Climate Variability, the Oceans, and Societal Impacts

SAT 13 JAN

7:30 AM - 9:00 AM WORKSHOP REGISTRATION

SUN 14 JAN

7:30 AM - 9:00 AM SHORT COURSE REGISTRATION

9:00 AM - 6:00 PM CONFERENCE REGISTRATION

MON 15 JAN

9:00 AM - 12:00 PM **SESSION 1: NATURAL CLIMATE VARIABILITY**
Chairperson: Otis Brown, RSMAS/Univ. of Miami, Miami, FL

9:00 AM 1.1 NORTH ATLANTIC OSCILLATION/ANNULAR MODE: TWO PARADIGMS-ONE PHENOMENON. John M. Wallace, Univ. of Washington, Seattle, WA

9:30 AM 1.2 20TH CENTURY NORTH AMERICAN AND EUROPEAN CLIMATE CHANGE: A FORCED RESPONSE TO TROPICAL OCEAN WARMING. Martin P. Hoerling, NOAA/ERL/CDC, Boulder, CO; and J. Hurrell and A. Kumar

9:45 AM 1.3 TREND-, ENSO-, AND AO- RELATED PRECIPITATION AND SURFACE TEMPERATURE VARIABILITY. Todd P. Mitchell, Univ. of Washington, Seattle, WA; and R. Quadrelli and J. M. Wallace

10:00 AM COFFEE BREAK

10:30 AM 1.4 THE LEADING PATTERNS OF CLIMATE VARIABILITY AND WINTER WEATHER EXTREMES IN THE UNITED STATES PART I: TEMPERATURE. R. W. Higgins, NOAA/NWS/NCEP/CPC, Washington, DC; and A. Leetmaa and V. E. Kousky

10:45 AM 1.5 AN ASSESSMENT OF THE ROLE OF THE OCEAN CIRCULATION IN GOVERNING SST VARIABILITY OUTSIDE THE TROPICAL PACIFIC. Richard Seager, Lamont Doherty Earth Observatory, Columbia University, Palisades, NY; and Y. Kushnir

11:00 AM 1.6 STOCHASTIC MODELING OF CLIMATE VARIABILITY. Prashant D. Sardeshmukh, NOAA/CDC and CIRES/University of Colorado, Boulder, CO

11:15 AM 1.7 OCEAN-ATMOSPHERE COUPLING AND THE REGULATION OF THE

SOUTH ASIAN MONSOON. Peter J. Webster, University of Colorado, Boulder, CO

11:30 AM 1.8 A DYNAMICAL STABILIZER IN THE CLIMATE SYSTEM: A SUMMARY OF PROGRESS TO DATE AND NEW RESULTS ON THE INFLUENCE OF THE EARTH'S ROTATION. J. Ray Bates, University of Copenhagen, Copenhagen, Denmark; and V. A. Alexeev

11:45 AM 1.9 IS THERE AN EQUATORIAL INDIAN OCEAN SST DIPOLE, INDEPENDENT OF THE EL NINO-SOUTHERN OSCILLATION?. Neville Nicholls, BMRC, Melbourne, Vic., Australia; and W. Drosdowsky

12:00 PM - 1:30 PM LUNCH BREAK

1:30 PM - 3:30 PM **POSTER SESSION 1: NATURAL CLIMATE VARIABILITY POSTERS**

Chairperson: Otis Brown, RSMAS/Univ. of Miami, Miami, FL

P1.1 REGIONAL SNOWFALL DISTRIBUTIONS ASSOCIATED WITH ENSO. Shawn R. Smith, Florida State Univ., Tallahassee, FL; and J. J. 0'Brien and J. M. Patten

P1.2 LONG TERM VARIABILITY OF PRECIPITATION MECHANISMS IN THE GREAT LAKES REGION. Emily K. Grover, Univ. of Michigan, Ann Arbor, MI; and P. J. Sousounis

P1.3 MODES OF SST VARIABILITY IN THE INDIAN OCEAN: INTERANNUAL AND INTERDECADAL VARIABILITY, CONNECTIONS WITH ENSO AND EAST AFRICAN COASTAL RAINFALL. Christina Oelfke Clark, PAOS, Univ. of Colorado, Boulder, CO; and P. J. Webster and J. E. Cole

P1.4 MONITORING SAHARAN DUST EVENTS USING INTEGRATED OBSERVING SYSTEMS . Hua Hu, JPL, California Inst. of Technology, Pasadena, CA; and W. T. Liu

P1.5 PDO MODIFICATION OF U.S. ENSO CLIMATE IMPACTS. Mark C. Bove, Florida State Univ., Tallahassee, FL; and J. J. O'Brien

P1.6 PAPER WITHDRAWN

P1.7 SOURCES OF SEASONAL PREDICTABILITY FOR DAILY PRECIPITATION EXTREME STATISTICS OVER THE EASTERN US. Alexander Gershunov, SIO/University of California, La Jolla, CA; and T. J. Reichler and J. O. Roads

P1.8 STUDY OF THE MULTISCALE VARIABILITY OF PRECIPITATION DURING EXTREME FLOOD AND DROUGHT EVENTS. Renu R. Joseph, Univ. of Illinois, Urbana, IL; and M. Ting and P. Kumar

P1.9 TEMPORAL AND SPATIAL EVOLUTION OF THE ASIAN SUMMER MONSOON IN THE SEASONAL CYCLE OF SYNOPTIC FIELDS. Young-Kwon Lim, Florida State Univ., Tallahassee, FL; and K.-Y. Kim and H.-S. Lee

P1.10 TORNADO FREQUENCY IN THE SOUTHERN PLAINS AS RELATED TO SEA SURFACE TEMPERATURES IN THE PACIFIC OCEAN. Jesse Austen Sparks, Univ. of Oklahoma, Norman, OK; and M. B. Richman

P1.11 HOW MUCH "SKILL" WAS THERE IN FORECASTING THE STRONG 1997-98 EL NINO AND 1998-2000 LA NINA EVENTS?. Christopher W. Landsea, NOAA/AOML/HRD, Miami, FL; and J. A. Knaff

P1.12 A DYNAMICAL STABILIZING MECHANISM IN THE CLIMATE SYSTEM: A LINEAR EIGENMODE ANALYSIS. Vladimir A. Alexeev, Univ. of Copenhagen, Copenhagen, Denmark

P1.13 A GLOBAL EL NINO COMPOSITE AND THE 1997-98 EVENT. N. K. Larkin, JISAO/Univ. of Washington, Seattle, WA; and D. E. Harrison

P1.14 A SOUTHWARD MIGRATION OF CENTENNIAL SCALE VARIATIONS OF DROUGHT/FLOOD IN THE EASTERN CHINA AND WESTERN U.S. Qi Hu, Univ. of Nebraska, Lincoln, NE; and S. Feng

P1.15 A STATISTICAL FORECAST MODEL FOR TROPICAL SST, SEA LEVEL AND PRECIPITATION: PREDICTABILITY OF WARM POOL AREA. Yan Xue, NOAA/NWS/NCEP, Camp Springs, MD; and A. Leetmaa

P1.16 WESTERN ATLANTIC SEA SURFACE TEMPERATURES AND NORTHEASTERN UNITED STATES PRECIPITATION, 1896-1995. John K. Creilson, Rutgers Univ., New Brunswick, NJ; and D. A. Robinson and S. Hartley

P1.17 A STUDY OF TELECONNECTIVITY PATTERNS FOR BOREAL SUMMER AND WINTER. M. S. Santhanam, IBM India Research Laboratory, Hauz Khas, New Delhi, India; and P. K. Patra, S. K. Kuila, and U. K. De

P1.18 CHANGES IN MECHANISM OF INTERANNUAL VARIATIONS IN SUMMER RAINFALL IN THE CENTRAL U.S. Qi Hu, Univ. of Nebraska, Lincoln, NE; and S. Feng

P1.19 CHARACTERISTICS OF LARGE SNOWFALL EVENTS IN THE MONTANE WESTERN U.S. AS EXAMINED USING SNOTEL DATA . Mark C. Serreze, CIRES/Univ. of Colorado, Boulder, CO; and M. P. Clark and A. H. Frei

P1.20 CLIMATIC VARIABILITY FOR EFFECT OF EL NIñO PHENOMENON IN BOLIVIA. Willian Ramiro Villarpando Camargo, Universidad Mayor de San Simón, Cochabamba, Cercado, Bolivia

P1.21 CHANGES IN SUBSEASONAL VARIABILITY ASSOCIATED WITH EL NINO. Gilbert P. Compo, NOAA/CDC and CIRES/Univ. of Colorado, Boulder, CO; and P. D. Sardeshmukh and C. Penland

3:00 PM - 3:30 PM COFFEE BREAK

3:30 PM **SESSION 2: IMPACTS IN THE COASTAL ZONE, IMPACTS ON ECOSYSTEMS AND HEALTH**

Chairperson: Christopher N. K. Mooers, RSMAS/Univ. of Miami, Miami, FL

3:30 PM 2.1 CLIMATE VARIABILITY OF THE GULF OF MEXICO COASTAL OCEAN. Robert H. Weisberg, Univ. of South Florida, St. Petersburg, FL

4:00 PM 2.2 SHORT-TERM CLIMATE CHANGES AND THE DYNAMICAL AND ECOSYSTEM RESPONSE OF THE EASTERN NORTH PACIFIC COASTAL OCEAN. Arthur J. Miller, SIO/Univ. of California, La Jolla, CA

4:30 PM 2.3 SIMULATIONS OF PAST AND FUTURE CLIMATE VARIABILITY OF THE

ATLANTIC OCEAN AND THE COASTAL ZONE. Tal Ezer, Princeton Univ., Princeton, NJ

5:00 PM ORAL SESSIONS END FOR THE DAY

5:30 PM - 7:30 PM FORMAL OPENING OF EXHIBITS WITH RECEPTION (CASH BAR)

TUE 16 JAN

8:00 AM - 5:30 PM **SESSION 3: FORECASTING CLIMATE VARIABILITY**

Chairperson: Ants Leetmaa, NOAA/NWS/NCEP/CPC, Camp Springs, MD

8:00 AM 3.1 CHALLENGES AND PROGRESS TOWARD MULTI-SCALE LAND SURFACE DATA ASSIMILATION. Paul R. Houser, NASA/GSFC, Greenbelt, MD

8:15 AM 3.2 THE MAGNITUDE AND VARIABILITY OF GLOBAL AND REGIONAL PRECIPITATION BASED ON THE 22-YEAR GPCP (GLOBAL PRECIPITATION CLIMATOLOGY PROJECT) AND THREE-YEAR TRMM (TROPICAL RAINFALL MEASURING MISSION) DATA SETS. Robert F. Adler, NASA/GSFC, Greenbelt, MD; and S. Curtis, G. Huffman, D. Bolvin, and E. Nelkin

8:30 AM 3.3 ENSO-PAST, PRESENT, AND FUTURE. Mark Cane, Lamont-Doherty Earth Observatory, Columbia Univ., Palisades, NY

9:00 AM 3.4 IRI/NCEP/APPLIED RESEARCH CENTER COLLABORATIVE PROJECTS IN SEASONAL PREDICTION. Steve Zebiak, Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY

9:30 AM 3.5 MOORED BUOY OBSERVATIONS FOR SEASONAL-TO-INTERANNUAL CLIMATE PREDICTION. Michael J. McPhadden, NOAA/PMEL, Seattle, WA

10:00 AM COFFEE BREAK

10:30 AM 3.6 SPRING 2000 DROUGHT FORECAST. Ants Leetmaa, NOAA/NWS/NCEP, Camp Springs, MD; and D. Lecomte, M. Kanamitsu, and H. Vandendool

10:45 AM 3.7 ECPC?S WEEKLY TO SEASONAL GLOBAL FORECASTS. John O. Roads, SIO/Univ. of California, La Jolla, CA

11:00 AM 3.8 AN EMPIRICAL-DYNAMICAL EXTENDED RANGE FORECAST MODEL INCORPORATING TROPICAL DIABATIC FORCING. Christopher R. Winkler, NOAA/CDC and CIRES/Univ. of Boulder, Boulder, CO; and M. Newman and P. D. Sardeshmukh

11:15 AM 3.9 NOAA’S EXTENDED-RANGE ATLANTIC HURRICANE OUTLOOKS. Gerald Bell, NOAA/NWS/NCEP/CPC, Camp Springs, MD; and M. Chelliah, C. W. Landsea, S. Goldenberg, L. A. Avila, and R. Pasch

11:30 AM 3.10 TROPICAL CYCLONES AND THE THERMOHALINE CIRCULATION. Kerry Emanuel, MIT, Cambridge, MA

11:45 AM 3.11 ATLANTIC BASIN TROPICAL STORMS-INTERANNUAL VARIABILITY AND NONPARAMETRIC SIMULATION OF TRACKS . Upmanu Lall, Lamont-Doherty Earth Observatory, Columbia Univ., Palisades, NY; and R. Balaji, K. Yochanan, and M. Jennifer

12:00 PM	3.12	REPRESENTATION OF THE MADDEN-JULIAN OSCILLATION: A TOUGH TEST FOR A COUPLED MODEL. Peter M. Inness, Univ. of Reading, Reading, Berks., United Kingdom; and J. M. Slingo
12:15 PM	CONFERENCE LUNCHEON	
2:15 PM	INTERMISSION	
4:00 PM	3.13	NWS/NOAA CLIMATE PREDICTION SERVICES: EVOLUTION AND NEW DIRECTIONS. Robert E. Livezey, NOAA/NWS, Silver Spring, MD
4:15 PM	3.14	DEVELOPING VALUE-ADDED CLIMATE INFORMATION FOR WEATHER-SENSITIVE ORGANIZATIONS: INCREASING OPPORTUNITIES FOR ATMOSPHERIC SCIENTISTS. David Changnon, Northern Illinois Univ., DeKalb, IL
4:30 PM	3.15	AFRICAN DROUGHT MONITORING AND ESTIMATION OF MALARIA VULNERABILITY. Mathew A. Barlow, Lamont-Doherty Earth Observatory, Columbia Univ., Palisades, NY; and B. L. Lyon and C. B. Ropelewski
4:45 PM	3.16	IMPROVING THE INTERACTIONS BETWEEN USERS AND PRODUCERS OF CLIMATE FORECASTS. Neville Nicholls, BMRC, Melbourne, Vic., Australia; and T. Kestin and G. Hammer
5:00 PM	3.17	THE APPLICATION OF WEATHER DERIVATIVES TO MITIGATE THE FINANCIAL RISK OF CLIMATE VARIABILITY, EXTREME PRECIPITATION EVENTS AND EXTREME TEMPERATURE EVENTS. Harvey Stern, BOM, Melbourne, Vic., Australia
5:15 PM	3.18	MIDWESTERN ECONOMIC IMPACTS RESULTING FROM NOAA'S SPRING DROUGHT FORECAST. Stanley Changnon, ISWS, Champaign, IL
10:00 AM - 2:00 PM	EXHIBIT HOURS	
12:15 PM - 2:15 PM	ANNUAL MEETING LUNCHEON	
12:15 PM		DETAILS ON LUNCHEON SPEAKERS. Jim Hartz and Rick Chappell, authors of the book World's apart: How the distance between science and journalism threatens America's future
2:15 PM - 3:30 PM	**POSTER SESSION 2: FORECASTING CLIMATE VARIABILITY POSTERS** Chairperson: Ants Leetmaa, NOAA/NWS/NCEP/CPC, Camp Springs, MD	
	P2.1	ON THE INTRASEASONAL OSCILLATION IN A COUPLED GCM. Joong-Bae Ahn, Pusan National Univ., Pusan, Korea; and H.-S. Park
	P2.2	THE GLOBAL CHANGE MASTER DIRECTORY: CONNECTING USERS OF CLIMATE DATA WITH PRODUCERS OF CLIMATE DATA. Scott A Ritz, NASA Global Change Master Directory, Lanham, MD; and S. M. Leicester
	P2.3	SIMULATION OF SEASONAL TO DECADAL VARIATIONS BY CPC'S NEW CLIMATE MODEL. Wilbur Y. Chen, NOAA/NWS/NCEP/CPC, Camp Springs, MD; and M. Kanamitsu
	P2.4	SEA SURFACE TEMPERATURE ANOMALIES DUE TO ANOMALOUS

OCEANIC HEAT FLUXES. Matthias Munnich, Univ. of California, Los Angeles, CA; and J. D. Neelin and J. C. McWilliams

P2.5 RELATIONSHIPS BETWEEN ATMOSPHERIC INTERNAL VARIABILITY AND THE RESPONSES TO AN EXTRATROPICAL SST ANOMALY. Shiling Peng, CIRES/Univ. of Colorado, Boulder, CO; and W. Robinson

P2.6 PAPER WITHDRAWN

P2.7 PERFORMANCE OF A NESTED REGIONAL SPECTRAL MODEL COUPLED WITH A MESOSCALE MODEL UNDER CONTRASTING ENSO REGIMES. Loren D. White, Jackson State University, Jackson, MS; and R. S. Reddy

P2.8 PAPER WITHDRAWN

P2.9 PAPER WITHDRAWN

P2.10 THE ROLE OF THE OCEAN BOUNDARY CONDITIONS FOR SEASONAL PREDICTABILITY. Thomas J. Reichler, SIO/Univ. of California, La Jolla, CA; and J. O. Roads and M. Kanamitsu

P2.11 TOWARD UNDERSTANDING THE NORTH AMERICAN MONSOON AND FORECASTING SUMMER ENERGY DEMAND IN THE DESERT SOUTHWEST. David L. Mitchell, DRI, Reno, NV; and K. Redmond, D. C. Ivanova, and R. Rabin

P2.12 USING THE HISTORICAL RELATIONSHIP BETWEEN SOLAR FLUX AND HURRICANE STRENGTH TO FORECAST LANDFALL INTENSITY. Phillip A. Zuzolo, Autometric Inc., Springfield, VA; and A. M. Powell, Jr. and B. J. Zuzolo

P2.13 VALUE OF QUALITY EVALUATED, HIGH-TEMPORAL RESOLUTION MARINE METEOROLOGY OBSERVATIONS. Shawn R. Smith, Florida State Univ., Tallahassee, FL; and M. A. Bourassa, D. M. Legler, and J. J. O'Brien

P2.14 THE RELATIONSHIP BETWEEN THE ATMOSPHERIC TRANSIENTS AND THE TROPICAL SEA SURFACE TEMPERATURES. Peitao Peng, NOAA/NWS/NCEP/CPC, Camp Springs, MD; and A. Kumar

P2.15 ON THE END OF EL NINO EVENTS. Gabriel A. Vecchi, JISAO/Univ. of Washington, Seattle, WA; and D. E. Harrison

P2.16 A CONCEPTUAL MODEL FOR THE INDIAN OCEAN DIPOLE MODE. Fei-Fei Jin, Univ. of Hawaii, Honolulu, HI; and L. Yu

P2.17 CONCERNING APPLICATIONS OF SINGULAR SPECTRUM ANALYSIS. Han-Ru Cho, National Central University, Chungli, Taiwan; and H. Ye

P2.18 CLIMATE VARIABILITY AND LARGE STORM SURGE ON THE PACIFIC COAST OF THE UNITED STATES. Anthony L. Westerling, SIO/Univ. of California, La Jolla, CA

P2.19 AN ANALYSIS OF STABILIZING MECHANISMS IN THE CLIMATE SYSTEM USING A SIMPLE ATMOSPHERE-OCEAN BOX-MODEL. Karina Lindberg, Univ. of Copenhagen, Copenhagen, Denmark; and V. A. Alexeev

P2.20 A WESTERN UNITED STATES FIRE CLIMATOLOGY. Anthony L. Westerling, SIO/Univ. of California, La Jolla, CA; and A. Gershunov, D. R. Cayan, and T. J. Brown

P2.21 A GLOBAL PARALLEL HIGH-RESOLUTION UCLA-POP COUPLED ATMOSPHERE-OCEAN GCM FOR ASSESSING CLIMATE AND VARIABILITY IN THE OCEAN. Jin-Yi Yu, Univ. of California, Los Angeles, CA; and R. C. Malone

P2.22 A COUPLED MODELING SYSTEM OF THE HYDROLOGIC CYCLE WITHIN RIVER BASINS. Keeley R. Costigan, LANL, Los Alamos, NM; and C. L. Winter, E. P. Springer, and J. R. Stalker

P2.23 DELAYED ATMOSPHERIC RESPONSE TO ENSO. Arun Kumar, NOAA/NWS/NCEP, Camp Springs, MD; and W. Wang and M. P. Hoerling

P2.24 DOUBLE ENSEMBLE ESTIMATES OF PRECIPITATION IN THE SOUTHEASTERN UNITED STATES FOR EXTREME ENSO EVENTS. K. V. Verzone, Florida State Univ., Tallahassee, FL; and M. A. Bourassa, T. E. LaRow, J. J. O'Brien, and S. D. Cooke

P2.25 EVALUATION OF PARAMETER SENSITIVITY FOR DIFFERENT LEVELS OF LAND-SURFACE MODEL COMPLEXITY. Terri S. Hogue, Univ. of Arizona, Tucson, AZ; and L. A. Bastidas, H. V. Gupta, and S. Sorooshian

P2.26 INTERANNUAL VARIABILITY IN THE REGIONAL CLIMATE SIMULATION OVER SOUTH AMERICA. Vasubandhu Misra, COLA, Calverton, MD; and P. A. Dirmeyer and B. P. Kirtman

P2.27 MAJOR BANGLADESH FLOODS AS COUPLED OCEAN-ATMOSPHERE PHENOMENA. Peter J. Webster, Univ. of Colorado, Boulder, CO; and W. Han, K. Sahami, and R. Grossman

P2.28 MECHANISM OF BIENNIAL OSCILLATION IN THE TROPICAL INDO-PACIFIC. Kwang-Yul Kim, Florida State University, Tallahassee, FL

P2.29 DEPENDENCE ON LAND SURFACE MODEL OF THE TIME SCALE OF SOIL MOISTURE VARIABILITY. Wanqiu Wang, NOAA/NWS/NCEP, Camp Springs, MD; and A. Kumar

P2.30 SUBSEASONAL VARIABILITY OF THE ASIAN SUMMER MONSOON: ROLE OF TROPICAL SST. H. Annamalai, Univ. of Hawaii, Honolulu, HI

3:30 PM - 7:00 PM EXHIBIT HOURS

3:30 PM - 4:00 PM COFFEE BREAK

5:30 PM - 7:00 PM GRAND POSTER NIGHT

7:00 PM **SESSIONS END FOR THE DAY**

WED 17 JAN

8:00 AM PRESIDENT'S SYMPOSIUM

9:30 AM - COFFEE BREAK

10:00 AM

10:00 AM PRESIDENT'S SYMPOSIUM CONTINUED

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11:30 AM

12:00 PM - 1:30 PM LUNCH BREAK

1:00 PM - 5:30 PM **JOINT SESSION 3: WHAT DO CLIMATE STUDIES TELL US ABOUT FUTURE HURRICANE FREQUENCY (JOINT SESSION WITH THE SYMPOSIUM ON CLIMATE VARIABILITY, THE OCEANS, AND SOCIETAL IMPACTS AND THE SYMPOSIUM ON PRECIPITATION EXTREMES: PREDICTION, IMPACTS, AND RESPONSES) (INVITED SESSION)**

Chairpersons: Christopher W. Landsea, NOAA/AOML/HRD, Miami, FL; Ants Leetma, NCEP, Camp Springs, MD

1:00 PM	J3.1	HISTORICAL HURRICANE TRENDS AND VARIABILITY. Christopher W. Landsea, NOAA/AOML/HRD, Miami, FL
1:15 PM	J3.2	CLIMATE CHANGE AND HURRICANE INTENSITY. Kerry Emanuel, MIT, Cambridge, MA
1:30 PM	J3.3	COUPLED MODEL SIMULATIONS OF HURRICANES IN A CO2-WARMED CLIMATE. Thomas R. Knutson, NOAA/GFDL, Princeton, NJ
1:45 PM	J3.4	GLOBAL WARMING AND HURRICANES. William M. Gray, Colorado State Univ., Fort Collins, CO
2:00 PM	OPEN DISCUSSION	
3:00 PM	COFFEE BREAK	

1:30 PM **SESSION 4: SOCIETAL IMPACTS OF WEATHER AND CLIMATE VARIABILITY (PARALLEL WITH SESSION J3)**

Chairperson: Otis Brown, RSMAS/Univ. of Miami, Miami, FL

1:30 PM	4.1	INTRODUCTORY REMARKS.
1:35 PM	4.2	WALTER ORR ROBERTS LECTURE: CLIMATE VARIABILITY AND SOCIETY: ARE WE FOOLING OURSELVES?. Jonathan Overpeck, Univ. of Arizona, Tucson, AZ
2:20 PM	DISCUSSION	
2:40 PM	INTERMISSION	
3:00 PM - 3:30 PM	COFFEE BREAK	

3:30 PM **JOINT SESSION 3: CONTINUED: HURRICANE MITCH: PERSPECTIVES ON A NATURAL DISASTER (INVITED SESSION)**

Chairperson: Kerry Emanuel, MIT, Cambridge, MA

3:30 PM	J3.5	FORECASTING DIFFICULTIES DURING HURRICANE MITCH. Lixion A. Avila, NOAA/NHC, Miami, FL
4:00 PM	J3.6	HURRICANE MITCH'S EFFECT ON HONDURAS. Hector Flores, Director of the Honduran Hydrometeorological Service, Honduras
4:30 PM	J3.7	PAPER WITHDRAWN
4:31 PM	J3.7A	TRENDS IN HURRICANE VULNERABILITY IN LATIN AMERICA AND

THE CARIBBEAN. Roger A. Pielke, Jr., NCAR, Boulder, CO; and J. Rubiera

5:00 PM J3.8 THE RECONSTRUCTION EFFORT IN HONDURAS. Curt Barrett, Manager of the U.S. DOC Mitch Re-construction effort, Silver Spring, MD

5:00 PM **SESSIONS END FOR THE DAY**

6:00 PM RECEPTION (CASH BAR)

7:30 PM AMS ANNUAL AWARDS BANQUET

THUR 18 JAN

8:00 AM - 12:00 PM **SESSION 5: DECADAL VARIABILITY AND THE OCEANIC CARBON CYCLE**

Chairperson: Lisa Dilling, NOAA/OGP, Camp Springs, MD

8:00 AM 5.1 ANATOMY OF NORTH PACIFIC DECADAL VARIABILITY. Niklas Schneider, SIO/Univ. of California, La Jolla, CA; and A. J. Miller and D. W. Pierce

8:15 AM 5.2 THE INFLUENCE OF ENSO ON THE GLOBAL OCEANS: A REVIEW OF "THE ATMOSPHERIC BRIDGE". Michael A. Alexander, NOAA/ERL/CDC, Boulder, CO; and I. Blade, G. Lau, M. Newman, J. Lanzante, and J. Scott

8:30 AM 5.3 THE NORTH ATLANTIC OSCILLATION: A CLIMATE PHENOMENA WITH SIGNIFICANT IMPACTS ON SOCIETY. Martin Visbeck, Columbia Univ., Palisades, NY; and H. Cullen and J. Cherry

9:00 AM 5.4 A NORTH ATLANTIC OCEAN OBSERVING SYSTEM FOR DETECTING UPPER LAYER TEMPERATURE VARIABILITY AT DECADAL TIME-SCALES: THE PAST, PRESENT, AND FUTURE. Robert L. Molinari, NOAA/AOML, Miami, FL

9:30 AM 5.5 MECHANISMS OF TROPICAL ATLANTIC DECADAL CLIMATE DECADAL VARIABILITY. Yochanan Kushnir, Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY; and R. Seager and J. Chiang

9:45 AM 5.6 SCALE INTERACTIONS OVER THE NORTH ATLANTIC: CONNECTIONS BETWEEN THE NORTH ATLANTIC OSCILLATION, THE EL NINO/SOUTHERN OSCILLATION AND INTRASEASONAL VARIATIONS. Wilhelm May, Danish Meteorological Institute, Copenhagen, Denmark; and M. Stendel and S. Legutke

10:00 AM COFFEE BREAK

10:30 AM 5.7 RESPONSE OF OCEAN BIOLOGY TO FUTURE CLIMATE CHANGE. Jorge Sarmiento, Princeton Univ., Princeton, NJ; and R. Barber, L. Bopp, S. Doney, A. C. Hirst, J. Kleypas, R. Matear, U. Mikolajewicz, P. Monfray, J. Orr, S. Spall, R. Slater, and R. Stouffer

11:00 AM 5.8 ATMOSPHERIC CONSTRAINTS ON THE UPTAKE OF CARBON DIOXIDE BY THE OCEANS AND LAND BIOTA. Ralph F. Keeling, SIO/Univ. of California, La Jolla, CA; and C. D. Keeling and A. C. Manning

11:30 AM 5.9 ASSESSING CALIFORNIA STREAMFLOW UNDER PRESENT DAY AND A 2040 TO 2049 CLIMATE CHANGE SCENARIO. N. L. Miller, Lawrence Berkeley National Lab., Berkeley, CA; and W. J. Gutowski, E. Strem, Z. Pan, J. Kim, R. W. Arritt, E. S. Takle, O. B. Christensen, J. H. Christensen, and R. K.

Hartman

11:45 AM 5.10 COMPARISON OF MONSOON CHANGES SIMULATED IN A GREENHOUSE WARMING AND FOR 6000 YEARS BEFORE PRESENT. Akio Kitoh, MRI, Tsukuba, Ibaraki, Japan

10:00 AM - 1:30 PM EXHIBIT HOURS

12:00 PM - 1:30 PM LUNCH BREAK

1:30 PM - 3:00 PM **POSTER SESSION 3: DECADAL VARIABILITY AND OCEANIC CARBON CYCLE POSTERS**

P3.1 USING REGRESSION AND NEURAL NETWORKS TO RECONSTRUCT WINTER CIRCULATION INDICES AND PRECIPITATION IN THE SOUTHWEST. Tereza Cavazos, Univ. of Arizona, Tucson, AZ; and F. Ni, M. K. Hughes, G. Funkhouser, and A. C. Comrie

P3.2 USING A 200-YEAR SIMULATION OF A FULLY-COUPLED CLIMATE SYSTEM MODEL TO INVESTIGATE THE ROLE OF THE CONTINENTAL RUNOFF FLUX ON THE GLOBAL CLIMATE SYSTEM. Marcia L. Branstetter, Univ. of Texas, Austin, TX; and J. S. Famiglietti, W. M. Washington, and A. P. Craig

P3.3 TELECONNECTIONS OF WINTER PRECIPITATION OVER NORTHERN CENTRAL EURASIA TO SEA SURFACE TEMPERATURES OVER THE ATLANTIC AND PACIFIC OCEANS. Hengchun Ye, Univ. of Idaho, Moscow, ID

P3.4 POTENTIAL CLIMATE CHANGE AND ITS EFFECTS ON BARLEY YIELDS IN CANADA. Reinder de Jong, Agriculture and Agri-Food Canada, Ottawa, ON, Canada; and K. Li

P3.5 MODULATION OF ENSO-RELATED CLIMATE VARIATIONS ACROSS THE SOUTHWEST U.S. BY THE PACIFIC DECADAL OSCILLATION. C. Thornbrugh, Univ. of New Mexico, Albuquerque, NM; and C. Liles, D. Kann, and D. S. Gutzler

P3.6 MIDLATITUDE OCEAN-ATMOSPHERE INTERACTION IN AN IDEALIZED COUPLED MODEL. Sergey V. Kravtsov, Univ. of California, Los Angeles, CA; and A. W. Robertson and M. Ghil

P3.7 LAND-ATMOSPHERE INTERACTIONS OVER SOUTHERN SOUTH AMERICA USING A COUPLED PLANT AND ATMOSPHERIC MODEL. PRELIMINARY RESULTS. Adriana Beltran, Colorado State Univ., Fort Collins, CO; and R. A. Pielke, Sr., G. Liston, J. L. Eastman, and M. B. Coughenour

P3.8 INTERDECADAL CHANGES IN THE INTENSITY OF INTRASEASONAL OSCILLATIONS DURING BOREAL SUMMER ASIAN MONSOON. Igor I. Zveryaev, Univ. of Hawaii, Honolulu, HI

P3.9 ARCTIC OSCILLATION AND ITS IMPACT ON US CLIMATE. Julian X. L. Wang, NOAA/ERL/ARL, Silver Spring, MD

	P3.10	ANALYSIS OF REGIONAL INDIAN RAINFALL: INTERDECADAL VARIABILITY AND CONNECTION WITH INDIAN OCEAN SST. Christina Oelfke Clark, PAOS, Univ. of Colorado, Boulder, CO; and P. J. Webster
	P3.11	ELEVATIONAL DEPENDENCE OF THE ENSO PRECIPITATION SIGNAL IN THE SW U.S. Peter J. Fawcett, Univ. of New Mexico, Albuquerque, NM; and A. Tillery and D. S. Gutzler
3:00 PM - 6:00 PM	EXHIBIT HOURS	
3:00 PM - 3:30 PM	COFFEE BREAK	
3:30 PM	**SESSION 6: GLOBAL CHANGE DIRECTIONS**	
3:30 PM	6.1	OBSERVING THE OCEANS FOR CLIMATE. D. James Baker, Administrator of NOAA, Washington, DC
4:00 PM	6.2	SUSTAINABILITY DEVELOPMENT: AN EMERGING RESEARCH AGENDA. J. Michael Hall, NOAA, Office of Global Programs, Silver Spring, MD
4:30 PM	6.3	CLIMATE CHANGE AND VARIABILITY: LESSONS FROM EARTH SYSTEM HISTORY. Eric J. Barron, Penn State Univ., University Park, PA
5:00 PM - 6:00 PM	CLOSING RECEPTION IN EXHIBIT HALL (CASH BAR)	
5:00 PM	CONFERENCE ENDS	
6:30 PM	CLOSING KEYNOTE ADDRESS	
6:30 PM		DETAILS ON CLOSING KEYNOTE ADDRESS. Jean-Michel Cousteau, President and Founder Ocean Futures Society
7:30 PM - 9:30 PM	FIESTA	