

APE Workshop

20 - 22 April, The University of Reading, UK

- Agenda -

Wednesday 20 April

Introduction

| | | |
|--------------|-------------------|--|
| 09.00 | | (arrival & preparation) |
| 09.15 | Mike Blackburn | APE background and context |
| 09.25 | <all groups> | Group introduction and model highlights (5-10min each) |
| 11.00 | Coffee/tea | |

Tropical Convection

| | | |
|--------------|---------------------|---|
| 11.30 | John McGregor | Aqua-planet simulations using CCAM |
| 12.00 | Rachel Stratton | Sensitivity of the Met Office Aqua-planet results to convection |
| 12.30 | - | <i>discussion</i> |
| 12.45 | Buffet Lunch | |

Tropical Variability

| | | |
|--------------|-------------------|---|
| 14.00 | Zaizhi Wang | Wavenumber-frequency characteristics of the LASG model |
| 14.30 | Yukiko Yamada | A resolution dependence of equatorial precipitation activities represented in a general circulation model |
| 15.00 | Hirofumi Tomita | A cloud-resolving aqua planet experiment |
| 15.30 | Tea/coffee | |

Tropical Variability / Intercomparison

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|--------------|--------------------|--|
| 16.00 | Yoshi-Yuki Hayashi | On the varieties of forced and spontaneously generated tropical precipitation patterns: some expectations and comparison |
| 16.30 | <MB / all> | Intercomparison + discussion: • <i>tropical precipitation time series / spectra</i> |
| 17.00 | Finish | |

| | | |
|--------------|------------------------|---|
| 20.00 | Workshop Dinner | <i>Loch Fyne restaurant - taxis from Department of Meteorology at 19.30</i> |
|--------------|------------------------|---|



APE Workshop

Thursday 21 April

Diurnal Cycle

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|--------------|--------------------------|--|
| 09.00 | Myong-In Lee | Diurnal and semi-diurnal cycles of convection in an aqua-planet GCM |
| 09.30 | Steve Woolnough | The diurnal cycle of convection and atmospheric tides in an aquaplanet GCM |
| 10.00 | - | <i>discussion</i> |
| 10.45 | <i>Coffee/tea</i> | |

Tropical & sub-tropical Circulation

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|--------------|----------------------------|---|
| 11.15 | Hartmut Borth | Tropical precipitation and Hadley circulation on the DWD-Aqua-Planet for the APE sea surface temperature distributions |
| 11.45 | Wataru Ohfuchi | Sensitivity of intensities of subtropical jet and Hadley circulation on cumulus parameterizations and resolutions |
| 12.15 | Masahiro Watanabe | <i>10min: 3KW1 zonal mean / plans</i> |
| 12.30 | <MB / all> | Intercomparison + discussion <ul style="list-style-type: none"> • <i>tropical zonal mean hydrology & cloud</i> • <i>“qobs”, “3KW1” differences from control</i> |
| 13.00 | <i>Buffet Lunch</i> | |

Extra-tropical Variability

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|--------------|--------------------------|---|
| 14.00 | Masahiro Watanabe | On the extratropical low-frequency variability in aqua-planet simulations |
| 14.30 | David Williamson | Low-frequency mid-latitude variability in the APE simulations |
| 15.00 | Xiaoyun Liang | The mid-latitude wave activity of the LASG model |
| 15.30 | <i>Tea/coffee</i> | |

Intercomparison: extra-tropics

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|--------------|----------------------|--|
| 16.00 | Kevin Hodges | Extra-tropical storms: track statistics |
| 16.15 | <MB / all> | Intercomparison + discussion: <ul style="list-style-type: none"> • <i>KE spectra; polar tropopause & lower stratosphere</i> |
| 17.00 | <i>Finish</i> | |

APE Workshop

Friday 22 April

Dynamical Aspects; Remaining topics

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|-------|------------------|---|
| 09.00 | Andrea Molod | Aquaplanet Simulations using Different Vertical Grids for Dynamics and Physics in the MIT GCM |
| 09.30 | David Williamson | <i>10min: resolution & dynamical core sensitivities</i> |
| 09.45 | <MB / all> | intercomparison + discussion: <i>global budgets</i> |

Summary Discussion

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|-------|-------|-----------------------------|
| 10.00 | <all> | What have we learnt so far? |
|-------|-------|-----------------------------|

10.45 ***Coffee/tea***

Future Directions

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|-------|-----------------|---|
| 11.15 | Steve Woolnough | Coupled aqua-planet modelling with a mixed-layer ocean |
| 11.35 | Robin Smith | A low-resolution coupled OAGCM Aquaplanet simulation |
| 12.00 | <all> | Where next: further diagnosis, experiments, publications? |

13.00 ***Buffet Lunch***

Workshop ends