

Academic Staff Resume

Name: Keith K. C. Chow

Title: Assistant Professor

Space Science Institute



Office : A502

Tel. : 2248

E-mail : kcchow@must.edu.mo

Academic Qualification:

PhD in Mathematics, Hong Kong University of Science & Technology (HKUST)

MPhil in Mathematics, HKUST

BEng (Hons) in Mechanical Engineering, Middlesex University, UK

Teaching Area

General Mathematics: Linear Algebra, Differential Equations, Calculus

Research Area

Numerical modeling of planetary atmospheres, climate dynamics , general circulation and dust storms on Earth and Mars

Working Experience

Jan. 2009 -Jan. 2016 : Lecturer, Department of Mathematics, HKUST.

Jun. 2009 - Jun. 2011: Adjunct Assistant Professor, HKUST Fok Ying Tung Graduate School.

Nov. 2007 - Nov. 2008: Research Assistant Professor / Research Associate, HKUST Fok Ying Tung Graduate School

Feb. 2006 - May 2006: Visiting Scientist, Abdus Salam International Centre for Theoretical Physics, Italy.

Feb. 2003 - Sep. 2007: Senior research assistant / Instructor, Dept. of Physics & Materials Science, City University of Hong Kong

Nov. 2001 - Sep. 2002: Postdoctoral Research Assistant, National Oceanography Centre, Southampton, UK.

Academic Publication

Journal Articles:

Chow, K. C., L. SU, J. C. H. Fung, H. Ma, A. K. H. Lau, 2014: Numerical Modeling of a Strong Dust Event over the South China Region in March 2010. *Meteorology and Atmospheric Physics* . v126, 119-138.

Chow, K. C. and J. C. L. Chan, 2010: A dual-scheme approach of cumulus parameterization for simulating the Asian summer monsoon. *Meteorological Applications*, v17, 287-297.

Lu, X., K. C. Chow, T. Yao, J. C. H. Fung, and A. K. H. Lau, 2009: Seasonal variation of the land sea breeze circulation in the Pearl River Delta region. *Journal of Geophysical Research - Atmosphere*, v114, D17112, doi:10.1029/2009JD011764. (I. F. = 3.55)

Chow, K. C. and J. C. L. Chan, 2009: Diurnal variations of circulation and precipitation in the vicinity of the Tibetan Plateau in early summer. *Climate Dynamics*, v32, 55-73.

Chow, K. C., H. W. Tong, and J. C. L. Chan, 2008: Water vapor sources associated with the early summer precipitation over China. *Climate Dynamics*, v30, 497-517.

Chow, K. C., J. C. L. Chan, J. S. Pal, and F. Giorgi, 2006: Convection suppression criteria applied to the MIT cumulus parameterization scheme for simulating the Asian summer monsoon. *Geophysical Research Letters*, v33, L24709, doi: 10.1029/2006GL028026.

Chow, K. C. and K. L. Chan, 2003: Angular momentum transports by moving spiral waves. *Journal of the Atmospheric Sciences*, v60, 2004-2009.

Chow, K. C., K. L. Chan, and A. K. H. Lau, 2002: Generation of moving spiral bands in tropical cyclones. *Journal of the Atmospheric Sciences*, v59, 2930-2950.

會議論文：

K. C. CHOW, K. L. CHAN, K. V. FANG: NUMERICAL MODELING OF THE ATMOSPHERIC CIRCULATION AND DUST CYCLE ON MARS
International Symposium on Lunar and Planetary Science (ISILPS2016), June 2016, Wuhan, China.

Research Projects

Dust climate associated with mesoscale dynamics in the atmosphere of Mars (Co-Investigator),

Professional Certification and Awards

Member: *American Geophysical Union*.

Professional Society Membership

Journal Reviewer:

Nature, International Journal of Climatology, Climate Dynamics, Journal of Geophysical Research,