

**“Meteorology Series IV” story outlines**

From April 26 to May 17, 2014, “Meteorology Series IV” will be simultaneously broadcast every Saturday at 7.30pm – 8.30pm on TVB Jade and RTHK TV31.

<p>Episode 1 (April 26)</p>	<p>Typhoon</p>	<p>When typhoon sweeps, it results in various disasters, especially serious casualties and damages caused by the storm surge. Under the influence of climate change, the intensity of typhoons may be even stronger in the future.</p> <p>To better understand the formation of typhoons and their impact, the filming crews fly with the Government Flying Service on a fixed-wing aircraft equipped with meteorological measurement systems to monitor and track the tropical cyclones over the South China Sea. In addition, how the Hong Kong Observatory monitors storm formation, movement, intensification and landfall as well as forecasting will be recorded. The landfall of typhoons and the corresponding impact will be covered, including Hong Kong and Guangdong coastal regions, as well as the severe impact of storm surge to the central Philippines due to Super Typhoon Haiyan.</p>
<p>Episode 2 (May 3)</p>	<p>Meltdown: Cryosphere under Pressure</p>	<p>According to the Fifth Assessment Report of the United Nations Intergovernmental Panel on Climate Change, the average surface temperature had risen by 0.85 degrees during 1880 to 2012. The Cryosphere is undergoing abrupt changes that have not been seen before.</p> <p>In this episode, the crew visits Greenland, where it has been undergoing facelift changeover due to global warming. The melting of glaciers and how local residents have adapted to the situation are recorded. The crew also films at the northwestern part of China where the freshwater source at Kunlun Mountains have nurtured millions of Chinese, and explores the impact of snow reduction at Tianshan.</p>
<p>Episode 3 (May 10)</p>	<p>Flooding</p>	<p>Under the influence of climate change, extreme weather conditions including rainstorm may become more frequent.</p>

		<p>Since ancient times, flooding in China never ceased. In this episode, the crew visits the Guizhou Anshun Municipal water control construction at Baojia village, aka a mini Dujiangyan Irrigation System, which is reputed as one of the Song Dynasty preserved ancient constructions still in use. The operation of water milling room based on hydroelectric power has played a significant role in the agriculture of the village. Meanwhile, some local areas of Vietnam near the Mekong River with frequent flooding, voluntary agencies have applied natural methods to help local farmers in flood protection as well as adaptation to climate change.</p> <p>Although Hong Kong has modernised city infrastructures and urban planning, heavy rain is still a threat to public safety. This episode introduces how the Hong Kong Observatory makes use of a self-developed nowcast system to forecast heavy rain and issue appropriate rainstorm warnings, while the Drainage Services Department and Geotechnical Engineering Office, respectively, shoulder the task on drainage and slope safety.</p>
<p>Episode 4 (May 17)</p>	<p>Drought and Water Resources</p>	<p>Our Blue Planet is filled with water but mostly in the sea. In fact, only 0.5 per cent of water resource can be used by mankind. While climate change has been disturbing the water cycle which potentially has increased the chance of heavy rain, possibility of drought cannot be ruled out. Furthermore, population growth imposes pressure on the demand of water resource. This episode, the crew explores the drought situation in both Australia and Lesotho in Africa.</p> <p>In the past, Hong Kong suffered from severe drought. Although water supply from Dongjiang has provided a reliable water source to Hong Kong nowadays, the development and the population growth in Hong Kong and Guangdong Province will inevitably increase the pressure on the demand of the water supply for Hong Kong and southern China in the future. Good water resource management and planning are crucial factors for sustainable development.</p>