



WRF in the MIDDLE EAST

Weather Research and Forecasting (WRF) model workshop for
Middle Eastern scientists, faculty, and students
Nicosia, Cyprus, 2-8 May 2011

**Sponsored by the
U.S. National Center for Atmospheric Research and
National Oceanic and Atmospheric Administration,
and
The Cyprus Institute**

1 May, Sunday

1800-2100: Registration, at the Cyprus Hilton (CyI representative, Loretta Quinn)

2 May, Monday

0730: Shuttle pickup at the Cyprus Hilton

0800-0900: Registration at the Cyprus Institute lobby; name tags, handouts (CyI representative, Loretta)

0900-0930: Welcome and introduction to the workshop (CyI representative, CyMS representative, Tom Warner) (lecture hall)

0930-0945: Logistical information (Loretta)

0945-1015: Participants introduce themselves - 30 seconds each (name, country, organization)

1015-1045: Break, on site

1045-1200: NWP short course Session 1 (lecture hall)

1045-1100: THE GOVERNING SYSTEMS OF EQUATIONS

1100-1200: NUMERICAL SOLUTIONS TO THE EQUATIONS - Part 1

1200-1300: Catered lunch, on site; helpdesk in CyI lobby open

1300-1700: NWP short course Session 2 (lecture hall)

1300-1330: NUMERICAL SOLUTIONS TO THE EQUATIONS - Part 2

1330- 1445: PHYSICAL-PROCESS PARAMETERIZATIONS

1445-1515: Break, on site

1515- 1545: MODELING SURFACE PROCESSES

1545-1700: INITIALIZATION AND DATA ASSIMILATION

1715: Shuttle returns to Cyprus Hilton

1900-2100: Get-acquainted ice breaker at Cyprus Hilton

3 May, Tuesday

0730: Shuttle pickup at Cyprus Hilton

0800-0810: Daily announcements

0810-1200: NWP short course Session 3 (lecture hall)

0810-0900: ENSEMBLE METHODS

0900-0930: PREDICTABILITY

0930-1000: Break, on site

1000-1045: VERIFICATION METHODS

1045-1130: EXPERIMENTAL DESIGN IN MODEL-BASED RESEARCH

1130-1200: TECHNIQUES FOR ANALYZING MODEL OUTPUT

1200-1300: Catered lunch, on site; helpdesk in CyI lobby open

1300-1320: Special presentation – “Computational challenges in weather and climate simulations”, Professor Dimitris Drikakis, Director - Computation-based Science and Technology Research Center (CaSToRC), The Cyprus Institute

1320-1720: NWP short course Session 4 (lecture hall)

1320-1350: OPERATIONAL NUMERICAL WEATHER PREDICTION

1350-1420: STATISTICAL POST PROCESSING OF MODEL OUTPUT

1420-1505: COUPLED SPECIAL-APPLICATIONS MODELS

1505-1535: Break, on site

1535-1550: COMPUTATIONAL FLUID-DYNAMICS MODELS

1550-1720: CLIMATE MODELING AND DOWNSCALING

1735: Shuttle returns to Cyprus Hilton

4 May, Wednesday

0730: Shuttle pickup at Cyprus Hilton

0800-0810: Daily announcements

0810-1130: WRF tutorial Session 1 (lecture hall)

0810-0845: WRF MODELING SYSTEM OVERVIEW

0845-0945: WRF PRE-PROCESSING SYSTEM (WPS) - DESCRIPTION OF GENERAL FUNCTIONS

0945-1000: Break, on site

1000-1045: WRF INITIALIZATION - DESCRIPTION OF GENERAL FUNCTIONS

1045-1100: Break, on site

1100-1130: INSTALLATION OF WRF AND WPS CODE

1130-1230: Catered lunch, on site; helpdesk in CyI lobby open

1230-1700: WRF tutorial Session 2 (lecture hall)

1230-1330: WPS: SET UP AND RUN

1330-1345: Break, on site

1345-1445: WRF MODEL: SET UP AND RUN

1445-1500: INTRODUCTION TO PRACTICE

1500-1700: PRACTICE SESSION (1) (location to be announced)

1715: Shuttle returns to Cyprus Hilton

5 May, Thursday

0730: Shuttle pickup at Cyprus Hilton

0800-0810: Daily announcements

0810-1130: WRF tutorial Session 3 (lecture hall)

0810-0915: WRF MODEL DYNAMICS AND NUMERICS

0915-0930: Break, on site

0930-1030: WRF MODEL: NESTING – GENERAL DESCRIPTION

1030-1045: Break, on site

1045-1130: WRF MODEL: NESTING – SET UP AND RUN

1130-1230: Catered lunch, on site; helpdesk in CyI lobby open

1230-1800: WRF tutorial Session 4 (lecture hall)

1230-1300: WRF OPTION: NUDGING

1300-1330: OBSGRID: PROGRAM FOR OBJECTIVE ANALYSIS AND DATA
PREPARATION FOR NUDGING

1330-1345: Break, on site

1345-1445: WRF REGISTRY AND HOW TO MAKE CODE CHANGES

1445-1500: Break, on site

1500-1600: POST-PROCESSING TOOLS (NCL, ARWpost and RIP)

1600-1800: PRACTICE SESSION (2) (location to be announced)

1815: Shuttle return to Cyprus Hilton

1900: Workshop banquet – location TBD

6 May, Friday

0730: Shuttle pickup at Cyprus Hilton

0800-0810: Daily announcements

0810-1200: WRF tutorial Session 5

0810-0915: WRF PHYSICS (1)

0915-0930: Break, on site

0930-1030: WPS – ADVANCED USAGE

1030-1045: Break, on site

1045-1145: WRF – MORE RUN-TIME OPTIONS

1145-1245: Lunch, on site; helpdesk in CyI lobby open

1245-1730: WRF tutorial Session 6

1245-1345: WRF PHYSICS (2)

1345-1400: Break, on site

1400-1500: WRF SOFTWARE – PARALLELIZATION, CODE STRUCTURE

1500-1530: WRF Tools

1530-1730: PRACTICE SESSION (3) (location to be announced)

1745: Shuttle return to Cyprus Hilton

7 May, Saturday

0730: Shuttle pickup at Cyprus Hilton

0800-0810: Daily announcements

0810-1200: Hydrologic applications with WRF

0945-1015: Break, on site

1200-1300: Lunch, on site; helpdesk in CyI lobby open

1300-1700: Climate downscaling with WRF

1445-1515: Break, on site

1715: Shuttle return to Cyprus Hilton

8 May, Sunday

0730: Shuttle pickup at Cyprus Hilton

0800-0810: Daily announcements

0810-1200: The UNIDATA program

0945-1015: Break, on site

1200-1300: Lunch, on site; helpdesk in CyI lobby open

1300-1500: The UNIDATA program continued

1500-1600: Concluding discussions

1615: Shuttle return to Cyprus Hilton