

中国水下考古报告系列(二)

# 西沙水下考古

## 1998~1999

中国国家博物馆水下考古研究中心  
海南省文物保护管理办公室 编著



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《西沙水下考古》是我国水下考古学科研领域的第二本专题报告，也是我第二次为水下考古报告来作序。目睹水下考古事业不断取得一个又一个成果，我感到由衷地高兴。同时，我也不由得追念起前年底去世的著名考古学家、我的老师俞伟超先生，他是中国水下考古事业的奠基人，这本报告的问世也是对他最好的纪念。

水下考古是我国文物考古事业中一个富有特色的领域，国家文物局对这项工作一直非常重视，抓得很紧。南海诸岛考古项目是国家文物局规划的水下考古全盘工作中非常重要的一项工作。南海既是古代中国海上丝绸之路的大通道，也是现代中国和平崛起的战略空间。从汉唐时期开始，中国人开创了途经南海的海外交通线，至明朝，中国进入大航海时期，郑和船队远涉重洋到达波斯湾、红海、非洲的蒙巴萨和南亚的吉里地闷，形成了著名的“海上丝绸之路”。中国古代船舶分别在沿大陆边沿的“内沟”航线和沿西沙、中沙、南沙群岛航行的“外沟”航线上，遗留下大量的中国历朝历代的文化遗产，这些水下文化遗产是证明中国最早开发南海的珍贵的文物史料。因此，开展南海诸岛水下考古研究工作，既有着重大的学术意义，也有着特殊的现实意义和政治意义。

作为南海诸岛考古项目之一的1998~1999年西沙水下文物遗存抢救发掘工作，取得了丰富的成果。按照国家文物局的要求，水下考古队员们对调查发掘资料进行了精心整理和深入细致地分析研究，分工合作编写了这本科学报告，集中、系统地反映了发掘工作的收获和成绩，为学术界相关领域的研究提供了新的材料和科学依据。同时依靠实物资料所获得的科学结论，再次向世人昭示，居于古代“海上丝绸之路”要冲的南海诸岛，蕴藏有极为丰富的我国古代文化遗产，它们是中国最早到达、最先开发南海诸岛的最好的历史见证。

西沙水下考古也是对我们水下考古专业队伍的一次很好的检验。在远离陆上的后勤保障，长时间海上作业的条件下，西沙水下考古工作队发扬团结友爱、艰苦奋斗、勤俭节约的精神，经受了恶劣自然环境的考验，出色地完成了党和国家赋予的庄严使命，表明我国水下考古队伍的整体素质得到了很大的提高，这是一支团结的队伍、坚强的队伍，是我们考古事业的骄傲。西沙水下考古表明了我们这支年轻队伍的远海作业能力和适应

能力有了长足的进步。

我本人曾在西沙水下考古队出发时，代表国家文物局到海南琼海向他们授旗，为他们壮行；当他们不辱使命满载而归时，我再次到琼海潭门港迎接他们凯旋。这充分体现了国家文物局对水下考古工作的高度重视，对南海诸岛考古工作的高度重视。现在，南海水下文化遗产保护工作的重要性与紧迫性日益凸现，国家文物局已委托国家博物馆水下考古研究中心会同海南省文管办，抓紧研究制定关于南海水下文化遗产的保护和科研规划，2006年开始逐步实施。“十一五”期间，南海水下考古工作将呈现出崭新的局面。

我国的水下考古事业自开创以来，在国家文物局的统一领导和部署下，原中国历史博物馆水下考古学研究中心，现中国国家博物馆水下考古研究中心一直承担着具体的业务科研工作，组织全国的水下考古专业人员开展了一系列调查发掘，包括本次西沙水下考古。但水下考古任何项目的实施都离不开地方政府和主管部门的支持，团结协作是水下考古的优良传统，是我们事业取得成功的基础，必须保持发扬下去。目前，我们的水下考古队伍面临着繁重的工作任务，比如沿海水下文物普查，目前只在广东、福建开展了一部分，广东“南海 I 号”南宋沉船遗址的发掘工作，福建近海古代沉船遗址的抢救发掘工作等。要完成好这些工作，既需要国家文物局的正确领导和周密部署，以及各级领导和有关单位的支持合作，更需要水下考古研究中心组织全国的水下考古队员们，继续艰苦奋斗，发扬亲密团结、特别能战斗的团队精神，为文物考古事业做出更大的贡献。

1998~1999年西沙水下考古工作，为南海诸岛的水下文化遗产的保护科研工作打下了良好的基础。南海作为中国古代中华文明传播的前沿地带，其辖区内遗存的历史文物将越来越显现出重要的价值。展望未来，只要我们同心同德，全面、准确地宣传水下文化遗产的价值及特殊作用，科学、有效地利用文物资源和优势，展示中华民族在各个历史变革时期所体现的伟大创造力、生产力和强大的凝聚力，必将会为国家的强盛产生巨大的推进作用。

国家文物局副局长 

2005年9月20日





参加西沙水下考古的工作人员合影

(从左至右：崔勇、黄明忠、邱玉胜、朱滨、鄂杰、李滨、黎吉龙、张松、徐海滨、张威、赵嘉斌、孙键)

# 前 言

西沙群岛水下文化遗存抢救发掘工作是国家文物局规划的“南海诸岛考古项目”之一。居于古代“海上丝绸之路”要冲的南海诸岛，即东沙群岛、中沙群岛、西沙群岛、南沙群岛和曾母暗沙，自古以来就是我国神圣领土不可分割的一部分，有着极为丰富的水下文化遗产，它们是中国人最早到达、最先开发南海诸岛的最好的历史见证。

1998年11月，海南省文化广播体育厅和中国历史博物馆（现中国国家博物馆）联合向国家文物局提出了开展西沙群岛水下文物遗存抢救发掘工作的请示。国家文物局报请国务院批准并征得外交部等相关部门的同意后，批准开展西沙水下考古工作。在国家文物局的直接领导下，中国历史博物馆和海南省文化广电出版体育厅（后简称海南省文体厅）组成了项目领导小组，由中国历史博物馆水下考古学研究室（现中国国家博物馆水下考古研究中心）牵头，调集海南省文物保护管理办公室、广东省文物考古研究所、青岛市文物局、福州市文物考古工作队等单位的水下考古专业人员组成了西沙水下考古队，名单如下：

队 长：张 威（中国历史博物馆水下考古学研究室主任）

副队长：王亦平（海南省文物保护管理办公室主任）

队 员：郝思德（海南省文物保护管理办公室）

张 松（广东省文物考古研究所）

崔 勇（广东省文物考古研究所）

黎吉龙（海南省文物保护管理办公室）

孙 键（中国历史博物馆水下考古学研究室）

徐海滨（中国历史博物馆水下考古学研究室）

李 滨（中国历史博物馆水下考古学研究室）

鄂 杰（中国历史博物馆水下考古学研究室）

赵嘉斌（中国历史博物馆水下考古学研究室）

邱玉胜（青岛市文物局）

朱 滨（福州市文物考古工作队）

黄明忠（海南省文物保护管理办公室）

王大新（海南省文物保护管理办公室）

张利城（福建电视台，第二期全国水下考古专业人员培训班特邀学员）

担负辅助工作的广州救捞局专业潜水员6人

考古队分为调查发掘、测绘记录、水下摄影摄像、技术设备、后勤保障五个小组，租用海南省琼海市潭门港的两艘运输船（琼琼海03088、琼琼海03089）作为工作船，排水量均为100吨，航速8~10节，可驶进北礁礁盘内停泊、作业。航行路线由潭门港出发，直接开赴北礁。

西沙水下考古队自1998年12月18日启航，1999年1月25日凯旋，海上作业39天。以西沙群岛北礁为主要工作地点，在华光礁与银屿两地避风期间也开展了调查试掘工作，均取得了丰富的成果。共发现五代、宋、元、明、清各个年代的水下文物遗存13处，近代遗存1处。这些遗存均分布在珊瑚环礁的礁盘之上，最深35米，最浅的1~2米。根据遗物堆积的情况初步分析，13处古代遗存大致应分为两类。一类是确凿无疑的古代沉船遗址，以华光礁1号宋元沉船为代表。另一类遗存是基本上不见沉船的遗迹，以散落的瓷器碎片为主。推测一种可能是这类遗存并不是沉船海难原发地点，大量的水下文物的堆积可能是由海浪、潮水冲积而形成的；第二种可能是沉船的船体因自然力以及后期人为的破坏已不存在，仅保存下部分遗物。

此次考古调查采集和发掘获得的出水文物（包括标本）共计1500余件，以瓷器为主，还有少量铁器、铅锡、象牙、船板等。瓷器种类比较丰富，有宋元时期的青瓷、影青、白瓷，明清时期的青花等；器型有碗、碟、粉盒、瓶、壶、军持、小罐、大罐、缸等。以福建、广东、江西的窑系为主。宋元时期瓷器的装饰图案有缠枝花卉、莲瓣纹、卷云纹等；部分豆青釉大碗内底有凸起阳文笔“吉”、“大吉”文字款；还有些器物的外底有墨书题字。明清时期青花瓷的装饰图案更是绚丽多彩，题材有花鸟、动物、人物、山水、楼台等等；文字有“福”、“寿”等吉祥语，有些器底还有“上品佳器”一类的吉颂款。在北礁3号沉船遗址还发现有4块碇石，经选择打捞上一块，长3.2米，重近500公斤，是迄今为止发现的最大的碇石（有专家认为这类碇石是我国古代木石锚的一部分）。西沙群岛海水的水质清澈，能见度好。在考古调查发掘过程中，水下考古队员按照严格的科学程序，依照国际标准，利用GPS、水下照相机、水下摄像机等技术设备，对每一处遗存地点都进行了测量、绘图、照相、摄像等较高水平的科学记录。现场获取的这批完整而系统的科学资料，与出水遗物一样，具有同等重要的科研价值。

此次工作任务的顺利完成，还是我国水下考古事业进一步发展壮大，走向成熟的重要标志。在此之前，我国水下考古工作主要是在近海沿岸海区进行。1996年西沙文物普查期间，虽也开展了一些水下考古工作，但



主要是在岛礁陆地进行调查。此次是我国水下考古工作者首次在远海开展专项水下考古的调查发掘工作,表明我们这支年轻队伍的远洋作业能力和适应能力有了长足的进步。

1998~1999年西沙水下考古获得的丰富成果,再次以无可争辩的事实向世人昭示,西沙群岛自古以来就我国神圣领土不可分割的一部分。同时它也为研究我国航海史、海外贸易史、陶瓷外销史、造船史等提供了一批非常宝贵的实物资料,具有重要的学术意义。

国家文物局十分重视西沙水下考古工作,为确保此项目的顺利实施与水下考古队的人员安全,进行了周密的部署,提出了明确的指导方针。张柏副局长和文保司宋新潮、关强亲自到琼海潭门港为考古队送行和迎接他们归来。中国历史博物馆、海南省文体厅的领导也给予了指导与支持。此外,西沙水下考古的成功实施与海军的支持保障、当地各级政府乃至西沙渔民的热情协助更是密不可分的。

中国国家博物馆水下考古研究中心和海南省文物保护管理办公室联合组织了调查发掘资料的整理和报告的编写工作。张威同志任主编,采取分工合作的方式,各章节分别安排专人撰写,人员如下:

第一章:孙键;第二章:张松;第三章:赵嘉斌、鄂杰;第四章:崔勇、鄂杰;第五章:李滨、徐海滨;第六章:王亦平、孙键、鄂杰;第七章:孙键;附录:栗建安。

附表一:王亦平;附表二:赵嘉斌;附表三、四:赵嘉斌、鄂杰。

英文目录和前言的翻译由鄂杰完成;文物摄影由徐海滨、李滨完成;文物绘图由赵荣娣、赵秀玉、刘方完成。

特别应该指出的是,福建省考古研究所栗建安所长为完成本报告的编写工作做出了突出贡献,他不但在报告编写过程中给予大量具体指导和帮助,而且担负了报告终稿的审定工作。

1998~1999年西沙水下考古的成果,为我们展示了南海诸岛考古工作的远大前景。目前,国家文物局已委托中国国家博物馆水下考古研究中心制订《南海水下文化遗产保护与考古工作规划》,依照这一规划,在未来几年内,中国水下考古工作者的身影将再次出现在南海诸岛。

张威

# Preface

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**T**he Salvage Excavation on underwater heritage in Xisha Islands is an important part of the South China Sea Islands Archaeology Project which is issued by the State Administration of Cultural Heritage. The South China Sea Islands, as a whole, including the Dongsha Islands, Zhongsha Islands, Xisha Islands, Nansha Islands, and the Zengmu Reef, spreading on the thoroughfare of the Sea Silk Way, is a sacred and inalienable part of China since ancient time. Lots of underwater heritages from the mainland are located in this area, they are the most telling witness to show that Chinese are the people who had first arrived and developed the South China Sea Islands.

In November 1998, a report was submitted to the State Administration of Cultural Heritage, jointly by the Department of Culture Radio Television and sports of Hainan Province (nowadays, the Department of Culture Radio Television Publication and sports of Hainan Province) and the Nation Museum of Chinese History, requesting Instructions on salvage archaeology on underwater cultural heritage in the Xisha Islands. After obtaining the approval from the State Council and the Ministry of Foreign Affairs, the General Staff Department (GSD), the Headquarters of the Navy, the administration approved the excavation. Under the administration, the Underwater Archaeology Research Office of the Nation Museum of Chinese History (nowadays, the Underwater Archaeology Research Center of the National Museum of China) as the leader, composed a leading group for this project with the Department of Culture Radio Television and sports of Hainan Province. And other specialists from the Cultural Heritage administrative office of Hainan Province, the Institute of Cultural Relics and Archaeology of Guangdong Province, Qingdao Municipal Bureau of Cultural Heritage, Fuzhou Cultural Relics and Archaeology Task Force, were assembled to form the Xisha Islands Underwater Archaeology Team, they are as below:

Captain: Zhang Wei (director of the Underwater Archaeology Research Office of the Nation Museum of Chinese History),

Vice Captain: Wang Yiping (director of the Cultural Heritage administrative office of Hainan Province),

Team Members:

Hao Side (from the Cultural Heritage administrative office of Hainan Province),

Zhang Song (from the Institute of Cultural Relics and Archaeology of

Guangdong Province),

Cui Yong (from the Institute of Cultural Relics and Archaeology of Guangdong Province)

Li Jilong (from the Cultural Heritage administrative office of Hainan Province),

Sun Jian (from the Underwater Archaeology Research Office of the Nation Museum of Chinese History),

Xu Haibin (from the Underwater Archaeology Research Office of the Nation Museum of Chinese History),

Li Bin (from the Underwater Archaeology Research Office of the Nation Museum of Chinese History),

Ao Jie (from the Underwater Archaeology Research Office of the Nation Museum of Chinese History),

Zhao Jiabin (from the Underwater Archaeology Research Office of the Nation Museum of Chinese History),

Qiu Yusheng (from the Qingdao Municipal Bureau of Cultural Heritage),

Zhu Bin (from the Fuzhou Cultural Relics and Archaeology Task Force),

Huang Mingzhong (from the Cultural Heritage administrative office of Hainan Province),

Wang Daxin (from the Cultural Heritage administrative office of Hainan Province),

Zhang Licheng (from the TV Station of Fujian Province, a specially invited member of the 2nd Country-wide Underwater Archaeology Specialists Training Course).

and six divers from the Guangzhou Salvage Bureau for supported job.

The Archaeology Team was divided into five groups as investigation and excavation, surveying and recording, underwater photography, technology and equipments, and Logistical support. The factory ships were two hired fishing transprot ships(numbered as: Qiong Qionghai 03088 and Qiong Qionghai 03089) from Tanmen harbour, Qionghai City, Hainan Province, with 100-ton displacement and 8-10 knots speed each, able to steer through and anchor among the coral reefs for operation. The navigation course started from Tanmen harbour and ran straight to the Beijiao Reef in Xisha Islands.

The Xisha Islands Underwater Archaeology Team called away on December 18th, 1998, and returned on January 25th, 1999, having a 39-day course at sea. It had yielded substantial results not only from the work in Beijiao Reef, which was the mainpoint of this course, but also from the investigation and sondage carried out in Huaguang Reef and Yinyu Reef while taking shelter from typhoons. Thirteen ancient cultural heritage sites of Five Dynasties period ( 907-960), Song Dynasties, and Yuan, Ming, Qing Dynasty, and a extra modern site were found underwater from 35 meters deep to 1 or 2 meters shallow, spreading

among the reefs. Judging from the initial exploration of the deposit situation, those sites can be divided into two kinds:

1, conclusive ancient shipwrecks, take, for example the Huaguang Reef I Shipwreck of Song or Yuan Dynasty;

2, sites without shipwreck, mainly broken pieces of porcelain scattered all over on the seabed. One speculation was that there were not the original places of disaster, and the deposits were removed and piled up by waves and tides. Another speculation was the shipwrecks were destroyed by natural force or human activities, only small parts of relics remained.

Out from those sites, about 1500 pieces of relics were unearthed, most of them were porcelains, and small amount of ironware, lead and tin pieces, ivory, and plunks. Porcelains were rich in types, varied from celadon and misty blue ware of Song and Yuan Dynasties, to blue-and-white of Ming and Qing Dynasties, and shaped as bowl, plate, powder box, vase, pot, kendis, can, jar, and vat. Porcelains of Song or Yuan Dynasties carried the decorative patterns as curling or tangled tree branch, lotus and cirrose designs; some of the sea-green glazed bowls had projected character as Ji or Da Ji(means good luck) on the bottom inside, some others had the various inked characters on the bottom outside. Patterns on porcelains of Ming and Qing Dynasties turned more richful, having topics as bird-and-flower, animals, figure, landscape, and pavilion, some has praising words as Shang Hao Jia Qi( first-class product). On Beijiao Reef III Shipwreck site, four anchor stones were found and one was taken back, with 3.2 meters long, weighed roughly 500 kg, and it was believed by some specialists to be part of ancient wood and stone anchor of China. Xisha Islands has the clean water and good visibility, during the exploration and excavation, the underwater archaeologists strictly followed scientific procedures, under the international rules, positioning, mapping, and recording each site with GPS, underwater cameras/video cameras, and high-quality data were acquired, they were surely as important as the heritages themselves.

The success of the Xisha Islands project also stood for the further grown-up and development of our underwater archaeology career. Before that, our underwater archaeology work was operated mainly in the offshore waters. Although some underwater job had been done during the general survey of heritage in Xisha Islands in 1996, the course was mainly on-earth one. This project was the first time for our national underwater archaeologists to operate exploration and excavation in off-lying sea, demonstrating the substantial headway this team had made in its development of pelagic performing ability and problem-solving capability.

The substantial results yielded by this project demonstrated that the Xisha Islands is an inalienable part of the inviolable territory of China, and at the same time, the large quantities of valuable historical and cultural relics that were found



will benefit the research of the Nautical History, Overseas Trading History, Porcelain Exporting History and Ship-building History of China.

The State Administration of Cultural Heritage attached great importance to the Xisha Islands Underwater Archaeology Project, which made well-prepared deployment and definite guidelines to ensure the smooth performance and the personnel safety of the course. Vice director of the Administration Zhang Bei, and Song Xinchao, Guan Qiang (officials from the Department of Culture Relic Protection), went directly to the Tanmen Harbour to bid farewell and welcome the team. And the success of the project owed a lot to the support and protection from the Navy, the local governments of various levels and the fishermen of Xisha Islands.

The Underwater Archaeology Research Office of the Nation Museum of Chinese History and the Cultural Heritage administrative office of Hainan Province jointly carried out the collation of data and the commission report. Mr. Zhang Wei was the editor-in-chief of the report, and the chapters were written by various personnel as follows:

Chapter 1: Sun Jian; Chapter 2: Zhang Song; Chapter 3 Zhao Jiabin, Ao Jie; Chapter 4: Cui Yong, Ao Jie; Chapter 5: Li Bin, Xu Haibin; Chapter 6: Wang Yiping, Sun Jian, Ao Jie; Chapter 7: Sun Jian; research paper: Li Jian'an.

Appendix 1: Wang Yiping; Appendix 2: Zhao Jiabin; Appendix 3,4: Zhao Jiabin, Ao Jie.

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Special thanks to Mr. Li Jian'an, the director of Archaeology Institute of Fujian Province, who paid many hard efforts to this report, not only giving us the helpful advices during the commission, but also proofreading the report's final draft.

The achievement of the 98-99 Xisha Islands' Project highlighted the prospects of Underwater Archaeology work in South China Sea Islands. The State Administration of Cultural Heritage has authorized the the Underwater Archaeology Research Center of the National Museum of China to frame the Underwater Cultural Heritages Protection and Archaeology Work Plan, under that plan, the underwater archaeologists will carry out more activities in the South China Sea Islands in the coming two or three years.

Zhang Wei

# 目 录

## 目录

序	张 柏(i)
参加西沙水下考古的工作人员合影	(iii)
前言	张 威(v)
第一章 西沙群岛的历史沿革与既往考古工作	1
第二章 西沙群岛的自然环境与水下文物遗存	9
第一节 西沙群岛自然环境	10
第二节 本次水下考古调查涉及的主要岛礁及其自然生态状况	15
第三节 西沙水下文物遗存的形成与自然环境	18
第三章 1998~1999年的水下考古调查	21
第一节 调查经过	22
第二节 调查方法	23
第三节 水下文物遗存的分布	27
第四章 华光礁1号沉船遗址的试掘	35
第一节 发现经过	36
第二节 探方设置	38
第三节 发掘方法及技术手段	40
第四节 采集、发掘与绘图	43
第五节 遗迹	48
第五章 西沙群岛水下考古调查的摄影与摄像	51
第一节 水上摄影	52
第二节 水下摄影	57
第三节 水下摄像	62
第六章 西沙群岛水下考古调查的出水文物	65
第一节 华光礁1号沉船遗址	66
第二节 北礁1号沉船遗址	139
第三节 北礁3号沉船遗址	150
第四节 北礁1号遗物点	185

第五节 北礁2号遗物点·····	191
第六节 北礁3号遗物点·····	193
第七节 北礁4号遗物点·····	195
第八节 北礁5号遗物点·····	196
第九节 石屿1号遗物点·····	196
第十节 银屿1号遗物点·····	204
第十一节 银屿2号遗物点·····	223
第十二节 银屿3号遗物点·····	224
<b>第七章 结语</b> ·····	<b>228</b>
第一节 广泛存在于南海诸岛的古代沉船·····	229
第二节 贸易陶瓷·····	234
第三节 海上“陶瓷之路”·····	239
<b>附表</b> ·····	<b>245</b>
附表一 西沙群岛发现文物遗存地点一览表·····	245
附表二 西沙水下考古调查水下摄影与摄像潜水表·····	247
附表三 西沙水下考古潜水记录表（一）·····	248
附表四 西沙水下考古潜水记录表（二）·····	249
<b>附录 西沙群岛水下考古调查发现陶瓷器的相关问题</b> ·····	<b>250</b>

# Contents

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Foreword .....	Zhang Bai (i)
The Xisha Underwater Archaeology Working Group.....	(iii)
Preface .....	Zhang Wei (v)
Chapter 1 The History of Xisha and the Work Done there .....	1
Chapter 2 The Natural Environment of the Underwater Cultural Heritage in Xisha Islands .....	9
1. The Natural Environment of Xisha Islands .....	10
2. The Ecologic Regime of the Concerned Reef Islands of the Underwater Archaeology Project .....	15
3. The Formation of the Underwater Cultural Heritage and Their Natural Environment .....	18
Chapter 3 The Underwater Archaeology Exploration from 1998 to 1999 .....	21
1. The Process of the Exploration .....	22
2. The Methods of the Exploration .....	23
3. The Distribution of Underwater Cultural Heritage .....	27
Chapter 4 The Underwater Excavation of Huaguangjiao 1 Ship- wreck .....	35
1. The Process of the Discovery .....	36
2. The Installation of Excavation Frames .....	38
3. The Methods and Technologies of Excavation .....	40
4. Collecting, Excavating, and Drafting .....	43
5. The Site .....	48
Chapter 5 Photography and Video in the Underwater Archaeology Exploration of Xisha .....	51
1. Off-water Photographing .....	52
2. Underwater Photographing .....	57
3. Underwater Videoing .....	62
Chapter 6 The Unearthed Antiques from Xisha Islands .....	65



1. The Huaguangjiao 1 Shipwreck .....	66
2. Beijiao 1 Shipwreck .....	139
3. Beijiao 3 Shipwreck .....	150
4. Beijiao 1 Site .....	185
5. Beijiao 2 Site .....	191
6. Beijiao 3 Site .....	193
7. Beijiao 4 Site .....	195
8. Beijiao 5 Site .....	196
9. Shiyu 1 Site .....	196
10. Yinyu 1 Site .....	204
11. Yinyu 2 Site .....	223
12. Yinyu 3 Site .....	224
<b>Chapter 7 Understanding and Consideration .....</b>	<b>228</b>
1. Widely distributed ancient shipwrecks in South Sea Islands .....	229
2. Foreign-trade Porcelains .....	234
3. The Silk Road on Sea .....	239
<b>Appendix .....</b>	<b>245</b>
1. Log Book .....	245
2. Dive Log Book .....	247
3. Statistic Table of the Unearthed Antiques .....	248
4. Statistic Table of the Unearthed Antiques .....	249
<b>Associated Problems about the Porcelains Discovered in the Underwater Exploration .....</b>	<b>250</b>