香港天文台
HONG KONG OBSERVATORY

Sustainability Report

Fiscal Year 2024 / 25

本報告目前僅備有英文版本。不便之處，敬請原諒。

Director's Message

> *"We are striving to ensure that everyone can be protected by early warnings, receive timely alerts on approaching extreme weather and be safeguarded from the escalating impacts of natural disasters."*

Dr. Chan Pak Wai, JP

This fiscal year brought rewarding milestones in the face of evolving demands. I would like to extend my sincere gratitude to all our current and former colleagues whose professionalism, dedication and innovative spirit have been instrumental in shaping a more sustainable future for the Hong Kong Observatory (the Observatory). Their tireless efforts enable us to protect lives, advance science and serve the community with excellence.

Technology continues to play a pivotal role in strengthening our forecasting capabilities and service delivery. In 2023 we piloted an AI weather-prediction model to support forecasters and improve tropical-cyclone track forecasts. Building on this progress, additional AI-based forecast products and upper-air charts were introduced on the "Earth Weather" webpage. The Observatory will continue to enhance the "Earth Weather" webpage this year with the addition of more computer model forecast products, including the forecast of chance of thunderstorms to facilitate the public to track weather changes more comprehensively.

Our radar and satellite imagery services have undergone substantial upgrades. The refresh of Fengyun-4B satellite images covering Western Asia has been increased from hourly to every 15 minutes. The 64 km low-level rainfall product now includes an additional layer at 2 km above sea level. Leveraging deep learning models, "All-day Visible" images are now generated to enhance nighttime weather monitoring. Additionally, aerosol optical depth imagery from the Republic of Korea's GK-2B satellite has been introduced to improve visibility monitoring over southern China and the northern part of the South China Sea. These advancements have enhanced our ability to monitor precipitation, visibility and atmospheric conditions across the region.

To further improve public access to weather information, our digital services continue to evolve. The "My Observatory" mobile application now offers district-level rainfall graphics, real-time weather data for the Greater Bay Area and voice-enabled "Dr Tin" chatbot.

Community engagement remains a priority. To mark World Meteorological Day on 23 March, we held an Open Day titled "Closing the early Warning Gap Together", showcasing decades of international collaboration and demonstrating how cutting-edge technology enhances public safety. For those unable to attend in person, a virtual tour was made available on the Hong Kong Observatory Open Day 2025 website, ensuring broader access to our mission and services.

The Observatory remains steadfast in its role as a model of scientific excellence, protecting lives and building a resilient, sustainable society. We will continue to leverage AI and advanced observation systems to enhance forecast services, expand digital and educational platforms that empower the public and deepen international partnerships to strengthen global climate resilience. The public's valuable feedback fuels our continuous improvement, and I am confident that, together, we can close the early warning gap and secure a build a safer future for Hong Kong and the world.

Dr. Chan Pak Wai
Director of
the Hong Kong Observatory

2024 Performance at a glance

Department Overview

Manned Offices	Weather Stations	Approved Establishment as at 31 March 2024
4	>200	372

Service Achievements

Weather Service

100%

Hourly local weather report dissemination with first 10 minutes of each hours

77%

Forecasts perceived as accurate by the public

>91%

Forecast perceived as accurate by objective means, ship captains, airline operators

Time Standard, Geophysical, Astronomical and Climatological Information Services

0.01

Microseconds per day

Time standard accuracy

100%

Written requests for Climatological information responded within 10 working-days

100% Data capture rate

Geophysical, meteorological and oceanographic information

Radiation Monitoring and Assessment

99.9%

Data availability of environmental radiation monitoring network

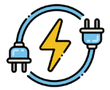
Media

> 168

billions

Views of website and application

Green Achievements



- 9.7%

Electricity Consumption compared to FY18/19

- 40.3%

Paper Consumption per capita compared to FY19/20

Contents

Organisation

The Observatory is organised into four branches: Forecasting and Warning Services, Aviation Weather Services, Radiation Monitoring and Assessment, and Development, Research and Administration. These branches comprise a total of 23 divisions.

Development, Research and Administration

1 Climate Information Services and Tropical Cyclone Studies
2 Geophysics, Time and Marine Meteorological Services
3 Climate Forecast Services and Climate Change Studies
4 Corporate Communication, Publicity and Media Services
5 Annex Block Project
6 Quality Management and International Cooperation
7 Administration Services

Forecasting and Warning Services

1 Forecast Operation
2 Service Delivery
3 Forecast Development
4 Forecast Systems

Aviation Weather Services

1 Aviation Meteorological Innovative Solutions
2 Aviation Meteorological Data Analytics
3 Aviation Weather Forecast and Warning Services
4 Radar and Satellite Meteorology
5 Three Runway System Project
6 International Aviation Meteorological Collaboration
7 Aviation Meteorological Impact Assessment

Radiation Monitoring and Assessment

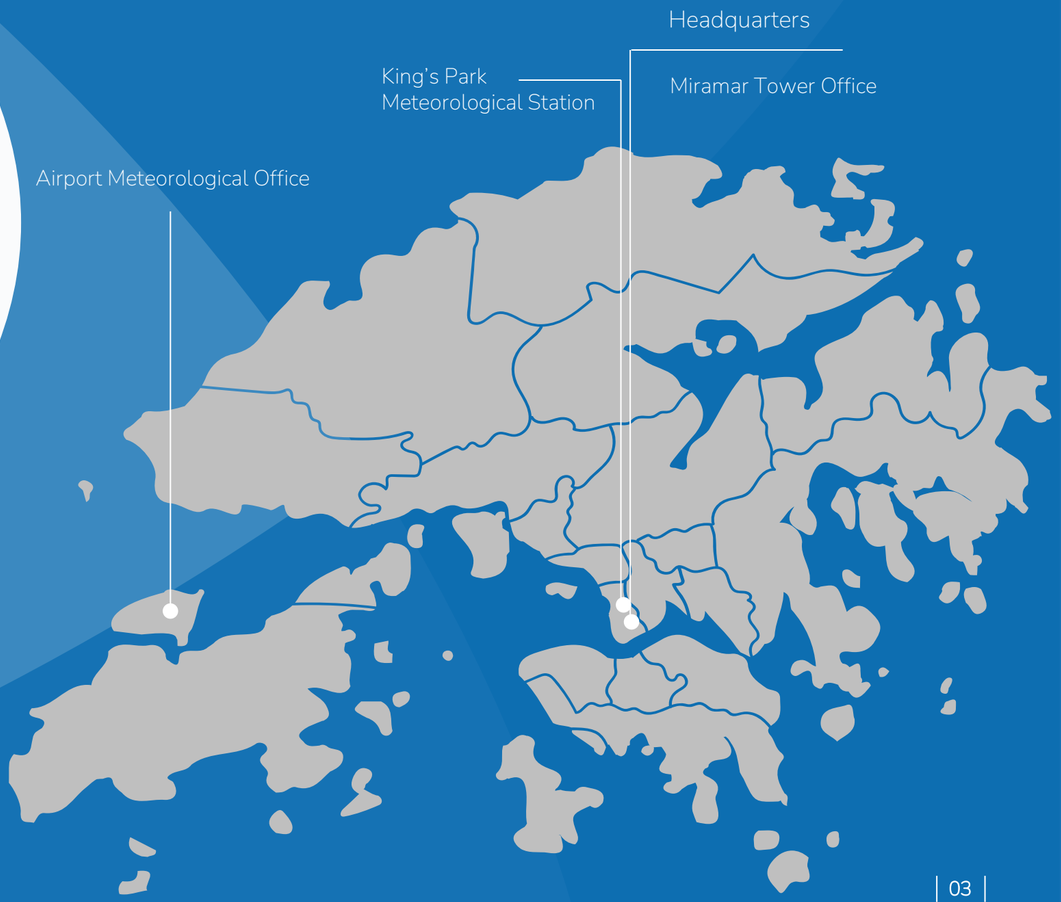
1 Environmental Radiation Monitoring and Meteorological Measurements
2 Training and Exercises
3 Weather and Radiation Observation Networks
4 Emergency Preparedness and Assessment
5 Information Technology Management

About the Department

The Hong Kong Observatory, established in 1883, is one of the departments under the Environment and Ecology Bureau of the government of Hong Kong Special Administrative Region. The Observatory is responsible for monitoring and forecasting weather, as well as issuing warnings on weather-related hazards.

The Observatory also monitors and assesses radiation levels in Hong Kong, and provides other climate and geophysical services to meet the needs of the public, shipping, aviation, industrial and engineering sectors. With governance at international standard, the Observatory stands as one of the leading meteorological organisations in the world.

Four manned offices



Outstations

The Observatory operates more than two hundred weather stations, including radar stations, automatic weather stations, rain gauges, automatic weather buoy stations, automatic wind stations, anemometers and tide stations etc.

Each station is strategically positioned to ensure comprehensive coverage across different regions.

New Tai Po Kau Tide Gauge Station

The reconstruction of the Tai Po Kau Tide Gauge Station, originally built in the 1960s, was completed by the Observatory in collaboration with the Civil Engineering and Development Department, the Architectural Services Department, and the Hong Kong Institute of Architects. The project was initiated through a design competition held in 2020, with the winning concept titled “Revealing the Tip of Iceberg”, symbolizing the impact of global warming.

The newly rebuilt station commenced official operation in September 2024, serving as a key facility for monitoring tide levels in Tolo Harbour. It features an enhanced structural design, including increased interior headroom to accommodate tide measurement equipment at elevated positions for improved data accuracy.

Beyond tracking regular tidal variations, the station supports astronomical tide prediction, storm surge assessment for Tai Po and Sha Tin districts, and climate change monitoring related to sea level rise. It is also equipped with an anemometer to provide real-time weather data within the harbour.

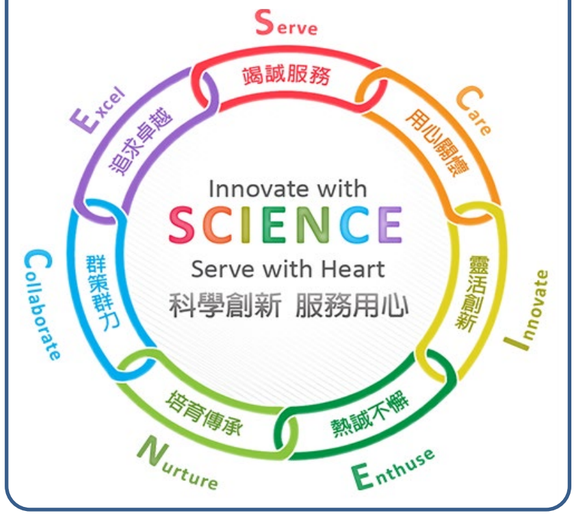
Management Approach

Vision

Be a model of excellence in protecting lives and building together a better society through science.

Departmental Video

Values

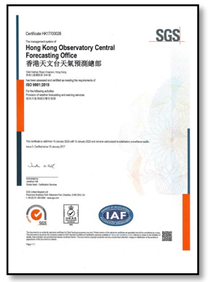


Mission

To provide people-oriented quality services in meteorology and related fields, and to enhance the society's capability in natural disaster prevention and response, through science, innovation and partnership.

Quality Management

In pursuit of quality management as advocated by the World Meteorological Organization (WMO), the Observatory has been certified to the International Organization for Standardisation ISO 9001 Quality Management Systems indicating international recognition of quality management of the following services. In addition, the Observatory completed the scope extension of ISO/IEC 20000-1:2018 certification of Information Technology (IT) service management system, affirming the Observatory's dedication to high-quality IT service management.



Public Weather Services

Aviation Weather Services

Radiation and Meteorological Measurement Services

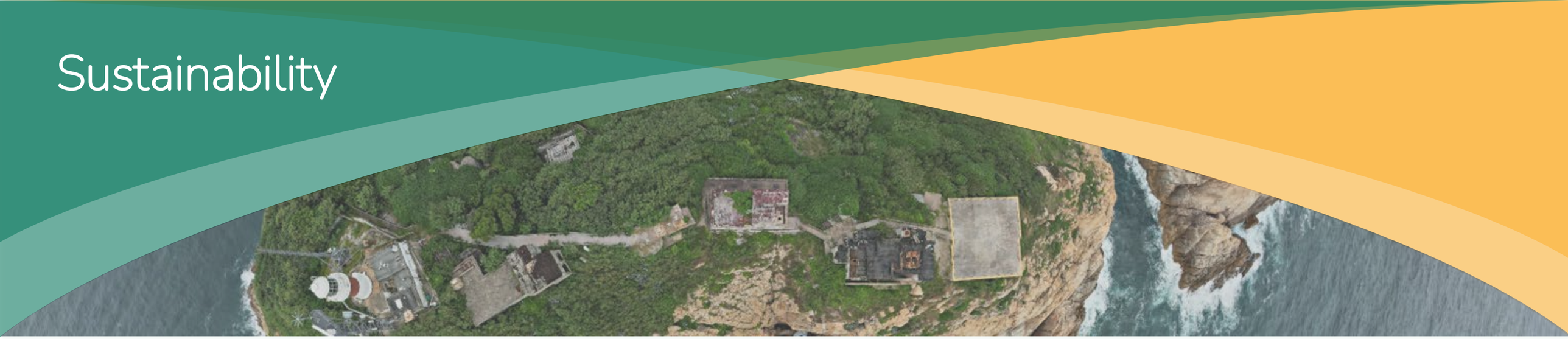
Ambient Gamma Radiation Monitoring Service

Automatic Regional Meteorological Measurement Services

Tate's Cairn Weather Radar System Radar Imagery Services

Information Technology Service Management System

Sustainability



About this Report

This report is prepared annually to meet the needs of:

- the general public receiving the Observatory information via the media, telephone, mobile devices or by browsing the website of the Observatory;
- all Government Bureaux and Departments;
- visitors to the Observatory; and
- other users of the Observatory services including those from the aviation, shipping, business, industry, education, engineering, public utility and tourism sectors.

The Sustainability Report for fiscal year 2024-25 of Hong Kong Observatory summarises our efforts and achievement in sustainable development over the past year. The report was compiled with reference to the Global Reporting Initiative (GRI) Standards, covering information on material sustainability aspects of the Observatory. The period covered is from 1 April 2024 to 31 March 2025, unless otherwise specified.

This report is divided into three main parts as follows:

- the sustainability policies adopted by the Observatory and its achievement in support of sustainable development during the fiscal year;
- the staff development related matters and its achievement during the fiscal year; and
- the activities and initiatives of the Department during the fiscal year.

Environmental Management

Environmental Policy

The Observatory has put in place a departmental environmental policy that meets the guidelines issued by Environmental Protection Department and other government departments, such as the Electrical and Mechanical Services Department and the Architectural Services Department. Our Sustainability Policy covers environmental, workplace well-being, health and safety, and community engagement issues. We strive to improve the environment by:

- conserving bio-diversity and preserving natural habitat within the Observatory Headquarters and its outstations;
- developing a culture of environmental conservation among staff;
- adopting the best practices in green housekeeping;
- complying with requirements of relevant environmental protection ordinances; and
- promoting public awareness of environmental issues.

Environmental Management System

The Observatory has set up the following committees / working groups to formulate, monitor and implement environmental policy at the Observatory:

Working Group on Energy and Environment

The Working Group on Energy and Environment, established in 2006, aims to collect and implement green ideas from staff and promote green awareness among all levels in the Observatory. It is chaired by Assistant Director (Development, Research and Administration), with staff from different grades/ranks as members.

Buildings, Grounds and Accommodation Committee

The Buildings, Grounds and Accommodation Committee, chaired by Assistant Director (Development, Research and Administration), evaluates the utilisation of space and all major civil and building services works carried out at the Observatory premises and grounds to minimise the impact on the environment.

Energy Conservation

The Observatory has implemented various energy-saving measures, including but not limited to:

Adopting clean energy sources such as solar power, wind power, and self-produced Direct Methanol Fuel Cells to support the operation of automatic weather stations and radiation monitoring stations

Replacing outdated equipment units with energy-efficient models to reduce electricity consumption and enhance operational sustainability

RCx

Implementing the energy saving opportunities identified during the Retro-commissioning Programme to improve energy efficiency and performance

Maintaining a “Green Corner” intranet page to share green tips, guidelines and good practices with staff to promote energy-saving awareness

OFF

Using automatic circuit-break timers to switch off unnecessary electrical appliances after office hours, optimizing operating hours of lifts, and encouraging staff to use staircases instead of lifts for inter-floor movement

25.5°C

Setting the ambient office temperature to 25.5°C in summer months and switching off air-conditioning system in winter, wherever and whenever appropriate, by using electronic control panel

Solar panels in Kowloon Tsai Radar Station

Energy Saving Achievement

In alignment with the 2019 Policy Address, the Observatory established a target to achieve a 6% reduction in total electricity consumption by FY 2024/25, using FY 2018/19 as the baseline.

In FY 2024/25, the annual electricity consumption after normalisation was 4,800,984 units, a decrease of 530,144 units, representing a 9.6% reduction compared to the baseline year of 2018/19 (5,331,128 units). Together with the renewable energy initiatives, the observatory has achieved an overall 9.7% saving, successfully surpassing the established target.

Waste Management

Annual quantity of waste generated

≈ 131 380 L

Annual quantity of recycled waste

≈ 6750 Kg

To enhance waste reduction at source and promote recycling practices, the Observatory has implemented several waste management measures. These measures include:

- Implementing Electronic Recordkeeping System to reduce paper consumption;
- Placing recycling bins to every floor of the building to promote recycling;
- Adopting reusable tablewares at departmental functions, and refillable stationeries at daily operation;
- Banning the sales of beverage drinks packed in plastic bottles and tetra paks;
- Setting up shared printers to reduce the purchases of printers and toner cartridges;
- Collecting empty toners and inkjet cartridges of computer printers for recycling.

Air-Quality Management

Indoor Air Quality Certificate
室內空氣質素檢定證書

Excellent Class 卓越級

Valid period 有效日期 : 13 Sep 2024 to 到 12 Sep 2025

I hereby certify that the indoor air quality of the following location(s) has fully complied with the Excellent Class of the Indoor Air Quality Objectives.
本人證明下列地點的室內空氣質素完全符合「卓越級」室內空氣質素指標。

Name of building 建築物名稱 : Brothers Point Terminal Doppler Weather Radar Station 大欖角機場多普勒天氣雷達站
Address 地址 : Tai Lam Chung, Tuen Mun 屯門大欖涌
Certified location(s) 已檢定地點 : Office Area 辦公室

Name of competent examiner 合資格檢驗師姓名 : KO Wai Shan, Susan
IAQ Certificate Issuing Body 室內空氣質素證書簽發機構 : CMA Industrial Development Foundation Limited
Signature 簽署 :
Date of issue 簽發日期 : 12 Sep 2024
Certificate No. 證書編號 : 3689602202409(2023)

Organisation Chop 機構印鑑

Indoor Air Quality Certification Scheme for Offices and Public Places
辦公室及公眾場所室內空氣質素檢定計劃

Indoor Air Quality Information Centre 室內空氣質素資訊中心
環境保護署 Environmental Protection Department

Indoor Air Quality Certificate
室內空氣質素檢定證書

Good Class 良好級

Valid period 有效日期 : 03 Oct 2024 to 到 02 Oct 2025

I hereby certify that the indoor air quality of the following location(s) has fully complied with the Good Class of the Indoor Air Quality Objectives.
本人證明下列地點的室內空氣質素完全符合「良好級」室內空氣質素指標。

Name of building 建築物名稱 : Hong Kong Observatory - 1883 Building 香港天文台 1883 大樓
Address 地址 : 134A Nathan Road, Tsim Sha Tsui 尖沙咀彌敦道 134A 號
Certified location(s) 已檢定地點 : G/F 地下

Name of competent examiner 合資格檢驗師姓名 : KO Wai Shan, Susan
IAQ Certificate Issuing Body 室內空氣質素證書簽發機構 : CMA Industrial Development Foundation Limited
Signature 簽署 :
Date of issue 簽發日期 : 23 Dec 2024
Certificate No. 證書編號 : 8884692202412(2023)

Organisation Chop 機構印鑑

Indoor Air Quality Certification Scheme for Offices and Public Places
辦公室及公眾場所室內空氣質素檢定計劃

Indoor Air Quality Information Centre 室內空氣質素資訊中心
環境保護署 Environmental Protection Department

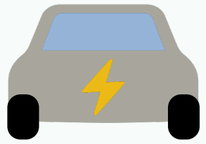
Indoor Air Quality Certification Scheme

To uphold a healthy work environment and maintain high indoor air quality standards, the Observatory continues its active participation in the Indoor Air Quality (IAQ) Certification Scheme.

In FY 2024/25, the Brothers Point Terminal Doppler Weather Radar Station retained its “Excellent” class certification, while the Observatory Headquarters buildings, along with the Miramar office and King’s Park office, continued to hold “Good” class certifications. These consistent results reflect the Observatory’s ongoing commitment to providing a safe and comfortable workplace through sustained efforts in air quality management.

Green Transport

As part of our ongoing efforts to reduce the carbon footprint and promote environmental sustainability, the Observatory is planning to replace its departmental vehicles with electric vehicles (EVs).



Bio-diversity

The Observatory continued its commitment to bio-diversity conservation and habitat protection at its headquarters site. The woodland located within the premises continues to be one of the few remaining semi-natural woodlands in Kowloon, serving as an important ecological asset in the urban environment.

This woodland provides essential habitat for a variety of resident bird species, including the Spotted Dove, Chinese Bulbul, Crested Bulbul, Magpie Robin, Black-necked Starling, and White-eye. These species are regularly observed throughout the year and contribute to the ecological diversity of the site.

During spring and autumn migration periods, the woodland also functions as a temporary stopover for migratory birds such as flycatchers and thrushes. Notably, certain migratory species—including the Brown Flycatcher, Blackbird, and Grey-backed Thrush—have been observed overwintering within the site, indicating the suitability of the habitat for extended seasonal use.

In parallel, the Observatory maintained a structured tree management program. Certified arborists conducted systematic inspections in 2024/25 to ensure tree health and safety, removing diseased or unstable branches and promoting vitality. These efforts also helped reduce potential hazards in the vicinity and supported the long-term sustainability of the site's green infrastructure.

Through ongoing efforts in habitat conservation and tree care, the Observatory will continue to play a supportive role in promoting bio-diversity within its urban setting.

Tree crown reduction

New aerial roots diversion

Green Synergy

Green Low Carbon Day 2024

As part of its core values, the Observatory places significant importance on the active participation of its colleagues in various topics, including green initiatives.

The Observatory has also actively supported and participated in various green initiatives and environmental events organised by NGOs and other community partners. These include Green Low Carbon Day by The Community Chest, Biz-Green Dress Day by the Construction Industry Council (CIC) and Hong Kong Green Building Council Limited (HKGBC), Earth Hour by World Wildlife Fund (WWF) etc.

Through these efforts, the Observatory continues to foster environmental stewardship and strengthen its connection with the community in promoting a greener future.

Biz-Green Dress Day

Ms. Sandy Song, ADHKO, was invited to be one of the officiate guests for Earth Hour 2024

Carbon Management

A carbon audit was conducted in 2025 for the Observatory's premises, covering the 2023/24 fiscal year. The total greenhouse gas (GHG) emissions were measured at 1 965 tonnes of carbon dioxide equivalent (tCO_2e), indicating a 1.7% reduction compared to the previous reporting period. This decrease suggests enhanced operational efficiency and the effectiveness of implemented emission control strategies.

Scope of reporting	Tonnes of CO2-e
Sub-total scope 1 Direct greenhouse gas (GHG) emissions	39.7
Sub-total scope 2 Energy Indirect GHG emissions	1 910.5
Sub-total scope 3 Other indirect GHG emissions	14.4
Total GHG emissions	1 964.6

The Observatory maintains strict compliance with governmental policies and regulatory frameworks pertaining to green procurement practices. A full-scale implementation of the e-Procurement system has been achieved, effectively reducing paper consumption across supply chain and procurement operations. Furthermore, environmentally preferable procurement criteria are systematically incorporated into tender documentation where applicable, ensuring alignment with sustainability objectives.

Staff Development and Engagement

Staff Development

Staff Training

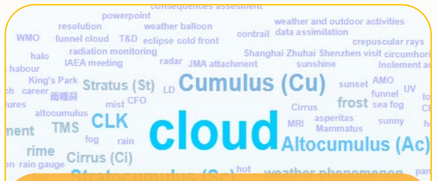
At the heart of the Observatory's pursuit of excellence lies a strong commitment to continuous learning. Equipping staff with the skills and knowledge needed to meet evolving challenges is essential to advancing our mission of safeguarding lives and contributing to a better society through science.

To support this, the Observatory develops an annual Training and Development Plan that sets out strategic priorities, learning pathways, and development opportunities for staff across all ranks. This forward-looking framework ensures that professional, technical, and core competencies are nurtured in alignment with long-term organisational goals.

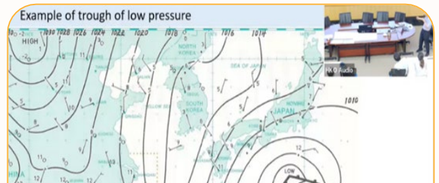
The training programmes delivered to staff are meticulously structured to reinforce essential competencies, including leadership and the effective provision of public services. Furthermore, they serve to equip personnel with the requisite knowledge and skills to remain aligned with evolving global trends, such as international relations, machine learning, Internet of Things (IoT) technologies, and intelligent crowdsourcing for big data analytics.

In addition, the Observatory has instituted a series of strategic initiatives aimed at advancing knowledge management and fostering a culture of continuous professional development, including:

Voluntary Mentorship Programme



Sharing Databank



Cyber Learning Centre

Technical Forum, Weather Review Forum and Management Forum

Manpower Developer

10th Consecutive year recognised as a Manpower Developer

4576
Total Training Hours

12.4 Man-days
Average training time

The Observatory has always been committed to the nurturing and development of talent. The Employees Retraining Board (ERB) once again commended the Observatory as a "Manpower Developer" for the tenth year in a row, with validity of two years, to recognise Observatory's achievements and dedication to the nurturing and development of talent.

Visits to the National Security Exhibition Gallery

In February 2025, Observatory's Directorates led a group of staff to visit the National Security Exhibition Gallery, with the aim of enhancing awareness and understanding of national security. Remaining staff members will take their turns to visit the gallery in due course, as part of ongoing efforts to strengthen knowledge and reinforce the importance of safeguarding national security.

Civil Service Code Briefing

Following the Civil Service Bureau's update to the Civil Service Code, an internal briefing was conducted by the Director of the Observatory to promulgate the revised Code and enhance staff understanding of its principles and obligations.

Leadership Development Training Course 2025

In March 2025, the Observatory invited Hong Kong University Business School to organised a two-day leadership training course for our middle management staff. The course was designed to empower our supervisory staff with essential leadership skills and insights.

Occupational Safety and Health

The Observatory places strong emphasis on Occupational Safety and Health (OSH) as a core aspect of its operations. Staff are regularly encouraged to attend OSH training courses, such as the General Training Course on OSH by the Civil Service Bureau, and awareness is further promoted through the circulation of relevant online materials.

精神健康友善卓越機構
Mental Health Friendly Supreme Organisation

精神健康職場約章
Mental Health Workplace Charter

The Observatory recognises the importance of a healthy workplace in boosting staff morale and engagement, contributing to greater efficiency and service quality. As a signatory to the Department of Health's Mental Health Workplace Charter, the Observatory reaffirms its commitment to promoting mental well-being and cultivating a supportive work environment.

In addition to the stress management workshops that CSB organised, the departmental welfare officer of the Observatory completed the Mental Health First Aid Standard Course to strengthen staff support capabilities and promote mental well-being in the workplace.

Staff Engagement

The AMO is the designated meteorological authority in Hong Kong to provide weather facilities and services for international air navigation.

"Happy Business" programme

The Observatory launched the "Happy Business" programme in 2004. Through sowing the nine seeds of happiness, viz, teamwork, communication, appreciation, love, wisdom, health, family, environment and recreation, the Programme aims to help colleagues in the department to derive happiness from their careers and to serve the public with a positive spirit.

One of the activities included a visit to the Airport Meteorological Office, offering staff and their family members an opportunity to observe firsthand how weather observations are conducted and weather reports are prepared by the Observatory's personnel. The Observatory also collaborated with the Civil Aviation Department to arrange a visit to the backup Air Traffic Control Tower, allowing participants to explore aviation facilities and gain a better understanding of the daily operations that help keep flights safe and efficient.

Staff Engagement and Recognition Initiatives

The Observatory undertakes a range of initiatives to enhance staff well-being and foster a sense of unity within the department. These include the convening of Departmental Consultative Committee Meetings, which provide a structured platform for discussing staff-related matters, and implementing a commendation scheme that recognises staff members for sustained excellence or significant contributions. These efforts reflect the department's commitment to valuing and acknowledging the dedication and hard work of its personnel.

Commendation Letter Presentation Ceremony

The face-to-face discussion session of the staff opinion survey

Staff Feedback Initiatives

The Observatory remains committed to cultivating a supportive and inclusive workplace by fostering mutual understanding between management and staff.

To facilitate open dialogue and gather staff input, initiatives such as the Staff Suggestion Scheme and Staff Opinion Survey have been implemented. In addition, a face-to-face meeting between the Director and all staff members was held to promote direct communication and reinforce a culture of transparency and trust.

HKO's Volunteer Team

The Hong Kong Observatory Volunteer Team (HKOVT) has spared no effort to participate in social welfare and voluntary services.

In November 2024, the team organised a countryside trail-cleaning initiative to help maintain the natural environment and promote civic responsibility. In January 2025, the HKOVT took part in a flag-selling fundraising event organised by the Hong Kong Alzheimer's Disease Association, with proceeds supporting day centres dedicated to serving individuals affected by cognitive disorders and their families. Through these meaningful activities, the team continues to demonstrate its commitment to serving the community with care and dedication.

Cleaning hiking trails in country parks

Team-building activities organsied by the staff association

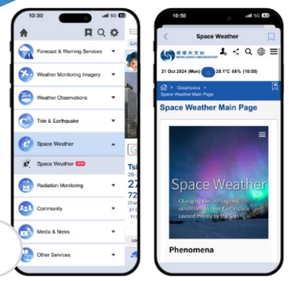
The Hong Kong Observatory Staff Association

The Hong Kong Observatory Staff Association plays an active role in strengthening staff relations, promoting well-being, and boosting morale through a variety of social and team-building activities. These events are thoughtfully organised by a committed team of volunteers and all staff members are warmly encouraged to take part and contribute to a vibrant workplace culture.

Highlights of the Year 2024/25

New Look of MyObservatory

Nov 2024



Voice Feature Support of "Dr. Tin" and Addition of Space Weather Information

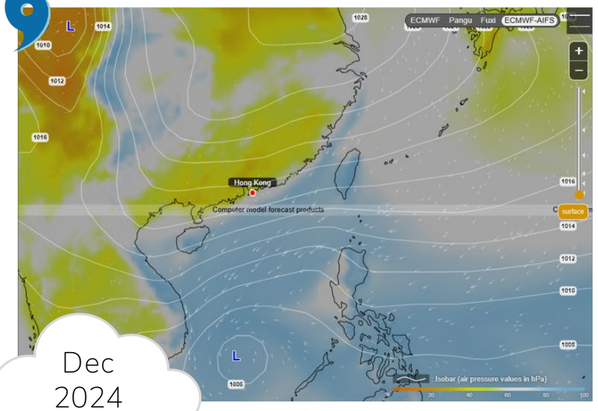
A new version of "MyObservatory" was launched to improve access to weather, astronomical, and climate-related information. It introduced a trial voice feature for the "Dr. Tin" Chatbot, allowing users to get weather updates through voice input in addition to text. Space weather information was also made available in the updated app.

Trial Version of the Greater Bay Area Weather Information Service

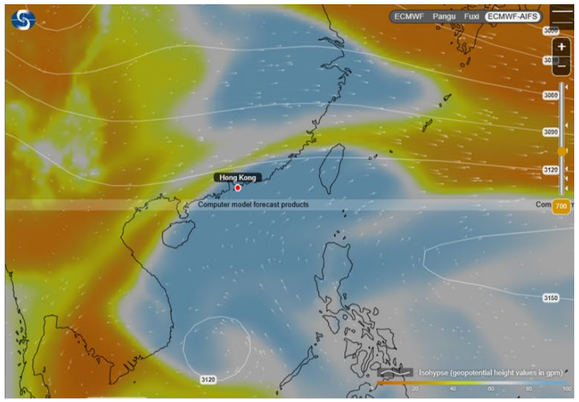
In addition, weather information for the Greater Bay Area (GBA) was added, allowing users to easily check real-time weather observations, warnings in force and forecast information of more than 50 districts in the other 10 cities within the GBA on "MyObservatory". Through the positioning function, users can also access up-to-date weather information over the located districts in the GBA anytime, helping them to prepare for daily activities and travel plans.

Dec 2024

Dec 2024



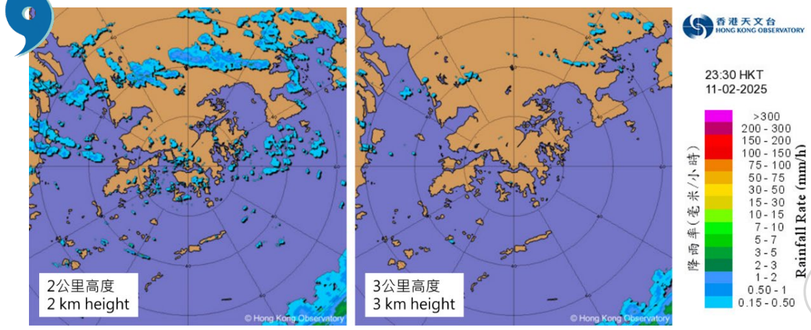
Surface



700 hPa (around 3,000 metres aloft)

More AI forecast model products and upper-air weather forecasts

The "Earth Weather" webpage added 15-day forecasts from the ECMWF-AIFS model, covering surface wind direction and speed, air temperature, relative humidity, mean sea-level pressure, and rainfall. Upper-air forecasts at five isobaric levels were also introduced, offering users a more comprehensive understanding of weather changes.



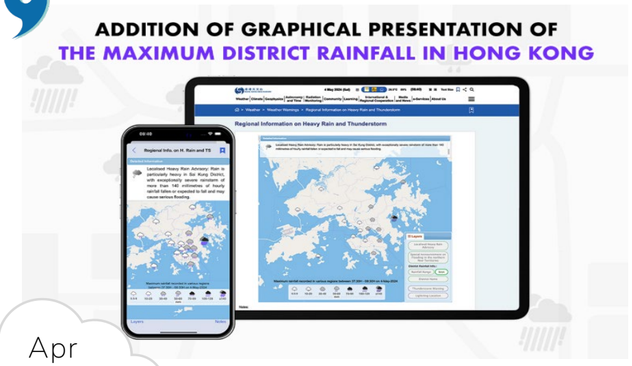
Mar 2025

Enhanced radar and satellite imagery services

Radar and satellite imagery services were enhanced with more frequent radar updates for the 128 km and 256 km ranges, and new rainfall rate imagery at 2 km height for the 64 km range. "All-day Visible" imagery and aerosol optical depth imagery were also introduced to improve monitoring of weather and visibility over southern China and the northern South China Sea.

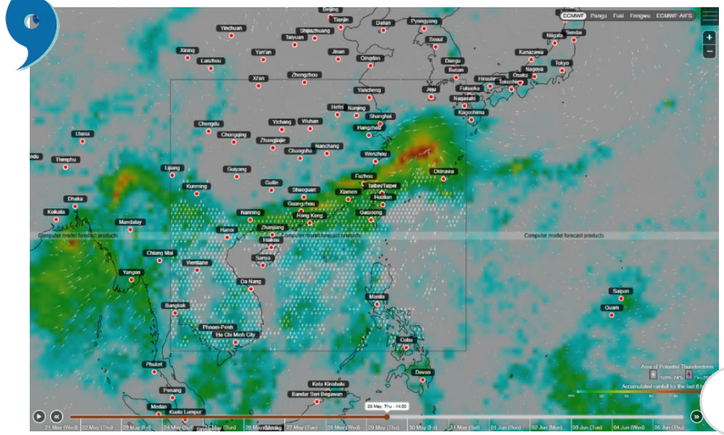
Service Enhancement

Enhanced Information Services related to Heavy Rain and Severe Convective Weather



Apr 2025

The "Regional Information of Heavy Rain and Thunderstorm" webpage added graphical displays of maximum hourly rainfall for different Hong Kong districts, helping the public identify areas affected by heavy rain. Additionally, when tornadoes or waterspouts are possible during thunderstorms, the Observatory will include this information in Thunderstorm Warnings and issue Special Weather Tips, urging the public to follow safety precautions.



Jun 2025

New computer model forecast products on "Earth Weather"

Further to the ECMWF-AIFS model, a new 15-day forecasts AI model "Fengwu" was added to the "Earth Weather" webpage, covering surface and upper-air parameters such as wind, temperature, pressure, rainfall, humidity and geopotential height. Additionally, the page was updated to featured "Area of Potential Thunderstorm" forecasts for East Asia, derived from ECMWF ensemble data, to indicate areas with elevated thunderstorm risk across different time periods.

Collaboration

May 2024

Organised a Typhoon Committee Workshop on "Promoting Technical Exchange of AI Applications in Tropical Cyclone Analysis and Forecasting"

Jul 2024

Meeting on meteorological cooperation between the Hong Kong Observatory and the Thai Meteorological Department in Bangkok

Sep & Dec 2024

Updated Memorandum of Understanding (MOU) with the Solomon Islands Meteorological Service and signed MOU with the Fiji Meteorological service to strengthen meteorological collaboration

Collaboration

Oct
2024

Participated in Regional Working Group on Tsunami Warning and Mitigation System in the South China Sea Region

Nov
2024

Participated in United Nations Climate Change Conference, where the Observatory and the EEB hosted a side event to promote climate science, new energy opportunities and showcase Mainland and HKSAR's climate policies and international collaboration efforts.

Dec
2024

Establishment of the Meteorological Training Centre for Belt and Road Countries, marking a significant milestone in enhancing the capabilities of meteorological professionals in the Belt and Road (B&R) regions and promoting future meteorological co-operation and development.

Dec
2024

Co-organised workshop on "Aviation Meteorological Science and Service Development" with the World Meteorological Organisation and International Civil Aviation Organization

Jan
2025

Organised a Workshop on Nuclear Emergency Preparedness

Mar
2025

Participated in the Guangdong-Hong Kong-Macao Meeting on Cooperation in Meteorological Operations

Mar
2025

Supported the UN's "Early Warnings for All" initiative and adopted new international technical standards to enhance global efforts in disaster preparedness and resilience.

The Observatory “Working Together for a Better Climate” and “Closing the early Warning Gap Together” Open Day

The Observatory organised two Open Days in FY2024/25, first on 30 November–1 December 2024 and again on 22–23 March 2025. The events adopted themes “Working Together for a Better Climate” and “Closing the Early Warning Gap Together”, highlighting climate change awareness and support for the UN’s “Early Warnings for All” initiative.

Nov & Dec 2024

Activities included exhibitions, interactive games, live weather reporting and interaction with the Observatory’s mascot, Dr Tin. Visitors learned about the Observatory’s services, international collaborations, and use of technology in weather forecasting. Across both events, nearly 20,000 visitors participated, with support from over 70 volunteers. Online access was also provided for broader outreach.

Mar 2025

May 2024

May 2025

Participated in "New Territories Disaster and Emergency Preparedness Day 2024“ & "Hong Kong Island Disaster and Emergency Preparedness Day 2025“, organised by Fire Services Department, aiming at enhancing public awareness of disaster prevention and emergency preparedness capabilities

Jul 2024

Co-organised “Community Weather Information Network” (Co-WIN) Teaching Application Awards to promote meteorological and geographical education

Jan 2025

Participated in the “Education & Careers Expo 2025”, introducing the public to the work of its various departmental grades, including job duties, entry requirements and career opportunities.

International Air Cadet Exchange Programme 2025

2024 HKO Summer Placement Programme

Visits and Internship Programmes

The Observatory promotes meteorological education through regular visits and internship programmes, offering students and young professionals hands-on exposure to weather forecasting and climate services. These efforts reflect the Observatory's commitment to nurturing future talents and advancing public understanding.

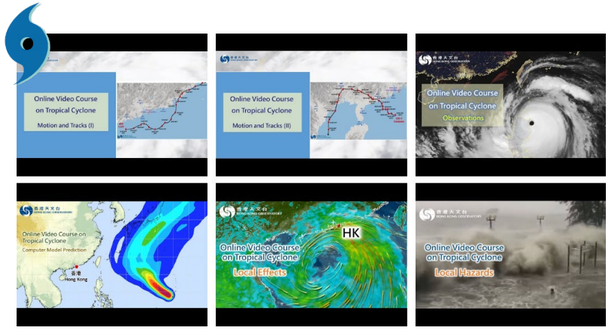
Science in the Public Service All partners Meeting

Science in the Public Service

The Observatory has fully engaged in the Science in the Public Service, a joint campaign organised by the Government bureaux or departments and other organisations to promote their scientific work and application of technology to the provision of services for the general public.

Educational Resources

All educational materials are available on the Educational Resources website, which serves as a central hub for learning. The site receives over ten million page views annually.



School talks on climate change

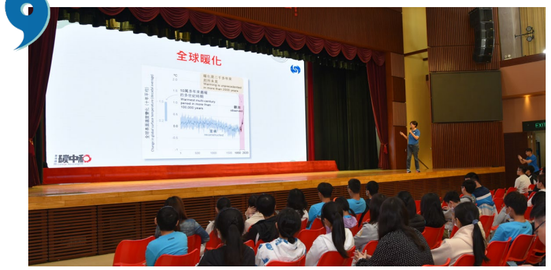
In 2024, the Observatory delivered 34 climate change talks to over 5,000 participants, with the aim of promoting students' awareness and understanding of climate change issues.

"Cool Met Stuff" Video Series

"Cool Met Stuff" produced by the Observatory was first broadcast on 3 January 2014, and over 450 episodes have since been aired. The series aims to enhance public understanding of meteorology and climate science through engaging, accessible content.

Online Video Courses

Online video courses on the Observatory website help the public learn more about meteorology through short, easy-to-follow lessons. The courses are available in both Chinese and English, making them accessible to a wider audience



Awards and Recognition

CARE Scheme Civil Service Category
Highest Per Capita Contribution Award

In 2024/25, the Hong Kong Observatory was once again honoured with the "CARE Scheme Civil Service Category Highest Per Capita Contribution Award" under the Community Chest's "Corporate and Employee Contribution Programme." This recognition reflects the unwavering dedication of Observatory staff to charitable giving and their strong commitment to social responsibility.

Caring Organisation

The Observatory has been awarded the "Caring Organisation" title under the Caring Organisation Scheme by the Hong Kong Council of Social Service, in recognition of its continual commitment to employee volunteering, community support, social inclusion, and environmental protection.

Verification Statement

I have verified the information and data of the Sustainability Report for Fiscal Year 2024/25. I confirm that the data presented in the Sustainability Report for Fiscal Year 2024/ 25 are authentic and the methodology for the collection and analysis of data is appropriate. The report represents an accurate account of the Observatory's sustainability actions and performance in the fiscal year of 2024/25.

Liza Siu
Green Manager
Hong Kong Observatory

CONTACT

This report is available on our homepage at the following link or QR code:

https://www.hko.gov.hk/en/publica/publica.htm

If you wish to obtain further information or raise any suggestions about this report, please contact :

Green Manager	(852) 2926 8227	dsec@hko.gov.hk
Resource Centre	(852) 2926 8250	-

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- End -

Hong Kong Observatory
November 2025