

1 Full Name:

Huang Gang
(Family) (First)

2 Date and Place of Birth:

Nov 12th, 1971 in Beijing

3 Sex:

Male



4 Present Address:

State Key Laboratory of Numerical Modeling for Atmospheric Sciences and Geophysical Fluid Dynamics(LASG)
Institute of Atmospheric Physics, Chinese Academy of Sciences
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5 Academic Positions: Distinguished Core Researcher of Chinese Academy of Sciences, Professor of University of Chinese Academy of Sciences, Researcher (Grade II) and PhD supervisor of Institute of Atmospheric Physics, Chinese Academy of Sciences, Recipient of National Outstanding Youth Fund (2014), National Young and Middle-aged Science and Technology Innovation Leaders (2016), National Ten Thousand Plan Science and Technology Innovation Leaders (2017), Head of Monsoon and Sea Air Team, LASG State Key Laboratory, Director of Research Center for Artificial Intelligence in Atmospheric Sciences, Institute of Atmospheric Physics, Chinese Academy of Sciences (CAS), Recipient of the State Council's Special Governmental Allowance, Member of the Academic Committee of the Institute of Atmospheric Physics, CAS

6 Short Scientific Biography:

Graduated from Chengdu Meteorological Institute (B.S.) in July, 1994

Major: atmospheric dynamics

Graduated from Institute of Atmospheric Physics, Chinese Academy Sciences, (Ph.D) in Sep.1999, major: Climatology (Research focus: monsoon dynamics), Ph.D degree

2024.5- Now, Key Laboratory of Earth System Numerical Simulation and Applications

2022.5-Present, Director of Artificial Intelligence Research Center for Atmospheric Sciences, Institute of Atmospheric Sciences, Chinese Academy of Sciences (also)

2016.4-present, LASG state key laboratory of monsoon and air-sea team leader

2015.9-present, Distinguished research fellow of Chinese Academy of

Sciences(CAS)

2015.1-present, Professor at the University of Chinese Academy of Sciences(UCAS)

2015.1-present, Professor, State Key Laboratory of Numerical Modeling for Atmospheric Sciences and Geophysical Fluid Dynamics(LASG), c/o Institute of Atmospheric Physics, Chinese Academy of Sciences

2013.1-2014.9, vice dean of Research Institute of Huainan, Institute of Atmospheric Physics, Chinese Academy of Sciences;

2006.7-2015.1, professor, Key Laboratory of Regional Climate-Envirment for East Asia(RCE-TEA); c/o Institute of Atmospheric Physics, Chinese Academy of Sciences;

2001.12-2006.7, associate professor, START Global Change Regional Research Center for Temperate East Asia; c/o Institute of Atmospheric Physics, Chinese Academy of Sciences;

1999.9-2001.12, assistant professor, START Global Change Regional Research Center for Temperate East Asia; c/o Institute of Atmospheric Physics, Chinese Academy of Sciences;

2019.10, Senior Visiting Scientist at the university of Maryland ESSIC (Earth System Science Interdisciplinary Center)

2018.4, the Chinese University of Hong Kong graduate course teaching

2016.4, the Chinese University of Hong Kong graduate course teaching

2016.1-2, Senior Visiting Scientist at the IPRC in the United States

2015.12, Senior Visiting Scientist at the UCLA and UCSD Scripps research institute in the United States

2015.4, Senior Visiting Scientist at the Curtin University of Technology and Bureau of Meterology in Melbourne and give an Public Lecture

2015.2, the Chinese University of Hong Kong graduate course teaching

2014.3, the Chinese University of Hong Kong graduate course teaching

2013.2, the Chinese University of Hong Kong graduate course teaching

2013.1, Senior Visiting Scientist at Met Office Hadley Centre in UK and participate in the IAP, CAS-UKMO cooperation seminar

2012.11, Senior Visiting Scientist at ICTP (The Abdus Salam International Centre for Theoretical Physics) in Italy and also giving the oral conference report

2012.6, the Chinese University of Hong Kong graduate course teaching

2011.11, the Chinese University of Hong Kong graduate course teaching

2011.4 Senior Visiting Scientist at The Macao Meteorological and Geophysical Bureau (SMG), Chinese University of HK and city University of HK

2010.2-2010.5, Senior Visiting Scientist at the IPRC(International Pacific Research Center) and COLA, U.S.A

2009.8 Senior Visiting Scientist at The Macao Meteorological and Geophysical Bureau (SMG)

2007.6-2007.7 Senior Visiting Scientist at Liverpool University of UK

2005.1-2005.7 Senior Visiting Scientist at City University of Hong Kong

2004.3-2004.6 Senior Visiting Scientist Fellowship at Max-Planck-Institute for Meteorology, Hamburg, Germany

2000.9-2001.1 Post doctor Fellowship, IPRC (International Pacific Research Center) , SOEST , University of Hawaii , U.S.A

1998.4-1998.5 Visiting Scholar at Department of Atmospheric Science, Pusan National University, Korea

Visit and attend the meeting of the countries and regions: (the United States, Japan, South Korea, Thailand, Holland, Germany, Britain, Russia, Australia, Italy, New Zealand, Sri Lanka , China Hong Kong, China Taiwan, China Macau)

7 Fields of Specialization:

Climate Dynamics, Monsoon Dynamics, Air-Sea Interaction, Global Warming (Carbon Neutral) Dynamics, Global Change and Regional Response, ENSO, Extreme Climate, Climate Models and Numerical Simulations, Climate Prediction Estimates, Data Analysis, Blue Skies, Climate and Health, Artificial Intelligence in Atmospheric Science, Database Construction and its Visualization and Analysis

I mainly investigate climate dynamics, especially, the mechanism of variability of atmospheric circulation and monsoon system in East Asia. The study is systematic and original. I have done great amount of original studies on the observation analysis and simulation of the impacts of Indian Ocean long-term variability on Asia Monsoon, as well as the dynamics of extreme climate, ENSO dynamics and associated decadal climate variability. In addition, I have done great amount of research on dataset comparison, construction of database, design of model platform and model simulations (mainly on multi-model ensemble, ocean-atmosphere coupling model, its predictability and uncertainty) et cetera.

8 Honors and Services:

Honors:

Jan.2024, received the AAS Journal 2023 Outstanding Editorial Board Award;

Jan.2024, received the 2023 Special Governmental Allowance from the State Council;

Jan.2024, the Climate Dynamics course, for which he was responsible as the chief professor, was awarded the 2023 Outstanding Graduate Program at the College Level by the University of Chinese Academy of Sciences (UCAS);

Jan.2024, selected as one of the "World's Top 2% Scientists 2023" by Stanford University.

Apr.2023, Selected as one of Research.com's Best Scientists in China for 2023 in the field of Environment

Sep. 2022, Huang Gang's group's work on "ENSO impact on East Asian summer climate under global warming and the mechanism of change" was evaluated by the National Meteorological Administration (NMA) as an excellent achievement in meteorological science and technology since the 13th Five-Year Plan.

May 2021, Stanford University released the "World's Top 2% Scientists 2020"

Apr. 2021, selected as one of the 1000 most influential scientists in the world in the field of climate change research (89 Chinese scientists were selected)

Dec.2020, obtained the Chinese Academy of Sciences "Zhu Li Yue Hua" excellent teacher award

Dec.2020, obtained National outstanding youth fund acceptance of outstanding projects, It is one of the only three outstanding projects in the 21 geoscience projects, and the only one selected by the Atmospheric and Marine Geography Project.

2019, I took charge of the application of "mechanism of influence of Indian Ocean basin mode on summer climate in east Asia" and won the first prize of the basic research award of atmospheric science of Chinese meteorological society (to be officially released).

Oct.2018, honored as an outstanding alumnus of the school of earth and planetary sciences, university of Chinese academy of sciences

Sep.2018, obtained Chinese academy of sciences in 2018 outstanding graduate student advisor

January 2018, "Marine dynamics mechanism of climate modality in the tropical Indian Ocean" won the first prize of natural science of Guangdong province in 2017, ranking second (Guangdong provincial science and technology department)

Dec 2017, elected to the 3th National million plan leader

June 2017, the national innovation talents promotion project in 2016 young and middle-aged leading science and technology innovation talents (National Ministry of Science and Technology)

January 2017, the Institute of Atmospheric Physics, Chinese academy of sciences, title of "advanced worker"

October 2016, the 70th anniversary of the founding by China Democratic League of Beijing's activities, was awarded the service job title of "advanced individual"

October, 2014, "Lu Jia-xi" outstanding teacher of the year award

Agu.2014,obtained Outstanding Young Scientist Foundation of National Nature Science Foundation of China (NSFC)

Nov.2013, obtained Chinese academy of sciences in 2013 outstanding graduate student advisor

Oct. 2013, obtained the 2013 annual "Zhao Jiu-zhang" outstanding young and middle-aged scientists (biennial);

Dec.2012, obtained the 2012 annual scientific and technological innovation contribution award of Institute of Atmospheric Physics (IAP),CAS

Nov.2012, obtained Chinese academy of sciences in 2012 outstanding graduate student advisor

Jun.2012, obtained the Beijing meteorological society young and middle-aged best paper third prize

Jun.2012, obtained the third national youth science blog competition - best picture award

Nov.2012, obtained the Chinese Academy of Sciences "Zhu Li Yue Hua" excellent teacher award

Nov.2011, obtained "science and education combined with innovation and contribution project award" of CAS in 2011

Nov.2010, obtained the excellent apply case of scientific informatization of Chinese Academy of Sciences, the case name is "Atmospheric Science Data Integration Analysis Platform" (Project Leader)

Sep.2010, obtained the 7th excellent youth meterological scientist and technical worker of China Funded by Chinese Academy of Sciences Funded Overseas Study Plan "Advanced Researchers" in 2009; Scholarship (full funding) of Wang Kuan-cheng Education Fund for international conference program in 2008;

Oct.2005, obtained the Second Prize of "Chang-Wang Tu" Young Scientist of Meteorological and Technical Fellowship

Jan.2000, obtained "Xue Du Feng Zheng" Fellowship due to excellent Ph.D dissertation in China

Feb.1999, obtained "Xue Du Feng Zheng" Fellowship due to excellent paper of Atmospheric Science in China

Social honor:

Beijing's zhongguancun high school distinguished alumni (2015 - present); Distinguished Alumnus of Chengdu University of Information Engineering (2014-present); Distinguished Alumnus of School of Earth and Planetary Sciences, University of Chinese Academy of Sciences (2018-present)

Standing member of magazine editors:

Standing member and Editor of Chinese Journal of Atmospheric Sciences (2006 - present)

Editor of Climatic and Environmental Research (2006 - present)

Editor of ACTA Meterologica Sinica (2014 - present)

Editor of China Scientific Data (2015 - present)

Standing Editorial Board, Meteorological Sciences (in Chinese) (2023-present)

Editorial Board of Frontiers in Atmospheric Science, since 2013

Lead Guest Editor of Advances in Meteorology (SCI), since 2014

Guest Editor of Advances in Atmospheric Sciences (SCI, IF = 1.479, 2014), since 2014

Editor of PeerJ (SCI, IF=2.1770, 2016) since 2017

Guest Editor for Sustainability (SCI,IF=2.576,2019) since 2020

Guest Editor for Frontiers in Earth Science (SCI,IF=2.689,2019), since 2020

Editor of Advances in Atmospheric Sciences (SCI, IF = 3.9, 2021), since 2022

Section Editor-in-Chief role for the section Climate in Geosciences (ISSN 2076-3263) (<https://www.mdpi.com/journal/geosciences/sections/climate>) ,since 2022

Editor of The Innovation Geoscience, since 2023

Editor of Scientific reports, since 2023

Services:

Reviewer of International SCI-Journals (42) :

Journal of the meteorological society of Japan (IF=1.233,2012);

Journal of Climate (IF=4.362, 2013);

Monthly Weather Review (IF= 2.758, 2013);

Climate Dynamics (IF=4.602, 2012);

Journal of Geophysical Research—Atmospheres (IF= 3.174, 2013);

Climate Research (IF= 2.684, 2013);

Theoretical and Applied Climatology (IF=1.942, 2012);

Meteorological Applications (IF=1.411, 2012);

International Journal of Climatology (IF=2.906, 2012);

Meteorology and Atmospheric Physics (IF=1.327, 2013);

Geophysical Research Letters (IF=3.982, 2013);

Nature Communications (IF=10.742, 2014);

Geophysical & Astrophysical Fluid Dynamics. (IF=1.062,2014);

Atmosphere (IF=0.226,2014);

Global and Planetary Change (IF=2.766, 2014) ;

Scientific Reports (IF=5.578,2015)

SOLA (IF=0.791,2015)

Hydrological Sciences Journal (IF=2.222,2016)

Science of the Total Environment (IF=4.9,2016)

Deep-Sea Research Part I (IF=2.48, 2016)

Atmospheric Research (IF=4.0343, 2017)

Renewable & sustainable energy reviews(IF=8.05, 2017)(12.11,2019)

PIOS One(IF=2.806,2017)

Atmospheric Science Letters(IF=1.198,2017)

Environmental Research Letters (IF=6.096,2019)

Advances in Meteorology (IF=1.577,2019)

Ocean Engineering (IF=3.068, 2019)

Weather and Climate Extremes (IF=4.698, 2019)

Earth's Future (IF=6.141, 2019)
Journal of Maps (IF=2.654, 2020)
Climatic Change (IF=4.743, 2020)
Environmental Science and Pollution Research (IF=4.223, 2020)
Atmospheric Chemistry and Physics (IF=6.1325, 2021)
Journal of Cleaner Production(IF=11.0717,2021)
Modern Physics Letters B(IF=1.9480,2021)
Annals of the New York Academy of Sciences(IF=6.4994,2021)
Remote Sensing(IF=5.3493,2021)
Nature Climate Change(IF=28.6610,2021)
Healthcare(IF=3.16,2021)
NPJ climate and atmospheric science (IF=9.4475,2022)
Bulletin of the American Meteorological Society (IF=9.11,2022)
Communications Earth & Environment (IF=7.9, 2022)

Reviewers of Chinese Journals (14SCI, 12CSCD) :
Science Bulletin (IF=18.8,2023)
National Science Review (IF=16.3,2023)
Journal of Oceanology and Limnology (IF=1.6,2022)
Journal of Mountain Science (IF= 2.3713,2021)
Advances in Climate Change Research (IF=4.130,2021);
Science in China series d-earth sciences, IF=1.588,2012;
Chinese Science Bulletin, IF=1.321,2012;
Chinese Physics B,IF=1.376,2012;
Acta Physica Sinica, IF=1.016,2012;
Advances in Atmospheric Sciences(AAS), IF=1.338,2012;
Journal of Meteorological Research (JMR),IF=0.799, 2013
Journal of Tropical Meteorology, IF=0.313, 2012;
Chinese Journal of Oceanology and Limnology, IF =0.498, 2012;
Acta Oceanologica Sinica), IF=0.728,2017;

Journal of Ocean University of China (JOUC),since 2012 SCIE;
Climatic and Environmental Research;
Journal of Tropical Oceanography;

Transactions of Atmospheric Sciences;
Chinese Journal of Atmospheric Sciences;
Atmospheric and Oceanic Science Letters(AOSL);
Resources and Environment in The Yangtze Basin;
Chinese Journal of Computational Physics;
Advances in Earth Science;
Journal of the Meteorological Sciences;
Journal of University of Science and Technology of China
Journal of Lanzhou University (Natural Sciences)

Standing member and Editor of Chinese Journal of Atmospheric Sciences;
Editor of Climatic and Environmental Research;
Member of the 6th and 7th CNC-WCRP (China Climate Research Council);
Member of development and strategy investigation group in Institute of Atmospheric Physics, Chinese Academy of Sciences; the 9th of the academic degree evaluation committee of IAP (Institute of Atmospheric Physics, Chinese Academy of Sciences)
Adjunct Professor, Graduate School of Chinese Academy of Sciences (Now rename: University of Chinese Academy of Sciences) ;
Member of academic committee in Center for Plateau Atmosphere and Environment Research in Chengdu University of Information Technology;
Committee member of dynamical meteorology of Chinese Meteorological Society;
Adjunct professor and master teachers of Chengdu University of Information Technology;
Evaluation expert of NSFC fund; Evaluation expert of China Postdoctoral Science Foundation;
The Beijing natural Science foundation of evaluation experts and rate experts;
Adjunct Professor, Nanjing University of Information Science &Technology;
Adjunct Professor, Anhui University of Science and Technology, Master tutor;
The Beijing municipal commission of science and technology experts;
Computer Network Information Center, Chinese Academy of Sciences, Cross Training Postgraduate Tutor
National ministry of science and technology major scientific research projects evaluation experts
National key research and development project review experts
AGU(American Geophysical Union)Member, Chinese Meteorological Society Member, AAAS(American Association for the Advancement of Science) Member;
Feb.2013, was invited to the third chapter 5 of the national assessment report on climate change's lead author and a specific written work
Nov.2013, Editorial Board of Frontiers in Atmospheric Science (Swiss, Gold open-access academic publisher)
Apr.2014, Lead Guest Editor of Advances in Meteorology (SCI, IF = 1.239, 2013)

Dec. 2014. The Editors of ACTA Meterologica Sinica
August 25-27, 2015, Scientific data assembly - data, science and the silk road economic belt program committee members
Since 2015, University of Chinese academy of sciences graduate program "climate dynamics" speaker teacher (40 hours) (2015 - present); Scale of excellent courses
2016 scientific data assembly program committee, Shanghai, China
Dec. 2015, The first Editors of China Scientific Data (CN11-6035/N)
2017 scientific data assembly program committee, Kunming, China
Dec. 2016, The instructor of the youth talent collection project of China meteorological society
Mar. 2017, The first batch of experts invited to be the expert database on the "Liaowang Zhiku"
Sept. 2017, Editor of PeerJ (SCI, IF=2.1770,2016)
Nov. 2017, Member of the expert advisory committee of the institute of carbon emission and environmental data research institute of fudan university
Nov. 2018, The academic committee member of aviation meteorological laboratory of China civil aviation flight university
Apr. 2019, IPCC AR6 Expert Reviewer
Mar. 2020, Member of the academic committee of the institute of atmospheric physics, Chinese academy of sciences
Mar. 2020, JMR reviewer award in August 2019
Mar. 2020, Part-time doctoral supervisor of hohai university
Aug.2020, a member of the academic committee of tianjin key laboratory of Marine meteorological
Sept. 2020, Guest Editor for Sustainability (IF = 2.576, 2019)
Nov.2020, Member of the 3rd Academic Committee of the Key Laboratory of Semi-Arid Climate Change, Ministry of Education, Lanzhou University
Nov.2020, Guest Editor for Frontiers in Earth Science (IF=2.689)
Dec.2020, Expert Team of THE XPLORER PRIZE
July 2022, Editor of Advances in Atmospheric Sciences (SCI, IF = 3.9, 2021)
July 2022, Visiting Professor, Shenzhen Research Institute, Guangdong Ocean University
Aug.2022, Member of Academic Committee, Yunnan Natural Disaster Defense Technology R&D Center, Chengdu University of Information Engineering
November, 2022, First Expert Service Mission Member of "Thousands of People in Thousands of Enterprises", Innovation Service Center, Beijing Science and Technology Association
Mar.2023, Editor of Scientific reports (SCI) (IF= 4. 9967, 2022)
Mar.2023, Vice Chairman of the Academic Leadership Team of the NSFC A3 Foresight Program
Agu.2023, Managing Editor, Meteorological Sciences (CSCD)
May 2024, served as a part-time postgraduate tutor of Civil Aviation Flight College of China (off-campus)

June 2024, served as an expert of the Chinese Academy of Sciences Scientists' Spiritual Propaganda Group

9 Publications:

By the Oct.2024 Dr. Gang Huang has published 293 articles;

The first and corresponding author paper: 156. 210 are published in SCI journal, first author (including corresponding author) SCI: 121, 144 papers are published in 1 zone SCI Journals, (including 30 in Journal of Climate, 36 in Climate Dynamics, 17 Top Journals (including 1 in PNAS, 3 in Nature Climate Change, 2 in Science Advances, 3 in Nature Geoscience, 4 in Nature Communications, 1 in Annual Review of Earth and Planetary Sciences, 3 in NPJ climate and atmospheric science etc.); 30 articles with an impact factor greater than 9; 69 are published in CSCD Journals, including 28 first and corresponding author papers, 3 in AOSL; 14 book chapters are published, including foreign publications section 2 piece, the domestic book chapter 10 articles. The first author and corresponding author's book chapters: 7 papers.

The SCI journals published (210 articles in 46 journals), impact factor and the list is as follows(The combined impact factor of 1361.6):

Journal Title	impact factor (2022)	the number of research papers published
Nature Climate Change	28.6610	3
Nature Geoscience	21.5314	3
Science Bulletin (SB)	20.5776	6
Nature Communications	17.6939	4
Annual Review of Earth and Planetary Sciences	16.3040	1
Science Advances	14.9579	2
Proceedings of the National Academy of Sciences of the United States of America (PNAS)	12.779	1
Desalination	11.211	1
Science of The Total Environment	10.753	2
Environmental Pollution	9.988	2
NPJ climate and atmospheric science	9.4475	3
Bulletin of the American Meteorological Society	9.1162	2
Energy	8.857	2
Earth's Future	8.852	2
Renewable Energy	8.6341	1

Quarterly journal of the royal meteorological society	7.237	1
Environmental Research Letters	6.947	7
Journal of Environmental Sciences	6.9	1
Frontiers in Public Health	6.4608	1
Journal of the American Heart Association(JAHA)	6.106	1
SCIENCE CHINA Earth Sciences	6.0	1
Atmospheric Environment	5.755	1
Metabolites	5.5810	1
Geophysical Research Letters (GRL)	5.576	13
Atmospheric Research	5.5	1
Frontiers in Environmental Science	5.4110	1
Journal of Climate (JC)	5.380	30
Remote Sensing	5.3493	2
Journal of Geophysical Research-Atmosphere	5.217	6
Scientific Reports	4.996	1
Climate Dynamics (CD)	4.901	36
BMC Public Health	4.5	1
Quaternary Science Reviews	4.456	1
Geoscience Letters	4.375	4
Advances in Atmospheric Sciences (AAS)	3.9	16
PLOS One	3.752	1
Frontiers in Marine Science	3.7	1
Frontiers in Earth Science	3.661	2
International Journal of Climatology (IJC)	3.651	9
Theoretical and Applied Climatology (TAC)	3.409	26
Journal of the Meteorological Society of Japan (JMSJ)	3.356	1
Hydrological Processes	3.2	1
Biomedical and Environmental Sciences	3	1
Journal of Meteorological Research (JMR)	2.569	2

Atmospheric Sciences Letters (ASL)	2.992	3
Dynamics of Atmospheres and Oceans (DAO)	2.049	1

Note: click on the  You can download directly;

***Major Publications:**

- 1) Zheng,C., J. Wu, H. Tang, X. Wang, Y. Tian, X. Cao, Y. Tian,R. Gu,Y. Song,X. Pei,J. Qiu,Z. Nie, M. He*, G. Huang* and Z. Wang*. 2024: Relationship of Ambient Humidity with Cardiovascular Diseases: A Prospective Study of 24,510 Adults in a General Population, Biomedical and Environmental Sciences. 37(x):1-11, <https://doi.org/10.3967/bes2024.156> (SCI) 
- 2) Yao, M.,H. Tang*,G. Huang* and R. Wu, 2024, Interdecadal shifts of ENSO influences on Spring Central Asian precipitation, npj Climate and Atmospheric Science, 7,194(2024), <https://doi.org/10.1038/s41612-024-00742-x> (SCI) 
- 3) Su, X., G. Huang*, L. Wang and T. Wang*. 2024: Global drought changes and attribution under carbon neutrality scenario, Climate Dynamics. <https://doi.org/10.1007/s00382-024-07310-2> (SCI) 
- 4) Zhang, S., X. Qu*, G. Huang* and P. Hu, 2024: Reduced rainfall over the Amazon basin in an idealized CO₂ removal scenario: Remote dynamic processes , Journal of Environmental Sciences , <https://doi.org/10.1016/j.jes.2024.05.035> (SCI) 
- 5) Feng, X. ,W. Tao*, G. Huang*,Y. Hu, K M Lau, X. Qu, K. Hu and Y. Wang. 2024: A multivariate probabilistic framework for tracking the regional tropical edges: analysis of inter-annual variations and long-term trends, Environmental Research Letters, 19 (2024) 054026, <https://doi.org/10.1088/1748-9326/ad3b23> (SCI) 
- 6) Huang, G.*, Y. Wang*, Yoo-Geun Ham, B. Mu, W. Tao and C. Xie, 2024: Toward a learnable climate model under the artificial intelligence era. Advances in Atmospheric Sciences , <https://doi.org/10.1007/s00376-024-3305-9> (SCI) 
- 7) Zhang S, Qu X* and Huang, G*. 2024: Enhanced impacts of the North Pacific Victoria Mode on the Indian summer monsoon onset in recent decades. Geoscience Letters. 11, 6 (2024). <https://doi.org/10.1186/s40562-024-00324-y> (SCI) 
- 8) Wang, Y. , G. Huang*, B. Pan, P. Lin, N. Boers, W. Tao, Y. Chen, B. Liu and H. Li, 2024: Correcting Climate Model Sea Surface Temperature Simulations with Generative Adversarial Networks: Climatology, Interannual Variability, and

- Extremes, Advances in Atmospheric Sciences, <https://doi.org/10.1007/s00376-024-3288-6> (SCI) 
- 9) Zhang, S., Xia Qu*, G. Huang*, P. Hu, S. Zhou and L. Wu, 2024: Delayed Onset of Indian Summer Monsoon in Response to CO₂ Removal, *Earth's Future*, 12(2) e2023EF004039, <https://doi.org/10.1029/2023EF004039>(SCI) 
- 10) Chen, Y., Y. Wang*, G. Huang* and Q. Tian, 2024: Coupling Physical Factors for Precipitation Forecast in China with Graph Neural Network, *Geophysical Research Letters*, 51, e2023GL106676. <https://doi.org/10.1029/2023GL106676> (SCI) 
- 11) Zhang, S. X. Qu*, G. Huang*, P. Hu, X. Yang, Y. Wang and L. Wu, 2024: Resilience of Amazon rainfall to CO₂ removal forcing, *Environmental Research Letters*, 19(1)014073, <https://doi.org/10.1088/1748-9326/ad193d> (SCI) 
- 12) Zhang, S., P. Hu*, G. Huang* and X. Qu, 2024: Observed impacts of the North Pacific Victoria Mode on Indian summer monsoon onset, *Atmospheric Research*, 297(2024)107126,<https://doi.org/10.1016/j.atmosres.2023.107126> (SCI) 
- 13) Gan ,R., G. Huang* and K. Hu, 2024: The diverse impacts of El Niño on northeastern Canada and Greenland surface air temperatures, *Journal of climate*, 37(1), 335–348, <https://doi.org/10.1175/JCLI-D-22-0677.1> (SCI) 
- 14) CHEN Sisi, ZHAO Huan, HUANG Gang*, Tang haosu. 2024. Spatiotemporal Distribution Characteristics of Summer Extreme Heat Events with Dry and Humid Heat Days in Chengdu during 1980–2019 [J]. *Climatic and Environmental Research* (in Chinese), 29 (X): 1–15. doi: 10.3878/j.issn.1006-9585.2024.24003
- 15) Huang, R and G. Huang*.2024: In Memory of Our Mentor and Academician Prof Ye Duzheng : Overview of His Academic Achievements and Serious and Careful Spirit of Scholarship [J]. *Chinese Journal of Atmospheric Sciences* (in Chinese), 48(1): 1–7. <https://doi.org/10.3878/j.issn.1006-9895.2310.23302> (CSCD) 
- 16) Huang, G.* , K. Hu, H. Tang , et al. 2024.et al. 2024. Understanding the Influence of Background Mean-state Field on ENSO Tropical and Extratropical Teleconnection from An Energetic Perspective [J]. *Chinese Journal of Atmospheric Sciences* (in Chinese), 48(1): 218–227. ,<https://doi.org/10.3878/j.issn.1006-9895.2305.23304> (CSCD) 
- 17) Liu, F.; J. Zhou; B. Wang; J. Leung; D. Chen; Z. Lin; I-S Kang; Q. Chao; Z. Ke; K. Fan; B. Liu; G. Huang; P-c Hsu and W. Dong, 2024: Opportunities and barriers for skillful sub-seasonal prediction of East Asian summer precipitation, *Bulletin of the American Meteorological Society (BAMS)* (SCI)

- 18) Xu, X., J. Liu*, **G. Huang** and Y. Ding, 2024: Distribution and trend of explosive cyclones over the Southern Ocean and associated atmospheric and oceanic changes during 1980–2020, *Geoscience Letters* 11, 38 (2024). <https://doi.org/10.1186/s40562-024-00356-4> (SCI) 
- 19) Wang L, Chen W*, **Huang G.**, Wang T.* ,Wang Q., Su X., Ren Z., Chotamonsak C, Limsakul A, Torsri K. 2024. Characteristics of super drought in Southwest China and the associated compounding effect of multiscalar anomalies. *Science China Earth Sciences*, 67(7), 2084-2102, <https://doi.org/10.1007/s11430-023-1341-4> (SCI) 
- 20) Wang, Z.-B., Q.-H. Ding*, R. Wu, T. Ballinger, B. Guan, D. Bozkurt, D. Nash, I. Baxter, D. Topál, Z. Li, **G. Huang**, W. Chen, S.-F. Chen, X. Cao, and Z. Chen, 2024: Role of atmospheric rivers in shaping long term Arctic moisture variability. *Nature Communications*, 15, 5505 (2024). <https://doi.org/10.1038/s41467-024-49857-y> (SCI) 
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Indo-western Pacific ocean capacitor and coherent climate anomalies in post-ENSO summer S Xie, K Yu, D Yan, K Hu, J Chowdary, G Huang Advances in Atmospheric Sciences	668 *	2015
Role of Air-Sea Interaction in the Long Persistence of El Niño-Induced North Indian Ocean Warming G Huang, S Xie, K Hu, J Chowdary, Y Du, G Huang, T Tampe Journal of Climate 22 (3), 730-747	550	2009

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Huang, Gang	Institute of Atmosph	chn	211	1999	2024	36,490	1,193	15	
Huang, Gang	Institute of Atmosph	chn	190	1999	2023	44,165	1,041	14	
Huang, Gang	Institute of Atmosph	chn	162	1999	2022	51,424	880	13	
Huang, Gang	Institute of Atmosph	chn	162	1999	2022	51,424	880	13	
Huang, Gang	Institute of Atmosph	chn	136	1999	2021	58,035	1,167	14	
Huang, Gang	Institute of Atmosph	chn	116	1999	2020	54772	906	13	

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1 Huang Gang*, Wang Pengfei, Liu Bo, Hu Kaiming, Tao weichen and Huang Yong: CIESM earth system model coupling prediction software V1.0, Registration number: 2019SR0970428 (the first persons involved)

2 Huang Gang*, Wang Pengfei, Liu Bo, Hu kaiming, Tao weichen and Huang Yong: CIESM earth system model of ENSO prediction system V1.0, Registration number: 2019SR0971354(the first persons involved)

3 Huang Gang*, Wang Su and Hu Kaiming: The definition and application software of China blue index V1.0, Registration number: 2019SR1184690 (the first persons involved)

4 Yong Huang, Gang Huang, Ying Wang, BP neural network based ENSO ensemble prediction software V1.0, registration number: 2022SR1359291, second completer

Patent: 1 item

1 Huang Gang*, Wang Su: A method and system for determining the sky blue index based on meteorological elements, 2020, China, 202010226425.X

****International Conference Paper List 46**

1. Critical climate issues towards carbon neutrality targets, **Gang Huang***, The 2nd workshop on the A3 Foresight Program “Networking Climate Change Research Hubs for Promoting Future Earth Over Northeast Asia”, Dec.24,2023, zhuhai, China
2. Solving the Mystery of Summer Climate Disasters in East Asia, **Huang Gang***, 2023 International Conference on Frontiers of Ocean Science and Technology (ICFOST), Changsha, China, October 13-15, 2023(Invited Talk)
3. Cracking the Mystery of Summer Hazards in East Asia-Talking about the Impact of ENSO on Summer Precipitation in East Asia and Its Future Changes, **Huang Gang***, International Symposium on Energy and Water Cycle in East Asia and its Interaction with Monsoon (Invited Presentation), August 20-25, 2023, Dunhuang, China.
4. The impact of ENSO on summer precipitation in East Asian and its future changes, **Huang Gang***,2023,1st Joint Workshop on the A3 Foresight Program: Networking Climate Change Hubs for Promoting Future Earth Over Northeast Asia, Busan, Korea, Apr. 18-19

5. The impact of ENSO on East Asian summer rainfall and its future change, **Huang Gang***, 2022 International Conference on Sea-Air Interaction and Climate Dynamics, Changsha, P.R. China, Nov19-21,(Invited Talk)
6. The Definition, Variations, Reasons, and Forecast of Blue Days, **Huang Gang*** etc International year of Basic Sciences for Sustainable Development -- International Forum for Basic Sciences in Climate Changes and Sustainable Development, Nov 22st – 26th, 2022, Beijing (Invited Talk)
7. Solving the Mystery of Summer Climate Disasters in East Asia, **Huang Gang***, International Training Course on Marine Scientific Research in the South China Sea, online, 22-26, Agust 2022, China and ASEAN Member States (AMS) young Scientist (<http://scs.fio.com.cn/Training2022>) (Invited Talk)
8. The impact of ENSO on summer precipitation in East Asia and its future changes , **Huang Gang***, 2021 China-Thailand Symposium on Decadal Change of Climate Extremes in Southeast Asian Region, online, Dec 6, 2021(Invited report)
9. Distinct global warming rates tied to multiple ocean surface temperature changes, **Huang Gang* etc**, The 5th China-Thailand Joint Conference on Climate change,27-29 Nov,2017, Chiangmai, Thailand
10. A New Circulation Index for the East Asian Summer Monsoon Variability, **Huang Gang* etc**, The 13th 'General Circulation Model Simulations of the East Asian Climate' (EAC) workshop'- East Asian Climate under Global Warming: Understanding and Projection, 24-25 March, 2016,Beijing,China (Invited Speakers)
11. A New Dynamical Index for the East Asian Summer Monsoon, **Huang Gang* etc**, Second International Symposium on Climate and Earth System Modeling, Oct.15-16, 2015, Nanjing (Invited)
12. The impact of ENSO on Northwest Pacific summer climate simulated in CMIP5 models, **Huang Gang***, **Ocean-atmospheric dynamics in the changing climate, 2015.12.10-12.12** , *Climate Atmosphere Science and Physical Oceanography (CASPO)*, Scripps Institution of Oceanography, UC San Diego, La Jolla, California, USA
13. A New Upper-level Circulation Index for the East Asian Summer Monsoon Variability, **Huang Gang* etc**, 'Recent and expected climate change along the Chinese coastal zones' workshop, Sept.10-11, 2015,Qingdao (Invited)
14. Indian Ocean air-sea interaction and its climate effects, **Huang Gang***, **Public Seminar, Curtin University** Australia, 9 April 2015, Perth, Australia (invited talk)

15. Coupled ocean-atmosphere dynamics of global warming, **Huang Gang***, The 12th NIMR-IAP Joint Research Workshop, 1-5 Apr.2014, Jeju-do, Korea (Invited)
16. Spatial and temporal variations of light rain events over China and the mid-high latitudes of the Northern Hemisphere, **Huang Gang***, Workshop on Climate Change and Urban Adaptation Science and Practice: Exploring the Challenges, 8-15 December 2013, Raglan, New Zealand (Invited)
17. Ocean's Role in Regional Climate Change under Global Warming, **Huang Gang***, Beijing Symposium on Global Change 2013(Global Change and Sustainable Development),23-25 Sept,2013,Beijing ,China
18. Equatorward shift of the South Asian high in response to anthropogenic forcing,**Gang Huang*** and Xia Qu, Physical Processes in outer and near-earth space and XII Young scientists' Conference (BSFP-2013), Sep 9 – 14, 2013, Irkutsk,Russia (Invited)
19. Equatorward shift of the South Asian high in response to anthropogenic forcing, **Gang Huang*** etc, the Third Korea-China Joint Symposium,2-6 May 2013 in Guilin, China (Invited)
20. An Enhanced Influence of Tropical Indian Ocean on the South Asia High after the Late 1970s, **Gang Huang*** etc, International Workshop on Seasonal to Decadal Prediction, 13-16 May 2013 in Toulouse, France.
21. The Decadal Change in the Relation Between ENSO and WNP/EA Summer Climate in CMIP5 Simulation, **Gang Huang*** etc, Workshop on IAP and Met-office Jan15-Jan18, 2013, UK (Invited)
22. Decadal change in the impact of summer Indian Ocean SST anomaly on the western North Pacific summer monsoons in the late 1970s,**Gang Huang***, Workshop on Variability in the Western Tropical Pacific: Mechanisms, Teleconnections and Impacts on Sub-Seasonal, Inter-Annual and Inter-Decadal Time Scales, Nov. 12 – Nov.16., ICTP, Italy, 2012
23. An enhanced influence of tropical Indian Ocean on the South Asia High after the late 1970s, **Gang Huang***, The first workshop of the weather and climate in East-south Asia, Aug.2012,chuxiong,Yunnan Province, China
24. Interannual variability in East Asian climate and its association with tropical Indian Ocean conditions in CMIP5 models, **Gang Huang***, The 11th IAP-NIMR Joint Research Workshop, Beijing, May2012,China (Invited)
25. Interannual variability in East Asian climate and its association with tropical Indian Ocean conditions in CMIP5 models; **Gang Huang***, Kaiming Hu, Xia Qu, WCRP Workshop on Coupled Model Intercomparison Project Phase5 (CMIP5) Model Analysis, Mar5-9, 2012, Hawaii, IPRC,U.S.A

26. The Impact of Indian Ocean variability on high temperature extremes across south of Yangtze River Valley in late summer: **Gang Huang***, Kaiming Hu, The China-Korea Joint Workshop on the East Asian Monsoon Variability, Apr. 4-8 ,2011,Guangzhou (Invited)
27. Strengthening of tropical Indian Ocean teleconnection to the Northwest Pacific since the mid-1970s:An atmospheric GCM study: **Gang Huang***, Kaiming Hu, Shang-ping Xie, Proceedings of the 10th NIMR-IAP Joint Research Workshop, Oct.28-29 ,2010, ByeonSan, Jeolla-do,Korea,PP59 (Invited)
28. Threatening of climate change on water resources and supply: case study of northwest China: Cui, X.; **Huang, G.**; Chen, W.; Morse, A. EGU2008-A-01959, EGU General Assembly 2008
29. Impact of Summer Indian Ocean SST variability on Asian Monsoon: **Gang Huang***, Kaiming Hu, 2008 Western Pacific Geophysics Meeting, Number: 49, Cairns, Australia, 29 July - 1 August 2008
30. Long persistence of El Nino-induced Indian Ocean warming: Role of air-sea interaction: Yan Du, Shang-ping Xie, **G. Huang**, K.M.Hu, 2008 Western Pacific Geophysics Meeting, Number: 263, Cairns, Australia, 29 July - 1 August 2008
31. Indian Ocean capacitor effect: El Nino's long grip on the Asian-western Pacific summer monsoon, Shang-Ping Xie, K.M.Hu, J.Hafner, Y.Du, **G. Huang**, H.Tokinaga, 2008 Western Pacific Geophysics Meeting, Number: 261(invited), Cairns, Australia, 29 July - 1 August 2008
32. Impact of Summer Indian Ocean SST variability on Asian Monsoon: Differences between North and South, **Huang Gang*** and Hu kaiming,42, Joint Conference on the 6th International Symposium on Asian Monsoon System (ISAM6) and the 9th East Asian Climate Workshop (EAC9), 10-13 December,2007 ACROS Fukuoka, Japan
33. Differences between the NCEP/NCAR and ERA-40 reanalysis data over East Part of China, **Huang Gang***, The 5th International Symposium on Asian Monsoon System (ISAM5),11-15 october,2005, Korea
34. The Variability of the Wind System Circulating round the West Side of the Tibetan Plateau and Its Relation to the Asian-African Summer Monsoon, **Huang Gang*** and Johnny C.L .Chan, IAMAS 2005, Beijing
35. An Index meansuring the international variation of the East Asian summer monsoon-The EAP index, **Gang Huang***, The Fourth International Symposium on Asian Monsoon System(ISAM4),Kunming,China,2004, 24-29May
36. Interannual Variations of the Summer Monsoon over China, **Huang Gang***, International workshop on climate variability in Asian Monsoon Region: Past to Future, 2-4 Dec 2003, Bangkok, Thailand (Invited report)

37. Further Study about A 20-member Ensemble Simulation with An AGCM forced by Observed SSTs, **Huang Gang***, Shang-Ping, Xie and Shinji Matsumura ,The Third International Symposium on Asian Monsoon System(ISAM3) ,December 11-14, 2001, Nago, Okinawa, Japan
38. A 20-members ensemble simulation using CCSR/NIES AGCM forced by observed SST, **Huang Gang*** etc. Challenges of A Changing Earth, 10-13 July,2001 Amsterdam, Netherlands
39. The study of NAO by using a 20-member Ensemble Simulation by CCSR/NIES AGCM, **Huang Gang***, The Fifth Atmospheric Dynamics academic meeting, April, 2001. Yang Zhou
40. About Ensemble simulation using CCSR/NIES AGCM, **Huang Gang***, International Pacific Research Center (IPRC) seminar, Hawaii, USA, Dec30,2000
41. North China and North Africa Drought in Global Viewpoint, **Huang Gang***, The Second International Symposium on Asian Monsoon System (ISAM2), Cheju, Korea, March 27-31, 2000
42. The Climate Background of the Drought in North China and Dry in Yellow River, **Huang Gang***, The meeting of “The Climate and the Continual Development”; Taipei, Taiwan, 1999.6, 51-55
43. The Relationship between the East Asian Summer Monsoon Circulation Anomaly and the climatic Variation over China and Korea. **Huang Gang***, Yan Zhongwei, Baek-Jo Kim, Proceedings of International Conference on the Variability and Predictability of the Asian Monsoon (ICAM), September22-26, 1998, Xian, China, 26-29
44. Interannual Variability of the East Asian Summer Monsoon associated with the thermal states of the tropical Pacific, Ren Baohua, Huang Ronghui, **Huang Gang**, Proceedings of International Conference on the Variability and Predictability of the Asian Monsoon (ICAM), September 22-26,1998, XiAn, China, 258-262
45. The East Asian Summer Monsoon Circulation Anomaly Index and the Interannual Variation of the East Asian Summer Monsoon, **Huang Gang***, Yan Zhongwei, International Conference on Monsoon and hydroloic Cycle, Kyongju, Korea, 22-25, April, 1998, 236-241
46. The Study of East Asian Summer Monsoon strength index and the relationship with East Asian summer monsoon interannual variability, **Huang Gang***, The fourth Atmospheric Dynamics academic meeting, Sept.1997, WuYi Mountain, Fujian

**** National Academic Conferences ***** (2014-now)

1 2023, Nov 3-4, Assessment and Dynamics of Drought Changes in the Context of Carbon Neutrality (Invited Presentation), **Gang Huang**, The 3rd Symposium on Atmospheric Science Development and Strategy in Western China, Lanzhou, China

2 Feb 17, 2023 **Huang Gang**, National Outstanding & Outstanding Youth Science Foundation Application Experience Sharing, Lecture on Marine Science, Sun Yat-sen University, Online, Invited Presentation

3 Nov 26, 2022 **Huang Gang**, Definition, Changes, Modeling and Impacts of Blue Skies, IYBSSD Conference Agenda | International Forum on Climate Change and Sustainable Development, online, invited

4 April 22, 2022, **Gang Huang**, Impacts of ENSO on summer precipitation in East Asia and its future changes, NUIST Science and Technology Activity Month 2022 - Longshan Environmental Forum (40th), Online, Invited presentation

5 November 26-27, 2020, Impacts of High and Low Emissions on Ocean Heat Absorption in the Context of Global Warming (Invited Presentation), **Gang Huang**, 2020 Workshop on Laboratory Development Strategies of the Key Laboratory of Semi-Arid Climate Change of the Ministry of Education, Lanzhou University, Lanzhou, China

6 November 21, 2019, **Gang Huang**, The past, present and future of anticyclones in the Northwest Pacific Ocean, Academic Lecture in Marine Science, Sun Yat-sen University, Zhuhai, Invited

7 May 8, 2019, **Gang Huang**, Re-conceptualization of Interannual Prediction of Summer Precipitation in East Asia - The Role of Topography, Collaborative Innovation Center for Meteorological Disaster Forecasting, Warning and Evaluation, Nanjing University of Information Engineering, Nanjing, Invited

8 July 20-21, 2017, **Gang Huang**, Global Warming and Regulation of Oceans, Workshop on Monsoons and Extreme Climate Events, Lanzhou, China

9 November 11-12, 2017, **Gang Huang**, Contribution of oceans at different stages of global warming and its relationship with carbon emissions, Inauguration Ceremony and Symposium of Carbon Emission and Environmental Big Data Institute, Big Data Research Institute, Fudan University, Shanghai, China

10 October 26-27, 2017, **Gang Huang**, Multi-year intergenerational changes in tropical SST and its contribution to global warming over the last century, The 4th Young Scientists Forum (Invited Presentation), Hangzhou

11 November 10, 2014, **Gang Huang**, Warming of the Indian Ocean and its impact on the summer climate of East Asia, School of Earth Sciences, Zhejiang University, Hangzhou, Invited

**** Hong Kong, Macao and Taiwan report**

1. **Huang Gang**, A new East Asian summer monsoon index, 2016 The typhoon rainstorm weather cooperation symposium on both sides of China, held on January 20 to 22, Taiwan kaohsiung (30 minutes, invited talk)
2. **Huang Gang etc**, Orographically Anchored El Nino Effect on Summer Rainfall in Central China, the 2019 cross-strait academic seminar on typhoon Rainfall and short-term climate, January 19-23, 2019, (invited report)

**** Public Report**

1 Huang Gang, Global warming is a flicker? The 11th Public Science Day, Chinese Academy of Sciences--- On May 17, 2015 Beijing

2 Huang Gang, Global Warming? April 13, 2016 Second Grade Science Presentation, Zhong guan cun No. 4 Elementary School

****Media with the introduction of my achievements and articles**

<http://hg.lasg.ac.cn/article/229>

Published several articles and results by

Foreign media: Nature Climate Change. A team; NBC news; The Discovery; Yahoo; PlanetSave; Daily India; Science daily; Star advertiser; Hawaii Public Radio; Tusco Citizen; Scripps Magazine; ClimateWire; South China Morning Post etc.

and Other Domestic media: the people's Daily, Guang-ming Daily, China Daily, Oriental Morning Post, Beijing times, the Beijing news, Xinhua net, Phoenix net, Sina; Proceedings of China, the scientific network, China meteorological news, CAS news (both in English and Chinese) (CAS- Chinese academy of sciences), reports and interviews

To participate in the Beijing TV station life: 2016; Experts decode: how long farewell haze (March 31, 2016, 20:25)

To participate in Guangming Net(founded by guangming daily) :Mr Du-zheng ye one hundred commemorative feature program (on April 22, 2016)

***Teaching Course:**

1 "The latest progress on climate change study" - the summer semester of graduate university of Chinese academy of sciences, teacher and course organizer (20 hours) (2009 - present); Every year ratings are A;

2 "Advanced environmental planning techniques the MSC programs" - invited instructor at the Chinese university of Hong Kong, from 2011 - present);

3 "Climate dynamics" - spring semester teaching teachers university graduate school, Chinese academy of sciences (50 hours) (-) in the spring of 2015

To participate in courses:

4 "Tropical Marine climate and air-sea interaction" workshops, on November 10-21, 2014, Speaker: Huang Gang; lecture: the Indian Ocean Warming and its influence on

east Asian summer climate; Guangzhou, China, South China sea institute of academy of sciences, Chinese academy of sciences university courses, 3 credits

5 "Ocean's influence on the arid and semi-arid climate" workshop, on April 19, 2016, Speaker: Huang Gang; Lecture: Tropical air-sea interaction on the influence of the east Asian summer climate; Lanzhou, Lanzhou university

6. Workshop on "effects of oceans on arid and semi-arid climate" (2nd session), 23 April 2018, report by: huang gang; Lecture content: Effects of ENSO on topographic precipitation in China; Lanzhou, Lanzhou university

7 "tropical Marine climate and air-sea interaction" workshops, November 18, 2019, Huang Gang, content of the lecture: under the background of global warming in the northwestern Pacific summer wind response to ENSO change and influence of simulation error analysis; South China sea institute of academy of sciences, Guangzhou, China

***Scientific Data Platform:**

1. Atmospheric Scientific Database (since 1990,1995,2000,2005 major participant) since 1990
<http://data.iap.ac.cn>
2. Atmospheric Science Data Integration Analysis Platform (Leader) since 2009
<http://adoap.csdb.cn>
If you have any suggestion or advice, please send email to hg@mail.iap.ac.cn

***Technical Research Report:**

1. **Huang Gang***, 2002:The Manual of East Asian Monsoon System Database, IAP website, <http://data.iap.ac.cn>; <http://hg.iap.ac.cn/data.htm>
2. **Huang Gang***, 2002:In Common use of atmospheric science dataset, Model and Academic institute unit: Classification and Link, <http://hg.iap.ac.cn/mylink.htm>
3. **Huang Gang*** and Wang Lin, 2004:ERA-40 Reanalysis dataset and Its manuals, Data center of IAP internal Material,1-50
4. Wang Pengfei, Xu Yuhong, Ma Xiaoguang, Jian Wensheng and **Huang Gang** etc, 2005:Design and Realization of Atmospheric Science Data management System, IAP(Institute of Atmospheric Physics) internal manual of dataset,1-122

***PhD Thesis (1999) of Dr. Gang Huang**

Title “Anomalous Meridional Activity Of the East Asian Summer Monsoon In Regional and Global Viewpoint”, Institute of Atmospheric Physics, Chinese Academy of Sciences outstanding doctoral dissertation & National excellent doctoral dissertation nomination;

Advisor: Prof. Ye Duzheng Academicians,

10 Projects :

Finished Projects:

- (1) Key scientific project in the 9th Five-Year Plan “96-908” project “National short-term climate prediction”, (1996-2000), backbone.

- (2) Major Program of The Chinese Academy of Sciences (CAS) “Asia monsoon climate shift and global change” (1997-2000), backbone
- (3) Pre-selected project in the 9th Five-Year Plan “the projection of national living environment in future”, (1997-2000), participant.
- (4) Key innovation Project of Institute of Atmospheric Physics (IAP) “Decadal variability of the North Pacific and East Asia”, (1999-2000), major participant.
- (5) General program of IAP “The evolution feature of Asia-Africa monsoon and the trend of China monsoon under global warming”(1999-2000), PI.
- (6) The National Natural Science Foundation of China (NSFC) for Young Scholar “the impacts of the Arctic sea ice on Asia monsoon” (2000-2002), backbone.
- (7) CAS Knowledge Innovation Major Project “The evolution regulation of ecological environment in western China and sustainable utilization of land and water resources” KZCX1-10-07, (2000-2003), major backbone.
- (8) Major State Basic Research Development Program “The evolution of living environment and aridification projection in North China”, (1999-2004), backbone & program contact.
- (9) IAP Major innovation Project “the response/adaption of transition zone to global warming”, (2001-2006), backbone.
- (10) CAS Knowledge Innovation Project—Scientific database and its application—atmospheric sciences and environment database NF105-SDB-1-25 (2001.1-2005.12), backbone.
- (11) NSFC for Young Scholar “The decadal evolution and trends of Asia-Africa monsoon under global warming” (2004.1-2006.12), PI.
- (12) CAS Knowledge Innovation Project “The theory of water resources optimal allocation under South water to north background” KZCX3-SW-218, (2003—2006), PI of subprogram.
- (13) Open fund of Key laboratory of Meteorological Disaster of Ministry of Education (Nanjing University of Information Sciences & Technology) “The influences of round-off errors on climate model long-time integration” KLME0601, (2007.1-2008.12), PI.
- (14) Major State Basic Research Development Program “The monitor/forecast theory and method study of severe storm rain in South China” 2004CB418300, (2004-2008), PI of a topic.
- (15) Key Program of atmospheric physics of Knowledge Innovation Project of CAS “The application of computation instability theory in climate models” (2007-2009).
- (16) Youth Program of atmospheric physics of Knowledge Innovation Project of CAS “The role of Pacific decadal signal tunnel on Asia monsoon-ENSO decadal relationship” IAP07314, (2007-2009), co-PI.
- (17) Major State Basic Research Development Program “Aridification over North China and human adaption” 2006CB400500, (2006-2010), backbone.
- (18) National Marine Environmental Forecasting Center-IAP joint project “The development of global ocean-atmosphere coupled model” (2008-2010), PI.
- (19) General Program of NSFC “Indian Ocean long-term variability on the decadal evolution of Asia-Africa monsoon” 40775051/ D0507 (2008-2010), PI.

- (20) CAS Knowledge Innovation Project (3rd phase) “Mechanisms, models design and simulation of land-atmosphere interaction in aid and semi-aid regions” KZCX2-YW-220, (2007-2010), PI of subprogram.
- (21) CAS information specific fund—Atmospheric science database INFO-115-C01-SDB4-07, (2009-2010), backbone.
- (22) Key Program of NSFC “the responses/influences of South China Sea oceanic environment to/on the summertime weather and climate over South China” U0733002 (2008-2011), PI of its subprogram.
- (23) National Key Technology R&D Program “The synthetical evaluation technique of major natural disaster classification” 2008BAK50B02 (2008.9-2011.12), backbone.
- (25) CAS Knowledge Innovation Project “Tropical Indian Ocean basin warming and its impacts on East Asia summer climate”, (2009-2011), PI of subprogram.
- (26) Major Projects of International Cooperation and Exchanges NSFC “climate change over East Asia and the Northwestern Pacific and its simulation” 40810059005 (2009-2011), backbone.
- (27) Major Program of NSFC “The boundary currents in lower latitude of the Pacific and low frequent anomalies in warmpool” 40890155, (2009-2012), backbone.
- (28) Special Scientific Research Project for Public Interest “The Influences of the western Pacific warmpool and near China seas on seasonal-interannual variability over East Asia” GYHY201006021, (2010-2012), PI of sub-project.
- (29) Hong Kong RGC joint project "" Roles of Tropical Indian and Pacific -oceans Summertime in the South China Sea Climate Variability"; co-PI (project leader); 2013-2015.
- (30) Major State Basic Research Development sub-program “High-performance algorithm in climate system models and its application” 2011CB309704, (2011-2015), vice PI.
- (31) Plateau atmosphere and environment key laboratory of Sichuan Province open project "The Qinghai-Tibet Plateau and The Tropical Indian Ocean Thermal Contrast the impact on the Climate of East Asia", the project number: PAEKL - 2014 - K2, PI; 2014-2015.
- (32) Sub-program of CAS Strategic Priority Research Program “The Thermal Contrast Variability of East Asia and Surrounding Areas and Its Impacts” XDA05090402, (2011-2015), Backbone.
- (33) Major State Global change Research Development sub-program “The Inhomogeneity of Indian-Pacific oceans to global warming and its influences on East Asia Climate” 2012CB955604, (2012-2016), PI.
- (34) Shenzhen Key Laboratory of Severe Weather in South China project "under the background of global warming the climate change characteristics and causes of shenzhen heavy rain disaster analysis", project director, 2015-2016
- (35) General Program of NSFC “Indian Ocean on East Asia summer climate and relevant predict skill” 41275083 (2013-2016), PI.
- (36) Major Research Plan Breeding Project of NSFC “Synergistic effects of Tibetan Plateau and Indian Ocean on East Asia summer monsoon” 91337105 (2014-2016), PI.

- (37) National outstanding youth fund project "tropical air-sea interaction and the east Asian monsoon system", the project number: NSFC. 41425019; PI; 2015.01 to 2019.12
- (38) Public science and technology research funds projects of ocean (201505013), "the global ocean climate sets prediction model application system development and business model", PI of sub-project., 2015-2018
- (39) International cooperation and exchanges of national natural science fund project (NSFC) "the decadal variability of southeast Asia monsoon climate and recent forecasts", project number: NSFC. 41422501; Project backbone; 2016.09 to 2019.08
- (40) National natural science foundation key project "rapid and slow ocean response process and impact on east Asian regional climate in the context of global warming", project no. : NSFC 41831175, project leader; 2019.01- 2023.12
- (41) National natural science foundation innovation group project "east Asia monsoon variation characteristics and mechanism", project number: NSFC41721004, project backbone; 2018.01- 2023.12
- (42) Key project of ocean research center, Chinese academy of sciences: "study on the coupling process between ocean in indo-pacific convergence area and east Asian summer monsoon and long-term climate change in qinghai-tibet plateau under the background of climate warming", project leader, 2019.11-2022.11
- (43) Subproject "impact of Indian Ocean - third pole thermal differences on monsoons and their meridional transport effects ", funded by cas strategic pilot science and technology project no. : XDA20060501; Subtopic backbone; 2018-2022
- (44) National key research and development plan for global change and response key project "research and development of high-resolution sea ice model" (2018YFA0605900), project backbone; 2018.9- 2023.12
- (45) National natural science foundation of China (NSFC) major research program "multi-layer interaction on the qinghai-tibet plateau and its climate impact" integrated project, project approval no. 91937302, project leader, 2019.9-2022.9
- (46) Horizontal project: Climate feasibility study of Erdos High-tech Zone, Inner Mongolia Autonomous Region, 2022.3-2022.5, project leader

Projects on study (2024--):

- (1) "Climate change and westerly - monsoon synergy", The Second Comprehensive Scientific Investigation of the Qinghai-Tibet Plateau by the Ministry of Science and Technology, (2019QZKK0102), project backbone, 2019.11-now
- (2) National Natural Science Foundation of China Key Project "Key Climate Dynamics Processes in the Context of Carbon Neutrality and Their Impacts on Regional Climate in China", Project No. NSFC42141019, Project Leader; 2022.01-2025.12
- (3) National Natural Science Foundation of China (Grant No. 42261144687), National Natural Science Foundation of China (Grant No. 42261144687), 2023.01-2025.12

**Underline means PI or co-pi projects

11 The Mentor Team Introduced:

Note: My tutor team including overseas cooperation mentors: Professor Shang-Ping Xie and Professor Renguang Wu;

Since 2010, with the famous meteorologist, Thousands of people plan in China, Professor Shang-ping Xie joint admissions.

Professor Shang-ping Xie's Resume:

<http://www.soest.hawaii.edu/~xie/> (Professor of the university of Hawaii, IPRC),

<http://scrippsscholars.ucsd.edu/sxie/> (UCSD Scripps honorary Professor, USA);

<http://scholar.google.com/citations?user=vGEx6O0AAAAJ&hl=en>

Welcome to join our group!

12 My Contact Information:

Gang Huang

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My Homepage at University of Chinese academy of sciences:

<http://people.ucas.ac.cn/~hg>



My ScienceNet Blog: <http://blog.sciencenet.cn/u/hgiap>

My Sina Blog: <http://blog.sina.com.cn/hgiap>

My Sina Weibo: <http://weibo.com/u/1406513455>

My Renren Blog: <http://www.renren.com/548048800/profile>

My Google Scholar:

<http://scholar.google.com/citations?user=OabEWb0AAAAJ&hl=en>

<http://scholar.gfsstp.com/citations?user=OabEWb0AAAAJ&hl=zh-CN&oi=ao>

My Researchgate:

http://www.researchgate.net/profile/Gang_Huang14

My Linkedin

<https://www.linkedin.com/in/hgiap>

Electronic card:

please use mobile phone scan the code:

Chinese version:

