Civil Service Outstanding Service Award Scheme 2017
Hong Kong Observatory
Big Data Analysis and Decision Support
Media Unit for Service Enhancement (MUSE)
(5-minute version)

Screen content :	At the production site of "Weather On-Air", the technician is tuning the recording panel and the Scientific Officer is hosting the weather report.
LEE Fung-ying :	Good morning. Welcome to Weather Report!
Screen content :	Flash back to the time before the production of the weather report The staff of the Observatory are busy with various preparatory tasks.
Voice over :	The Hong Kong Observatory's (HKO) TV weather programme is produced and presented by its dedicated "Weather On-Air" team, every morning and night, rain or shine. Producing such a short programme might look easy, but it wouldn't have been possible without the concerted efforts among all HKO staff.
Key on caption :	Hong Kong Observatory Big Data Analysis and Decision Support Media Unit for Service Enhancement (MUSE)
Screen content :	HKO releases the pilot balloon. The computer system displays the meteorological data collected.
Voice over :	A range of weather monitoring equipment is placed at King's Park Meteorological Station to collect meteorological data, which is then instantly transmitted to HKO headquarters for analysis by weather forecasters.
Screen content :	The weather forecasters analyse the data.
Voice over :	Weather forecasters are the frontline members of the team. They constantly monitor changes in weather conditions. The data collected, coupled with their past forecast experience, facilitate the provision of weather forecasts to the public.
Key on caption :	LI Sun-wai Senior Scientific Officer Hong Kong Observatory

LI Sun-wai :	Compared with 20 years ago, the daily amount of data collected by HKO has been drastically increased to 1.3 terabytes, equivalent to 160 million text pages. It's impossible for us to process such a large amount of data within a short time.
Voice over :	To tackle information overload, HKO developed its own system using artificial intelligence to handle large amount of meteorological data for real-time dissemination of weather information.
Screen content :	The weather information display screen
Key on caption :	Intelligent Meteorological Monitoring Assistant
Voice over :	The newly developed "Intelligent Meteorological Monitoring Assistant (IMMA)" serves as an "assistant" to forecasters. It helps forecasters analyse and prioritise information among all the data collected.
Computer :	IMMA message: Rain
Voice over :	Automatic audible and visual alarms will be triggered to alert duty forecasters to changes in weather conditions.
Key on caption :	HE Yu-heng Scientific Officer Hong Kong Observatory
HE Yu-heng :	The new system utilises artificial intelligence to analyse and screen from the data collected the useful information for forecasters to provide more timely and accurate weather forecasts.
Screen content :	Li and his colleagues are discussing the content of the weather forecast.
Voice over :	Other than statistical data, experience in regional weather analysis also plays a key role in weather forecasting. The new intelligent system simulates the problem-solving behaviour of weather experts to support weather analysis and decision making. It also helps retain the valuable experiences of weather forecasting.
LI Sun-wai :	Every organisation faces this problem. When colleagues retire, their wisdom and knowledge may be lost. The system helps retain those wisdom and knowledge and pass them on. Even though the colleagues have left the department, their wisdom can still be retained for their

	successors to continue to serve the public.
Screen content :	HKO Scientific Officers are having a meeting.
Voice over :	Every morning and afternoon, HKO Scientific Officers get together to discuss and forecast the weather.
Screen content :	Photos showing how wall charts were used in the meetings in the past.
LI Sun-wai :	20 years ago, HKO was still using wall charts to display weather data for analysis at meetings. We are no longer able to manage so many wall charts given the substantial increase in data volume.
Key on caption :	Integrated Information Display System
Screen content :	HKO Scientific Officer uses “Integrated Information Display System” to facilitate discussion in the meeting.
LI Sun-wai :	That’s why we built an “Integrated Information Display System” to present the information on screens.
Voice over :	The “Integrated Information Display System” developed by HKO enables more flexible display and update of real-time weather information. It also saves a large amount of paper and printing materials. It not only streamlines work processes, but also protects the environment.
Screen content :	Scientific Officer, Lee, prepares for the shooting of “Weather On-Air”.
Voice over :	After the afternoon meeting, the assigned Scientific Officer has to get ready for the filming of the evening programme.
LEE Fung-ying :	Let’s look at the weather conditions at Cape D’Aguilar this morning.
Screen content :	Lee and her colleagues are shooting the weather programmes by themselves.
Voice over :	To move with the times, the “Weather On-Air team” broadcast their own weather programmes on social media platforms and mobile apps.
Key on caption :	LEE Fung-ying Scientific Officer Hong Kong Observatory
LEE Fung-ying :	Besides regular weather programmes, some members of the “Weather On-Air” team also host the programme, “Cool Met Stuff’, which provides meteorological knowledge and information about natural disasters to the public.

	From filming to script writing, we have to work individually most of the time.
Key on caption :	“Friends of the Observatory” Member
Screen content :	A member watches the weather report on cell phone.
“Friends of the Observatory” member :	I watch the weather report, “Weather On-Air” and “Cool Met Stuff” every morning. The programmes are interesting and provide a lot of useful meteorological knowledge. Sometimes, I’ll share the programmes with my friends to clarify their misunderstandings.
LEE Fung-ying :	Weather is everybody’s daily lives. HKO programmes can help enhance public knowledge of meteorology.
Screen content :	Outdoor filming of “Weather On-Air”
Key on caption :	YEUNG Hon-yin Acting Senior Scientific Officer Hong Kong Observatory
YEUNG Hon-yin :	Engaging in morning programme production, outdoor filming, and collaboration work, is tiring but rewarding. I am over the moon whenever I receive positive comments on the programmes from the public or relatives. It makes my effort worth it.
Key on caption :	Acknowledgement: Hong Kong Observatory Civil Service Bureau The Government of the Hong Kong Administrative Region ©2018