstration Project report

## Duty Charter of NWFC (Operation) Support for Cyclone & marine warning services

**Duty Officer (DO) and Duty Assistant (DA) in 24 hours roster  
(6 hr'ly with 4 batches with 4 DOs + 8 DAs in each batch)**

### **Duty Officer (1x4=4) : Roster**

- Continuous monitoring of weather
- Analysis of weather charts, model analysis and evaluation of model guidance.
- Development of objective consensus forecast through Multi-Model Ensemble (MME)
- Daily map discussion through Video conference with forecasters of RMCs/MCs for subjective consensus
- Preparation of forecast bulletins and products
- Preparation of daily weather video
- Coordination with ACWCs/CWCs and other agencies
- Dissemination through phone, email, social media etc
- Preparation of weekly, monthly and seasonal reports
- Preparation of Press Release
- Research and development & Capacity building
- Briefing to press & electronic media

### **Duty Assistant (1x4) – Roster**

- To provide support to the DO for the mentioned work
- Checking of Bulletins and warnings including social media
- Data Observation, summarisation of past weather
- Updating Various Data in Data sheets for local weather reporting
- Preparation of input for the National Video Conference (VC)
- Preparation of inputs for All India Weather Inference and uploading on the Website and mail to various officials
- Preparation of GIS-based maps (Rainfall and weather warning for the next 5 days)
- Press release preparation (Daily) and uploading on the website.
- Preparation of presentation for daily weather Video (Morning and afternoon) and weekly weather summary and Forecast.

### **Duty Assistant (1x4) – Roster**

- Preparation of All India Weather Bulletin and Severe Weather Impact-Based Warning Bulletin
- Updating Social media (Twitter, Facebook) posts of significant weather features, forecasts, warnings, real-time thunderstorms updates, press releases and important events of IMD..
- Regular updates in the IMD YouTube Weather Channel
- Preparation of Monsoon Checklist in monsoon season
- Providing inputs to the general public about weather updates in their area
- Assisting the RSMC team at the time of severe weather/significant weather/cyclones

**Miscellaneous:** Preparation of various drafts/tables/images/reports/press releases on technical demand. Supply of rainfall data as required by many users. Assisting the Duty Office in the preparation of various reports.

## **Duty Charter of Numerical Weather Prediction (NWP) Division**

### **Duty Officer (I to IV) :**

- (i) Running of NWP models and preparation of NWP models products.
- (ii) Monitoring of possible cyclogenesis commencing from circulation and low pressure system in each individual model (total 7 models) and forecast up to 10 days.
- (iii) Running of extended range forecast model and preparation of products of wind, rainfall, cyclogenesis probability for 4 weeks.
- (iv) Uploading of products in website and communicating through email to all forecasters
- (v) Checking website and ensure all the charts are properly uploaded
- (vi) Trouble shooting issues in Web server and FTP server and monitoring issues in HPCS and communicate with support team for resolving issues.
- (vii) Preparation and supply of model data and customized products to various stakeholders and various IMD users.
- (ix) Preparation of products for DSS and products for various sectoral applications.
- (x) Managing HPCS space and storage of essential data and ensuring smooth operational model runs.
- (xi) Preparation of products using multiple models for different applications to support decision making of forecasters
- (xii) Preparation of NWP model based cyclone tracks during cyclones

### **Duty Assistant (I to IV) :**

- (i) To support the DOs in all the above work
- (ii) Preparation of PPT and products for weekly extended range forecast
- (iii) Preparation of STORM bulletin, Winter bulletin etc

### **Duty Officer (V to VII) :**

- (i) Preparation of Multi-Model Ensemble (MME) products using seven global models.
- (ii) Preparation of MME based products for marine weather services
- (iii) Running of Hurricane WRF model during cyclone
- (iv) Preparation of dynamical-Statistical products
- (v) Research and Developmental work, Documentation and training
- (vi) Development of new tools and products validation
- (vii) Development of customized products for DSS using real time observations and NWP model products
- (viii) Bias correction of model products, development of products for severe weather like hail, heavy rain, lightning, fog, cyclones etc
- (ix) Development NWP model products for various application like marine weather services, aviation applications, energy sector, health Sector etc
- (x) Development of NWP products at different spatial scales for forecasting at met-sub division, state, district, blocks, river catchment etc
- (xii) Research and development in models and data assimilation system to improve forecasts

**Duty Assistant (V to VII) :** To verify the forecast of each model & MME on real-time, monthly and seasonal scale Also support the DOs

## Duty Charter of Information System Service Division (ISSD)

### **Duty Officer (I to IV) :**

- (i) Monitoring and exchange of met data through RTH, timely action in case of any data is not received.
- (ii) Quality check of data.
- (iii) Trouble shooting in communication and monitoring of National and International circuits
- (iv) Monthly and annual statistics of data exchange.
- (v) Dissemination of bulletins and messages through Fax/Email/SMS/GTS/API/Mobile APP/website/CAP etc.
- (vi) Geospatial applications to make the products available in text, QGIS and WebGIS platforms.
- (vii) Monitoring of VVIP flight/ DAS messages and submission.
- (viii) Monitoring of nuclear atomic energy messages/ alerts.
- (ix) Monitoring of AWS/ ARG data and submission of surface and INCLI data.
- (x) Maintaining of Duty officer diary and submission of report on daily basis.
- (xi) Monitoring of all models, radar and satellite data and timely action in case of any issues.

### **Duty Assistant (I to IV) :**

- (i) Collection, monitoring & submission of data.
- (ii) Submission of GMDSS, Fleet forecast and IWS data.
- (iii) Submission of SHIP data, BUOY data & SAARC data.
- (iv) Monitoring and submission of news to AIR.
- (v) Monitoring of display board/ screen at main gate and ground floor.
- (vi) Monitoring and submission of satellite bulletin.
- (vii) Monitoring and submission of tropical weather outlook.
- (viii) Continuous watch on surface and upper air data and maintaining log over log sheet.

### **Scientist (I & II) :**

- (i) Research and Development.
- (ii) Capacity building and training.
- (iii) Development of software to generate various products and reports.
- (iv) Generation of automated products like Sea Area bulletin, Coastal Area Bulletin.
- (v) Generation of Auto city weather forecast using model data.
- (vi) Development of software for monitoring of servers and circuits.

## Duty Charter of Satellite Meteorological Division at IMD, New Delhi

### **Duty Officer (I - IV): (24 hour Roster Duty)**

- Continuous monitoring of weather through satellite products
- Analysis of Satellite-based products such as Derived dynamical products, RGB products, Atmospheric Motion Vectors etc.
- Analysis of severe weather such as Tropical Cyclones, Thunderstorms, Dust storms, Fog, Heavy rainfall etc through satellites
- Preparation of 3 hourly bulletins based on satellite products
- Preparation of Special bulletins in case of severe weather like Tropical Cyclones
- Application of Dvorak technique in monitoring and assessment of Tropical Cyclones
- Coordination with CWD and Nowcasting unit for nowcast warnings and updates
- Dissemination and updates through phone and email
- Contributing to the preparation of Tropical Cyclones Best track

### **Duty Assistant (I - IV) :**

- To support in collection of all types of satellite data, monitoring of satellite-based products continuously
- Uploading of bulletins & products on website.

### **Scientist (I and II) :**

- Capacity building through training activities
- Research work – Carrying out research work related to monitoring and assessment of severe weather such as Tropical Cyclones, Heavy rainfall, Fog, thunderstorms – dust storms etc.
- Development work – Developing new products, utilizing satellite imagery and products from other international satellites, hosting the products on a dedicated website etc.
- Training and Capacity building
- Development of new tools
- Validation of products
- Documentation

## Duty Charter of Radar Division at IMD, New Delhi

### **Duty Officer (I-IV) : (24 hour Roster Duty):**

- Continuous monitoring of radar network and products
- Preparation of radar status report on daily basis
- Coordination with radar stations/ RMCs and other agencies for radar products availability on website
- Regular monitoring of radar images uploaded by respective radar stations on website.
- Monitoring of real-time radar data sharing with different organizations, app developers and other divisions in IMD.
- Catering to radar data requests as received from different national and international users.
- Preparation of daily and monthly radar status reports

**Duty Assistant (I-IV) :** *To support in collection of all types of Radar data, monitoring of Radar based products continuously, uploading of bulletins & products on website*

### **Scientist (I and II) :**

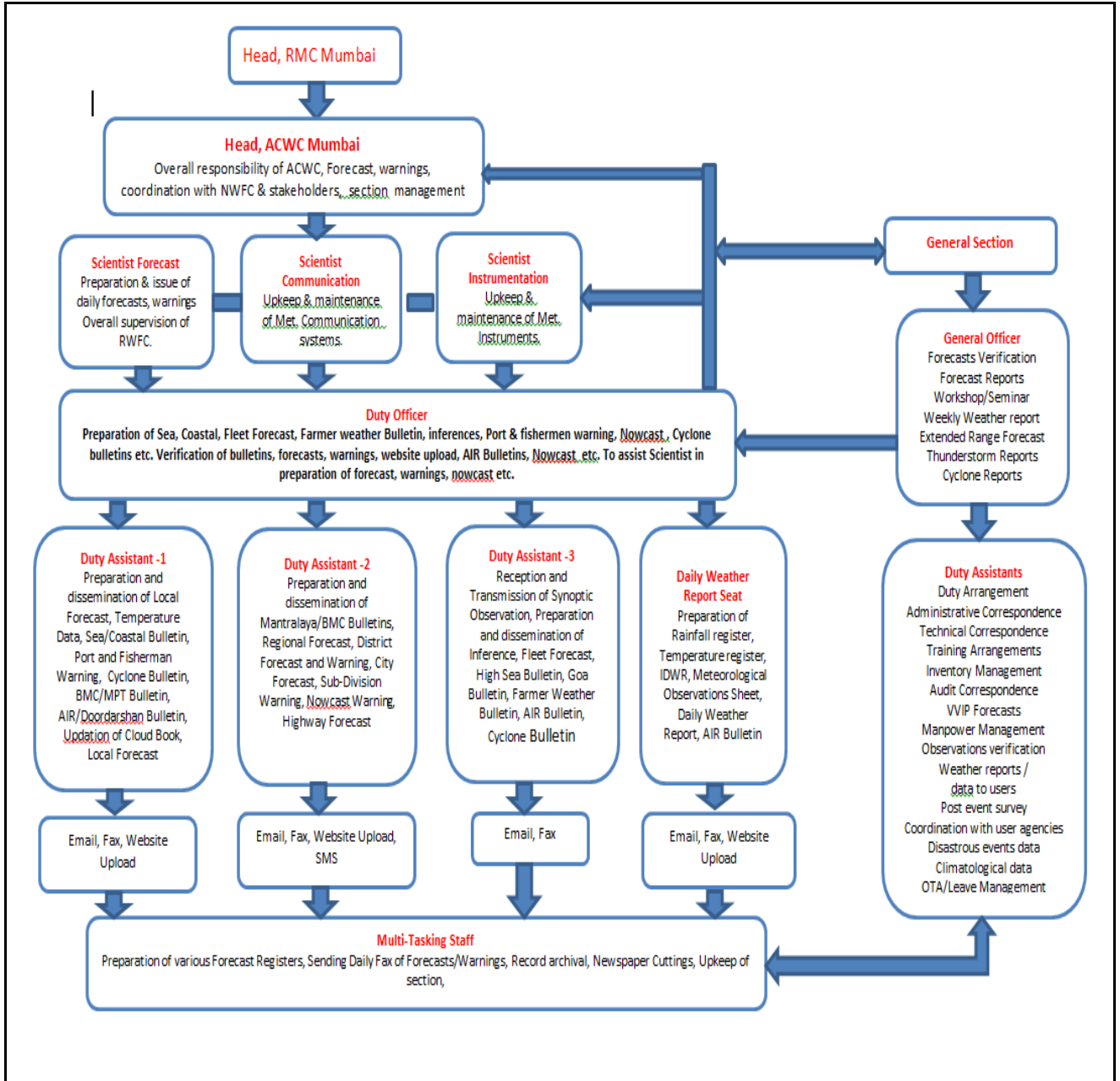
- Research and Development
- Training and Capacity building
- Development of new tools
- Validation of products
- Documentation

## Duty Charter of Radar Station (Chennai)

Details of Officers and staffs of DWR Chennai involving in Cyclone operations.

Sl. No	Head/Duty Officer/Duty Assistant	No	Responsibilities
1	Head/Duty Officer Radar Station	(I & II)	(i) Automization of Cyclone Bulletin, Interaction with IMD offices on the real time status of the cyclone and overall monitoring of the performance of the Radar and in issuing of the Cyclone Bulletin in time. (ii) Overall Technical and administrative charge of the Doppler Weather Radar facility
2	Duty Assistant	(I and II)	(i) Analysis in identification of System features, (ii) Preparing GIS overlays of track and overlays of Cyclone (iii) Assistance in the preparation of the Cyclone Bulletin. (iv) Staff duty management and coordination
3	Duty Assistant	(I to IV)	(i) Helping in finding out the Cyclone features and in preparation of Cyclone Bulletin and attending phone calls from the users and general public. (ii) Helping in the rectification process of Radar faults for early revival. (iii) Helping in constantly monitoring the overall performance of the Radar, DG Set, UPS, Split A/C units.
4	Support Staff	(I to III)	Overall support for the DWR Chennai officials during their active participation of the Cyclone tracking, file moments, communications and also in arranging hospitality provisions either inhouse or nearby purchase.

# Area Cyclone Warning Centre (ACWC), Mumbai





## **CHARTER OF DUTIES/RESPONSIBILITIES**

### **Area Cyclone Warning Centre (ACWC)/Regional Weather Forecasting Centre (RWFC), RMC Mumbai**

Area Cyclone Warning Centres (ACWCs/RWFCs) take care of the cyclone warning services as well as marine weather services, as per their area of responsibility. Forecasts and warning services for high seas are issued by ACWC Mumbai for Arabian Sea. This centre issues sea area bulletins for Arabian Sea, coastal weather bulletins, fleet forecast for Maharashtra-Goa and Gujarat coasts, Fishermen warning and Port warning for Maharashtra-Goa coasts.

#### **Duties of Director/In-Charge (RWFC/ACWC)**

- Act as section head of ACWC/RWFC Mumbai.
- Perform administrative/technical duties and supervise the works of officers/staff under their control.
- Briefing on and participating in the daily video conference with headquarters to discuss weather over Maharashtra state and Arabian Sea.
- Looking after the preparation and issuing of various types of forecasts, including city forecasts, local area forecasts, regional forecasts, district-level forecasts, and warnings for adverse weather conditions.
- Act as the contact person for different stakeholders.
- Act as liaison officer with other organizations.

#### **Duties of Scientists**

- Analysis of weather charts, other observations, model guidance and preparation of forecasts for the Maharashtra state and the Arabian Sea
- Briefing and participating in the daily video conference with all forecasting centres of IMD to discuss weather over Maharashtra state and Arabian Sea and forecasts over the region.
- Looking after the preparation and issuing of various types of forecasts, including city forecasts, local area forecasts, regional forecasts, district-level forecasts, and warnings for adverse weather conditions.
- Overall supervision of the section in issuing weather-related forecast warnings and bulletins.
- Research and Development
- Training and capacity building

<b>DESIGNATION</b>	<b>CHARTER OF DUTIES / RESPONSIBILITIES FOR CYCLONE AND MARINE WEATHER SERVICES</b>
<b>Duty Officer (operational duty)</b>	<ul style="list-style-type: none"> <li>• Assisting the Class 1 officer to prepare city forecast for 37 cities</li> <li>• To analyze of all synoptic surface charts and save on Synergie module.</li> <li>• Preparation of coastal, Sea Area bulletins and fleet forecast (Wind, Weather, Visibility and Sea conditions) using the weather models, satellite imagery and INCOIS wave model.</li> <li>• Looking into the different weather web sites &amp; Synergies model</li> <li>• Preparation of coastal, Sea Area bulletins and fleet forecast (Wind, Weather, Visibility and Sea conditions) using the weather models, satellite imagery and INCOIS wave model.</li> <li>• Preparation of Weather inference, Farmer Weather Bulletins, Issuing the weather forecast to various organizations e.g. Port Authorities, State Government, Municipal Corporation, Navy Met., Farmers, Fisheries dept., All India Radio, Door Darshan.</li> <li>• Preparation of weekly weather reports, weekly special distribution.</li> <li>• Preparation of Nowcast warnings in consultation with Scientist/Forecasting Officer.</li> <li>• Preparation of cyclone bulletins in consultation with Scientist/Forecasting Officer.</li> <li>• Checking all weather website in connection with forecasting to keep update &amp; using synergy data for assisting Director ACWC in routine forecast.</li> <li>• During night duties working as Nodal Officer.</li> </ul>
<b>MORNING DUTY (0800 IST TO 1400 IST)</b>	
<b>DUTY ASSISTANT 1 (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• 03Z/06z SYNOP entry in Local f/c Register and Cloud plotting.</li> <li>• Temperature, Relative Humidity (RH) and rainfall entries of 03z/06z in Local forecast register.</li> <li>• Sending Minimum temperature &amp; Rainfall by SMS to user agencies.</li> <li>• Normal departure entries with rainfall in seasonal and annual totals (COLABA/Santacruz/Ahmedabad/Panji) &amp; web upload.</li> <li>• Prepare &amp; send BMC Weather Report at 0900 IST.</li> <li>• Collection of Ghat /Lake data during Monsoon from authorities.</li> <li>• Updation of Observation Register entries with temperature, Relative Humidity (RH), wind in Local register.</li> <li>• Preparation and e-mail of 1300 IST Sea area bulletin, Coastal weather bulletin, MPT, Fishermen/Port/Cyclone/Thunderstorm/Heavy Rainfall/cyclone warnings, Local forecast for Mumbai etc.</li> <li>• Uploading &amp; checking of all 1300 IST bulletins on regional/HQ website.</li> </ul>

	<p>Entries of F/c, met. Data in Action A/C book.</p>
<b>DUTY ASSISTANT 2 (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• 37 city minimum and r/f entries with departures.</li> <li>• 00z Pilot charts download &amp; print on plotter.</li> <li>• 03z minimum /Rainfall all SMS of CLB and SCZ</li> <li>• City f/c upload of 37 city on website.</li> <li>• Monitoring of satellite and radar images and reporting to duty officer for Nowcast.</li> <li>• Archival of various weather charts (03z change chart, satellite images, Upper Air (U/A) wind and Model analysis charts.</li> <li>• Preparation &amp; Uploading of district f/c, regional f/c &amp; highway f/c.</li> <li>• Preparation &amp; dissemination of subdivision weather Warnings.</li> <li>• Send SMS of Thunderstorm/ Heavy rainfall/ Fishermen warnings.</li> <li>• Preparation &amp; dissemination of Mantralaya, BMC bulletins.</li> <li>• Upload district &amp; city NOWCAST of 1000/1300 IST &amp; SMS to user agencies.</li> <li>• To attend wireless messages of DMU &amp; phone calls of MCGM authorities.</li> </ul> <p>Updating of district/regional f/c &amp; nowcast as and when issued by Forecaster.</p>
<b>DUTY ASSISTANT 3 (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• Collection and transmission of 03z/06z observations through AMSS/email.</li> <li>• Sending of Ghats &amp; Lake r/f message on AMSS &amp; email.</li> <li>• Prepare and transmit Inference at 0900, 1300 IST.</li> <li>• Attend public phone calls for weather-related information &amp; reply to them.</li> <li>• Preparation &amp; dissemination of cyclone bulletins.</li> <li>• Preparation &amp; dissemination of Colaba climate temperature data.</li> <li>• Prepare and transmit Aurora, Coastal Bulletin, High Sea Bulletin, Fleet Forecast, Fishermen &amp; Port Warning, Goa Bulletin, FWB M to AMSS &amp; also email to user agencies.</li> <li>• Assist Duty Asst. 2 during bad weather for dissemination of forecast.</li> </ul>
<b>EVENING DUTY (1400 IST TO 2000 IST)</b>	
<b>DUTY ASSISTANT 1 (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• Uploading of coastal, sea area, port and fishermen warning bulletins on RSMC website.</li> <li>• Uploading of coastal, sea area, port and fishermen warning bulletins on Marine website.</li> <li>• Preparation &amp; uploading of Coastal/Sea area bulletin of Marine website based on model output.</li> <li>• 09Z/12z SYNOP entry in Local Register and Cloud plotting</li> <li>• Maximum temperature Entries 12z for Akashwani/Doordarshan bulletins.</li> <li>• Normal departure entries Panaji/Ahmedabad/Colaba and</li> </ul>

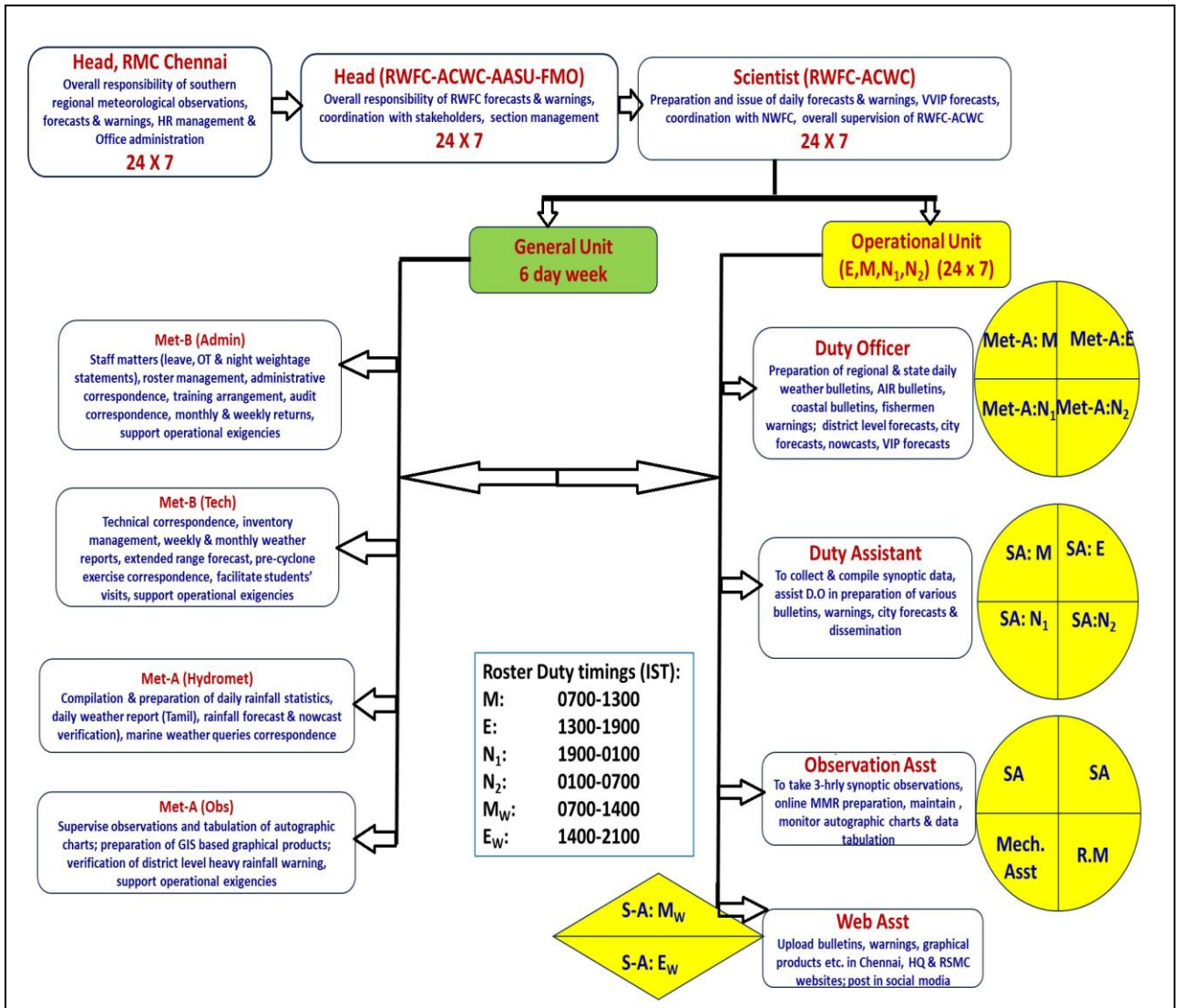
	<p>Santacruz</p> <ul style="list-style-type: none"> <li>• Preparation &amp; dissemination of Akashwani/Doordarshan weather report.</li> <li>• Part preparation of costal/sea bulletin, Port &amp; Fishermen warning</li> <li>• Preparation &amp; uploading of 1730 IST Port &amp; Fishermen warning.</li> <li>• Preparation &amp; uploading of 2000 IST Local forecast.</li> </ul>
<b>DUTY ASSISTANT 2 (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• 37 city maximum temperature with departure entry.</li> <li>• Monitoring of satellite and radar images and reporting to duty officer.</li> <li>• Archival of various weather charts (06/09z charts, satellite images, Upper Air (U/A) wind and Model analysis charts.</li> <li>• BDDR/IDWR synops update.</li> <li>• Sending Maximum temperature and rainfall SMS to user agencies</li> <li>• District/Station level NOWCAST SMS &amp; upload of 1600/1900 IST.</li> <li>• Rainfall 12 UTC entry</li> <li>• Send SMS of Thunderstorm/ Heavy rainfall/ Fishermen warnings.</li> <li>• To prepare &amp; upload updated District f/c &amp; regional f/c as &amp; when issued during duty time.</li> <li>• To attend wireless messages of DMU &amp; phone calls of MCGM authorities.</li> </ul>
<b>DUTY ASSISTANT 3 (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• Collect and transmit 09z/12z Obs. through AMSS/Email.</li> <li>• Transmit Goa E at 0400 pm and Akashwani Ratnagiri at 0500 pm</li> <li>• To prepare &amp; Send Evening Inference of 1700 IST.</li> <li>• Generate and pass BDWR, IDWR data to ACWC.</li> <li>• Attend public phone calls of weather-related information &amp; reply them.</li> </ul>
<b>NIGHT DUTY (2000 IST TO 0800 IST)</b>	
<b>DUTY ASSISTANT 1 (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• 15Z/18z/21Z/00Z synoptic observations entry in the Local Register and their plotting in the Cloud register.</li> <li>• Preparation and e-mail/website upload of 2100 IST Sea area, Coastal, Press bulletin, Fishermen &amp; Port Warnings.</li> <li>• Preparation &amp; upload of 0200, 0700 IST Local f/c Mumbai.</li> <li>• Preparation &amp; upload of 0530 IST Fishermen &amp; Port Warnings.</li> <li>• Preparation &amp; email of 2200 IST &amp; 0530 IST Akashwani weather report.</li> <li>• Upload of coastal, sea area, port and fishermen warning on RSMC &amp; Marine website.</li> <li>• Uploading &amp; checking of all 2100 IST bulletins on regional /HQ website.</li> <li>• Entries of F/c, met. Data in Action A/C book.</li> <li>• Preparation &amp; uploading of Costal/Sea area bulletin of Marine website based on model output.</li> </ul>

<b>DUTY ASSISTANT 2 (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• Monitoring of satellite and radar images and reporting to duty officer.</li> <li>• Synergie charts saving (12z change chart, sat images).</li> <li>• District/Station NOWCAST SMS &amp; upload of 2200/0100 IST/0400 IST/0700 IST.</li> <li>• Prepare &amp; Send SMS of Thunderstorm/ Heavy rainfall/ Fishermen warnings.</li> <li>• To prepare &amp; upload updated District f/c &amp; regional f/c as &amp; when issued.</li> <li>• To attend wireless messages of DMU &amp; phone calls of MCGM authorities.</li> <li>• Preparation of BMC/Mantralaya weather reports of 2100 IST.</li> </ul>
<b>DUTY ASSISTANT 3 (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• Collect and transmit 15z, 18z, 21z, 00z synops &amp; upper air observation through AMSS/Email.</li> <li>• Prepare and transmit 2100 IST Balloon, Coastal Bulletin, High Sea Bulletin, Fleet Forecast, Goa, FWB, inference weather bulletins.</li> <li>• Attend public phone calls of weather related information &amp; reply them.</li> <li>• Prepare &amp; email Akashwani Ratnagiri / Sangli bulletins. Upload press release, IBF or any other bulletin as directed by Duty Officer.</li> </ul>
<b>GENERAL/OPERATIONAL DUTY</b>	
<b>BDWR SEAT</b>	<ul style="list-style-type: none"> <li>• Preparation of daily Temp. Register with Max. &amp; Min. temp of 53 stations for temperature forecast.</li> <li>• Preparation of daily rainfall register of approx. 300 stations for rain forecast.</li> <li>• Updating of daily R/f register for rainfall records.</li> <li>• BDWR / IDWR data entries, departure and rainfall totals calculation.</li> <li>• Coordination with Hydrology Section for daily rainfall data of block level stations.</li> <li>• Preparation of Regional Daily Weather Report.</li> <li>• Preparation &amp; dissemination of Akashwani bulletins to 10 nos. of Akashwani stations.</li> <li>• Preparation &amp; website upload of daily met. Observations.</li> </ul>
<b>DUTY ASSISTANT</b>	<ul style="list-style-type: none"> <li>• Pre Cyclone exercise work &amp; preparation of Cyclone /severe weather event reports.</li> <li>• Section all File/correspondence work – both Technical &amp; Administrative.</li> <li>• Correspondence with user agencies like State Government, BMC and Private Companies in all weather related matters.</li> <li>• Maintaining of Dak register with inward and outward entries.</li> <li>• Maintaining of CL / RH / C OFF register of Officers and Staff of section.</li> <li>• Maintaining of Stock, Telephone, Hindi letter etc. register.</li> <li>• Performing of Duty Assistant (Operational duty) as &amp; when</li> </ul>

	<p>required.</p> <ul style="list-style-type: none"> <li>• Preparation of OTA statement of section Staff.</li> <li>• Preparation and sending of monthly reports like Progress reports, blank Weather charts, Disaster weather event etc.</li> <li>• Uploading of weekly weather report, extended range forecast</li> <li>• Daily duty arrangement &amp; leave management of section officials.</li> <li>• ACR, ATR &amp; AMT related work.</li> <li>• Pre Cyclone exercise work &amp; preparation of Cyclone /severe weather event reports.</li> <li>• Preparation of VVIP forecast related work.</li> </ul> <p>Any other work allotted by Director In-charge.</p>
<b>Duty Officer</b>	<ul style="list-style-type: none"> <li>• Monthly Verification of local forecast (14 stations).</li> <li>• Monthly Verification of Subdivision forecasts (Distribution &amp; Intensity)</li> <li>• Monthly Verification of Now cast issued – 8 stations</li> <li>• Section all File/correspondence work – both Technical &amp; Administrative.</li> <li>• Any other extra work allotted by the Director In-charge as and when required.</li> </ul>
<b>Multi-Tasking Staff (MTS)</b>	<ul style="list-style-type: none"> <li>• Preparation of 13 registers for daily weather forecast every month.</li> <li>• Sending daily fax of forecasts/warnings to BMC / MANTRALAYA / Railway / Ports / Fisheries / Collector offices / AIR/Doordarshan/ other user agencies etc.</li> <li>• Keeping all forecast/bulletins/warnings etc. in records for archival.</li> <li>• Keeping newspaper cut-outs from various newspapers for office records.</li> <li>• Upkeep of section &amp; its infrastructure.</li> <li>• Arranging action book A/B/C for weather data entry &amp; pasting of Inference/FWB etc. in it.</li> <li>• Involved in file movement of section to all sections of RMC/seats.</li> <li>• Collecting/faxing/recording of additional forecasts/bulletins/warnings issued during bad weather periods.</li> <li>• Arrangement of forecast registers/books for various entries.</li> </ul> <p>Any section related duties assigned by Director/Duty Officer/Duty Assistants.</p>

# CHARTER OF DUTIES/RESPONSIBILITIES

## Area Cyclone Warning Centre (ACWC), Chennai



**Area Cyclone Warning Centre (ACWC) Chennai/Regional Weather Forecasting Centre (RWFC) Chennai** takes care of the cyclone warning and marine weather services for its area of responsibility and also carries out the mandates of general public weather services for the state of Tamilnadu and Puducherry & Karaikal areas of the UT of Puducherry. This centre is responsible for issuing cyclone bulletins for Tamilnadu-Puducerry-Karaikal coast; coastal weather bulletins for Tamilnadu-Puducerry-Karaikal coast; warnings for fishermen for Tamilnadu-Puducerry-Karaikal coast, Gulf of Mannar & Comorin area; and port warnings for Tamilnadu-Puducerry-Karaikal ports.

<b>RWFC-ACWC Chennai: Duty Charter</b>
<p><b>Head (RWFC-ACWC-AASU-FMO) (24 X 7):</b></p> <ul style="list-style-type: none"> <li>(i) Act as section head of RWFC-ACWC-AASU-FMO Chennai.</li> <li>(ii) Perform administrative/technical duties and supervise the works of officers/staff under their control.</li> <li>(iii) Briefing on and participating in the daily video conference with headquarters to discuss weather over Tamilnadu-Puducherry-Karaikal coasts, gulf of Mannar &amp; Comorin area.</li> <li>(iv) Responsible for preparation and issuing of various types of forecasts, including City forecasts, local area forecasts, regional forecasts, district-level forecasts, and warnings for adverse weather conditions.</li> <li>(v) Act as the contact person for different stakeholders.</li> <li>(vi) Act as liaison officer with other organizations.</li> <li>(vii) Research &amp; development</li> </ul>
<p><b>Scientist (RWFC-ACWC) (24 x 7):</b></p> <ul style="list-style-type: none"> <li>(i) Analysis synoptic charts and NWP products daily; frequently during cyclone and other severe weather conditions</li> <li>(ii) Participation in VC conducted by HQ</li> <li>(iii) Issue regional &amp; state daily weather bulletins, state weekly &amp; monthly weather reports</li> <li>(iv) Issue special bulletins during cyclone and other severe weather periods</li> <li>(v) Issue VVIP &amp; VIP forecasts</li> <li>(vi) Preparation &amp; issue of IBF – as and when required</li> <li>(vii) Preparation &amp; issue of ERF – weekly (every Thursday)</li> <li>(viii) Issue of CAP feed for TS &amp; heavy rainfall warning – as and when required</li> <li>(ix) Supervision of all the activities of RWFC-ACWC</li> <li>(x) Coordination with NWFC &amp; stakeholders</li> <li>(xi) Research &amp; Development</li> </ul>

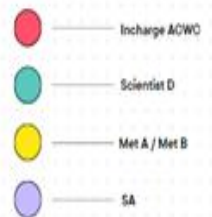
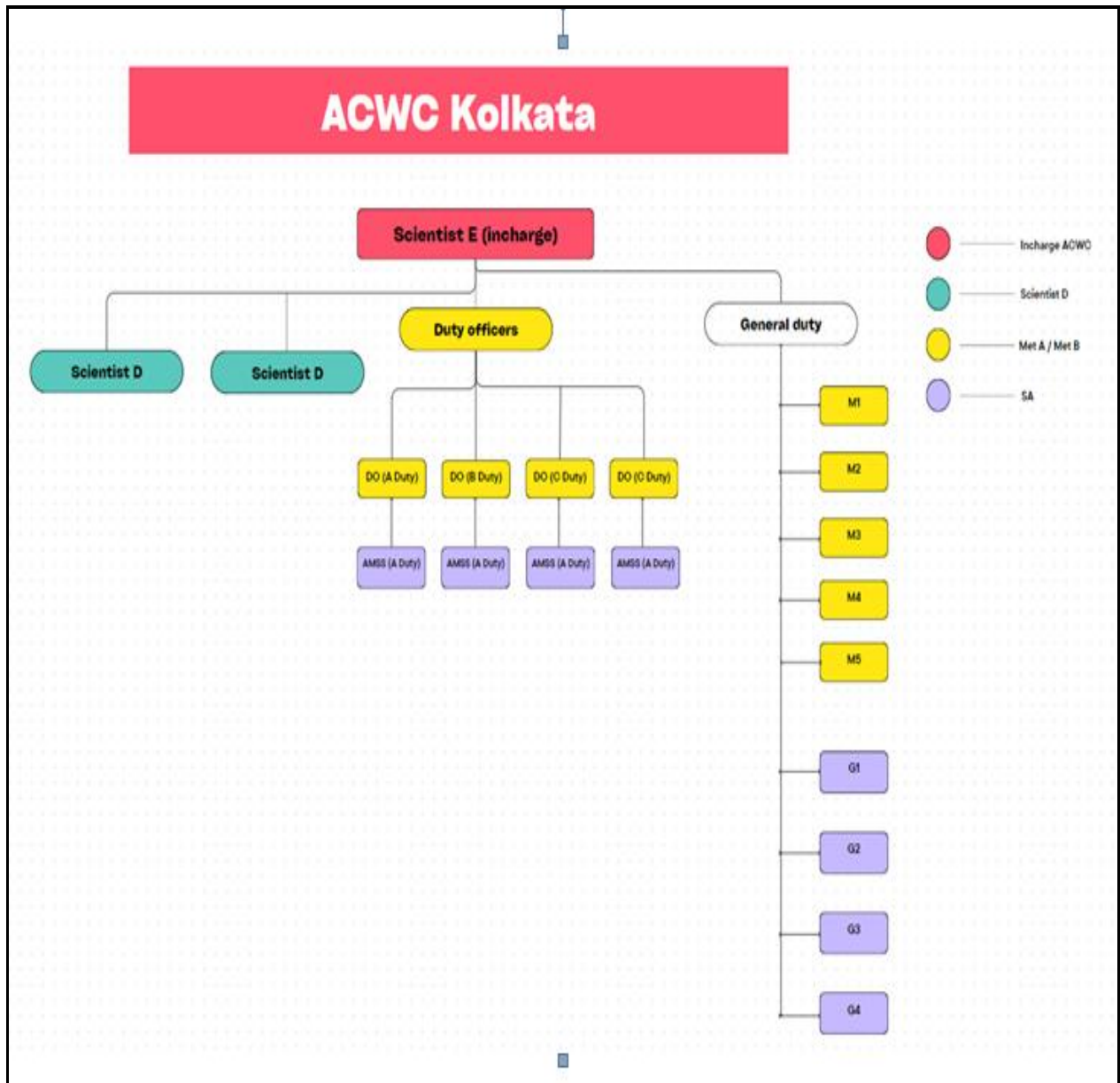


Duties and responsibilities	M	E	N (N <sub>1</sub> & N <sub>2</sub> )
	Based on analysis time (UTC)		
<b>Duty Officer [E, M, N (N<sub>1</sub>&amp; N<sub>2</sub>):</b>			
Preparation and issue of			
(i) Regional / General forecast (4/day)	00, 03	12	15
(ii) Local forecast (3/day)	00	12	15
(iii) Thunderstorm Nowcast (8/day)	00,03,06	09,12	15,18
(iv) Chennai City nowcast (8/day)	00,03,06	09,12	15,18
(v) District rainfall forecast (daily once)	03	---	---
(vi) Highway forecast (daily once)	03	---	---
(vii) Fisheries warnings (4/day)	03	---	---
(viii) Coastal weather bulletins (2/day)	03	---	---
(ix) Depression / Cyclone report (5-8/day)	00,06	12	18
(x) VIP / Special forecasts	03	12	
(xi) WhatsApp updates to media (in Tamil & English)	As required	As required	As required
(xii) Answer telephonic weather queries from the public			
<b>Duty Assistant [E, M, N (N<sub>1</sub>&amp; N<sub>2</sub>)]</b>			
(i) Uploading of 22 IVRS station forecasts in HQ website	03	12	---
(ii) Preparation of 5 days Highway forecast for 16 stations	03	12	---
(iii) Preparation of daily weather summary for dissemination to AIR/DD/Chief Secretary/CRA and other concerned officials	03	---	---
(iv) Preparation of coastal weather bulletins	06	12	---
(v) Preparation of fisheries warnings	00,06	12	18
(vi) Determination of spatial rainfall activity	03	---	---
(vii) Determination of max/min temperature over the region	03	12	---

<b>Observation Assistant [E, M, N (N1&amp; N2)]</b> (i) Taking surface observations (ii) Changing and correcting autographic charts (iii) Tabulation of observations (iv) Special (hrly) observations as and when required	03,06 03	09,12	15,00
<b>Web uploading assistant (Mw/Ew)</b> Uploading of (i) 7 days general forecast for the region (4 times a day) (ii) Nowcast update (3-hrly) (iii) Coastal weather bulletin (twice a day) ; (5-6 times during monsoon season and inclement weather period (RSMC & HQ sites also) (iv) Fisheries warnings (4 times a day); (5-6 times during monsoon season and inclement weather period (RSMC & HQ sites also) (v) Highway forecast for selected cities in TN/PDC (twice a day) (vi) Cyclone warnings during the periods of low-pressure systems especially in pre- and post-monsoon periods (vii) Port warnings daily & as and when warranted during cyclone periods (viii) Daily Rainfall graph (ix) Districtwise forecast (x) Agromet bulletins (xi) Monthly weather extremes (xii) FDP-storm project data (xiii) Other official documents and weather related information (xiv) Tamil bulletins			
<b>General unit- Met-B (Admin), Met-B (Tech), Met-A (Obs), Met-A (Hydromet)</b> (i) Preparation of various weather reports for answering weather enquires (ii) Action pertaining to pre-cyclone exercise (iii) Action taken reports and post-cyclone survey reports (iv) Reception, consolidation and forwarding of working papers for ACR/AMR/ATR from the region to HQ. (v) Preparation of action-taken reports based on ACR/AMR/ATR recommendations and uploading the same in the HQ website (vi) General correspondences – Cabinet summary points, progress reports, quarterly and monthly reports (vii) Correspondence with NIC (viii) Preparation of weekly weather reports (ix) Preparation of disastrous weather reports. (x) Forecast verification			

- (xi) Arrangement for school/college students visits.
- (xii) Graphical warnings & QGIS – weather maps
- (xiii) Collect daily rainfall data from CRA website and also rainfall pertaining to ARG/AWS stations and compile using mkRAIN software for generating rainfall statistics regarding spatial distribution/monsoon activity daily for the preparation of daily weather reports.
- (xiv) Preparation of stationwise daily rainfall / Spatial distribution / Activity for Tamil Nadu and Puducherry subdivision, daily using mkRAIN software and email to HQ / Agrimet Pune / State Government Officials.
- (xv) Generate weekly weather products (every Wednesday) along with week/season rainfall maps and weekly rainfall data for Tamil Nadu and Puducherry subdivision (38 TN districts, Puducherry & Karaikal).
- (xvi) Preparation of Daily rainfall graph for specified & cumulative periods from mkRAIN database.
- (xvii) Preparation of monthly/seasonal/annual rainfall statistics districtwise for Tamil Nadu and Puducherry subdivisions.
- (xviii) Archival of daily rainfall database
- (xix) Preparation of Tamil bulletins
- (xx) To cover weekly offs, leave & training vacancies in Met-A & SA rosters

## Area Cyclone Warning Centre (ACWC), Kolkata



### **1. Head, Area Cyclone Warning Centre, Kolkata**

- (i) Overall supervision of the functioning of ACWC, Kolkata.
- (ii) He is responsible for all types of weather forecasts and warning of West Bengal, the entire Bay of Bengal and the Andaman Sea
- (iii) He is the nodal officer of RMC Kolkata to co-ordinate and correspondence with Disaster Management Department and other stakeholder of West Bengal
- (iv) Discuss the Synoptic system over the Bay of Bengal and Eastern India on day to day weather video conferencing with NWFC New Delhi

### **2. Duty Scientist (I and II)**

- (i) Responsible for analysing and issuing forecasts and warnings in consultation with the Head, ACWC Kolkata
- (ii) Monitoring and giving nowcast warning
- (iii) Preparing city forecast of seven days
- (iv) Forecast verification

### **3. Duty Officers (I to X)**

#### **DUTIES OF DUTY OFFICER (DO) :-**

The following work is to be done in B,A,C&D (Night duty). **(4 + 1- covered Weekly Off and Leave)**

#### **A-duty (morning)(0700 hrs. IST-1300 hrs. IST):**

- (i) Nowcast warnings (station wise & district wise) issue and update in the website(Kolkata and Delhi) and WhatsApp, X handle, Instagram, YouTube and telegram groups etc.
- (ii) Updating of minimum temperature, rainfall, relative humidity, sunrise, sunset, moonrise and moonset times in the City forecast website.
- (iii) Prepare Sea area Bulletin (Aurora, Balloon, Daily-I & Daily-II, Fleet, GMDSS, etc for Bay of Bengal and Andaman sea.
- (iv) Preparing, sending and uploading of local forecast(midday) and fishermen warning(morning).
- (v) Preparing and uploading of forecast and warning pages(midday) of Regional, North Bengal, Gangetic West Bengal and Andaman & Nicobar Islands in Kolkata website and WhatsApp groups.
- (vi) Issuing and sending of Extra bulletins(morning)(Ganga Sagar mela forecast and warning, visibility forecast over Hugli river) through Emails and WhatsApp groups to the concerned addresses.
- (vii) Cyclone bulletins, port warning and special bulletins issue on Depression and Cyclonic storm.
- (viii) VIP and VVIP forecast.

**B-duty(evening)(1300 hrs. IST -1900 hrs. IST):**

- (i) Nowcast warnings (station wise & district wise) issue and update in the website(Kolkata and Delhi) and WhatsApp, X handle, Instagram, Youtube and telegram groups etc.
- (ii) Updating of maximum temperature, rainfall, relative humidity, sunrise, sunset, moonrise and moonset times in the City forecast website.
- (iii) Entry of sunrise, sunset, moonrise and moonset times from Google Drive (comm.alp) to City forecast exercise books.
- (iv) Preparing, sending and uploading of local forecast(evening) and fishermen warning(evening).
- (v) Preparing and uploading of forecast and warning pages(evening) of Regional, North Bengal, Gangetic West Bengal and Andaman & Nicobar Islands in Kolkata website and WhatsApp groups.
- (vi) Cyclone bulletins, port warnings and special bulletins issue on Depression and Cyclonic storms.
- (vii) VIP and VVIP forecast.

**C&D duty (night duty) (1900 hrs. IST - 0700 hrs. IST of the next day):**

- (i) Nowcast warnings (station wise & district wise) issue and update in the website(Kolkata and Delhi) and WhatsApp, X handle, Instagram, YouTube and telegram groups etc.
- (ii) Updating of sunrise, sunset, moonrise and moonset times in the City forecast website.
- (iii) Prepare Sea area Bulletin (Aurora, Balloon, Daily-I & Daily-II, Fleet, GMDSS, etc for the Bay of Bengal and Andaman Sea.
- (iv) Preparing, sending and uploading of local forecast (night and morning).
- (v) Preparing and uploading of forecast and warning pages (night) of Regional, North Bengal, Gangetic West Bengal and Andaman & Nicobar Islands in Kolkata website and WhatsApp groups.
- (vi) Issuing and sending of Extra bulletins (night)(Ganga Sagar mela forecast and warning, visibility forecast over Hugli river) through Emails and WhatsApp groups to the concerned addresses.
- (vii) Cyclone bulletins, port warnings and special bulletins issue on Depression and Cyclonic storms.
- (viii) VIP and VVIP forecast.
- (ix) Farmers warnings for West Bengal and Fishermen warnings for West Bengal and Andaman & Nicobar Islands issues.

**Duty Officer –(I):** Preparation of VVIP, Special Bulletin and Duty Arrangement etc.,

**Duty Officer –(II):** Exchange and dissemination of weather observations and forecast and warning messages through different communication channels

**Duty Officer –(III):** Preparation of dataset of District Rainfall Monitoring System.

**Duty Officer –(IV):** Data Supply, preparation of Disaster and Extreme weather report etc.,.

**Duty Officer –(V):** Severe Local Storm project etc.

**In addition, the following works are being carried out time to time as per requirement.**

- (i) Data supply to various private and government parties.
- (ii) Communication with HQ regarding rainfall analysis, inclusion of new observatories in MKRain software etc.
- (iii) Preparation of progress report.
- (iv) Communication with State Agriculture Department regarding receipt of state rainfall data.
- (v) Communication with the state government regarding various weather forecast-related issues.
- (vi) Arranging various workshops at the local level.
- (vii) Attending various workshops/training/awareness programs at different government organizations.

## **2) Duty Assistant - (I to IX)**

### **DUTIES OF AMSS SEAT :- (4 +1- covered Weekly Off and Leave)**

#### **A DUTY**

- (i) Collection of the 03 UTC Synop from all Departmental and Part-time Observatories in West Bengal, Sikkim, Odisha, Bihar, Jharkhand and the Andaman and Nicobar Islands and dissemination of them to AMSS channel.
- (ii) Generating daily rainfall sheets and uploading it on the regional website.
- (iii) Filling up of daily temperature data sheet.
- (iv) Collection of the 06 UTC Synop from all Departmental and Part-time Observatories in West Bengal, Sikkim and the Andaman and Nicobar Islands and dissemination of them to AMSS channels.
- (v) Sending Local forecast reports to concerned stakeholders.
- (vi) Uploading local forecasts in different languages in the regional website.

#### **B DUTY**

- (i) Collection of the 09 UTC Synop from all Departmental and Part-time Observatories in West Bengal, Sikkim and the Andaman and Nicobar Islands and disseminating them to the AMSS channel.

- (ii) Filling up of 7 days of city forecast data in the city forecast portal of IMD.
- (i) Filling up of station-wise daily weather forecast and District level multi-hazard warning on the website.
- (ii) Completion of local forecast verification in the local forecast verification portal.
- (iii) Collection of the 12 UTC Synop from all Departmental and Part-time Observatories in West Bengal, Sikkim, Odisha, Bihar, Jharkhand and the Andaman and Nicobar Islands and dissemination of them to AMSS channel.
- (iv) Preparation of 12Z Rainfall sheet.
- (v) Sending local forecast reports to concerned stakeholders
- (vi) Filling up of max temperature data sheet.

### **C DUTY**

- (i) Collection of the 15 UTC Synop from all Departmental and Part-time Observatories in West Bengal, Sikkim and the Andaman and Nicobar Islands and dissemination of them to the AMSS channel.
- (ii) Preparation of Night bulletins i.e BALOON, DAILY TWO, FLEET, GMDSS, EVENING INFERENCE, etc
- (iii) Sending the checked reports to the concerned stakeholders.
- (iv) Uploading of NIGHT reports on the regional website.
- (v) Sending local forecast reports to concerned stakeholders.
- (vi) Collection of the 18 UTC Synop from all Departmental and Part-time Observatories in West Bengal, Sikkim and the Andaman and Nicobar Islands and disseminating them to the AMSS channel.

### **D DUTY**

- (i) Collection of the 21 UTC Synop from all Departmental and Part-time Observatories in West Bengal, Sikkim and the Andaman and Nicobar Islands and dissemination of them to AMSS channel.
- (ii) Collection of the 00 UTC Synop from all Departmental and Part-time Observatories in West Bengal, Sikkim and the Andaman and Nicobar Islands and dissemination of them to the AMSS channel.
- (iii) Sending local forecast reports to concerned stakeholders.
- (iv) Sending AMSS functionality report.
- (v) Sending Andaman & Nicobar fishermen report.

**Duty Assistant (I): Product visualization through QGIS and preparation of weather Video etc.,**

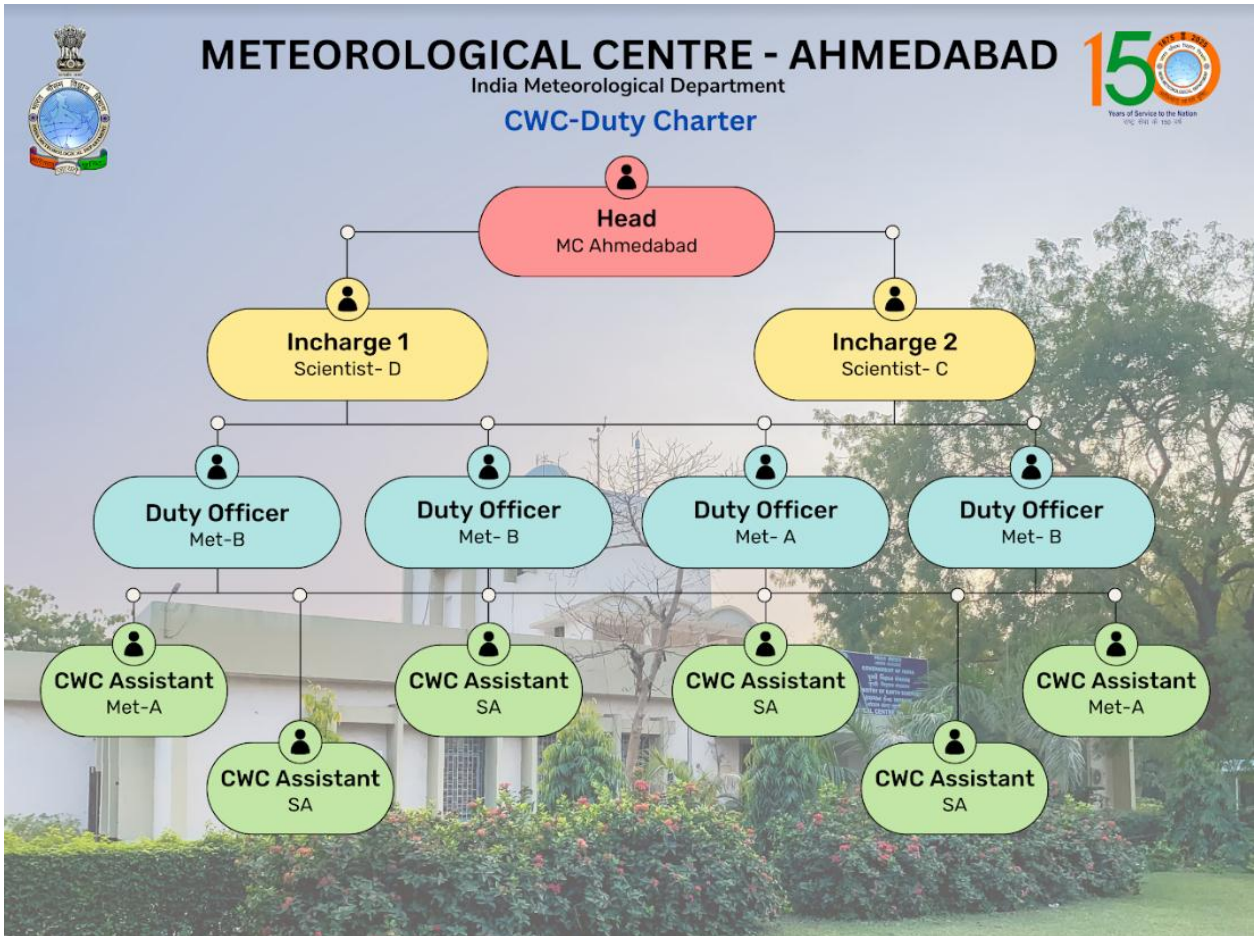
**Duty Assistant (II):** Uploading of products and constant interaction in social media etc.

**Duty Assistant (III):** Works related to Port Met Office

**Duty Assistant (IV):** Supporting Duty Officer in preparation and Dissemination of Weather Bulletins.



# CHARTER OF DUTIES/RESPONSIBILITIES Cyclone Warning Centre (CWC), Ahmedabad



**CHARTER OF DUTIES/RESPONSIBILITIES**  
**Cyclone Warning Centre, CWC-Ahmedabad**

**Cyclone Warning Centres (CWCs)** take care of the cyclone warning services of the coastal states as well as marine weather services, as per their area of responsibility. Forecasts and warning services for high seas are issued by CWC Ahmedabad for the Arabian Sea. This centre issues sea area bulletins for the Arabian Sea, coastal area bulletins, and Fishermen and Port warnings for Gujarat coasts.

**Duties of Head/In-Charge (M.C. Ahmedabad)**

- (i) Act as section head of CWC Ahmedabad.
- (ii) Perform administrative/technical duties and supervise the works of officers/staff under their control.
- (iii) Briefing on and participating in the daily video conference with headquarters to discuss weather over Gujarat state and Arabian Sea.
- (iv) Looking after the preparation and issuing of various types of forecasts, including city forecasts, local area forecasts, state forecasts, district-level forecasts, and warnings for adverse weather conditions.
- (v) Act as the contact person for different stakeholders.
- (vi) Act as liaison officer with other organizations.

**Duties of Scientists**

- (i) Analysis of weather charts, other observations, model guidance and preparation of forecasts for the Gujarat state and the Arabian Sea.
- (ii) Briefing and participating in the daily video conference with all forecasting centres of IMD to discuss weather over Gujarat state and Arabian Sea and forecasts over the region.
- (iii) Looking after the preparation and issuing of various types of forecasts, including city forecasts, local area forecasts, regional forecasts, district-level forecasts, and warnings for adverse weather conditions.
- (iv) Overall supervision of the section in issuing weather-related forecast warnings and bulletins.
- (v) Research and Development.
- (vi) Training and capacity building.

<b>DESIGNATION</b>	<b>CHARTER OF DUTIES / RESPONSIBILITIES FOR CYCLONE AND MARINE WEATHER SERVICES</b>
<b>Duty Officer</b> (operational duty)	<ul style="list-style-type: none"> <li>• Assisting the Class 1 officer to prepare city forecast for 26 cities</li> <li>• To analyse of all synoptic surface charts.</li> <li>• Preparation of coastal, Sea Area bulletins (Wind, Weather, Visibility and Sea conditions) using the weather models, satellite imagery and INCOIS wave model.</li> <li>• Looking into the different weather web sites &amp; Synergies model.</li> </ul>

	<ul style="list-style-type: none"> <li>• Preparation of coastal, Sea Area bulletins (Wind, Weather, Visibility and Sea conditions) using the weather models, satellite imagery and INCOIS wave model.</li> <li>• Preparation of Weather inference, Farmer Weather Bulletins, Issuing the weather forecast to various organizations e.g. Port Authorities, State Government, Municipal Corporation, Navy Met., Farmers, Fisheries dept., All India Radio, Door Darshan.</li> <li>• Preparation of weekly weather reports, weekly special distribution.</li> <li>• Preparation of Nowcast warnings in consultation with Scientist/Forecasting Officer.</li> <li>• Preparation of cyclone bulletins in consultation with Scientist/Forecasting Officer.</li> <li>• Checking all weather website in connection with forecasting to keep update.</li> <li>• During night duties working as Nodal Officer.</li> </ul>
<b>MORNING DUTY (0800 IST TO 1400 IST)</b>	
<b>DUTY ASSISTANT -I (MET-B /MET-A)</b>	<ul style="list-style-type: none"> <li>• 03Z/06z SYNOP entry in Local f/c Register.</li> <li>• Temperature, Relative Humidity (RH) and rainfall entries of 03z in Local forecast register.</li> <li>• Normal departure entries with rainfall in seasonal and annual totals (Ahmedabad) &amp; web upload.</li> <li>• Collection of rainfall data during the Monsoon from authorities.</li> <li>• Updation of Observation Register entries with temperature, Relative Humidity (RH), and wind in the Local register.</li> <li>• Preparation and e-mail of 1300 IST Sea area bulletin, Coastal weather bulletin, Fishermen/ Port/ Cyclone/ Thunderstorm/ Heavy Rainfall/Cyclone warnings, Local forecast for North &amp; South Gujarat Coast and Arabian Sea etc.</li> <li>• Uploading &amp; checking of all 1300 IST bulletins on the regional/HQ website.</li> <li>• Entries of F/c met. Data in Action A/C book.</li> <li>• Preparation &amp; uploading of 0800 IST, 1400 IST Local forecast.</li> </ul>
<b>DUTY ASSISTANT -II (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• 26 city minimum and r/f entries with departures.</li> <li>• 00z Pilot charts download &amp; print on plotter.</li> <li>• City f/c upload of 26 cities on the website.</li> <li>• Monitoring of satellite and radar images and reporting to the duty officer for Nowcast.</li> <li>• Preparation &amp; uploading of district f/c, regional f/c &amp; highway f/c.</li> <li>• Preparation &amp; dissemination of subdivision weather Warnings.</li> <li>• Send SMS of Thunderstorm/ Heavy rainfall/ Fishermen warnings.</li> <li>• Upload district &amp; city NOWCAST of 1000/1300 IST &amp; SMS to user agencies.</li> </ul>

	<ul style="list-style-type: none"> <li>Updating of district/regional f/c &amp; nowcast as and when issued by Forecaster.</li> </ul>
<p align="center"><b>DUTY ASSISTANT 3</b> (SA/MET-A)</p>	<ul style="list-style-type: none"> <li>Collection and transmission of 03z/06z observations through AMSS/email.</li> <li>Prepare and transmit Inference at 1300 IST.</li> <li>Attend public phone calls of weather-related information &amp; reply them.</li> <li>Preparation &amp; dissemination of cyclone bulletins.</li> <li>Prepare and transmit Coastal Bulletin, High Sea Bulletin, Fishermen &amp; port warning.</li> <li>Assist Duty Asst. 2 during bad weather for dissemination of forecast.</li> </ul>
<b>EVENING DUTY (1400 IST TO 2000 IST)</b>	
<p align="center"><b>DUTY ASSISTANT -I</b> (MET-B /MET-A)</p>	<ul style="list-style-type: none"> <li>Uploading of coastal, sea area, port and fishermen warning bulletins on RSMC website.</li> <li>Uploading of coastal, sea area, port and fishermen warning bulletins on Marine website.</li> <li>Preparation &amp; uploading of Coastal/Sea area bulletin of the Marine website based on model output.</li> <li>Preparation &amp; uploading of press bulletin on the website.</li> <li>09Z/12z SYNOP entry in Local Register.</li> <li>Maximum temperature Entries 12z for Akashwani/Doordarshan bulletins.</li> <li>Normal departure entries Ahmedabad and other 25 cities.</li> <li>Preparation &amp; dissemination of Akashwani/Doordarshan weather report.</li> <li>Part preparation of coastal/sea bulletin, Port &amp; Fishermen warning.</li> <li>Preparation &amp; uploading of 1730 IST Port &amp; Fishermen warning.</li> <li>Preparation &amp; uploading of 2000 IST Local forecast.</li> </ul>
<p align="center"><b>DUTY ASSISTANT -II</b> (SA/MET-A)</p>	<ul style="list-style-type: none"> <li>26 city maximum temperature with departures entry.</li> <li>Monitoring of satellite and radar images and reporting to duty officer.</li> <li>GDWR/IDWR synops update.</li> <li>District/Station level NOWCAST SMS &amp; upload of 1600/1900 IST.</li> <li>Rainfall 12 UTC entry.</li> <li>Send SMS of Thunderstorm/ Heavy rainfall/ Fishermen warnings.</li> <li>To prepare &amp; upload updated District f/c &amp; regional f/c as &amp; when issued during duty time.</li> </ul>

<p style="text-align: center;"><b>DUTY ASSISTANT - III (SA/MET-A)</b></p>	<ul style="list-style-type: none"> <li>• Collect and transmit 09z/12z Obs. through AMSS/Email.</li> <li>• To prepare &amp; Send Evening Inference of 1700 IST.</li> <li>• Generate and pass GDWR data to ACWC.</li> <li>• Attend public phone calls of weather-related information &amp; reply them.</li> </ul>
<b>NIGHT DUTY (2000 IST TO 0800 IST)</b>	
<p style="text-align: center;"><b>DUTY ASSISTANT 1 (SA/MET-A)</b></p>	<ul style="list-style-type: none"> <li>• 15Z/18z/21Z/00Z synoptic observations entry in Local Register.</li> <li>• Preparation and e-mail/website upload of 2100 IST Sea area, Coastal, Fishermen &amp; Port Warnings.</li> <li>• Preparation &amp; upload of 0530 IST Fishermen &amp; Port Warnings.</li> <li>• Preparation &amp; email of 2030 IST &amp; 0530 IST Akashwani weather report.</li> <li>• Upload of coastal, sea area, port and fishermen warning on RSMC &amp; Marine website.</li> <li>• Uploading &amp; checking of all 2100 IST bulletins on regional /HQ website.</li> <li>• Entries of F/c in Action A/C book.</li> <li>• Preparation &amp; uploading of Coastal/Sea area bulletin of Marine website based on model output.</li> </ul>
<p style="text-align: center;"><b>DUTY ASSISTANT 2 (SA/MET-A)</b></p>	<ul style="list-style-type: none"> <li>• Monitoring of satellite and radar images and reporting to duty officer.</li> <li>• District/Station NOWCAST SMS &amp; upload of 2200/0100 IST/0400 IST/0700 IST.</li> <li>• Prepare &amp; Send SMS of Thunderstorm/ Heavy rainfall/ Fishermen warnings.</li> <li>• To prepare &amp; upload updated District f/c &amp; regional f/c as &amp; when issued.</li> </ul>
<p style="text-align: center;"><b>DUTY ASSISTANT 3 (SA/MET-A)</b></p>	<ul style="list-style-type: none"> <li>• Collect and transmit 15z, 18z, 21z, 00z synops &amp; upper air observation through AMSS/Email.</li> <li>• Prepare and transmit 2100 IST Coastal Bulletin, High Sea Bulletin, FWB, inference weather bulletins.</li> <li>• Attend public phone calls of weather-related information &amp; reply them.</li> <li>• Prepare &amp; email Akashwani Vadodara,Rajkot,Bhuj bulletins.</li> <li>• Upload press release, IBF or any other bulletin as directed by Duty Officer.</li> </ul>
<b>GENERAL/OPERATIONAL DUTY</b>	
<p style="text-align: center;"><b>GDWR SEAT</b></p>	<ul style="list-style-type: none"> <li>• Preparation of daily Temp. Register with Max. &amp; Min. temp of 72 stations for temperature forecast.</li> <li>• Preparation of daily rainfall register of approx. 72 stations.</li> <li>• Updating of daily R/f register for rainfall records.</li> </ul>

	<ul style="list-style-type: none"> <li>• GDWR / IDWR data entries, departure and rainfall totals calculation.</li> <li>• Coordination with Rainfall analysis seat and FMO Section for daily rainfall data of block level stations.</li> <li>• Preparation of Regional Daily Weather Report.</li> <li>• Preparation &amp; dissemination of Akashwani Ahmedabad bulletin.</li> <li>• Preparation of QGIS map for rainfall forecast, realised weather (maximum temperature, minimum temperature and realised rainfall) &amp; share on various social media.</li> </ul>
<b>DUTY ASSISTANT</b>	<ul style="list-style-type: none"> <li>• Pre-Cyclone exercise work &amp; preparation of Cyclone /severe weather event reports.</li> <li>• Section all File/correspondence work – both Technical &amp; Administrative.</li> <li>• Correspondence with user agencies like State Government and Private Companies in all weather-related matters.</li> <li>• Maintaining of register with inward and outward entries.</li> <li>• Maintaining of CL / RH / C OFF register of Officers and Staff of section.</li> <li>• Maintaining Stock, Telephone, Hindi letter etc. register.</li> <li>• Performing Duty Assistant (Operational duty) as &amp; when required.</li> <li>• Preparation of OTA statement of section Staff.</li> <li>• Preparation and sending of monthly reports like Progress reports, Disaster weather events etc.</li> <li>• Uploading of weekly weather report, extended range forecast etc.</li> <li>• Daily duty arrangement &amp; leave management of section officials.</li> <li>• ACR, ATR &amp; AMT related work.</li> <li>• Pre-Cyclone exercise work &amp; preparation of Cyclone /severe weather event reports.</li> <li>• Preparation of VVIP forecast-related work.</li> <li>• Any other work allotted by the Director In-charge.</li> </ul>
<b>Duty Officer</b>	<ul style="list-style-type: none"> <li>• Monthly Verification of local forecast (14 stations).</li> <li>• Monthly Verification of Subdivision forecasts (Distribution &amp; Intensity)</li> <li>• Monthly Verification of Nowcast issued – 8 stations</li> <li>• Section all File/correspondence work – both Technical &amp; Administrative.</li> <li>• Any other extra work allotted by the Director In-charge as and when required.</li> </ul>
<b>Multi-Tasking Staff (MTS)</b>	<ul style="list-style-type: none"> <li>• Upkeep of section &amp; its infrastructure.</li> <li>• Arranging action book A/B/C for weather data entry</li> <li>• Involved in file movement of the section to all sections of RMC/seats.</li> <li>• Arrangement of forecast registers/books for various entries.</li> <li>• Any section-related duties assigned by the Director/Duty Officer/Duty Assistants.</li> </ul>

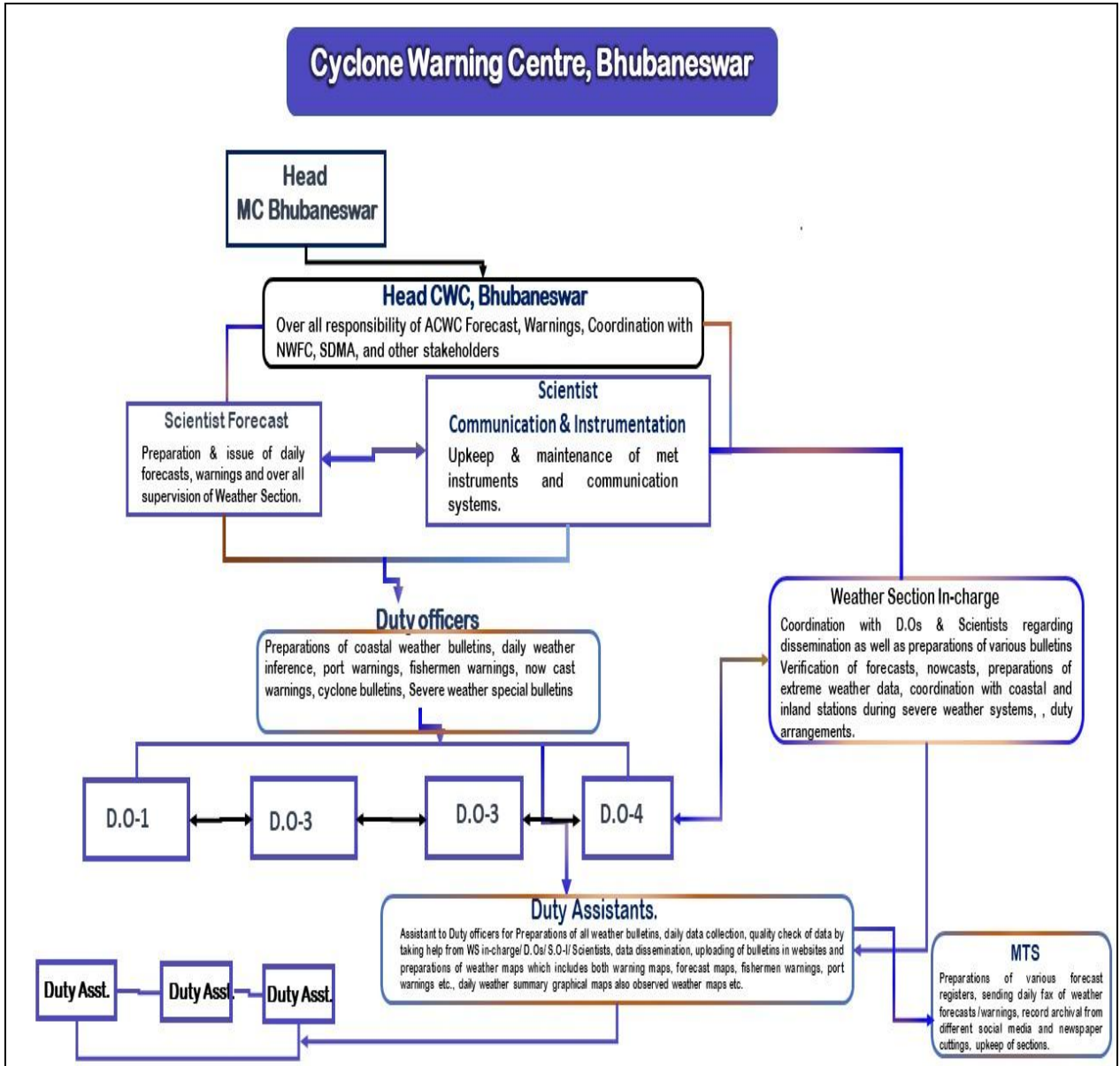
**DETAILS OF WEATHER BULLETINS ISSUED:**

S. N.	Name of Bulletin	Content	Time of Origin (IST)	Validity	Frequency	Mode of Dissemination
1	Sea Area Bulletin	Wind, weather, visibility, sea condition of different area of sea along with general F/C over sea.	12:00 / 2100 IST	12 hours	2	E-mail
2	Coastal Bulletin	Wind, weather, visibility, sea condition of adjacent sea area along with specific F/C over adjacent sea area.	12:00 / 2100 IST for Daily one	12 hours	2	E-mail
5	Cyclone Bulletin	<p><b>Four Stage Warnings: Watch/Alert/Cyclone Warning:</b></p> <p>i. Cyclone Alert/ Cyclone Warning Bulletin No.</p> <p>ii. Date and Time of Issue:</p> <p>(iii) Information on cyclone:</p> <p>a. Current location &amp; intensity</p> <p>b. Forecast about movement</p> <p>c. Further intensification</p> <p>d. Direction of Movement</p> <p>f. Expected Landfall Area</p> <p>g. Expected Time of Landfall</p> <p>h. Forecast track &amp; intensity</p> <p>iv. Weather Warnings:</p> <p>a) District wise Rainfall</p> <p>b) District wise wind warning (Gale/squally wind)</p> <p>(c) Sea condition</p> <p>d) Storm surge warning</p> <p>(e) Fishermen Warning</p> <p>(f) Damage expected district-wise</p> <p>g) Action suggested</p> <p>h) Cyclone-related graphics</p> <p><b>Post landfall outlook:</b> (To be appended at the end of the Cyclone Bulletin issued 12 hrs before estimated landfall time)</p>	<p><b>Depression/Deep depression stage/:</b> 5 times a day based on 00, 03, 06, 12 and 18 UTC observations.</p> <p><b>Cyclone Stage:</b> 8 times a day based on 00, 03, 06, 09, 12, 15 18 and 21 UTC observations</p> <p><b>During landfall:</b> Issued hourly</p>	<p><b>Depression/Deep depression stage:</b> 5 times a day</p> <p><b>Cyclone Stage:</b> 3 hourly</p> <p><b>During landfall:</b> Hourly</p>	<p>a) Email</p> <p>b) Website upload</p> <p><a href="http://www.rsmcnewdelhi.imd.gov.in">www.rsmcnewdelhi.imd.gov.in</a></p> <p><a href="http://www.mausam.imd.gov.in">www.mausam.imd.gov.in</a></p> <p><a href="https://mausam.imd.gov.in/ahmedabad/">https://mausam.imd.gov.in/ahmedabad/</a></p>	

		Direction of movement of the cyclone after its landfall and adverse weather likely to be experienced in the interior areas.				
6	<b>Fishermen warning</b>	<p>Sea state &amp; wind conditions with advisory for fishermen are issued whenever the wind speed is expected to exceed 45 kmph (i.e. for squally weather, gales, strong monsoon and off shore winds) and state of sea very rough or above</p> <ol style="list-style-type: none"> <li>1. Date &amp; time of issue</li> <li>2. Validity period</li> <li>3. Warning for North and South Gujarat coast (up to 100 Km from coast) and Arabian Sea.</li> </ol>	<p>0530, 1330, 1730, 2130 hours IST</p> <p><b>Cyclone Period:</b> Every 3 hourly</p>	Validity Period: 5 days	<p>Issued 4 times/day during undisturbed weather.</p> <p>Every 3 hours during the cyclone period.</p>	<p>a) Email b) Website upload <a href="http://www.rsmcnewdelhi.imd.gov.in">www.rsmcnewdelhi.imd.gov.in</a> <a href="http://www.mausam.imd.gov.in">www.mausam.imd.gov.in</a> <a href="https://mausam.imd.gov.in/ahmedabad/">https://mausam.imd.gov.in/ahmedabad/</a> c) Social media</p>
7	<b>Port Warning</b>	<ol style="list-style-type: none"> <li>i. Date and Time for Issue</li> <li>ii. Warning issued about disturbed weather likely to affect their ports.</li> <li>iii. Current location &amp; intensity Forecast about movement Further intensification Direction of Movement Expected Landfall Area Expected Time of Landfall</li> <li>iv. Advice for hoisting Storm Warning Signals</li> </ol>	<p>Issued twice a day based on 0300 and 1200 UTC in case of distant disturbances,</p> <p>3 times a day based on 0300, 1200 and 1800 UTC in case of squally weather likely over port</p> <p>In case of cyclone warning for the port. based on 0000, 0300, 0600, 1200 and 1800 UTC</p>		<p><b>Undisturbed Weather</b> : Twice a day</p> <p><b>Disturbed weather:</b> 3 times a day in case of squally weather likely over port.</p>	<p>a) Email b) Website upload <a href="http://www.rsmcnewdelhi.imd.gov.in">www.rsmcnewdelhi.imd.gov.in</a> <a href="http://www.mausam.imd.gov.in">www.mausam.imd.gov.in</a> <a href="https://mausam.imd.gov.in/ahmedabad/">https://mausam.imd.gov.in/ahmedabad/</a> c) AMSS</p>



## CHARTER OF DUTIES/RESPONSIBILITIES Cyclone Warning Centre (CWC), Bhubaneswar



### Cyclone Warning Centre (CWC)/MC Bhubaneswar

**Cyclone Warning Centres (CWC)** takes care of the cyclone warning services as well as marine weather services, as per their area of responsibility. Forecasts and warning services for Odisha coasts. This centre issues coastal area bulletins, Port warning and Fishermen warning for Odisha coasts and deep sea areas attached to this coast.

#### **Duties of Director/In-Charge (RWFC/ACWC)**

- ✚ Act as section head of CWC/MC Bhubaneswar.
- ✚ Perform administrative/technical duties and supervise the works of officers/staff under their control.
- ✚ Briefing on and participating in the daily video conference with headquarters to discuss weather over Odisha and Odisha coasts.
- ✚ Looking after the preparation and issuing of various types of forecasts, including city forecasts, local area forecasts, regional forecasts, district-level forecasts, and warnings for adverse weather conditions.
- ✚ Act as the contact person for different stakeholders.
- ✚ Act as liaison officer with other organizations.

#### **Duties of Scientists (I and II)**

- ✚ Analysis of weather charts, other observations, model guidance and preparation of district level forecasts for the Odisha state as well as Odisha coasts.
- ✚ Briefing and participating in the daily video conference with all forecasting centres of IMD to discuss weather over Odisha state as well as Odisha coasts and forecasts over the region.
- ✚ Looking after the preparation and issuing of various types of forecasts, including city forecasts, local area forecasts, regional forecasts, district-level forecasts, and warnings for adverse weather conditions.
- ✚ Overall supervision of the section in issuing weather-related forecast warnings and bulletins.
- ✚ Research and Development
- ✚ Training and capacity building

DESIGNATION	CHARTER OF DUTIES / RESPONSIBILITIES FOR CYCLONE AND MARINE WEATHER SERVICES
<b>Duty Officer -I (operational duty)</b>	<ul style="list-style-type: none"> <li>• Assisting the Class 1 officer to prepare city forecast for 39 cities</li> <li>• To analyse of all synoptic surface charts, satellite images and save them on daily basis.</li> <li>• Preparation of coastal weather bulletins, Fishermen warning and Port warnings using the weather observations, weather</li> </ul>

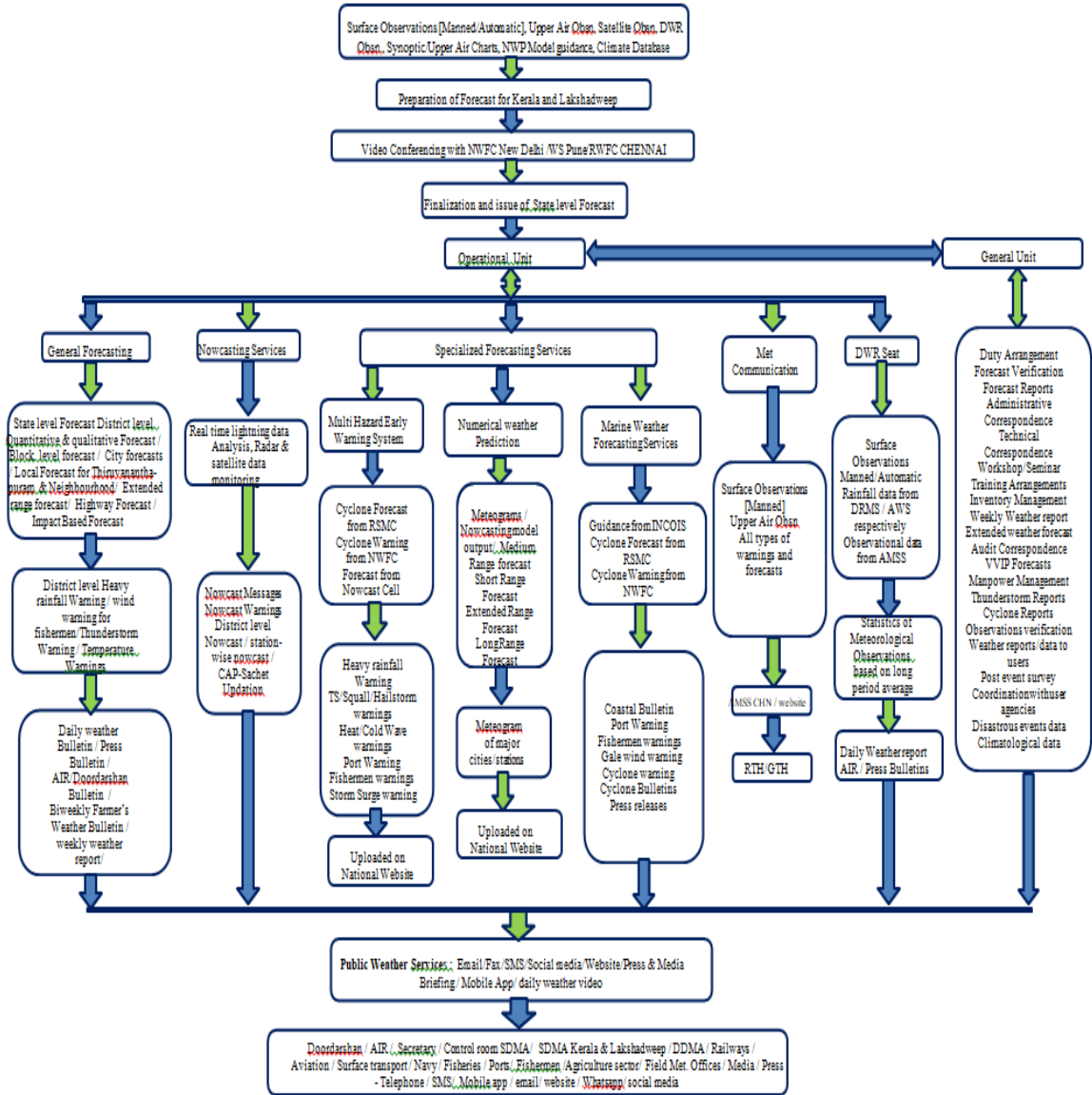
	<p>models, satellite imagery and INCOIS wave model.</p> <ul style="list-style-type: none"> <li>• Looking into the different weather web sites &amp; Synergies model</li> <li>• Preparation of Weather inference, Farmer Weather Bulletins, Issuing the weather forecast to various organizations e.g. Port Authorities, State Government, Municipal Corporation, Navy Met., Farmers, Fisheries dept., All India Radio, DoorDarshan.</li> <li>• Preparation of weekly weather reports, weekly special distribution.</li> <li>• Preparation of Nowcast warnings in consultation with Scientist/Forecasting Officer.</li> <li>• Preparation of cyclone bulletins in consultation with Scientist/Forecasting Officer.</li> <li>• Checking all weather website in connection with forecasting to keep update &amp; using synergy data for assisting Director CWC in routine forecast.</li> </ul>
<b>MORNING DUTY (0800 IST TO 1400 IST)</b>	
<b>DUTY ASSISTANT - I (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• 03Z/06z SYNOP entry in Local f/c Register and Cloud plotting.</li> <li>• Temperature, Relative Humidity (RH) and rainfall entries of 03z/06z in Local forecast register.</li> <li>• Sending Minimum temperature &amp; Rainfall by SMS to user agencies.</li> <li>• Normal departure entries with rainfall in seasonal and annual totals &amp; web upload.</li> <li>• Updation of Observation Register entries with temperature, Relative Humidity (RH), wind in Local register.</li> <li>• Preparation and e-mail of 1300 IST Coastal weather bulletin, Fishermen/Port/Cyclone/Thunderstorm/Heavy Rainfall/cyclone warnings,/ All INDIA Radio Bulletins/ Highway Forecast/ Local forecast for Bhubaneswar etc.</li> <li>• Uploading &amp; checking of all 1300 IST bulletins on regional/HQ website. Entries of F/c, met.</li> <li>• Preparation of block level forecast from city forecast and updating it in SDMA website.</li> </ul>
<b>EVENING DUTY (1400 IST TO 2000 IST)</b>	
<b>DUTY ASSISTANT - II (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• Uploading of coastal, port and fishermen warning bulletins on RSMC website.</li> <li>• Uploading of coastal, sea area, port and fishermen warning bulletins on Marine website.</li> </ul>

	<ul style="list-style-type: none"> <li>• Preparation &amp; uploading of Costal bulletin of Marine website based on model output.</li> <li>• Maximum temperature Entries 12z for Akashwani/Doordarshan bulletins.</li> <li>• Preparation &amp; dissemination of Akashwani/Doordarshan weather report.</li> <li>• Part preparation of costal, Port &amp; Fishermen warning</li> <li>• Preparation &amp; uploading of 1730 IST Port &amp; Fishermen warning.</li> <li>• Preparation &amp; uploading of 2000 IST Local forecast.</li> <li>• 39 city maximum temperature with departures entry.</li> <li>• Monitoring of satellite and radar images and reporting to duty officer.</li> <li>• Archival of various weather charts (06/09z charts, satellite images, Upper Air (U/A) wind and Model analysis charts.</li> <li>• Sending Maximum temperature and rainfall SMS to user agencies</li> <li>• District/Station level NOWCAST SMS &amp; upload of 1600/1900 IST.</li> <li>• Rainfall 12 UTC entry</li> <li>• Send SMS of Thunderstorm/ Heavy rainfall/ Fishermen warnings.</li> <li>• To prepare &amp; upload updated District f/c &amp; regional f/c as &amp; when issued during duty time.</li> </ul>
<b>General Duty (1000 IST TO 1700 IST)</b>	
<b>DUTY ASSISTANT -III (SA/MET-A)</b>	<ul style="list-style-type: none"> <li>• Preparation of Daily weather summary based on observed weather.</li> <li>• Disseminations of Daily weather summary in various platform like Facebook, twitter, WhatsApp group of SDMA, Media and different other stake holders.</li> <li>• Preparations observed weather graphics</li> <li>• Preparations of bulletins for urban city forecast.</li> <li>• Preparation &amp; upload of forecast and warning graphics.</li> <li>• Preparation &amp; upload of forecast and warning graphics for cyclone.</li> <li>• Helping Duty Asst-1 &amp; Duty Asst-2 in their routine work</li> </ul>
<b>Multi-Tasking Staff (MTS)</b>	<ul style="list-style-type: none"> <li>• Preparation of 13 registers for daily weather forecast every month.</li> <li>• Sending daily fax of forecasts/warnings to / Railway / Ports / Fisheries / Collector offices / AIR/Doordarshan/ other user agencies etc.</li> </ul>

	<ul style="list-style-type: none"><li>• Keeping all forecast/bulletins/warnings etc. in records for archival.</li><li>• Keeping newspaper cut-outs from various newspapers for office records.</li><li>• Upkeep of section &amp; its infrastructure.</li><li>• Involved in file movement of section to all sections of MC/seats.</li><li>• Collecting/faxing/recording of additional forecasts/bulletins/warnings issued during bad weather periods.</li><li>• Arrangement of forecast registers/books for various entries. Any section related duties assigned by Director/Duty Officer/Duty Assistants.</li></ul>
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# CHARTER OF DUTIES/RESPONSIBILITIES Cyclone Warning Centre (CWC), THIRUVANANTHAPURAM

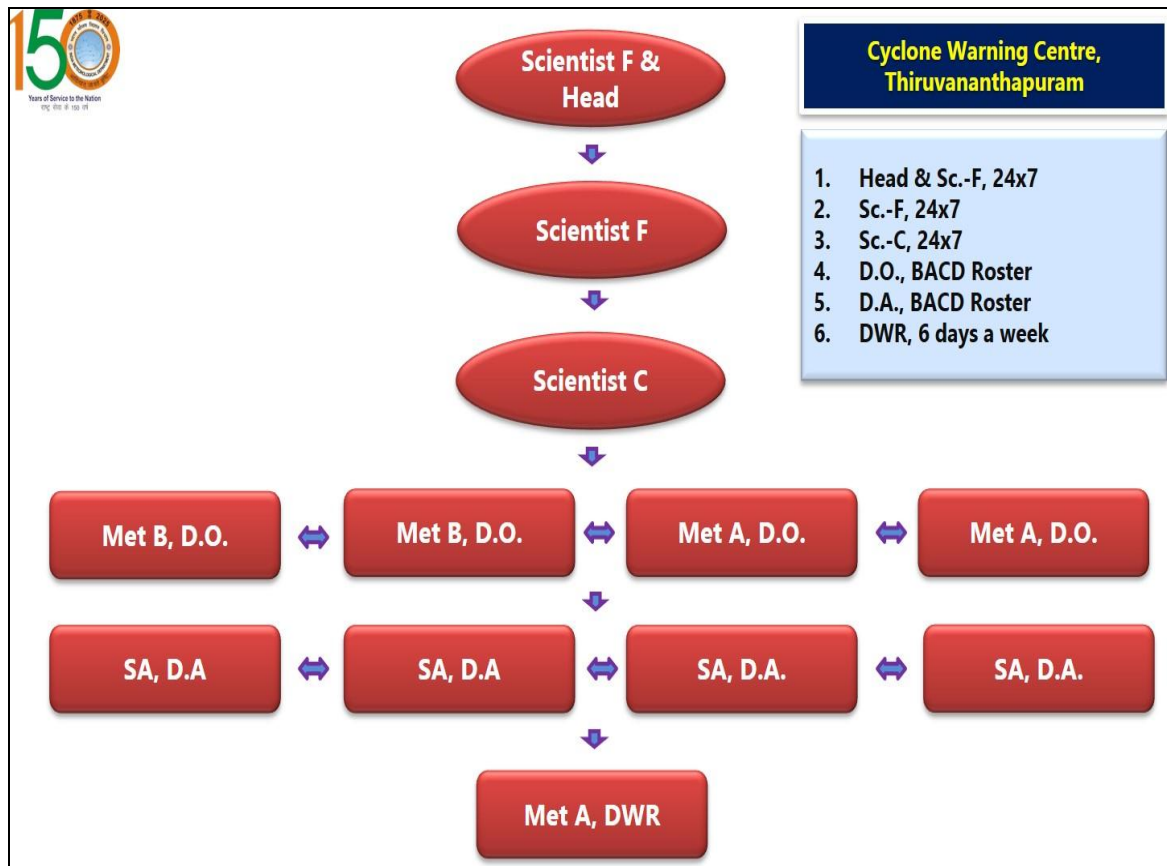
CWC THIRUVANANTHAPURAM (NON AVIATION)/STATE WEATHER FORECASTING CENTRE - ACTIVITY FLOWCHART



## CHARTER OF DUTIES/RESPONSIBILITIES

### Cyclone Warning Centre (CWC), THIRUVANANTHAPURAM

Cyclone Warning Centre (CWC) Thiruvananthapuram take care of the cyclone warning services of Kerala and Karnataka states as well as for the Lakshadweep islands. This Centre issues coastal area bulletins, Fishermen and Port warning for the said states and islands.



<b>Duties of Head, Meteorological Centre (MC), Thiruvananthapuram</b>
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- (i) Act as section head of CWC Thiruvananthapuram
- (ii) Perform administrative/technical duties and supervise the works of officers/staff under their control.
- (iii) Briefing on and participating in the daily video conference with headquarters to discuss weather over Kerala and Lakshadweep.
- (iv) Looking after the preparation and issuing of various types of forecasts, including city forecasts, local area forecasts, regional forecasts, district-level forecasts, and warnings for adverse weather conditions.
- (v) Act as the contact person for different stakeholders.
- (vi) Act as liaison officer with other organizations.

<b>Duties of Scientists (I and II)</b>
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- (i) Analysis of weather charts, other observations, and preparation of forecasts for Kerala state and the coastal areas of Kerala, Karnataka and over Lakshadweep area.
- (ii) Briefing on and participating in the daily video conference with headquarters to discuss weather over Kerala and Lakshadweep.
- (iii) Looking after the preparation and issuing of various types of forecasts, including city forecasts, local area forecasts, regional forecasts, district-level forecasts, and warnings for adverse weather conditions.
- (iv) Overall supervision of the section in issuing weather-related forecast warnings and bulletins.

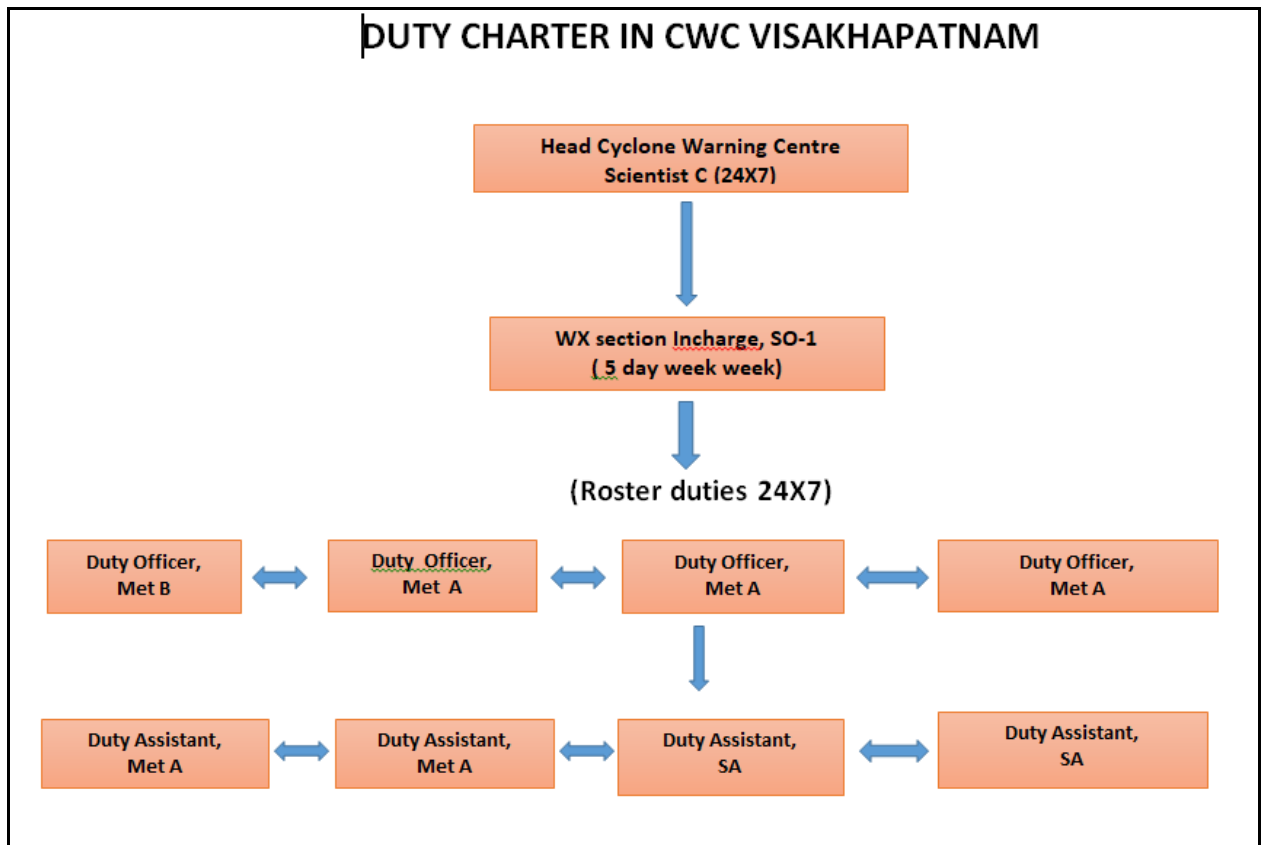
DESIGNATION	CHARTER OF DUTIES / RESPONSIBILITIES
<b>Duty Officer</b> <b>(operational duty)</b>	<ul style="list-style-type: none"> <li>• Preparation of city forecasts and uploading in MC website.</li> <li>• To analyze of all synoptic surface charts</li> <li>• Preparation of spatial distribution &amp; proposed forecast and sending to RMC Chennai.</li> <li>• Preparation and Uploading of coastal bulletin, fisherman warnings and port warning bulletins on RSMC and MC website.</li> <li>• Uploading of coastal, port and fishermen warning bulletins on Marine and RSMC website.</li> <li>• Preparation of Weather inference, Issuing the weather forecast to various organizations e.g. Port Authorities, State Government, Municipal Corporation, Fisheries dept., All India Radio, Door Darshan.</li> <li>• Updating multi hazard warning for all Kerala and Lakshadweep stations.</li> <li>• Updating relevant weather phenomena in MC website.</li> </ul>



	<ul style="list-style-type: none"> <li>• Updating Nowcast warning and heavy rainfall warnings in CAP integrated alert system.</li> <li>• Preparation of nowcast warnings in consultation with Scientist/Forecasting Officer and sending to SDMA and other stakeholders.</li> <li>• Preparation of cyclone bulletins in consultation with Scientist/Forecasting Officer.</li> <li>• Checking all weather website in connection with forecasting to keep updated.</li> <li>• During night duties working as Nodal Officer.</li> <li>• Preparation &amp; Uploading of district f/c, regional f/c &amp; highway forecast</li> <li>• Preparation and sending of VVIP/VIP Forecast as and when necessary.</li> <li>• Duty Arrangement of Weather Section Staff.</li> </ul>
<b>DUTY ASSISTANT</b>	<ul style="list-style-type: none"> <li>• Taking synoptic observations.</li> <li>• Analysis and tabulation of Autographic Charts and preparation of Surface Climate.</li> <li>• Collect and transmit synops of all stations &amp; upper air Obs. through AMSS/Email.</li> <li>• Prepare and transmit Inference at 1100, 2000 IST.</li> <li>• Attend public phone calls of weather related information &amp; reply them.</li> <li>• Preparation &amp; dissemination of cyclone bulletins.</li> <li>• Carrying out RSRW Ascents at 0430 and 1630 IST and their data dissemination through AMSS and by Mail.</li> <li>• Carrying out PB Ascents at 1030 and 2230 IST and their data dissemination through AMSS and by Mail.</li> <li>• Preparation, dissemination and uploading of Impact-based Forecast for Kerala and Lakshadweep.</li> <li>• Preparation, dissemination and uploading of Extended Range Forecast for Kerala and Lakshadweep.</li> <li>• Preparation and dissemination of Special Weather Bulletin.</li> <li>• Dissemination of VVIP and VIP Forecast as and when necessary.</li> <li>• Briefing visitors and school/college students about various activities of IMD.</li> </ul>
<b>DWR SEAT</b>	<ul style="list-style-type: none"> <li>• Collection of rainfall data from state govt./agencies, updating data in mkrain, preparation of daily rainfall summary register and other distribution charts of approx. 200 stations and AWS/ARG data for rain forecast</li> </ul>

	<ul style="list-style-type: none"><li>• Preparation of daily Temp. Register and temperature Summary with Max. &amp; Min. temp of Observatories and PT stations for temperature forecast.</li><li>• Preparation of daily TS/Storm report.</li><li>• Updating of daily R/f register and mkrain for rainfall records.</li><li>• Preparation of weekly, monthly and seasonal rainfall statistics after updating rainfall data.</li><li>• DWR/IDWR data entries, departure and rainfall total calculation.</li><li>• Coordination with DRMS Section for daily rainfall data of state RG stations.</li><li>• Preparation of State Daily Weather Report.</li><li>• Preparation &amp; dissemination of weather reports to Akashwani and Media.</li><li>• Preparation of Press Bulletin and dissemination to media and state agencies/uploading.</li><li>• Preparation &amp; website upload of different daily met. Parameters and temperature anomalies charts, rainfall graph, SW&amp; NE performance graph, week-wise performance of monsoon etc.</li><li>• Preparation of products for preparing videos for Social media.</li><li>• Preparation of Malayalam press bulletin and action book.</li><li>• Calculation and supply of rainfall distribution for any specific period as and when request receive over phone/mail</li><li>• Updating normal of Temperature and Rainfall data to the database.</li></ul>
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## CHARTER OF DUTIES/RESPONSIBILITIES Cyclone Warning Centre (CWC), VISAKHAPATNAM



**CYCLONE WARNING CENTRE,VISAKHAPATNAM**  
**CHARTER OF DUTIES/RESPONSIBILITIES**

Cyclone Warning Centre (CWC) Visakhapatnam takes care of the cyclone warning services of Andhra Pradesh state. This Centre issues coastal area bulletins, Fishermen and Port warning for the state.

**Duties of Head CWC Visakhapatnam**

- (i) Act as section head of CWC Visakhapatnam
- (ii) Perform administrative/technical duties and supervise the works of officers/staff under their control.
- (iii) Briefing on and participating in the daily video conference with headquarters to discuss weather over Andhra Pradesh.
- (iv) Looking after the preparation and issuing of various types of forecasts, including city forecast, local area forecasts, regional forecasts, and warnings for adverse weather conditions.
- (v) Act as the contact person for different stakeholders.
- (vi) Act as liaison officer with other organizations.

**Duty Officers (I)**

- (i) Analysis of weather charts, other observations, and preparation of forecasts for Coastal Andhra Pradesh.
- (ii) Briefing on and participating in the daily video conference with headquarters to discuss weather over Andhra Pradesh.
- (iii) Looking after the preparation and issuing of various types of forecasts, including city forecasts, local area forecasts, and warnings for adverse weather conditions.
- (iv) Overall supervision of the section in issuing weather-related forecast warnings and bulletins.
- (v) Duty Arrangement of Weather Section Staff.
- (vi) Issuing of fishermen warnings daily Four times a day.
- (vii) Issuing of Coastal bulletins

**Duty Officers (II)**

- Preparation of Local forecasts.
- To analysis of all synoptic surface charts
- Preparation of Coastal districts proposed forecast and sending to MC Amaravati.
- Preparation and Uploading of coastal bulletin, fisherman warnings and port warning bulletins on RSMC, Mausam and CWC website.
- Uploading of coastal, port and fishermen warning bulletins on Marine and RSMC website.

- Preparation of Weather inference, Issuing the weather forecast to various organizations e.g. Port Authorities, State Government, Municipal Corporation, Fisheries dept., All India Radio, Door Darshan.
- Updating multi hazard warning for all Andhra Pradesh stations.
- Updating Nowcast warning and heavy rainfall warnings in CAP integrated alert system.
- Issuing of fishermen warnings daily Four times a day.
- Issuing of Coastal bulletins twice a day
- Preparation of Nowcast warnings in consultation with Scientist/Forecasting Officer and sending to SDMA and other stakeholders.
- Preparation of cyclone bulletins in consultation with Scientist/Forecasting Officer.
- Checking all weather website in connection with forecasting to keep updated.
- During night duties working as Nodal Officer.
- Preparation & Uploading of district f/c.
- Facilitating and sending of VVIP/VIP Forecast as and when necessary.

#### **Duty Assistant (I to IV)**

- Prepare and transmit Inference at 1330, 2030 IST.
- Attend public phone calls of weather related information & reply them.
- Preparation & dissemination of cyclone bulletins.
- Preparation, dissemination and uploading of Impact-based Forecast for Andhra Pradesh
- Preparation and dissemination of Special Weather Bulletin, press bulletin.
- Dissemination of VVIP and VIP Forecast as and when necessary.
- Briefing visitors and school/college students about various activities of IMD.
- Dissemination and Uploading of fishermen warnings, Port Warnings and coastal bulletins in Mausam, RSMC and CWC website.
- Routine and timely update of Nowcast bulletins issued by the duty officer. Sending them by mail/SMS to the disaster managers, media and other departmental official outposts. Update the Nowcast bulletins on social media platforms viz., Facebook, Twitter and Press and special weather bulletins.
- Printing of Surface, change and upper air charts and Plotting of required additional data.
- Update of weather log books of weather summary of the day in respect of CWC, Dega and Command Met offices.
- Preparation and Dissemination of local forecast to IMD officials, all India radio daily 4 times and specially for press at 12 UTC.
- Preparation and dissemination of Farmer weather bulletin.
- Preparation and dissemination of change chart daily twice.
- Entry of Waltair and airport's hourly METAR.