經濟部幕僚單位及行政機關人員從事兩岸交流活動報告書

参加「第9屆亞洲海洋地質國際研討會 (ICAMG-9)」 報告書

研提人單位 :經濟部中央地質調查所

職 稱:科長

姓名: 陳松春

參 訪 期 間:107年10月8日至107年10月12日

報告日期:107年10月29日

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政府機關(構)人員從事兩岸交流活動(參加會議)報告

壹、交流活動基本資料

一、活動名稱:參加「第9屆亞洲海洋地質國際研討會(ICAMG-9)」

二、活動日期: 107年10月8日至107年10月12日

三、主辦單位:上海同濟大學

四、報告撰寫人服務單位:經濟部中央地質調查所

貳、活動重點

一、活動性質

「亞洲海洋地質國際研討會」為每3至4年由亞洲各國輪流舉辦,第1屆研討會為1988年在中國大陸上海舉行,之後第2~8屆分別由日本、韓國、中國大陸、泰國、日本及印度等國輪流舉行,時至今年已屆30年。「第9屆亞洲海洋地質國際研討會」包含眾多科學、環境及災害等議題,計有沿岸與大陸棚海洋地質、亞洲大陸邊緣的沉積環境、古海洋與古環境變遷、海洋地體構造與地質災害、海底能源資源(天然氣水合物、礦產資源等)、極地氣候變遷,以及亞洲海洋地質深海鑽探50年來的調查研究成果等。

自從 2011 年日本 311 地震海嘯發生後,亞洲各國更加深刻體會到周遭海洋地質及災害的連動相關性,相關海洋地質的調查研究必須互相密切合作及交流,尤其沿岸海底山

1

崩、海嘯災害及極端氣候變遷等,都直接影響到人民的生命 財產安全。我國在日本 311 地震後,開始著重海洋災害之海 底山崩及海嘯的調查研究;2015 年新加坡學者研究指出,文 獻記載 1781 年在臺灣西南沿海所發生的海嘯災害,可能是 西南海域海底山崩所引發造成的,更引起國內學者對海底山 崩的重視;另外,臺灣西南海域有大量的天然氣水合物(可燃 冰)蘊藏,可燃冰可能受到溫壓條件改變、地震或開採時的影 響而解離,如果在斜坡處,可燃冰的解離也會造成海底山 崩。因此,不論從環境、可燃冰開發海床穩定性或防災的觀 點,都已引起我國學研界對海底山崩的重視,並持續加強調 查研究中。

本所執行臺灣西南海域天然氣水合物(可燃冰)的調查研究計畫(2004~2015 年),在西南海域收集許多海洋地質、地球物理、地球化學及沉積物岩心等資料,這些海域資料均提供給國內學研界進行海底山崩地質災害研究所需的基礎資料。在本國際研討會議中,台灣大學海洋研究所蘇志杰教授、許鶴瀚教授、中央大學地球科學系林靜怡教授及葉一慶教授等人,特地籌組「海底山崩、引發機制、發生過程及沉積學的紀錄」的議題(S25: Seafloor Failures: Triggering Mechanisms, Processes and Sedimentological Records),除發表

我國海底山崩的調查研究成果外,也特意了解及收集各國海 底山崩災害調查研究的現況與進展。

參加此國際研討會,除了解各國在海洋地質、地質災害、環境變遷的調查研究概況及調查技術的進展外,並經由發表海底山崩調查研究成果,和各國學者專家交流,吸取相關調查技術與經驗。

預期效益為了解各國在海洋地質、地質災害、環境變遷 的調查研究概況、技術與經驗,作為我國藍色國土永續開發 利用、調查研究及防災與減災之規劃策略參考。

二、活動內容

(一)行程

本次參加「第9屆亞洲海洋地質國際研討會 (ICAMG-9)」的行程詳如表 1,赴陸期間自 107 年 10 月 8 日至 10 月 12 日,參加會前野外地質考察行程(長江三角 洲崇明島及國家濕地公園)、參加研討會及發表調查研究 成果。由於大會規劃 12 日議程在 17:50 結束(如附件 1), 從會場同濟大學到機場搭乘地鐵約需 2.5 hr,因大陸機場 安檢嚴格,進入機場前還需進行安檢,一般在飛機起飛前 約 3 hr 前到達機場,進行報到及安檢等程序,因此當晚已 無飛機回台,因此12日必須住宿上海,由於會議結束後, 規劃於13日至14日私人旅遊行程(上海附近的蘇州及烏 鎮),為節省公帑,不支領13日雜費,因此公務出差為8 日至12日。詳細行程安排如表1。

表 1、行程安排與活動內容

日期	星期	活動內容	往返地點	夜宿地點
10月8日	1	去程(桃園機場搭機至上 海)及報到	臺北-上海	上海
10月9日	11	會前野外地質考察行程 (長江三角洲崇明島、長 興島及東灘濕地公園)	上海	上海
10月10日	111	参加研討會	上海	上海
10月11日	四	參加研討會及發表調查 研究成果	上海	上海
10月12日	五	參加研討會及發表調查 研究成果	上海	上海
10月13日	六	私人旅遊行程(烏鎮)	上海-鳥鎮	烏鎮
10月14日	日	鳥鎮及蘇州旅遊及回程 (上海搭機回臺北)	烏鎮-蘇州- 上海-臺北	

(二)10月9日會前野外地質考察

本會議主辦單位為上海同濟大學,特於會議前1天(10 月9日)規劃在上海東北長江出海口三角洲之崇明島、長 興島及東灘國家濕地公園勘察(地理位置如圖1),讓與會 者可先了解上海附近的崇明島在地體構造環境下形成的原因及溼地公園的生態環境和氣候變遷的關聯。





Fig. 1 A Landsat satellite image in 2007 to show general pattern of river-mouth bars/islands and distributaries in the Yangtze Delta and important locations for the fieldtrip to Changxing and Chongming Islands

圖 1、10 月 9 野外地質勘察位置圖。位於長江出海口之崇明島(Chongming Island)及長興島(Changxing Island),勘查站位如下圖之標示 1-4 點位。

崇明島是三角洲中最大的沙洲,其次為長興島,另還 有 3 處小沙洲島,這些島嶼的形成和長江帶來大量沉積物 有關,約在7,000年前開始增積形成(圖2),研究指出這些 島嶼的形成也和海岸線變遷外移有關。堆積在三角洲河口 的沉積物是從長江上游搬運而來的,研究指出 1951-1968 年長江每年搬運約 497 百萬噸沉積物,1969-1984 年每年 約 445 百萬噸, 1985-2002 年每年約 345 百萬噸,呈現遞 減現象,2002年長江三峽大壩完後,2003-2014年沉積物 的搬運量驟減為每年 140 百萬噸(圖 3),約為建壩前沉積 物搬運量的 40%,另外中國大陸 2011 年在長興島北側興 建完成青草沙水庫(Qingcaosha Reservoir)(圖 4), 更阻擋了 沉積物往海濱搬運,學者擔心長江三峽大壩及青草沙水庫 阻斷沉積物搬運,對三角洲沙洲的構築及環境生態會有影 響,目前正密切監測調查中。圖5及6為現場勘查的照片, 東灘濕地公園是相當著名的生態區,園中設有鳥類保育 區,禁止進入(圖 6)。

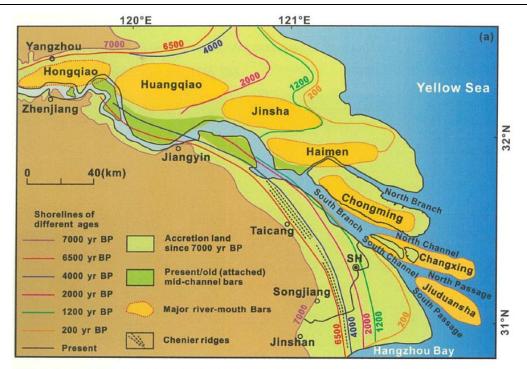


Figure 4 Development of the Yangtze delta since the middle Holocene (Fan et al., 2017)

圖 2、長江三角洲的演化歷程。自全新世中期以來,長江三角洲之崇明島 (Chongming Island)及長興島(Changxing

Island)的演化發展,三角洲大概分7,000年前開始處(上屬)的機形成(上屬)。地境屬為島線海岸線海岸線海線海線海線海線

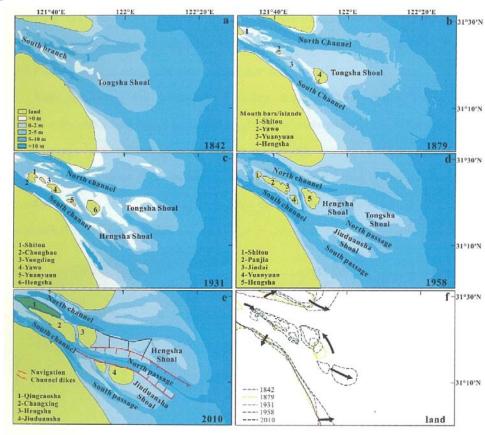


Fig.5 (a-e) Distribution patterns of different morphological units reproduced from historical bathymetric maps, and (f) shoreline change in the mouth-bar region off the South Branch in the period 1842-2010. Arrow denotes the direction of shoreline change (Su et al., 2018).

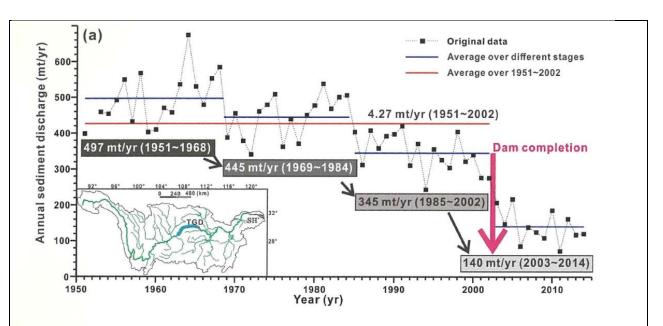


Fig. 3 Sediment discharge of the Yangtze River decreased continuously since the 1950s (Fan et al., 2017)

圖 3、長江從 1950 年代以來沉積物搬運量估算圖。長江沉積物的搬運量有減少的趨勢,尤其 2002 年長江三峽大壩完成後,沉積物的搬運量從 345 百萬噸/每年,約為建壩前沉積物搬運量的 40%。

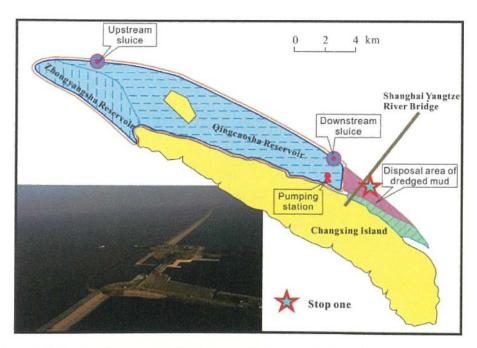


Fig. 7 Schematic map of Qingcaosha Reservoir and the first stop

圖 4、中國大陸 2011 年在長興島北側興建完成青草沙水庫(Qingcaosha Reservoir),提供上海飲用水,水庫的興建阻擋了沉積物往海濱搬運。





圖 5、同濟大學高杭教授在長興島上地質及環境解說(上圖),在崇明島上岩心 沉積物解說(下圖)。



圖 6、崇明島東南端濱海之東灘溼地,右圖為溼地內的鳥類生態保育區。位置如圖 1 所示。

(三) 研討會議主題及議程

第9屆亞洲海洋地質國際研討會(ICAMG-9)」於107年10月8日至10月12日在上海同濟大學綜合大樓舉行(圖7),會議議程如附件1。綜合大樓為本會議註冊及海報發表的場所,會議場所另在同濟大學校內的逸夫樓(Yifu Building)、中法中心(Sino-French Center)及129大廳(專題演講及大會會議)舉行。





圖 7、上圖為上海同濟大學校門口(四平路),下圖是同濟大學綜合大樓,為本會議場所。

本研討會共計約600多人參加,會議主題包含9大主題及33小項,各主題及小項議題詳列如附件2,9大主題摘列如下:

- 主題 1: 近岸及陸棚海洋地質(Coastal and shelf marine geology)。
- 主題 2: 亞洲大陸邊緣沉積物傳輸來源至沉降 (Source-to-sink study in Asian continental margins)。
- 主題 3: 主古海洋及環境變遷(Paleoceanography and paleoenvironmental changes)。
- 主題 4:海洋地體構造、地球物理及地質災害(Marine tectonics, geophysics and geoharzards)。
- 主題 5:海底資源(Submarine resources)。
- 主題 6:極區氣候變遷(Climate changes in Polar regions)。
- 主題 7:50 年來亞洲海洋鑽探及海洋地質(The 50 years of Ocean Drilling and Asian Marine Geology)。
- 主題 8:一般議題(General session)。
- 主題 9: 小型工作討論會(Workshops)。

研討會議議程如附件 1,大會另於每日安排 2 位學者專家專題演講,海報發表安排於 11 日下午。大會開幕式安排於 10 日 16:50~17:50 舉行,閉幕式及頒獎安排於 12 日 16:50~17:50 舉行。10 日會議結束後,大會特於晚間安排夜遊黃埔江,從黃浦江上觀看上海夜景,從臺灣去參加會議的學者教授,在黃浦江岸合影,如圖 8。





圖 8、上圖為從臺灣去參加會議的學者教授和同濟大學宋海斌教授(左一)在黃浦江岸合影,左二至六分別為台大海研所許鶴翰教授、劉家瑄就受及蘇志杰教授、景文科技大學鄭文彬教授、職(陳松春),右一為日本 JAMSTEC 熊衎昕博士、右二是中央大學林殿順教授、前左一是台灣海科中心尤柏森博士。下圖是上海外灘東方之珠大樓名勝夜景。

(四) 論文發表

會議主題有9大主題及33小項議題,經統計共有551 篇研究成果發表,其中口頭發表有292篇,海報發表有259 篇(如附件2),經分析發表論文篇數之前四大主題分別為 主題2:為亞洲大陸邊緣沉積物傳輸來源至沉降、主題1: 近岸及陸棚海洋地質、主題3:古海洋及環境變遷及主題 4:海洋地體構造、地球物理及地質災(圖10)。這前四大 主題論文發表篇數已佔全部論文篇數的72.6%,顯示亞洲

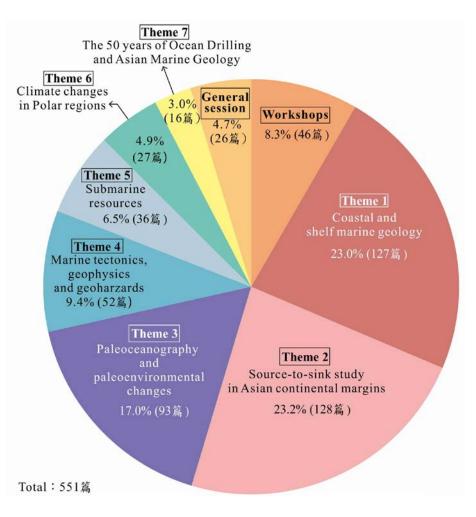


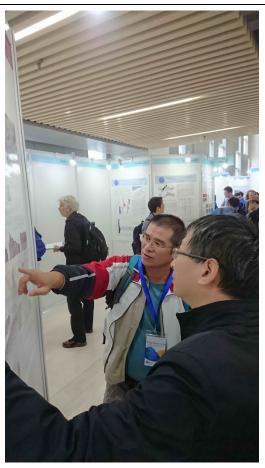
圖 10、會議發表論文統計分析圖。

近年來海洋地質熱門的研究項目為沉積物傳輸、近岸區海洋地質、古海洋與環境變遷及海洋地體構造、地球物理及地質災害等議題。其中沉積物傳輸來源至沉降及沿岸陸棚海洋地質兩議題勢均力敵,各佔約23%。近5年來全球氣候變化劇烈,而海洋海平面上升及海水暖化等都直接影響氣候,古海洋及環境變遷的研究顯得相當重要,發表論文篇數比例也高達17%。排名第4的海洋地體構造、地球物理及地質災害議題,發表的研究論文數也有52篇,佔9.4%。

本研討會議有一特色,就是有小型的工作討論會議, 提供亞洲各國進行海洋科研的合作平台,本項主題是以討 論會為主,發表的論文相對的較少一些(8.3%),6 項討論 議題分別為 W01:中韓第 2 屆天然氣水合物合作討論會 (2nd China-Korea Joint Workshop on Gas Hydrate)、W02:海 洋顆粒通量:最近進展及未來遠景(Particle Flux in the Oceans: Recent Progress and Future Perspectives)、W03:近 岸及海域地質的地質高峰會議(GeoSummit Workshop on Coastal and Offshore Geology)、W04:科學論文或特刊的 準備、出刊及審查(Preparing, Publishing and Reviewing a Scientific paper or Special Issue)、W05:南海形成的機制及 海洋鑽探(Mechanisms of the South China Sea formation and ocean drilling)及 W06:過去全球變熱過程的改變:水文學、氣候及碳循環(Tropical processes in past global change: hydrology, weathering and carbon-cycle)。

有關海底山崩的研究共有發表 11 篇,職發表 1 篇, 題目為「Fangliao Slide — a large slope failure in the upper Kaoping Slope off southwest Taiwan」,摘要如附件 3。臺灣 研究團隊發表 6 篇,摘要如附件 4。中國大陸發表 3 篇及 韓國發表 1 篇。職在海報會場中發表研究成果,和中國大 陸、日本及韓國等學者專家討論及經驗交流,其中中國大 陸對本研究非常感興趣,至少有 50 人蒞臨本研究的海報 區詳細討論及經驗交流(照片如圖 11)。值得注意的是中國 大陸已注意到臺灣西南海域的海底山崩的研究成果,濟南 大學的博士生張光(Kun Zhang),正逐漸收集臺灣西南海域 已發表的海底山崩研究成果,進行統計分類,並和珠江外 海的海底山崩作比較,依據南海不同的地體構造位置來探 討引發海底山崩的機制(圖 12)。韓國在 Ulleung Basin 的西 侧斜坡區發表 1 篇因重力滑移造成的海底山崩。





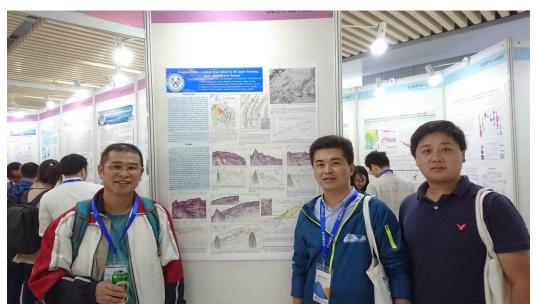


圖 11、職(陳松春)(左上圖左 1,下圖左 1)在海報區發表調查研究成果,和中國大陸學者專家合影。左上圖右 1 是海南島海南大學吳時國教授,右上圖右 1 是上海濟南大學宋海斌教授。下圖右 1 及 2 是濟南大學的 2 位博士生。

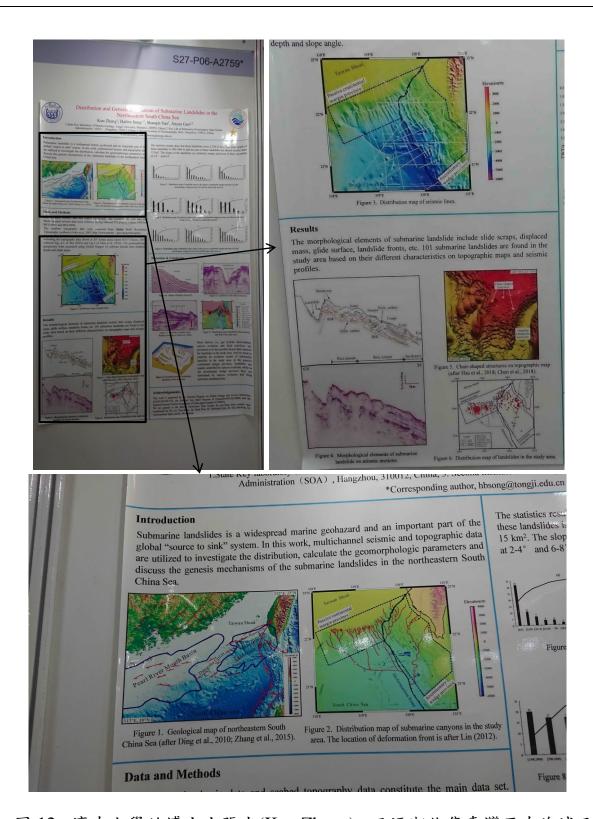


圖 12、濟南大學的博士生張光(Kun Zhang),正逐漸收集臺灣西南海域已發表的海底山崩研究成果,進行統計分類,和珠江外海的海底山崩作比較,並依據南海不同的地體構造位置來探討引發海底山崩的機制。(經作者同意後拍攝)

三、遭遇之問題

本次參加第9屆亞洲海洋地質國際研討會及私人旅遊,均未遭遇到任何問題。

四、 我方因應方法及效果:無

五、心得及建議

- (一)「亞洲海洋地質國際研討會」是亞洲地區專屬的國際研討 會,第1屆會議是在1988年9月在上海舉行,之後每3 至 4 年由亞洲各國輪流舉辦,第 2~8 屆分別由日本、韓國、 中國大陸、泰國、日本、印度及韓國等國輪流舉行,本第 9 屆會議為在中國大陸上海舉行,時至今年已 30 年,但大 部分的臺灣學者及職都是第1次參加該研討會。亞洲是同 屬一地體構造環境,在同一個生活圈當中,任何一地方因 地質災害或環境遭受影響,都會直接或間接影響到亞洲其 他地區,因此無論是以科學研究議題或地質災害的預防及 處理之經驗交流,日後我國都應積極參加這研討會議,除 可讓其他國家瞭解我國在海洋地質的科研能力以外,並可 了解鄰國在海洋地質及災害調查研究的進展,提供我國未 來在科研、防災及減災的政策研擬參考。
- (二)從本會議的論文發表統計來看,目前亞洲地區熱門的四大

海洋地質研究議題分別是沉積物傳輸(佔 23.2%)、近岸區 海洋地質(佔 23.0%)、古海洋與環境變遷(佔 17%)及海洋地 體構造、地球物理及地質災害(佔 9.4%)等議題。沉積物傳 翰議題和海底地質穩定性及海底災害有關;近岸區更是人 類生活的環境範圍; 古海洋與環境變遷的研究, 可以了解 全球氣候改變的歷程;地質災害的研究,更關係著人類生 命財產的安全。從熱門議題的內容來看都和民生息息相 關,從海洋地質科學研究,了解地質環境、災害預防與減 災、全球氣候的改變及歷程等,從中學習,取得教訓,進 而促使人類在科技及人文發展過程中,體認到應去適應大 自然環境的自然改變,並不應刻意去大肆改變或破壞環 境,達成文明和環境保育雙贏的局面,唯有保育地球環 境,才能使人類生活長治久安。

(三)本研討會有關海底山崩地質災害的調查研究,共有11篇,臺灣地區海底山崩的發表有7篇(佔64%),顯示我國在海底山崩災的研究能量較其他國家高。另值得注意的是,中國大陸已注意到臺灣西南海域的海底山崩的研究成果,正逐漸收集臺灣西南海域已發表的海底山崩研究成果,統計分類,並和珠江外海的海底山崩作比較,依據不同的地體構造位置來探討引發海底山崩的機制。

(四)我國海底山崩調查研究發表的論文篇數較其他國家多,乃 由於科技部於 2012 年成立能源國家型計畫-天然氣水合物 主軸計畫,在該計畫項下執行「探採安全與海床穩定性計 畫」,惟該計畫將於今年(2018)結束終止。臺灣西南海域有 豐富的可燃冰賦存,在近岸的陸棚區之海底山崩可能因可 燃冰的解離或地震引發,如果大型海底山崩可能引發海嘯 災害,文獻記載 1781 年在臺灣西南沿海曾發生海嘯災害, 研究指出可能是西南海域海底山崩所造成的。目前在小琉 球東南側水深約 420~900 公尺的海域已發現 1 處大型的海 底山崩(職在本會議發表的研究成果),長度達15公里,寬 度約6~10公里,初估崩塌體積約26立方公里,除此之外, 另還有其他小型海底山崩存在。現今臺灣西南城市人口高 達 300 萬以上,另有高雄深水港、永安液化瓦斯儲存槽及 恆春核電廠等設施,如果現今海嘯再度來襲,將造成嚴重 的災害。建議我國仍須持續進行海底山崩的調查研究,提 供政府防災及減災政策的研擬參考。

參、謹檢附參加本次活動(會議)相關資料如附件,報請 備查。

職 經濟部中央地質調查所

科長 <u>陳松春</u> 謹陳 107 年 10 月 29 日

Program at a Glance



		Wednesday 10 th	Thursday 11 th	Friday 12 th
	Venue 1	S10 a	S27 a	S26
-	Venue 2	S01 a	S03 a	W05
	Venue 3	S12 a	S19 a	S18 a
09:00-10:30	Venue 4	S16	S11 a	S15 & W02 a
	Venue 5	S05 a	W01 a	W03 a
	Venue 6	S30 a	S23 a	S09 & S14 a
-	Venue 7	S29 a	S06 a	S06 c
10:30-10:50 Tea Break				
	Venue 1	S10 b	S27 b	S04 a
	Venue 2	S01 b	S03 b	
	Venue 3	S12 b	S19 b	S18 b
10:50-12:20	Venue 4	S17 a	S11 b	S15 & W02 b
_	Venue 5	S05 b	W01 b	W03 b
	Venue 6	S30 b	S23 b	S09 & S14 b
-	Venue 7	S29 b	S06 b	S32
12:30-14:00		Lunch (Xueyuan Cantee	n, Sanhaowu Canteen) ar	nd Posters

		Wednesday 10 th	TI	hursday 11 th	Friday 12 th
	Venue 1	S28	14:00-	Plenary Talk (KyungSik WOO)	S04 b
	Venue 2	S22	14:30	129 Hall	S21
	Venue 3	S12 c	14:30- 15:00	Plenary Talk	S24
14:00-15:30	Venue 4	S17 b		(Eelco J. Rohling) 129 Hall	S15 & W02 c
	Venue 5	W06			S25
	Venue 6	S08			S09 & S14 c
	Venue 7	Venue 7 S29 c			W04
15:30-15:50		Tea Break			Tea Break
15:50-16:20		Plenary Talk (Asahiko Taira)		oster Session nd floor, Zhonghe Building)	Plenary Talk (Thomas S. Bianchi)
16:20-16:50	129 Hall	Plenary Talk (Brian Taylor)		··-a,	Plenary Talk (Zhifei Liu)
16:50-17:50		30 th anniversary of ICAMG			Closing Ceremony and Awards

Theme 7The 50 years of Ocean Drilling and Asian Marine Geology: Session 30 Theme 1 Theme 4 Marine tectonics, geophysics & geoharzards: Sessions 23-26 Coastal and shelf marine geology: Sessions 1-8 **Theme 5**Submarine resources:
Sessions 27, 28 Theme 2 General Session Source-to-sink study in Asian continental margins: Sessions 9-15 **Palette** 32 & 31,20,13,7,2 **Theme 3** Paleoceanography and paleoenvironmental changes: **Theme 6**Climate changes in Polar regions:
Session 29 Workshops W01-06 Sessions 16-22

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附件2、會議主題及發表文章統計

主題		內容	口頭發表篇數	海報發表篇數
	S01	Marine Geology of Islands and Reefs	11	12
	S03	World's River Deltas: research progress and perspectives	12	6
	S04	Coastal dynamic and sea level change over time scales	11	1
主題1:近岸及陸棚海洋地質(Coastal	S05	Quaternary shelf sand bodies in Asia and elsewhere: Processes and products	10	3
and shelf marine geology)	S06	Nearshore Dynamic Processes and Hazards under Coastal Storms and Influence of Human Activities	18	29
	S08	Anthropocene Coasts under Global Changes	6	8
		小計	68 1 2	59 27
	S09	Sediment Gravity Flows: Processes, Products, and Implications to Resource Explorations	8	5
	S10	Sediment Dynamics in the River Plume Regime: Coupling between Physical Process and Geochemical Response	12	7
主題 2: 亞洲大陸邊緣沉積物傳輸來源至 沉 降	S11	Interaction of tectonic-climate change with weathering and erosion processes in Asian continental margin	12	1
(Source-to-sink study in Asian continental margins)	S12	Sediment source-to-sink processes and environmental records in Asian continental margins	18	36
	S14	When and how clastic detritusare transported from shelf-edge staging areasinto deep-waterareas: From a source-to-sink perspective	9	6
	S15	Deep-Sea Sedimentary Processes: from Observations to Geological Records	9	5
	小計		68 1 2	60 28
	S16	Neogene Paleoceanographic and Paleoclimate Variability in the Indo-Pacific Warm Pool	7	3

		,		
	S17	Late Cenozoic ocean circulation, carbon cycle, and climate change in the western Pacific marginal seas	12	12
主題 3: 古海洋及環境 變 遷	S18	Burial of organic carbon in the coastal margin under a changing world	11	5
(Paleoceanography and paleoenvironmenta l changes)	S19	Paleoceanographic and climatic evolution and variability recorded in marginal and deep-sea western Pacific sediments; linking land-ocean in present and past	10	14
	S21	Low latitude Indo-Pacific marginal seas: variabilities in paleoclimatology and paleoceanography and their implications	6	7
	S22	Land-sea interaction processes and paleoenvironmental evolutionin the joining area of Indian-Pacific Ocean	6	0
		小計	52 9	3
主題 4:海洋地體構	S23	Structure, magmatism and dynamics of marginal seas in Western Pacific	11	11
造;地球物理及地	S24	Seafloor sediment acoustics	5	7
質 災 害 (Marine		Seafloor Failures: Triggering		
tectonics,	S25	Mechanisms, Processes and	6	4
geophysics and	S26	Sedimentological Records Marine Geohazards	5	3
geoharzards)	320		27	25
		小計	·	2
主題 5:海底資源	S27	Advances in natural hydrate systems and methane seeps in marine settings	7	18
主機 3・海 及 真 係 (Submarine resources)	S28	Seabed Mineral Resources: Recent Achievements and Challenges	6	5
		小計	13	23 6
1 E () In E & 19 MM			3	
主題 6: 極區氣候變 遷(Climate changes in Polar regions)	S29	Arctic gateway connecting the North Atlantic and North Pacific Oceans	18	9
主題 7:50 年亞洲 海洋鑽探及海洋地 質(The 50 years of Ocean Drilling and Asian Marine Geology)	S30	The 50 years of Ocean Drilling and Asian Marine Geology	12	4

主題 8:一般議題 (General session)	S32	General sessions	5	21	
	W01	2 nd China-Korea Joint Workshop on Gas Hydrate	11	10	
	W02	Particle Flux in the Oceans: Recent Progress and Future Perspectives	9	4	
	W03	GeoSummit Workshop on Coastal and Offshore Geology	9	3	
主題 9: 小型工作討 論會(Workshops)	W04	Preparing, Publishing and Reviewing a Scientific paper or Special Issue	Open and free discussions		
	W05	Mechanisms of the South China Sea formation and ocean drilling	Open and fre	e discussions	
	W06 global change: hydrology, weathering and carbon-cycle		Open and free discussions		
		小計	29	17	
		.1.21		6	
		總計	292	259	
		(1/2 2)	551		

附件3、會中發表1篇論文之摘要

9th International Conference on Asian Marine Geology

Fangliao Slide — a large slope failure in the upper Kaoping Slope off southwest Taiwan

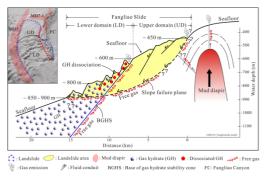
SONG-CHUEN CHEN¹, CHING-HUI TSAI², SHU-KUN HSU³, YI-CHING YEH ⁴, CHAR-SHINE LIU⁵

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Based on seismic reflection profiles and multi-beam bathymetric data, a large submarine landslide named Fangliao Slide is mapped for the first time off SW Taiwan. The Fangliao Slide occurred on the continental slope to the west of the Fangliao Canyon at water depths between 420 and 900 m. The seafloor of the Fangliao Slide has a gentle slope angle (~1 - 2°). The landslide covers an area of ~15 km length and ~10 km width and a volume of ~26 km³. The headwall of the landslide has ~30 m vertical offset at the southern flank of mud diapir MD7-1, and the sidewalls are bounded by fault A in the west and faults C and D in the east. The sliding area is composed of five bathymetric terraces, indicating that the slope failures have occurred several times. The Fangliao Slide can be divided into an upper domain and a lower domain, separated at the water depth of ~600 m where the gas hydrate off SW Taiwan becomes dissociate. The initial slope failure of the Fangliao Slide was probably linked to mud diapirism of MD7-1 and the slope failure in the lower domain was probably augmented by the gas hydrate dissociation. The seafloor morphology in the lower domain is therefore more corrugated than in the upper domain.

Keywords: Submarine landslide, Mud diapir, Gas hydrate, Southwest Taiwan

Fig. 1. A schematic model explains the sliding scenario of the Fangliao Slide. Mud diapirism and gas hydrate dissociation are two main factors for the slope failure of the Fangliao Slide. The slope failure was first triggered by mud diapirism. Free gas came out of the mud diapir could enhance the slope failure. Secondly, the gas hydrate dissociation and upward free gases could augment the slope failure in the lower domain resulting more corrugated seafloor.



9th International Conference on Asian Marine Geology

Causal Factors of Seafloor Instability in Taiwan Strait - Sedimentary and Structural Characteristics of the Western Taiwan Foreland Basin

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High resolution reflection seismic profiles shooting by both GI-gun and sparker sources together with bathymetry and well data are analyzed to reveal sedimentary and structural characteristics of the Western Taiwan Foreland Basin in the middle Taiwan Strait. Four major sequences were identified and interpreted as basal-foreland unconformity formed in 6-7 Ma, Cholan Formation-Toukoshan Formation boundary (0.9-1.25 Ma), Last Glacial Maximum unconformity (LGMU; 14-20 Ka) and maximum flooding surface (MFS; 5-6 Ka). More than 100 normal faults have been observed after the foreland basin developed; however only few of than have cut LGMU and are considered as active faults. Those shallow fault activity can be a potential factor affecting seafloor stability in the study area. In addition, some strong amplitude anomalies interpreted as volcanic intrusion are discovered in the area offshore of north Penghu Islands. It is another structural factor resulting in instability of strata. Besides structural activities, effect of sedimentary processes including sandwave migration and liquefaction also play important roles to induce seafloor instability in the middle Taiwan Strait. After LGM, sea level rise turned sedimentary environment in the study area from terrestrial facies into pro-delta facies. Then, strong tidal current caused widely sandwave structures developing in highstand systems tract above MFS. Rapid sedimentation rates due to river discharge apparently caused high pressure fluid accumulated in strata and likely induce seafloor liquefaction. Widely distributed vertical blanking zones showing amplitude anomalies on seismic profiles are regarded as one of evidences for fluids migrating from deep strata to shallow strata and even seafloor. Seismic profiles and bathymetry data present that sandwave mobility cannot be neglected to assess present seafloor stability in the middle Taiwan Strait, especially in the Changyun Ridge area. The wavelengths of sandwaves are from tens to hundreds meters, and the wave heights can up to be ten meters. Thicknesses of sandwave range from several to dozens of meters and seabed level changes can even reach to several meters in one year. As a conclusion, four sedimentary and structural factors including active fault, volcanic intrusion, sandwave migration and liquefaction process are proposed to be causal mechanisms for seafloor instability in Taiwan Strait nowadays.

Keyword: seafloor instability, reflection seismic, foreland basin, fault, sandwave.

Submarine landslide: A case study from the southwestern of Taiwan offshore

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Abstract Submarine landslides not only regulate the shape of the seafloor and transport sediment into the deep-water environment but also have a significant influence on human life. Palm Ridge is an area located between passive and active continental margin. According to previous studies, there could be a submarine event that occurred in this area. That event also considered as highly related to the 1781/1782 tsunami event described in the historical records. However, the occurrence of that submarine landslide is still not well-studied. Based on the high-resolution multi-beam bathymetric, reflection seismic profiles and sub-bottom data, this study aims to confirm that whether there was an ancient submarine landslide in the study area or not. If the landslide does exist then the 3D model for the proposed landslide will be built. In addition, the STABL 5M software and an infinite slope stability analysis method will be applied to evaluate the possible magnitude of an earthquake and the amount of excess pore pressure resulting from gas-hydrate dissociation. They are considered as the most plausible landslide triggering factors. Utilizing the common use of ArcGIS and Fledermaus techniques, the range of landslide is predicted and mapped and then the identified range is validated by seismic reflection profiles and sub-bottom data. The pre-event topography is also reconstructed on the basis of seismic reflection profiles by using Topo to Raster interpolation algorithm. The preliminary result shows that there was a huge submarine landslide occurred in the study area with the dimension of roughly 22 km length, 6 km wide and covering a total area of 90.76 km². The maximum depth of the failure surface is about 375m and the average depth is 226m. This submarine landslide released and deposited a huge amount of sediment with an estimated volume of 4.9 km³. The STABL 5M and infinite slope analysis indicated that the required amount of excess pore pressure need to trigger the slope failure is about 1200 kPa when considering the gas-dissociation individually and an earthquake of magnitude within the range from 5.0 to 6.0 could be a trigger of that landslide event.

Keywords: Submarine landslide, multi-beam bathymetry, seismic reflection profiles, back-analysis, gas-hydrate dissociation, earthquake.

Shear-wave velocity of marine sediments offshore Taiwan using ambient seismic noise

JING-YI LIN1、YU-TSE LIN1、YI-CHIN YEH1、SHU-KUN HSU1

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Seismic ambient noise technology has many advantages over the traditional two-station method. The most important one is that noise is happening all the time and it can be widely and evenly distributed. Thus, the Green's Function of any station pair can be obtained through the data cross-correlation process. Many related studies have been performed to estimate the velocity structures based on the inland area. Only a few studies were reported for the marine area due to the relatively shorter recording time of ocean bottom seismometers (OBS) deployment and the high cost of the marine experiment. However, the understanding about the shear-wave velocity (Vs) of the marine sediments is very crucial for the hazard assessment related to submarine landslides, particularly with the growing of submarine resources exploration. In this study, we applied the ambient noise technique to four OBS seismic networks located offshore Taiwan in the aim of getting more information about the noise sources and having the preliminary estimation for the Vs of the marine sediments. Two of the seismic networks were deployed in the NE part of Taiwan, near the Ryukyu subduction system, whereas the others were in the SW area, on the continental margin rich in gas hydrate. Generally, ambient seismic noise could be associated with wind, ocean waves, rock fracturing and anthropogenic activity. In the southwestern Taiwan, the cross-correlation function obtained from two seismic networks indicate similar direction, suggestion that the source from the south part of the network could be the origin of the noise. However, the two networks in the northeastern Taiwan show various source direction, which could be caused by the abrupt change of bathymetry. The Vs determined from the dispersion curve shows a relatively higher value for the networks in the Okinawa Trough (OT) off NE Taiwan than that in the continental margin offshore SW Taiwan. This observation could be linked to the presence of numerous volcanic outcrops in the shallow marine sediments is the OT area. By comparing the 1-D velocity shear-wave profile with the previous studies, we found that the low Vs area could be associated with a sedimentary layer filled with gas in the OT and the creeping area along the continental margin. The Vs range estimated from our study also shows a good agreement with the velocity profile obtained based on the OBS seismic refraction experiment, suggesting that this method could be a more economical and effective way for the acquisition of the Vs parameters.

Seafloor instability in nearshore area of western Taiwan: evidence with High-Resolution Seafloor mapping

CHIH-CHIEH SU^{1,2}, TZU-TING CHEN^{1,3}, HO-HAN HSU^{1,2}; SHENG-TING HSU¹, YU-HUANG CHEN¹; CHAR-SHINE LIU^{1,2}

The seafloor mass movements and seafloor failures are controlled by long-term preconditioning factors and short-term triggering mechanisms. The major factor that reduced the shear stress of sediments is related to the subsurface fluid activity which may induced by high sedimentation rate, gas charging, gas hydrate dissociation and seepage activity. Moreover, these submarine geohazards are highly related to the existence of weak layers which parallel to seafloor and frequently with high excess pore pressure, clayrich and high water contents sediments. The liquefaction of these layers may further catalyze the formation of slumping/sliding processes on seafloor. Among the possible trigger mechanisms, earthquake is one of the most important triggering mechanisms of seafloor failures, and previous studies revealed more than 40% of submarine landslides were due to earthquakes. In nearshore area, besides earthquake, the stormy weather induced heavy rains and flooding frequently delivered large amount of sediment and quickly deposited on nearshore seafloor which's lateral migration might have great impact on marine infrastructures or further touch off liquefaction of sandy sediments. From seismic and chirp sonar profiles, it revealed strong subsurface fluid activities, which characterized with acoustically transparent sediments, are widely spread alone the nearshore area of western Taiwan. From newly collected bathymetry data and chirp profiles by using MBARI Mapping AUV, the stair-stepped morphology is observed at the edge of Fangliao submarine canyon, southwestern Taiwan. The comet-shaped depressions are located along the main headwall of the seafloor failure. The new detailed bathymetry suggests Fangliao submarine canyon head is preconditioned to failure and submarine groundwater discharge from the Pingtung Plain and the southern tip of the Central Mountains is inferred to generate elevated pore pressures leaving the area susceptible to liquefaction and failure when triggered by earthquakes. Another case from the Choushui River mouth, the high-resolution multi-beam seafloor morphology indicates large scale sand wave system developed at Taiwan Strait. These large scale sand waves are produced by strong tidal current system and the sediments were delivered from the Choushui River and adjacent small rivers during plum rain and typhoon seasons. The fast deposited sandy sediment with highly tidal current velocity not only produced large scale sand waves migration, it also makes the Choushui River mouth become a highly potential area of liquefaction.

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Geophysical Investigation of Shallow Subsurface Stress State on the Accretionary Prism off Southwest Taiwan

Cheng, W. B.1, Lin, J. Y.2, Hsu, S. K.2, Hsu, H. H.3, Dong, J. J.2

1. Jinwen University of Science and Technology, Taiwan.

2. National Central University, Taiwan.

3. National Kaohsiung First University of Science and Technology, Taiwan.

A multicomponent ocean-bottom seismometer (OBS) data set was collected by National Central University, Taiwan in the accreationary prism off southwestern Taiwan in 2013 and 2014, respectively. We estimated seismic anisotropy from walkaround vertical seismic profiling (VSP) that recorded GI-gun shots located at 1 mile and 1.5 miles radius from the OBS, with spacing approximately 40 m. The OBS recorded data at a sampling rate of 250 Hz and from a shot pattern that gave good azimuthal coverage around the OBS. Methods to obtain information about stress state in sediments have been developed from these data since anisotropy, an effect of parallel fracture trains, generates birefringence of P-S converted waves. The multicomponent seismic method allows recording the complete wave field, including P-S converted waves. Based on P and P-S converted waves recorded between the direct and multiple arrivals, this experiment targeted the top few hundred meters of sediment in the study area. After preliminary processing, including a static correction, the data were optimally rotated to radial (R) and transverse (T) components. The principal technique used to detect the anisotropy was azimuthal stacking of the radial and transverse horizontal geophone components. The R component shows azimuthal variation of traveltime indicating variation of velocity with azimuth; the corresponding T component shows azimuthal variation of amplitude and phase. From the radial component azimuthal gather and mode-converted wave amplitude variation for the first few layers and determined corresponding anisotropy parameter. Azimuthal variations of Vp of ellipsoidal fitting analysis showed that Vp anisotropic within

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sediments was about 4%. Both the direction of fast Vp and strong amplitude are aligned with the convergence vector of the Philippine Sea plate. We attribute the observed azimuthal anisotropy to the presence of microcracks and grain boundary orientation due to stress since fracture at this depth is not likely to occur. This result requires to be tested with complementary geological information.

Key words: ocean-bottom seismometer, seismic anisotropy, walkaround VSP

Modern sedimentation and extreme event in the South China Sea

Yu-Huang Chen, Chih-Chieh Su Institute of Oceanography, National Taiwan University, Taipei, Taiwan

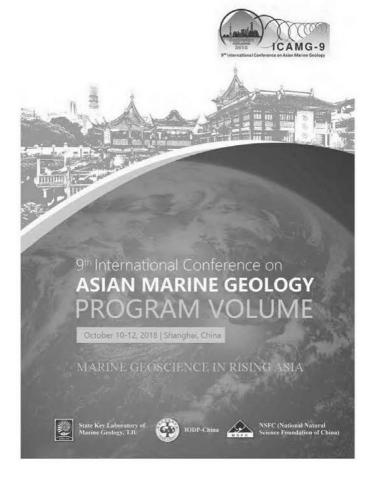
Abstract

In recent years, climate change issues are more critical with every passing day. Lin et al 2014 pointed out that during the recent decade, typhoon destructive potential has decreased considerably. This decrease, paradoxically, has occurred despite the increase in typhoon intensity and ocean warming. This cause more extreme event in recent years. With the extra-ordinary intensity of 170 kts, supertyphoon Haiyan devastated the Philippines in November 2013 and deposit in the South China Sea. In this study, we hope to use modern records of extreme event in sediment cores to analyze the sediment property and evaluate the history of extreme event in this place. We analyzed gravity cores collected around Taiping island and central basin of the South China Sea by using R/V Ocean Research 1 from 2014 to 2015. On the core surface images, there are obvious brown oxide layer in the surface, and we found higher value of Pb-210 activity beneath surface layer. Since we speculate the surface layer is caused by nature hazard and for the reason of sampling time, we think this event is typhoon Haiyan. Furthermore, Itrax data shows that calcium value is higher in the event layer and manganese value only exists in the event layer. The sedimentation rate of the normal accumulation years in these cores which derived from Pb-210 is about 0.1 ~0.2 cm/yr. However, the event layer is 87 cm thick caused by Haiyan in the South China Sea. This study aims to find out the sediment dispersal pattern in the event layer of Haiyan and use it to compare the other event layers to understand the difference of mechanism in sedimentation and the causes of these events in this area.

Reference

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附件5、「第9屆亞洲海洋地質國際研討會」會議手冊



Overview Meetings, Events & Workshops Overview Tuesday 9th October 14:00-22:00 Registration Zhonghe Building Sanhaowu Canteen, 2nd floor 18:30-20:00 Icebreaker Welcome Reception ■ Wednesday 10th October Venue 1-5, 7 09:00-12:20 Oral Presentations 09:00-12:20 Workshop (W05: Western Pacific) 12:30-13:30 Complimentary Lunch Venue 6 Xueyuan Canteen, 2nd floor 14:00-15:30 Workshop (W06: Carbon-cycle) Venue 5 14:00-15:30 Oral Presentations 15:50-16:50 Plenary Talk 16:50-17:50 30th anniversary of ICAMG Venue 1-4, 6, 7 129 Hall 129 Hall 18:00-21:00 Huangpu River Night Cruise Banquet leaving at the Parking Lot Thursday 11th October 09:00-12:20 Oral presentations 12:30-13:30 Complimentary Lunch Xueyuan Canteen, 2nd floor 14:00-15:00 Plenary Talk 15:00-17:50 Poster Session 129 Hall Zhonghe Building Friday 12th October 09:00-12:20 Oral presentations Venue 1-7 12:30-13:30 Complimentary Lunch Xueyuan Canteen, 2nd floor 14:00-15:30 Workshop (W04: Scientific Writing) 14:00-15:30 Oral Presentations 15:50-16:50 Plenary Talk Venue 1-6 129 Hall 16:50-17:50 Closing Ceremony and Awards * Halal restaurant located in Sanhaowu Canteen 1st floor

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ICAMG-9 Welcome

In September 1988, the First International Conference on Asian Marine Geology (ICAMG) was held in Shanghai, China. Since then, the conference has been held almost every four years. The 2nd ICAMG was in Tokyo in 1992; the 3rd in Cheju, Korea in 1996; the 4th in Qingdao, China in 1999; the 5th in Bangkok, Thailand in 2004; the 6th in Kochi, Japan in 2008; the 7th in Goa, India in 2011, and the 8th in Busan, Korea in 2015.

These conferences have given researchers good opportunities to exchange ideas and new information and to plan for future collaboration. The 9th ICAMG will be held in October 10-12, 2018 again in Shanghai.

You are kindly invited to join this event to review the progress of Asian marine geology over the past 30 years, to exchange ideas on new frontier research, and to discuss the perspectives of future development of marine geology.

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Plenaries





15:50-16:20 Wed. 129 HALL

Scientific and engineering achievements of the D/V Chikyu - Core-Log-Seismic-Observatory Integration

Asahiko Taira

Japan Agency for Marine- Earth Science & Technology, Japan
Professor in marine geology and geophysics.
President of JAMSTEC, fellow of the GSA
and Japan Geoscience Union, winner of Japan
Academy Prize.
http://www.jamstec.go.jp/e/about/foreword/



16:20-16:50 Wed. 129 HALL

Origin and Evolution of the West Philippine Basin

Brian Taylor

University of Hawai'i at Manoa, USA Dean, School of Ocean and Earth Science and Technology, University of Hawaii at Manoa. https://www.soest.hawaii.edu/soestwp/about/ directory/brian-taylor/

Plenaries





14:00-14:30 Thu. 129 HALL The Role of Marine Geology in Geoheritage Conservation

Kyung Sik Woo

Kangwon National University, Korea Professor in geology, geochemistry and paleoclimatology. Chair of IUCN WCPA Geoheritage Specialist Group. The former President of International Union of Speleology. Email: wooks@kangwon.ac.kr



14:30-15:00 Thu. 129 HALL A Last Interglacial perspective on future rates of sea-level rise

Eelco J. Rohling

Australian National University, Australia Professor in oceans and climate change; 2012 Australian Laureate Fellow, associate Director (research), editor of Reviews of Geophysics. http://climate.anu.edu.au/about-us/people/eelcoi-rohling



Plenaries





15:50-16:20 Fri. 129 HALL The Role of Aquatic Critical Zones in Coastal Carbon Cycling

Thomas S. Bianchi

University of Florida, USA
Professor in organic geochemistry and marine
biogeochemistry. Editor-in Chief of Marine
Chemistry, Fellow of the AAAS, Geochemical
Society, and European Association of
Geochemistry.

https://geology.ufl.edu/people/faculty/dr-thomas-s-bianchi/



16:20-16:50 Fri. 129 HALL Long-term in situ observations of deep-sea sedimentary dynamic processes

Zhifei Liu

Tongji University, China Professor in marine sedimentology and paleoenvironmental change. Changjiang (Cheung Kong) distinguished professor. http://ocean.tongji.edu.cn/space/zhifei/

Committees



International Committee

Advisors

Pinxian Wang Tongji University, China

Japan Agency for Marine-Earth Science & Asahiko Taira

Technology, Japan Commission on the Limits of the Continental Shelf, Yong Ahn Park

United Nations

Members

Yoshiki Saito

Zhimin Jian Tongji University, China

Second Institute of Oceanography, State Oceanic Jiabiao Li

Administration, China Shimane University, Japan

Japan Agency for Marine-Earth Science & Shin'ichi Kuramoto

Technology, Japan

Young Joo Lee Korea Institute of Geoscience & Mineral

Resources, Korea

Korea Institute of Ocean Science & Technology, Korea Hee Jun Lee

V. Ramaswamy National Institute of Oceanography, India Dhananjai Kumar Pandey National Center for Antarctic and Ocean

Research, India

Do Huy Cuong Institute of Marine Geology and Geophysics,

VAS, Vietnam

Thanawat Jarupongsakul Chulalongkorn University, Thailand Fernando P. Siringan V.R. Vijayan University of the Philippines, Philippines Minerals and Geosciences Department

Malaysia, Malaysia

Sergey A. Gorbarenko V.I. Il'ichev Pacific Oceanological Institute, Far-

Eastern Branch of Russian Academy of Science, Russia Ediar Usman Research & Development Center for Marine Geology,

Ministry of Mining and Energy, Indonesia



Committees



Organizing Committee

Chair

Shouye Yang Tongji University

Vice chair

Shu Gao East China Normal University/Nanjing University Xuefa Shi First Institute of Oceanography, State Oceanic

Administration

Members

Qingdao Institute of Marine Geology Nengyou Wu

South China Sea Institute of Oceanology, Chinese Academy of Jian Lin

Southern University of Science and Technology Jingping Xu China University of Geosciences-Wuhan Xinong Xie

Houjie Wang Ocean University of China

Weidong Sun The Institute of Oceanology, Chinese Academy of Sciences Shiguo Wu Institute of Deep-sea Science and Engineering, Chinese

Academy of Sciences National Sun Yat-sen University Yongqiang Zong University of Hong Kong

Secretary

James T Liu

Jiubing Cheng Coordinator, Finance

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Scientific sessions



Workshops

W01	2 nd China-Korea Joint Workshop on Gas Hydrate Conveners: Nengyou Wu, Dae-Gee Huh
W02	Particle Flux in the Oceans: Recent Progress and Future Perspectives Conveners:Martin Wiesner, Zhifei Liu, Jianfang Chen, Venu Ittekkot
W03	GeoSummit Workshop on Coastal and Offshore Geology Conveners: Se Won Chang, Ping Yin, Tomoyuki Sato, Huayan Gan
W04	Preparing, Publishing and Reviewing a Scientific paper or Special Issue Conveners: Gert J. de Lange, Shu Gao, Chunfeng Li, Zhifei Liu
W05	Mechanisms of the South China Sea formation and ocean drilling Conveners: Jian Lin, Zhimin Jian
W06	Tropical processes in past global change: hydrology, weathering and carbon-cycle Conveners: Yair Rosenthal, Enqing Huang, Haowen Dang

Scientific sessions



Theme 1 Coastal and shelf marine geology

S01	Marine Geology of Islands and Reefs Conveners: Ying Wang, Chengdong Ge, Kefu Yu
S03	World's River Deltas: research progress and perspectives Conveners: Yoshiki Saito, Steve Goodbred, Zhongyuan Chen
S04	Coastal dynamic and sea level change over time scales Conveners: Yongqiang Zong, Fengling Yu
S05	Quaternary shelf sand bodies in Asia and elsewhere: Processes and products Conveners: Daidu Fan, Serge Berné, Ping Ying, Yoshiki Saito
S06	Nearshore Dynamic Processes and Hazards under Coastal Storms and Influence of Human Activities Conveners: Bob Z You, Yongshen Wu, Qinghe Zhang, Jiawen Sun
S08	Anthropocene Coasts under Global Changes Conveners: Shu Gao, Ian Townend, Katsuto Uehara, HeeJun Lee

Scientific sessions



Theme 2 Source-to-sink study in Asian continental margins

S09	Sediment Gravity Flows: Processes, Products, and Implications to Resource Explorations Conveners: Jingping Xu, Guangfa Zhong, Xinnong Xie, Shiguo Wu
S10	Sediment Dynamics in the River Plume Regime: Coupling between Physical Process and Geochemical Response Conveners: James T. Liu, Janping Gan, Hui Wu, Daidu Fan
S11	Interaction of tectonic-climate change with weathering and erosion processes in Asian continental margin Conveners: Peter Clift, Christian France-Lanord, Shiming Wan
S12	Sediment source-to-sink processes and environmental records in Asian continental margins Conveners: Xuefa Shi, Steven Kuehl, Dhong-Il Lim, Shouye Yang, Sergey Gorbarenko
S14	When and how clastic detritusare transported from shelf-edge staging areasinto deep-waterareas: From a source-to-sink perspective Conveners: Chenglin Gong, RonaldJ. Steel, Changsong Lin
S15	Deep-Sea Sedimentary Processes: from Observations to Geological

Conveners: Zhifei Liu, Benjamin Kneller, Gert J. de Lange, Yanwei Zhang

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Scientific sessions



Theme 3 Paleoceanography and paleoenvironmental changes

- Neogene Paleoceanographic and Paleoclimate Variability in the Indo-Pacific Warm Pool
 Conveners: Yair Rosenthal, Jun Tian, Haowen Dang
- S17 Late Cenozoic ocean circulation, carbon cycle, and climate change in the western Pacific marginal seas Conveners: Jun Tian, Jimin Yu, Zhonghui Liu
- **S18** Burial of organic carbon in the coastal margin under a changing world Conveners: Limin Hu, Peng Yao, Thomas S. Bianchi
- Paleoceanographic and climatic evolution and variability recorded in marginal and deep-sea western Pacific sediments; linking land-ocean in present and past
 - Conveners: Gert J de Lange, Michael Sarnthein, Zhimin Jian
- S21 Low latitude Indo-Pacific marginal seas: variabilities in paleoclimatology and paleoceanography and their implications Conveners: Sanmin Hyun, Rina Zurida
- 522 Land-sea interaction processes and paleoenvironmental evolutionin the joining area of Indian-Pacific Ocean Conveners: CheAbd.Rahim Bin Mohamed, Shengfa Liu, Rina Zuraida, Narumol Kornkanitnan

Scientific sessions



Theme 4 Marine tectonics, geophysics and geoharzards

S23	Structure, magmatism and dynamics of marginal seas in Western Pacific Conveners: Tianyao Hao, Sanzhong Li, Weiwei Ding, Zhen Sun
S24	Seafloor sediment acoustics Conveners: Baohua Liu, Gil Young Kim, Guangming Kan, Guanbao Li

Seafloor Failures: Triggering Mechanisms, Processes and Sedimentological Records Conveners: Chih-Chieh Su, Jing-Yi Lin, Yi-Ching Yeh, Ho-Han Hsu

S26 Marine Geohazards Conveners: Yu Huang, Wuwei Mao

Theme 5 Submarine resources

S27 Advances in natural hydrate systems and methane seeps in marine settings Conveners: Dong Feng, Min Luo, Xiqiu Han, Haibin Song

S28 Seabed Mineral Resources: Recent Achievements and Challenges Conveners: Sang-Joon Pak,Wonnyon Kim, Jonguk Kim

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Scientific sessions



Theme 6 Climate changes in Polar regions

S29 Arctic gateway connecting the North Atlantic and North Pacific Oceans Conveners: Rujian Wang, Leonid Polyak, Seung-Il Nam, Masanobu Yamamoto

Theme 7
The 50 years of Ocean Drilling and Asian Marine Geology

The 50 years of Ocean Drilling and Asian Marine Geology Conveners: Yasuhiro Yamada, Gil Young Kim, Zhimin Jian

General session

S32 General sessions

		Wednesday 10 th	Thursday 11 th	Friday 12 th
	Venue 1	S10 a	S27 a	S26
	Venue 2	S01 a	S03 a	W05
	Venue 3	S12 a	S19 a	S18 a
09:00-10:30	Venue 4	S16	S11 a	S15 & W02 a
	Venue 5	S05 a	W01 a	W03 a
	Venue 6	S30 a	S23 a	S09 & S14 a
	Venue 7	S29 a	S06 a	S06 c
10:30-10:50	Tea Break			
	Venue 1	S10 b	S27 b	S04 a
	Venue 2	S01 b	S03 b	
	Venue 3	S12 b	S19 b	S18 b
10:50-12:20	Venue 4	S17 a	S11 b	S15 & W02 b
	Venue 5	S05 b	W01 b	W03 b
	Venue 6	S30 b	S23 b	S09 & S14 b
	Venue 7	S29 b	S06 b	S32
12:30-14:00 Lunch (Xueyuan Canteen, Sanhaowu Canteen) and			nd Posters	

Wednesday 10 th		Wednesday 10 th	Thursday 11 th		Friday 12 th		
	Venue 1	S28	14:00-		14.00-	Plenary Talk (KyungSik WOO)	S04 b
	Venue 2	S22	14:30	4:30 (Kydnigsik WOO) 129 Hall	S21		
	Venue 3	S12 c	14:30- 15:00	15.00 (Eelco J. Rohling)	S24		
14:00-15:30	Venue 4	S17 b			S15 & W02 c		
	Venue 5	W06		129 Hall	S25		
	Venue 6	S08			S09 & S14 c		
	Venue 7	S29 c			W04		
15:30-15:50	Tea Break		Poster Session (Ground floor, Zhonghe Building)		Tea Break		
15:50-16:20		Plenary Talk (Asahiko Taira)			Plenary Talk (Thomas S. Bianchi)		
16:20-16:50	129 Hall	Plenary Talk (Brian Taylor)			Plenary Talk (Zhifei Liu)		
16:50-17:50		30 th anniversary of ICAMG			Closing Ceremony and Awards		

	Theme 1 Coastal and shelf marine geology: Sessions 1-8	Theme 4 Marine tectonics, geophysics & geoharzards: Sessions 23-26	Theme 7 The 50 years of Ocean Drilling and Asian Marine Geology: Session 30
Palette	Theme 2 Source-to-sink study in Asian continental margins: Sessions 9-15	Theme 5 Submarine resources: Sessions 27, 28	General Session 32 & 31,20,13,7,2
	Theme 3 Paleoceanography and paleoenvironmental changes: Sessions 16-22	Theme 6 Climate changes in Polar regions: Session 29	Workshops W01-06

Onsite Information





Conference Rooms

Registration, posters, the exhibition and refreshments are located in the Zhonghe Building. Oral sessions will take place in rooms in the Sino-France Center and the Yifu Building. Plenary sessions will take place in 129 Hall. A map of the conference rooms can be found at the back of this handbook.



Registration & Help Desk Opening Times

Registration and the Help Desk will be open in the Zhonghe Building on the first floor from 14:00-22:00 on Tuesday (9th) and 09:00-17:50 on Wednesday (10th), Thursday (11th) and Friday (12th).



Refreshments & Breaks

These will be available in the Sino-France Center, the Yifu Building and the Zhonghe Building during the times allocated for oral presentations. Refreshments will also be available during the poster sessions on Thursday (11th).



Wireless Internet Access

All delegates may access the wireless internet on campus. Login details will be provided on registration desk.



Name Badges

Claim your name badge on the Registration desk. Please be sure to wear your name badge at all times.



Lost and Found

All items found in the relevant conference rooms should be brought to the Help Desk.

Smoking Policy

All rooms used by the conference have been designated as non-smoking areas.

Mobile Phones, Cameras and Video Cameras

Delegates are required to mute or turn off their cell phones during oral presentations. No photography or videoing is permitted in any of the oral and poster sessions. Please also respect the wishes of presenters who prefer that their results are not published on social media.

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Presenter Guidelines



Oral Presentation

Presentation Times and Locations

Oral presentations in 32 sessions will take place in seven venues located in Zhonghe Building, Yifu Building, Sino-France Center, and 129 Hall in time ranges of 9:00-10:30, 10:50-12:20, and 14:00-15:30 every day from 10th to 12th October, 2018. Please find your presenting time range and venue in the brochure.

Prepare your presentation

The presenters may prepare your presentation using various software, however, we suggest to save your presentations in Microsoft PowerPoint on Windows (*.pptx) or Adobe Reader (*.pdf) in order to display the presentation correctly and smoothly. The slides are suggested to be in landscape orientation with aspect ratio of 4:3 to have an optimum use of the screen. The major body of the presentation should be in English.

Upload your presentation

We strongly suggest the presenters to upload your presentations at the ground floor of the Zhonghe Building at least 6 hours before the start of the presenting session that you are assigned in. When you upload your presentation, please remind our staff to go over the presentation to make sure that all fonts and pictures appear as designed. If there is audio/video in the presentation, please inform our staff. If the presenters cannot upload the presentation 6 hours before the start of the session or if revision is made on the presentation that has been uploaded, the presenter should upload your presentation in the venue no less than 30 minutes

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Presenter Guidelines



Oral presentation

before the start of the first presentation in your session.

We also suggest the presenter bring a copy of your presentation file using a USB flash drive to the venue in case there is an issue with your uploaded file.

Presentation Timing

The presenter should arrive at the venue at least 15 minutes before the start of the first presentation to meet with the convener. The time limit for regular presentation is 15 minutes, we suggest the presenter finish your talk after 12 minutes to leave time for discussion. The convener will give signals after 10 and 12 minutes, and prevent further talking after 15 minutes. The presentation should be given in English.

* NO PHOTOGRAPHY OR VIDEOING IS PERMITTED IN ANY OF THE ORAL PRESENTATIONS.

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Presenter Guidelines



Poster Presentation

Poster session is scheduled from 15:00 to 17:50 on Thursday (11th) at the ground floor of the Zhonghe Building.

The Best Student Poster Award will be given in recognition of the Best Student Poster presented at the conference.

Prepare your poster

An A0 size poster in portrait orientation (841 mm wide by 1189 mm tall) would fit the poster board perfectly. So please make your poster size, especially the width be in this limit. The major body of the poster should be in English, and the presenter's name should be underlined.

Poster setup

Each poster is assigned with a poster ID, for example S01-P01-A0001, which can be found in the brochure, and will be marked on the poster board as well. The presenters are suggested to set up their poster at the assigned board as early as possible so that the conference attendee would have enough time to read your work, but are requested to be no later than the start of the Poster Session (15:00-17:50 on Thursday at the ground floor of Zhonghe Building). During the poster session, all the presenters are expected to be available by their poster for discussion. The presenter might also should put a card to indicate other time ranges to be present. The posters should be removed by 6:00 pm on Friday (12th October, 2018).

Poster printing

We do not provide on-site poster printing service, but there are places on and off campus where you can print posters. Please refer to the guideline map or find assistance from our volunteers.

Field Excursions



Pre-conference

Chongming Island and National Wetland Park in the Changjiang Delta

Fieldtrip Leaders: Prof. Daidu Fan and Dr. Hang Gao (Tongji University)

Dates: October 9, 2018 Transportation: Bus



Schedule (October 9, 2018)

7:30 am

Depart by bus from Magnolia Hotel STOP 1

Changxing Island for Qingcaosha Freshwater Reservoir (the largest estuarine typed freshwater reservoir in the world), onshore wind power tower, the first Changjiang Bridge across the North Channel.

Dongtan National Park for Yangtze alligator, migratory bird museum, and

saltmarsh plants and ecology. Lunch time, high tide will occur at 11:00 am STOP 3:

Dongtan tidal flat for morphology and sedimentology of saltmarsh, and bare flat, and tidal-creek-channel system.

Depart from Chongming Island and return to Magnolia Hotel

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Field Excursions



Post-conference

Birth of the upper Yangtze: Tibet uplift plus Asian monsoon revealed by Cenozoic sediments, Yunnan Province

Fieldtrip Leaders: Prof. Hongbo Zheng (Yunnan University), Prof. Shouye Yang (Tongji University)

Duration: October 13-17, 2018



Description

As an important border province of southwest China, Yunnan has long been reputed as 'the South of Colored Clouds', offering a large variety of scenic attractions. It has an average altitude of 2,000 meters and a temperate tropical plateau monsoon climate. Geologically, Yunnan is located in the southeastern margin of Tibetan Plateau. Such a location endows Yunnan with a unique natural laboratory for Earth System Science studies, with the most classic geological sites including 'Life Explosion' in early Cambrian in Chengjiang, 'Life Extinction' around Permian/Triassic boundary, dinosaur flourishing during Jurassic, and biodiversity and tectonic geomorphology during the Cenozoic.

Large river systems are an integral and essential component of Earth dynamics. The development of large river systems in Asia is closely linked to the evolving topography driven by both near-field and far-field effects of the interplay among Indian, Eurasian

Field Excursions



Post-conference

and Pacific plates. Plate tectonics together with climatic changes during the Cenozoic are therefore believed to have determined the evolution of Asian large rivers, yet the age of the Yangtze, the largest in Asia, has been strongly debated over a century. This field excursion aims to examine the Cenozoic sequences preserved in Jianchuan Basin, NW Yunnan, and explores its implications on tectonics, geomorphological evolution, possible linage with proto-Jinshajiang river, and paleoclimatic changes.



-- Restoration Image of the Chengjiang Fauna

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Schedule

Day 1 (October 13)

Morning, from Shanghai to Kunming by flight.

Afternoon, Chengjiang Fauna and Yunnan University.

Day 2 (October 14)

Morning, Kunming to Lijiang by flight. Afternoon, Drive to Liming, observe Cenozoic sequences; Stay in Liming.

Day 3 (October 15)

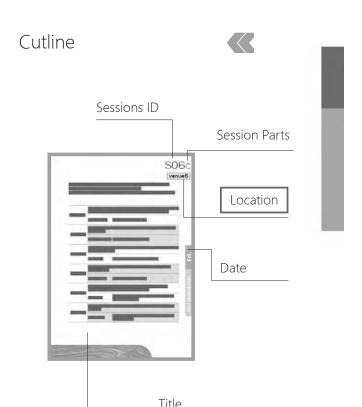
Morning, Liming to Shigu (First Bend). Afternoon, Tiger Leaping Gorge. Night, Stay in Lijiang.

Day 4 (October 16)

Morning, Drive to Jianchuan to observe Cenozoic sequences. Afternoon, visit Lijiang ancient city. Night, stay in Lijiang

Day 5 (October 17)

Depart for Shanghai by flight.



Presenter

Time

Affiliation



Sediment Dynamics in the River Plume Regime: Coupling between Physical Process and Geochemical Response Conveners: James T. Liu, Janping Gan, Hui Wu, Daidu Fan

09:00-09:15	Buoyant coastal current in a tidal coastal ocean			
09.00-09.13	Hui Wu	East China Normal University, China		
09:15-09:30	Hyperpycnal plume at the Yellow River Mouth triggered by dam regulation: In-situ observations			
09:15-09:50	Houjie Wang	Ocean University of China		
09:30-09:45	Water mass variability in the coupling between physics and suspended par-ticle dynamics along the pathway of Pearl River plume			
	Jay Lee	National Sun Yat-sen University, Taiwan, China		
09:45-10:00		rtation and deposition of the suspended sediments and Yellow Sea and the related mechanisms		
09.43-10.00	Nan Wang	Ocean University of China		
10:00-10:15	The distribution	of age in a coastal river plume		
10.00-10.13	Yeping Yuan	Zhejiang University, China		
10.15 10.20	hypoxia off Pearl	namics and sediment on the eutrophication and I River Estuary		
10:15-10:30	Jianping Gan	Hong Kong University of Science and Technology, Hong Kong, China		

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Marine Geology of Islands and Reefs Conveners: Ying Wang, Chengdong Ge, Kefu Yu

	Ecological Progre	ess of modern Coral reefs in the south china sea
09:00-09:15	Kefu Yu	Guangxi University, China
09:15-09:30		of the source apportionment and diversity of ing floating microplastics in the South China Sea
	Teng Wang	Nanjing University, China
09:30-09:45	on environmenta	n geochemical characteristics and their inplications I change in the lagoon sediments of the Dongdao lands in South China Sea
0,.00 0,.10	Chendong Ge	Nanjing University, China
00.45.10.00		ispended sediment nearby Nansha Islands in the observed from satellite
09:45-10:00	Danling Tang	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China
10.00.10.15	Geo-environmen Bangladesh	atal Degradation of the St. Martin's Island,
10:00-10:15	M.D. Shamsuzzaman	Geological Survey of Bangladesh, Bangladesh
10.15 10.20		rofiles and geomorphology of Daoming and the northern part of Nansha Islands
10:15-10:30	Xindi Hu	Naniing University, China



Sediment source-to-sink processes and environmental records in Asian continental margins

Conveners: Xuefa Shi, Steven Kuehl, Dhong-Il Lim, Shouye Yang, Sergey Gorbarenko

09:00-09:15	Role of the East Korean Warm Current to the Holocene sedimentation in the Hupo Trough of the southwestern East Sea				
09:00-09:13	Boo-Keun Khim	Pusan National University, Korea			
09:15-09:30	Clay mineral evolution in the central Okinawa Trough during the past 300 ka: sediment provenance and paleoenvironmental change				
09:15-09:30	Yanguang Dou	China Geological Survey, China			
09:30-09:45	Along-shore and Cross-shore Clinoforms Developed Over The River-Dominated Asian Margins				
09.30-09.43	Paul Liu	North Carolina State University, USA			
09:45-10:00	Suspended sediment distribution and its response to the Cold Water Mass evolution in the southern Yellow Sea				
09:45-10:00	Yi Zhong	Ocean University of China			
10:00-10:15	New insights on t	he sediments exchange through the Bohai Strait			
10:00-10:15	Xiao Wu	Ocean University of China, China			
10.15 10.20		rocess study on the Asian Continental Margin: rocesses and controlling mechanisms			
10:15-10:30	Xuefa Shi	First Institute of Oceanography, China			





Neogene Paleoceanographic and Paleoclimate Variability in the Indo-Pacific Warm Pool Conveners: Yair Rosenthal, Jun Tian, Haowen Dang

09:00-09:15	Two Anomalous Modes of the Precessional Modulated Annual Cycle in the Tropical Pacific			
09:00-09:15	Yue Wang Tongji University, China			
09:15-09:30	Indian Monsoon during last 30ka			
09.13-09.30	Hucai Zhang Yunnan University, China			
09:30-09:45	Pleistocene climate variability in the heart of the Western Pacific Warm Pool			
09:30-09:43	Yair Rosenthal Rutgers University, USA			
09:45-10:00	Neogene sea surface temperature of the Western Pacific Warm Pool			
09.43-10.00	Xiaoqing Liu Texas A&M University, USA			
10:00-10:10	Characteristics and significance of trace fossils in the Late Miocene deep-sea volcaniclastic sediments in the Central Basin of the South China Sea			
	Pingyuan Li Guangzhou Marine Geological Survey, China			
10:10-10:20	Mahanadi River soil organic matter discharge during the last 700 ka in Site U1446, Indian margin of the Bay of Bengal			
10:10-10:20	Masanobu Yamamoto Hokkaido University, Japan			
10:20-10:30	Late Quaternary Coccolith Records in Maldives: records from the IODP Site U1467			

Xiang Su

South China Sea Institute of Oceanology, China



Quaternary shelf sand bodies in Asia and elsewhere: Processes and products Co-chairs: Yoshiki Saito, Ping Yin;

09:00-09:15	Sand bodies as dipsticks of sea-level changes during the Quaternary: East China Sea and elsewhere		
	Serge Berné	Universit de Perpignan, France	
09:15-09:30		Yangtze Shoal in response to the stepwise gression in the paleo-Yangtze (Changjiang) estuary	
	Jian Liu	Qingdao Institute of Marine Geology, China	
00-20-00-45	Late Quaternary East China Sea	stratigraphic evolution on the outer shelf of the	
09:30-09:45	Zhongbo Wang	Qingdao Institute of Marine Geology, China	
00.45 10.00	Characteristics and Provenances of Holocene sediments in the the inner shelf of the East China Sea		
09:45-10:00	Qi Li	China University of Geosciences, China	
10:00-10:15	on a sand ridge o	morphological characterristics of low-angle dunes ff Jiangsu Coast, China	
	Li Wang	Nanjing University, China	
10:15-10:30	Research on stab Taking XIHU sag	ility of sand ridges on the East China Sea shelf—g area as example	
	Yongfu Sun	First Institute of Oceanography, China	





The 50 years of Ocean Drilling and Asian Marine Geology Conveners: Yasuhiro Yamada, Gil Young Kim, Zhimin Jian

aining keys to	understanding earthquake generation by ocean
oshi Suyehiro	Japan Agency for Marine-Earth Science and Technolo
osive volcani fic Ocean	sm in the North Bismarck microplate, South
-Hwa Chun	Korea Institute of Geoscience and Mineral Resources
	ohic framework of National Gas Hydrate Program GHP-02) Area-B, offshore eastern India
-Hsi Hsiung	Japan Agency for Marine-Earth Science and Technolo
	n ideal basin for paleo-mass flux study: an n sequestration rate and efficiency
i Tada	University of Tokyo, Japan
tocene climat	oceanographic changes during the Plio- e transition inferred from playnofloras in the rea Plateau (ESKP), East Sea: a preliminary result
gmi Kim	University of Science and Technology, Korea
	transportation during the MIS22 glaciations into a and implications for the mid-Pleistocene climate
ia-Angela etti	Centre of Education and Research on Mediterranean Environments, France
	osive volcanis ic Ocean -Hwa Chun onal stratigraj dition 02 (No -Hsi Hsiung Japan Sea as a pipe of carbon i Tada oclimate and tocene climate ern South Ko gmi Kim en Sea Fast Sea ition a-Angela



Arctic gateway connecting the North Atlantic and North Pacific Oceans Conveners: Rujian Wang, Leonid Polyak, Seung-Il Nam, Masanobu Yamamoto

09:00-09:15	New paleoceanographic insights on the Arctic-Pacific gateway: from early Pliocene to modern interactions $$		
	Leonid Polyak	Ohio State University, USA	
09:15-09:30	off the East Siber	depositional and glacial history of the Arliss Plateau ian margin, western Arctic Ocean	
	Young Jin Joe	Korea Polar Research Institute, Korea	
09:30-09:45	western Arctic C	ostratigraphy of sedimentary manganese in the ocean and implications for the North American	
	Kwangkyu Park	Korea Polar Research Institute, Korea	
00.45 10.00	Western Arctic p Event	paleoceanographic changes across the Mid-Bruhnes	
09:45-10:00	Wenshen Xiao	Tongji University, China	
10.00.10.15	²³⁰ Th and ²³¹ Pa as tracers of Arctic marine particle flux: implications for middle-late Quaternary glacial history		
10:00-10:15	Qian Xu	The University of Hong Kong, Hong Kong, China	
10:15-10:30	Reconstruction of the Western Arctic Ocean water stratification over the last 50,000 years		
	Ho Lai Hilary Man	The University of Hong Kong, Hong Kong, China	





Sediment Dynamics in the River Plume Regime: Coupling between Physical Process and Geochemical Response Conveners: James T. Liu, Janping Gan, Hui Wu, Daidu Fan

10:50-11:05		Dynamics Related to the River Plume: nysics and Biogeochemistry
	James T. Liu Na	ational Sun Yat-sen University, Taiwan, China
	Estimating effective of from holographic im	lensity of cohesive sediment using shape factors ages
11:05-11:20	Sunmin Choi In	ha University, Korea
11 20 11 25		of suspended sediment to the hydrodynamics a river and submarine canyon
11:20-11:35	Xiaoqin Du Na	ational Sun Yat-sen University, Taiwan, China
11 25 11 50	Causes during the Pa	Differentiation of Deposition Centre and Its st Sixty Years in Lingdingyang Estuary
11:35-11:50		n Yat-sen University, China
11.50-12.05		ochemical characteristics on the bacterial tion and diversity in the Changjiang River
		cond Institute of Oceanography, China
12:05-12:20		sfer across the open and closed estuary systems: a and Seomjin River systems, South Korea
12:05-12:20	Sujin Kang Ha	anyang University, Korea

Marine Geology of Islands and Reefs Conveners: Ying Wang, Chengdong Ge, Kefu Yu

10:50-11:05	River-Sea Interactive Processes Related to Marginal Seas Geomorphology: Examples from the Yellow Sea and East China Sea		
	Ying Wang Nanjing University, China		
11:05-11:20	New age evidences of evolution history for coral reef islands, northern South China Sea		
	Tianlai Fan Guangxi University, China		
11.20 11.25	The stratigraphy and sedimentary environment since the late Quaternary, South Yellow Sea coast to inner shelf and adjacent Yangtze delta regions, eastern China		
	Yong Yin Nanjing University, China		
11:35-11:50	Identification of diagenetic stage-diagenetic facies based on diagenesis process and reservoir porosity prediction: An example from Huagang Formation in Xihu Depression, East China Sea Basir		
11.55-11.50	Wendao Qian Yangtze University, China		
11:50-12:05	Geothermal regime of the northern continental margin of the South China Sea		
	Shaowen Liu Nanjing University, China		
12:05-12:20	Session discussions		

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Sediment source-to-sink processes and environmental records in Asian continental margins Conveners: Xuefa Shi, Steven Kuehl, Dhong-II Lim, Shouye Yang, Sergey Gorbarenko

10:50-11:05	Sediment Routing from the Himalayan-Sourced Ganges- Brahmaputra Rivers to the Deep-Sea Bengal Fan from Detrital Zircons		
	Mike Blum University of Kansas, USA		
11:05-11:20	Evidence for Provenance Change in Deep Sea Sediments of the Bengal Fan: a 6 Ma record from IODP U1444A		
	Liping Zhou Peking University, China		
	Allogenic controls on sediment transfer across the Ganges- Brahmaputra delta gateway		
11:20-11:35	Steven Goodbred Vanderbilt University, USA		
11.25 11.50	Loess Plateau storage of Northeastern Tibetan Plateau derived Yellow River sediment		
11:35-11:50	Junsheng Nie Lanzhou University, China		
11:50-12:05	Sedimentology, chronology, and provenance of the "Yangtze Gravel": Link the Lower Yangtze River to Late Cenozoic tectonic and climate in southeast China		
	Ping Wang Nanjing Normal University, China		
12:05-12:20	Glacial-interglacial sedimentation in the Bohai Sea, China during the last 1 Ma: evidence from magnetostratigraphic and astronomical tuning dating core		
	Zhengquan Yao First Institute of Oceanography, China		

Late Cenozoic ocean circulation,carbon cycle, and climate change in the western Pacific marginal seas Conveners: Jun Tian, Jimin Yu, Zhonghui Liu

10:50-11:05	Precession and glacial-cycle controls of monsoon precipitation isotope changes over East Asia during the Pleistocene		
	Enqing Huang	Tongji University, China	
11:05-11:20	inferred from ra-	hy of the Japan Sea over the last 9.5 million years diolarian assemblages (IODP Expedition 346 Sites 30)	
	Kenji Marc Raymond Matsuzaki	University of Tokyo, Japan	
11:20-11:35		culation Changes in the Southern Ocean During the te Pliocene - Early Pleistocene	
11:20-11:35	Baoqi Huang	Peking University, China	
11:35-11:50		ate burial in western equatorial Pacific	
11:35-11:50	Hua Feng	Tongji University, China	
11:50-12:05		topic evidence of abruptly intensified deep a overflow and gradually strengthened East Asian Plio-Pleistocene	
	Jun Tian	Tongji University, China	
12:05-12:20	Possible tectonic Miocene carbon	c controls on the development of the Middle-Late nate crash	
	Shijun Jiang	Jinan University, China	

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S1 7a Venue 4

Quaternary shelf sand bodies in Asia and elsewhere: Processes and products Co-chairs: Serge Berné, Daidu Fan

11:50-12:20 Session discussions

10:50-11:05	Study on sand wave fields in the Taiwan Banks		
	Ziyin Wu	Second Institute of Oceanography, China	
		ures in the upper Jiulong submarine can-yon: a rt of high-resolution ROV images	
11:05-11:20	Daidu Fan	Tongji University, China	
11:20-11:35	Review of researc	hes on shelf tidal sands in China Seas	
	Ping Yin	Qingdao Institute of Marine Geology, China	
11:35-11:50	Research on the Northern Sout	Migration Rule of Sand Waves on the Outer Shelf h China Sea	
	Yongfu Sun	First Institute of Oceanography, China	

The 50 years of Ocean Drilling and Asian Marine Geology Conveners: Yasuhiro Yamada, Gil Young Kim, Zhimin Jian

10:50-11:05		e hidden continent (Zealandia): preliminary results omarker (IODP Exp. 371)
	Yu-Hyeon Park	Pusan National University, Korea
		nd Rock Magnetic Studies of IODP Sites U1431 e South China Sea Basins
11:05-11:20	Xixi Zhao	Tongji University, China
11:20-11:35	by Korea-Japan a	nt of the Next Generation Borehole Magnetometer and Its Prospect as a New Model of Collaboration aal Ocean and Continental Drilling Programs
		Seoul National University, Korea
11:35-11:50	50 years	le (M2M) Drilling on the Horizon- Progress after
11:35-11:50	Kyaw Moe	R&D Center for Ocean Drilling Science, Japan
	Activity and futur	re plan of K-IODP
11:50-12:05	Gil Young Kim	Korea Institute of Geoscience and Mineral Resoruces
12:05-12:20	Near future direc	tions in scientific drilling
	Yasuhiro Yamada	ODS, JAMSTEC, Japan





Arctic gateway connecting the North Atlantic and North Pacific Oceans Conveners: Rujian Wang, Leonid Polyak, Seung-Il Nam, Masanobu

Yamamoto

10:50-11:05	A thermohaline-driven intensification of the Atlantic Meridional Overturning Circulation during the abnormally long interglacial of marine isotope stage 11		
	Benoit Thibodeau	The University of Hong Kong, Hong Kong, China	
11:05-11:20	Surface nutrient u AMOC dynamic	utilization in the Nordic Seas and its relevance for s during MIS 11	
	John Doherty	The University of Hong Kong, Hong Kong, China	
11.20 11.25		locene sea-ice variability north of Iceland and a circulation changes	
11:20-11:35	Xiaotong Xiao	Ocean University of China	
11:35-11:50	Holocene environ Spitsbergen, Svall	nmental changes in Woodfjorden of northern pard archipelago	
	Young-Ji Joo	Korea Polar Research Institute, Korea	
11:50-12:05		etrital neodymium isotopic compositions of in Svalbard fjords: preliminary results	
	Kwangchul Jang	Korea Polar Research Institute, Korea	
12:05-12:20	overturning circu	orador Current flow speed to Atlantic meridional lation (AMOC) during the Holocene: and organic geochemical perspectives	
	Harunur Rashid	Memorial University of Newfoundland Canada	

Seabed Mineral Resources: Recent Achievements and Challenges

Conveners: Sang-Joon Pak, Wonnyon Kim, Jonguk Kim

14:00-14:15	Hydrocarbon preservation evaluation in the Laoshan Uplift of the South Yellow Sea Basin
14.00-14.13	Penghui Zhang Hohai University, China
14:15-14:30	Discovery of active and inactive hydrothermal vents along the northern Central Indian Ridge
	Jonguk Kim Korea Institute of Ocean Science and Technology
14:30-14:45	Petrogenesis of subduction-related lavas from the southern Tonga arc
14:30-14:43	Bora Myeong Korea Institute of Ocean Science and Technology
14.45 15.00	Geochemical constraints on the enriched mantle source beneath the North Fiji Basin
14:45-15:00	Jihye Oh Korea Institute of Ocean Science and Technology
15:00-15:15	Tin Mineralization of Gold-Bearing Seafloor Hydrothermal Sulfides at Ocean Core Complex, 12.4°S, Central Indian Ridge
	Sun Ki Choi Korea Institute of Ocean Science and Technology
15:15-15:30	Geochemical and Microbial characteristics of ferro-manganese crusts on the seamonts in the northwestern Pacific
	Katsuhiko Suzuki Japan Agency for Marine-Earth Science and Technology

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Land-sea interaction processes and paleoenvironmental evolutionin the joining area of Indian-Pacific Ocean Conveners: CheAbd.Rahim Bin Mohamed, Shengfa Liu, Rina Zuraida, Narumol Kornkanitnan

14:00-14:15	Record of land-sea interaction through the Indian monsoon in the Mahanadi Basin (IODP Site U1445) of the Bay of Bengal during the last $200~\mathrm{ka}$
	Jongmin Lee Pusan National University, Korea
14:15-14:30	Sediment provenance based on detrital Sr-Nd isotopes in the Laxmi Basin (IODP Site U1456) of the Arabian Sea during the late Pleistocene
	Boo-Keun Khim Pusan National University, Korea
14 20 14 45	Chromium and gallium in suspended particles of Kelantan and Pahang Rivers: sources or sinks
14:30-14:45	Che Abd Rahim University Kebangsaan Malaysia
14:45-15:00	Land connections and disconnections of Sundaland (Last Glacial Maximum to Holocene) - Implications
	Edlic Sathiamurthy University Malaysia Terengganu, Malaysia
15:00-15:15	Peaty Sediment Distribution in the Straits of Malacca and its Potential use as the Sea Level indicators
	Abdullah Sulaiman Universiti Malaysia Terengganu, Malaysia
15:15-15:30	Calcareous Nannoplankton (marine algae) Analysis in Subsurface Sediments of Andaman Sea

Marine Geological Institute of Indonesia

Rina Zuraida

15:15-15:30



Sediment source-to-sink processes and environmental records in Asian continental margins

Conveners: Xuefa Shi, Steven Kuehl, Dhong-Il Lim, Shouye Yang, Sergey Gorbarenko

Seasonal variability in dust sources and transport processes over the

	Arabian Sea	
14:00-14:15	Venkitasubramani Ramaswamy	CSIR-National Institute of Oceanography, India
14:15-14:30		cteristics, seasonal variability and dynamic ace suspended sediment concentration in the
11110 11100	Chongguang Pang	Institute of Oceanology, Chinese Acadamy of Sciences, China
14:30-14:45		compositions (⁸⁷ Sr/ ⁸⁶ Sr, δ ⁸⁸ / ⁸⁶ Sr) of dissolved ds from a moutain catchment during typhoon
	Ni Su	Tongji University, China
14:45-15:00		strols of continental weathering and sediment le Basin since the Late Pleistocene
14:45-15:00	Nathalie Vigier	LOV, CNRS, Sorbonne University, France
15.00.15.15	Declined sediment in the Changjiang I	source and connectivity: a basin-wide synthesis River system
15:00-15:15	Leicheng Guo	East China Normal University, China
15:15-15:30	An integrated study in the East Asian co	y on the fluvial sediment source-to-sink processes ontinental margin
	Shouye Yang	Tongji University, China

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Venue 4

Late Cenozoic ocean circulation,carbon cycle, and climate change in the western Pacific marginal seas Conveners: Jun Tian, Jimin Yu, Zhonghui Liu

		ndonesian Throughflow thermal profile over the pective from the southern Makassar Strait
14:00-14:15	Peng Zhang	Northwest University, China
14:15-14:30	Southern Hemisp Chinese loess and	here forcing of onset of the MIS 14: evidence from global records
14:15-14:30	Qingzhen Hao	Institute of Geology and Geophysics, China
14:30-14:45	Complexity of East	st Asian climate change since last glaciation
14:30-14:45	Li Li	Tongji University, China
14:45-15:00		ility in surface and subsurface water temperature acial periods in the tropical southern South China
	Liang Dong	Tongji University, China
15:00-15:15	Depth distribution Ma	n of organic carbon flux in the Japan Sea since 1.5
	Tomohisa Irino	Hokkaido University, Japan
15:15-15:30	Climate dynamics Cretaceous Atlant	of a 1400 Ma marine setting: An analogy to the ic Ocean

Xiaomei Wang China National Petroleum Corporation



Tropical processes in past global change: hydrology, weathering and carbon-cycle

Conveners: Yair Rosenthal, Enqing Huang, Haowen Dang

1VIB6-1536 Open and free discussions

Past climate changes are tended to be viewed in the context of glacial cycles, while tropical climate changes are found to be able to respond directly to solar insolation forcing and exhibit strong variance at eccentricity and precession bands. This workshop aims to underlining the importance and the dependence of tropical process in the Earth's climate system. We plan to review and discuss recent progress in three major topics related to the tropical climate:

- (1) the hydrological cycle, e.g., monsoon and El Niño-Southern Oscillation;
- (2) weathering of tropical landmass and shelves;
- (3) perturbations of the carbon cycle via changes in alkalinity budget and tropical vegetation.

Invited talks related to these topics will be presented. Time is also reserved for an open discussion, especially how to foster and promote future studies in the framework of the International Ocean Discover Program (IODP).







Anthropocene Coasts under Global Changes Conveners: Shu Gao, Ian Townend, Katsuto Uehara, HeeJun Lee

	Wave-induced flows over crescentic bars in an open-coast beach, Korea		
14:00-14:15	Hee Jun Lee	Korea Institute of Ocean Science and Technology	
	Sediment transposystem	ort pattern in the southern Yellow Sea sand-ridges	
14:15-14:30	Yaping Wang	East China Normal University, China	
14:30-14:45	Tidal Flat Dynan	nics Influenced by Along-coast Tidal Currents	
	Qian Yu	Nanjing Univseisity, China	
14.45 15.00	Tidal Basin Infill	ing along the East China Sea Coast	
14:45-15:00	Yunwei Wang	Hohai University, China	
15:00-15:15	Dynamic equilibrium in the Qiantang Estuary, China		
	Dongfeng Xie	Zhejiang Institute of Hydraulics and Estuary, China	
15:15-15:30		ort processes in a mountainous river subaqueous onse to human activities	

Third Institute of Oceanography, China

Aijun Wang

Arctic gateway connecting the North Atlantic and North Pacific Oceans

Conveners: Rujian Wang, Leonid Polyak, Seung-Il Nam, Masanobu

14:00-14:15	Dynamics of branches of the Bering Strait inflow in the Chukchi Sea during the Holocene		
	Masanobu Yamamoto	Hokkaido University, Japan	
14:15-14:30	Micropaleontolo waters in the Chu reconstructions	gical and geochemical indicators of the Pacific ikchi Sea: application for paleoceanological	
	Mariia Obrezkova	POI FEB RAS, Russia	
14:30-14:45	Microbial Biogeo the Arctic Ocean	egraphy from Seawater to Holocene Sediments in	
14:30-14:43	Dukki Han	Jeju National University, Korea	
14:45-15:00		ea ice extent in the Chukchi Sea over the last 140 o the application of the PIP25 index	
14:45-15:00	Jung-Hyun Kim	Korea Polar Research Institute	
15.00 15.15		ge and nutrient regime changes in the southern Ocean since the late-Pliocene	
15:00-15:15	Ting Chen	Southern University of Science and Technology, China	
15:15-15:30		ntal changes recorded in the terrigenous sediments rthern slope since the last deglaciation	
	Yechen Sun	Tongji University, China	

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Plenary 129 Hall

15:50-16:20	Scientific and engineering achievements of the D/V Chikyu - CoreLog-Seismic-Observatory Integration		
	Asahiko Taira	Japan Agency for Marine-Earth Science and Technology	
16:20 16:50	The evolution of basalt by seafloor	the Philippine Sea Plate and the origin of proto-arc spreading	
16:20-16:50	Brian Taylor	University of Hawai'i at Manoa USA	

16:50-17:50



Advances in natural hydrate systems and methane seeps in marine settings Conveners: Dong Feng, Min Luo, Xiqiu Han, Haibin Song

	09:00-09:15	Occurrence of methane hydrate mounds inferred from geophysical survey in the eastern slope of the Chukchi Basin, Arctic Ocean		
		Young-Gyun Kim	Kangwon National University, Korean	
			dy on Correlation between Elastic Modulus of Gas Sediments and Gas Hydrate Saturation	
	09:15-09:30	Chul-Whan Kang	Korea Advanced Institute of Science and Technology	
	09:30-09:45	A recently active gas hydrate system with high concentration and geological controls in Shenhu area, South China Sea		
	09.30-09.43	Jiapeng Jin	Institute of Oceanology, Chinese Academy of Sciences, China	
	09:45-10:00	structures in a reg	ceanographic controls on seabed fluid escape ion of extensive seepage in the Northern sin, South China Sea	
		Jiangxin Chen	Qingdao Institute of Marine Geology, China	
	10:00-10:30	Session discussion	ns	





World's River Deltas: research progress and perspectives Conveners: Yoshiki Saito, Steve Goodbred, Zhongyuan Chen

	Recent Changes of the Asian Deltas: Rapid Shoreline and Seafloor Erosions		
09:00-09:15	Paul Liu	North Carolina State University, USA	
00.15 00.20	Coupled natural-s Ganges-Brahmap	system responses to anthropogenic change in the utra River delta	
09:15-09:30	Steven Goodbred	Vanderbilt University, USA	
00 20 00 45	Sedimentation and	d Coastal Area Management of Bangladesh	
09:30-09:45	Md Bazlar Rashid	Bangladesh	
00.45.10.00	The Fate of Ayeya	rwady River Sediment: A Seismic Study	
09:45-10:00	Austin Chandler Pierce	North Carolina State University, USA	
10.00 10.15	Prehistoric shoreli	ne changes of the Mekong delta, Vietnam	
10:00-10:15	Toru Tamura	Geological Survey of Japan	
10:15-10:30	Tide-dominated ledelta example	arge-river deltas and estuaries: The Mekong River	
	Yoshiki Saito	Shimane University, Japan	

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Paleoceanographic and climatic evolution and variability recorded in marginal and deep-sea western Pacific sediments; linking land-ocean in present and past Conveners: Gert J de Lange, Michael Sarnthein, Zhimin Jian

09:00-09:15	The evolution of the Asian and American Monsoon recorded in ferromanganese crusts		
07.00-07.13	Yang Wang	China University of Geosciences, China	
09:15-09:30	Paleoclimatic and paleoceanographic records through Marine Isotope Stage 19 at the Chiba composite section, central Japan		
09:15-09:50	Yusuke Suganuma	National Institute of Polar Research, Japan	
09:30-09:45	implications for o	Nd isotopes in the western Pacific Ocean: changes in weathering input over the last 30,000	
	Qiong Wu	Hohai University, China	
09:45-10:00	The deep-water oxygenation changes in the South China Sea since the last glacial period		
09.43-10.00	Gang Li	South China Sea Institute of Oceanology, China	
10:00-10:15	surface hydrogra	structions of the subarctic Northwestern Pacific phy and sea surface temperature since the last	
	Pai-Sen Yu	Taiwan Ocean Research Institute, Taiwan, China	
10:15-10:30	Session discussio	ns	



Interaction of tectonic-climate change with weathering and erosion processes in Asian continental margin Conveners: Peter Clift, Christian France-Lanord, Shiming Wan

09:00-09:15		ords in the Southern Bay of Bengal since 37 Ma: of the Bay of Bengal and paleoenvironmental
07.00-07.13	Zehua Song	Institute of Oceanology, Chinese Academy of Sciences, China
00.15.00.20	Neogene erosion the Bengal fan tur	regime and climate of the Himalayan basin from bidite record
09:15-09:30	Christian France- Lanord	CRPG - CNRS, Universite de Lorraine, France
00 20 00 45	Tectonic and clin South China since	natic controls on long-term silicate weathering in e 25 Ma
09:30-09:45	Shiming Wan	Institute of Oceanology, Chinese Academy of Sciences, China
09:45-10:00	Are lithium isotop	pes good proxies of continental silicate weathering
09:45-10:00	Xiao-Ming Liu	University of North Carolina at Chapel Hill, USA
10.00 10.15	history in the Pale	ne East Asian Summer Monsoon intensification progene
10:00-10:15	Chang Liu	Louisiana State University, USA
10:15-10:30	short-term silicate	mics of sediment transport system controls on e weathering in the Changjiang (Yangtze River)
	Lei Bi	Tongji University, China



2nd **China-Korea Joint Workshop on Gas Hydrate** Conveners: Nengyou Wu, Dae-Gee Huh

09:00-09:15	Aerobic microbial oxidation of hydrocarbon gases (methane, ethane and propane): Experimental simulation		
07.00-07.13	Jing Li	Qingdao Institute of Marine Geology, China	
	Estimation of gas hydrate saturation from rock physics modeling and seismic inversion in the Ulleung Basin, East Sea		
09:15-09:30	Bo-yeon Yi	Korea Institute of Geoscience and Mineral Resources	
09:30-09:45	Characteristics of natural gas hydrates in the Shenhu Sea Area of Northern South China Sea		
09.30-09.43	Jiangong Wei	Guangzhou Marine Geological Survey, China	
09:45-10:00	Numerical simulations for accidental gas leakage and drill cuttings transport in water column associated with gas hydrate production in the Ulleung Basin, East Sea		
07.15 10.00	Jong-Hwa Chun	Korea Institute of Geoscience and Mineral Resources	
10:00-10:15	Acoustic Characteristics and Micro-distribution Prediction during Hydrate Dissociation in Sediments from South China Sea		
10:00-10:15	Gaowei Hu	Qingdao Institute of Marine Geology, China	
10.15.10.20	Resource assessm structures in the U	ent method of gas hydrate within seismic chimney Jllelung Basin	
10:15-10:30	Nyeon-keon Kang	Korea Institute of Geoscience and Mineral Resources	



Structure, magmatism and dynamics of marginal seas in Western Pacific Conveners: Tianyao Hao, Sanzhong Li, Weiwei Ding, Zhen Sun

09:00-09:15	Characteristics of arc crust-mantle transition and mantle discontinuities beneath the western Pacific subduction zones		
09:00-09:15	Xiaobo He	Zhejiang University, China	
	Subduction initia	tion: observations of how subduction begins	
09:15-09:30	Robert Hall	Royal Holloway University of London, UK	
09:30-09:45		cts of subducted seamount during single-sided hrusting at the Manila Trench: Insights from ling	
	Zihua Cheng	Second Institute of Oceanography, China	
09:45-10:00		sectonic development, turbidite systems and Southern Okinawa Trough	
	Tien-Shun Andrew Lin	National Central University, Taiwan, China	
10:00-10:15		mensional lithospheric seismic velocity model ow Sea and surroundings from joint inversion of se-wave data	
	Yanlin wen	Shanghai Earthquake Administration, China	
10:15-10:30	Session discussion	ns	



Nearshore Dynamic Processes and Hazards under Coastal Storms and Influence of Human Activities Conveners: Bob Z You, Yongshen Wu, Qinghe Zhang, Jiawen Sun

09:00-09:15	Unified formula for erosion thresholds of sand, mud and sand-mud mixtures		
07.00-07.13	Dake Chen	Hohai University, China	
09:15-09:30		goon sediment core as a potential storm indicator: a An lagoon, Southeastern Hainan Island	
07.13-07.30	Yanan Li	East China Normal University, China	
09:30-09:45		f intertidal-dune morphodynamics and sediment on unmanned aerial vehicle (UAV)-assisted	
	Dohyeong Kim	Seoul National University, Korea	
09:45-10:00	Estimation of Wave Friction Factors on Movable Seabeds of Sediment		
09:45-10:00	Zai-Jin You	Ludong University, China; University of Queensland, Australia	
10:00-10:15		ment sources on the special distribution of sandy- nal beaches in southeastern coastal China	
10.00-10.13	Shaohua Zhao	Third Institute of Oceanography, China	
10:15-10:30	Increasing threat Pacific between 1	of typhoons to coastal area in the western North 980 and 2015	
10.15-10.50	Hongyuan Shi	Ludong University, China	



Advances in natural hydrate systems and methane seeps in marine settings Conveners: Dong Feng, Min Luo, Xiqiu Han, Haibin Song

	10:50-11:05	Methane flux from "HaiMa" cold seeps at Qiongdongnan Basin , South China Sea		
		Jiangong Wei Guangzhou Marine Geological Survey, China		
	11:05-11:20	Vivianite formation in methane-rich deep-sea sediments from the South China Sea		
		Jiarui Liu China University of Geosciences, China		
	11:20-11:35	Authigenic minerals in sediments recovered during IODP 353 and its implication for the paleo-SMTZs		
		Jiasheng Wang China University of Geosciences, China		
	11:35-12:20	Session discussions		

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World's River Deltas: research progress and perspectives Conveners: Yoshiki Saito, Steve Goodbred, Zhongyuan Chen

10:50-11:05	Mass Wasting Processes and Products of the Mississippi River Delta Front: Data Synthesis and New Insights
10.30-11.03	Samuel Bentley LSU College of Science, Baton Rouge, USA
11.05.11.20	When will the sediment flux into the Changjiang River delta reach lowest?
11:05-11:20	Zhongyuan Chen East China Normal University, China
11:20-11:35	Quantifying the impacts of human interventions on relative mean sea level change in the Pearl River Delta, China
11:20-11:35	Huayang Cai Sun Yat-sen University, China
11:35-11:50	Impacts of Dam-orientated Water-Sediment Regulation Scheme or the Lower Reaches and Delta of the Yellow River, China
11:55-11:50	Houjie Wang Ocean University of China
11:50-12:05	Holocene evolution of the Nakdong River delta, Busan, Korea
11:30-12:03	Eun Je Jeong Korea Institute of Ocean Science and Technolog
12:05-12:20	The response of Sr/Ba to salinity in artificial synthetic deltaic sediments
12:05-12:20	Aihua Wang Nanjing Center, China Geological Survey



Paleoceanographic and climatic evolution and variability recorded in marginal and deep-sea western Pacific sediments; linking land-ocean in present and past Conveners: Gert J de Lange, Michael Sarnthein, Zhimin Jian

10.50.11.05	Deep hydrography of the South China Sea and deep water circulation in the Pacific since the last glacial maximum		
10:50-11:05	Sui Wan	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China	
11:05-11:20	N. African paleo-river input to central-Mediterranean sediments during the Holocene – a high-resolution record		
11:05-11:20	Gert De Lange	Utrecht University-Fac.Geosciences, Holland	
11 20 11 25	The coldest climate on the appearance of the world's oldest stone arrowheads/pottery appeared in Japan		
11:20-11:35	Hodaka Kawahata	University of Tokyo, Japan	
11:35-11:50		rupt cold episodes around 4.2 ka in the Yangtze e of the earliest rice cultivating civilization	
11:55-11:50	Hiroto Kajita	University of Tokyo, Japan	
11:50-12:05	Discrepant in seawater isotope records deduced with hydrogen and oxygen isotopes in the northern South China Sea		
11.30-12.03	Juan He	Tongji University, China	
12:05-12:20	Session discussio	ns	

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Interaction of tectonic-climate change with weathering and erosion processes in Asian continental margin Conveners: Peter Clift, Christian France-Lanord, Shiming Wan

10:50-11:05	Increased seasonality and aridity drove the C4 plant expansion in Central Asia since the Miocene-Pliocene boundary		
10:50-11:05	Xingyan Shen	Institute of Oceanology, Chinese Academy of Sciences, China	
		mate change with weathering and erosion processes a Island over various time scales	
11:05-11:20	Zhaokai Xu	Institute of Oceanology, Chinese Academy of Sciences, China	
11:20-11:35	Marine Records	of Drainage Reorganization in Cenozoic Asia	
11.20-11.33	Peter Clift	Louisiana State University, USA	
11.25.11.50	History of Yellow and Yangtze River delivering sediment to the Yellow Sea since 3.5 Ma: tectonic or climate forcing?		
11:35-11:50	Jin Zhang	Institute of Oceanology, Chinese Academy of Sciences, China	
11:50-12:05		lution of Indian summer monsoon since 1.2 Ma: ay mineral and geochemical records of the eastern	
11.00 12.00	Hongjin Chen	Institute of Oceanology, Chinese Academy of Sciences, China	
12:05-12:20		led sediment transport to the eastern Arabian Sea kyr: Clay minerals and Sr-Nd isotopic evidence U1457	
	Zhaojie Yu	Institute of Oceanology, Chinese Academy of Sciences, China	



2nd **China-Korea Joint Workshop on Gas Hydrate** Conveners: Nengyou Wu, Dae-Gee Huh

10:50-11:05	Sand production system for hydrate exploitation from clayey silt reservoirs		
10:50-11:05	Yanlong Li	Qingdao Institute of Marine Geology, China	
11.05.11.20	Well-bore stability study program in Korea for gas production from gas hydrate deposits in the Ulleung Basin, East Sea, Korea		
11:05-11:20	Joo Yong Lee	Korea Institute of Geoscience and Mineral Resources	
11:20-11:35	Evolving bearing production: A Tl	capacity of an anchor plate during hydrate HMC analysis	
11.20-11.33	Fang Liu	Tongji University, China	
11:35-11:50	Current laboratory studies on depressurization-induced gas hydrate production in ${\rm KIGAM}$		
11:55-11:50	Taewoong Ahn	Korea Institute of Geoscience and Mineral Resources	
11:50-12:05	Effect of perforat northern South C	ion on gas production from hydrate deposits in China Sea	
11:50-12:05	Yizhao Wan	Qingdao Institute of Marine Geology, China	
12:05-12:20	Session discussio	ns	

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Structure, magmatism and dynamics of marginal seas in Western Pacific

Conveners: Tianyao Hao, Sanzhong Li, Weiwei Ding, Zhen Sun

10:50-11:05	Trough forearc b	nation and sedimentation in the North Luzon asin and evolution of a modern-forming melange hore eastern Taiwan
	Chi-Yue Huang	Tongji University, China
11:05-11:20	The lithosphere s gravity data	structure of North margin of South China Sea from
11:03-11:20	Ya Xu	Insititute of geology and geophysics, China
11:20-11:35	multi-channel se	ransition in the South China Sea: Evidence from ismic data and IODP Expeditions 367&368 drilling
	Weiwei Ding	Second Institute of Oceanography, China
11:35-11:50	The rifting-detac margin in the nor magmatism	hment-breakup process of the continental rthern South China Sea and its relationship with
11.55-11.50	Zhen Sun	South China Sea Institute of Oceanology, , Chinese Academy of Sciences, China
11:50-12:05		ribution of the Post-spreading Seamounts in the the South China Sea
11.30-12.03	Yanghui Zhao	Second Institute of Oceanography, China
12:05-12:20	Exploring source microseisms reco by cross-correlat	regions of single- and double-frequency orded in eastern North American margin (ENAM) ion
	Zhen Guo	Tongji University, China



Nearshore Dynamic Processes and Hazards under Coastal Storms and Influence of Human Activities Conveners: Bob Z You, Yongshen Wu, Qinghe Zhang, Jiawen Sun

10.50.11.05	Wave Overtopping of Vertical Sea Dike on a Laboratory Fringing Reef		
10:50-11:05	Shaowu Li	Tianjin University, China	
11:05-11:20	Tidal propagation	n in the Fraser River Estuary	
11:05-11:20	Yongsheng Wu	Bedford Institute of Oceanography, Canada	
11:20-11:35	Shanhaiguan Toi	ical Restoration Project on Hydrodynamics at urism Beach	
11:20-11:55	Boling Dong	Tongji University, China	
11:35-11:50	Parameterization	of Breaker Index for Random Wave Modelling	
11:35-11:50	Yuan Li	Hohai University, China	
11:50-12:05	Experimental stutidal currents and	dy on formation and evolution of sandwaves under l waves	
11:30-12:03	Zhipeng Zang	Tianjin University, China	
12:05-12:20	Modeling of Oil	Spill in the English Bay	
12:03-12:20	Haibo Niu	Dalhousie University, Canada	

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Thu.

resentation



15:00-17:50 Poster Sessions (Ground Floor, Zhonghe Building)

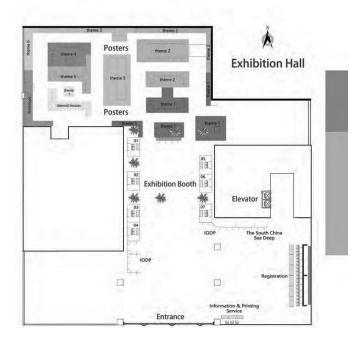
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Exhibition Hall



Zhonghe Building - Ground Floor





Marine Geohazards Conveners: Yu Huang, Wuwei Mao

09:00-09:15	Gravity Current-Pipeline Interaction: Numerical Simulations	
09:00-09:15	Eckart Meiburg UC Santa Barbara, USA	
09:15-09:30	Detection of submarine shallow gas and its risk assessment on marine engineering offshore of Zhoushan Islands	
09:15-09:30	Ping Yin Qingdao Institute of Marine Geology, China	
09:30-09:45	Influence of Short Term rainfall on The Jamuna Marine Embankment Stability At bahuka, Shirajgonj, Bangladesh.	
09:30-09:43	A.T.M. Hossain Jahangirnagar University, Bangladesh	
00.45.10.00	Geology and seismic profile around Krakatau waters	
09:45-10:00	Soepri Wahyoe RCG IIS, Indonesia	
10:00-10:15	Foraminifera Preservation Potential in the Paleotsunami : a Review	
10:00-10:15	Eko Yulianto Indonesian Institute of Sciences (LIPI), Indonesia	
10:15-10:30	Session discussions	



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Mechanisms of the South China Sea formation and ocean drilling Conveners: Jian Lin, Zhimin Jian

WS2WW61W23W Open and free discussions

Burial of organic carbon in the coastal margin under a changing world Chair: Thomas Bianchi

09:00-09:15	Blue Carbon Sequestration Within a N Wetland - Response to Climate Chang Variability	
	Derrick Vaughn University of Florida	, USA
09:15-09:30	Implications of eutrophication for biog Three Gorges Reservoir, China	eochemical processes in the
09:15-09:50	Xiangbin Ran First Institute of Oce	anography, China
09:30-09:45	Biogeochemical characterization of Pea FTICR-MS and high throughput seque	
07.50-07.45	Wei Xie Sun Yat-sen Univers	ity, China
09:45-10:00	Treated wastewater changes the export carbon and its isotopic compositon and coastal oceans	
	Xufeng Yang Ocean University of	China, China
10:00-10:15	Black carbon (BC) geochemistry in East	t China Marginal Seas
10:00-10:15	Yin Fang Tongji University, C	hina
10:15-10:30	Session discussions	

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S15/W02a

Venue 4

S15 Deep-Sea Sedimentary Processes: from Observations to Geological Records

W02 Particle Flux in the Oceans: Recent Progress and Future Perspectives

Co-chairs: Martin Wiesner, Zhifei Liu

09:00-09:15	A comparison of monsoon derived biological pump in Asian Marginal Seas: South China Sea, Arabian Sea and Bay of Bengal		
09:00-09:15	Jianfang Chen Second Institute of Oceanography, China		
00.15.00.20	Selective terrestrial organic matter loss in marine sediments		
09:15-09:30	Thomas ETH Zurich, Switzerland		
09:30-09:45	Modern transport process of terrigenous materials in the Gaoping Submarine Canyon off Taiwan		
09:30-09:43	Xiaodong Zhang Tongji University, China		
00.45.10.00	Double-diffusive Sedimentation		
09:45-10:00	Eckart Meiburg UC Santa Barbara, USA		
10.00.10.15	Calcification depths and temperature of planktonic foraminifera off southwest Hainan Island and their paleoceanographic implications		
10:00-10:15	Ismail Adejare Ladigbolu Second Institute of Oceanography, China		
10.15.10.20	Current status of Coccolith downward fluxes and potential environmental drivers in northern SCS		
10:15-10:30	W.N.C. Priyadarshani Second Institute of Oceanography, China		



GeoSummit Workshop on Coastal and Offshore Geology Conveners: Se Won Chang, Ping Yin, Tomoyuki Sato, Huayan Gan

	09:00-09:15	Origin and evolution of stacked cut-and-fill structures in the southwestern margin of the Ulleung Basin, East Sea (Japan Sea)		
		Yong Joon Park	Petroleum and Marine Research Division, Korea	
	09:15-09:30	Difference of subsaround Japan	surface structures of shelf due to tectonic setting	
	09:15-09:50	Tomoyuki Sato	Geological Survey of Japan	
	09:30-09:45		rds monitoring and mitigation practices in the lta and adjacent offshore	
	09:30-09:45	Ping Yin	China Geological Survey, Qingdao, China	
	09:45-10:00		es and depositional evolution of the Jeju Strait e Pleistocene to Holocene sea level changes,	
	09.43-10.00	Seok Hwi Hong	Institute of Geoscience and Mineral Resources, Korea	
	10:00-10:15	Ocean bottom gra Japanese Islands	avity surveys in the transition zones along the	
	10:00-10:13	Shigeo Okuma	Geological Survey of Japan	
10:15-10:30 Session discussions		ns		





S09 Sediment Gravity Flows: Processes, Products, and Implications to Resource Explorations

S14 When and how clastic detritusare transported from shelf-edge staging areasinto deep-waterareas: From a source-to-sink perspective

Co-chairs: Guangfa Zhong, Chenglin Gong

00.00.00.15	Inherent Biases in Sediment Routing to Deepwater: Concepts and Examples		
09:00-09:15	Mike Blum	University of Kansas, USA	
09:15-09:30	What are the requrising sea level?	nired conditions for deltas at the shelf edge during	
09:15-09:50	Jinyu Zhang	The University of Texas at Austin, USA	
00 20 00 45		from onshore to abyssal plain: insight from detrital the Gulf of Mexico Miocene deepwater fans	
09:30-09:45	Jie Xu	China University of Geosciences , China; The University of Texas at Austin, USA	
00.45.10.00		nsport regime at shelf edge as fundamental ery of shelf-edge sands to deepwater	
09:45-10:00	Chenglin Gong	China University of Petroleum, China	
10:00-10:15	the Paleocene low	es of the Transgressive-Regressive Cycles of ver Wilcox, Gulf of Mexico based on a long	
	Shunli Li	China University of Geosciences, China	
10:15-10:30		noforms in outcrops; jurassic lajas and los molles neuquen basin, argentina.	
10:15-10:30	Cornel Olariu	The University of Texas at Austin, USA	

09:00-09:15	Cohesive Sediment Transport and Fluid Mud Formation Simulation during Typhoon Processes: Linyungan Coast as An Example	
	Qinghe Zhang	Tianjin University, China
09:15-09:30		g System for the Long-term Prediction of ange along the Coast of the East Asia
	Dong-Young Lee	e Ocean University of China
09:30-09:45	Linkage of wave models by NS equations solver and fully non-linear potential flow solver	
	Hanbin Gu	Zhejiang Ocean University, China
09:45-10:00	Study on wave-induced seabed response based on DEM-PFV coupling model	
	Jinfeng Zhang	Tianjin University, China
10:00-10:15	Study on numerical simulation of three-dimensional multi- directional freak waves based on OpenFOAM	
	Cheng Cui	Tianjin Research Institute of Water Transport Engineering, China
10:15-10:30	Trends of storm surge in the coastal areas of Zhejiang and Fujian Provinces	
	Xingru Feng	Institute of Oceanology, Chinese Academy of Sciences, China



Coastal dynamic and sea level change over time scales Conveners: Yongqiang Zong, Fengling Yu

10:50-11:05	Sea-level behaviour during the Last Interglacial (MIS 5e) from far-field setting, Yorke Peninsula, Southern Australia		
	Tsun-You Pan	University of Wollongong, Australia	
11:05-11:20	Change from tide-influenced deltas in a regression-dominated set of sequences to tide-dominated estuaries in a transgression-dominated sequence set, East China Sea Shelf Basin		
	Shunli Li	China University of Geosciences, China	
11:20-11:35	Sea-level oscillations of the East China Sea and their implications for global seawater redistribution during 14.0 - $10.0~\rm kyr$		
	Jiang Dong	Institute of Oceanology, Chinese Academy of Sciences, China	
11:35-11:50	Holocene sea-lev	el history of the northern coast of South China Sea	
	Yongqiang Zong	University of Hong Kong, China	
11:50-12:05	Holocene sea leve	el change in the west coast of Bohai Bay	
	Hong Wang	Tianjin Centre, China Geological Survey, China	
12:05-12:20		ord of coastal wetland development in the r Plain since the mid-Holocene	
	Qiang Yao	Louisiana State University, USA	

Burial of organic carbon in the coastal margin under a changing world Chair: Peng Yao

10:50-11:05	Efficient burial of organic carbon in the hadal trenches		
	Yunping Xu	Shanghai Ocean University, China	
	Re-evaluating the use of BIT as a proxy for the relative abundance of terrestrial soil organic matter in sediments east off Taiwan		
11:05-11:20	Xiaoxia Lv	China University of Geosciences, China	
11:20-11:35	Sources and assimilation metabolism of archaea GDGTs in surface sediments of the Pearl River, China		
11:20-11:35	Xinxin Li	Southern University of Science and Technology, China	
11:35-11:50	Sedimentary organic matter compositions along the Pearl River in South China and their carbon cycle significance		
11:55-11:50	Baozhi Lin	Tongji University, China	
11:50-12:05	Centennial sedimentary responses of organic carbon burial to natural forcing and anthropogenic impacts along the East Asian continental margins		
	Limin Hu	First Institute of Oceanography, China	
12:05-12:20	The Role of Reactive Iron in the Preservation of Terrestrial Organic Carbon in Estuarine Sediments		
12:03-12:20	Bin Zhao	Ocean University of China	





SS 8b 02b **VV**en**V**u

S15 Deep-Sea Sedimentary Processes: from Observations to Geological Records

W02 Particle Flux in the Oceans: Recent Progress and Future Perspectives

Co-chairs: Gert J. de Lange, Jianfang Chen

10:50-11:05	Long-term in situ observations on typhoon-triggered turbidity currents in the deep sea		
	Yanwei Zhang Tongji University, China		
11:05-11:20	Transformation of hyperpycnal flows into turbidity currents		
	Benjamin Kneller University of Aberdeen, UK		
11:20-11:35	High-resolution Simulations of Gravity and Turbidity Currents		
	Eckart Meiburg UC Santa Barbara, USA		
11:35-11:50	In-situ observation of the subaqueous sand dunes at the upper slope of the northeast South China Sea $$		
	Yulong Zhao Tongji University, China		
11:50-12:05	Internal solitary waves and subaqueous sand dunes in the Dongsha region in the South China Sea		
	Haibin Song Tongji University, China		
12:05-12:20	Sedimentary dynamic processes of the Dongsha Contourite Drift formation in the South China Sea: Long-term in situ mooring observations		
	Zhifei Liu Tongji University, China		



GeoSummit Workshop on Coastal and Offshore Geology Conveners: Se Won Chang, Ping Yin, Tomoyuki Sato, Huayan Gan

10:50-11:05	Sedimentary processes along the northeastern continental margin of the Korean Peninsula (East Sea): Climatic and tectonic controls		
	Deniz Cukur	Korea Institute of Geoscience and Mineral Resources	
11:05-11:20	Architecture and Reservoir Quality of Low-Permeability Eocene Lacustrine Turbidite Sandstone From Dongying Depression, East China		
	Muhammad Jawad Munawar	University of the Punjab, Pakistan	
11:20-11:35	Time gap in Holo coast of Korea	ocene stratigraphy of Imja-do tidalflat, southwest	
	Hyun Ho Yoon	Korea Institute of Geoscience and Mineral Resources	
11:35-11:50	Organic geochemical variation in Holocene sedimentary records and its implications for sediment dynamic processes in the Changjiang River mouth, China		
	Zhanghua Wang	East China Normal University, China	
11:50-12:20	Session discussion	ns	





S09 Sediment Gravity Flows: Processes, Products, and Implications to Resource Explorations

S14 When and how clastic detritusare transported from shelf-edge staging areasinto deep-waterareas: From a source-to-sink perspective

Co-chairs: Changsong Lin, Ronald J. Steel, Chenglin Gong

10:50-11:05	Variations in submarine channel confluence and its implication for turbidity current activities		
	Yongpeng Qin	Institute of Deep-sea Science and Engineering, Chinese Academy of Sciences, China	
11:05-11:20	Gravity flow deposits caused by different initiation processes in a deep-lake system		
	Tian Yang	China University of Petroleum	
11:20-11:35	The characteristics and formation mechanism of carbonate and mixed filling deep-water canyon in Northwestern South China Sea		
	Yintao Lu	Petrochina Hangzhou Research Institute of Geology, China	
11:35-11:50	Event sedimentation and sand body structure in deep water area of large depression basin		
	Qiang Fu	Tongji University, China	
11:50-12:05	Recognition of ancient compound deltaic clinothem and how they are clothed by wave-, tide- and river-generated facies		
	Yang Peng	The University of Texas at Austin, USA	
12:05-12:20	Quantifying sediment supply to deep-water basins: Application to the Paleogene Wilcox Group, Gulf of Mexico		
	Jinyu Zhang	The University of Texas at Austin, USA	

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Venue 7

General sessions Conveners: Hao Cheng, Sugandha Panwar

10:50-11:05	Marine Geoscien	Marine Geosciences Education and Research Initiative in Myanmar		
10:50-11:05	Kyaw Moe	R&D Center for Ocean Drilling Science, Agency for Marine-Earth Science & Technology, Japan		
11:05-11:20	sediment mixing	agnetism to distinguish source litholgoy and pattern in the alaknanda and ramganga sub- a basin, india		
	Sugandha Panwar	Tongji University, China		
11:20-11:35	Tidal River Siltati Bangladesh	on and its Impact in the Coastal Parts of		
11:20-11:55	Kamrul Ahsan	Geological Survey of Bangladesh, Bangladesh		
11.25 11.50	Radiocarbon content of dissolved inorganic carbon from the Changjiang (Yangtze) estuary and the East China Sea			
11:35-11:50	Shing-Lin Wang	National Taiwan University, Taiwan, China		
11:50-12:05		conic Setting and Geochemical Maturity of the diments, eastern part of Central Basin, Myanmar		
11.50-12.05	Moe Soe Lwin	East Yangon University, Myanmar		
12:05-12:20	Session discussion	ns		

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Coastal dynamic and sea level change over time scales Conveners: Yongqiang Zong, Fengling Yu

14.00.14.15	Upper Tertiary to Recent geology of North Java offshore and coastal zone based on core and seismic data			
14:00-14:15	Soepri Wahyoe Hantoro	RCG IIS, Indonesia		
14:15-14:30	Geochemical studies on late Quaternary sediments of the Great Rann of Kachchh (GRK) basin, Western India			
14:15-14:50	Niteshkumar Khonde	The Maharaja Sayajirao University of Baroda, India		
14 20 14 45	Discrepancy between fine and coarse quartz OSL age dating results from continental shelf sediments in the Jeju Strait, Korea			
14:30-14:45	Jooah Choi	Korea Institute of Geoscience and Mineral Resources		
14:45-15:00	Human-induced changes in recent sedimentation rates in Bohai Bay, China: implications for coastal development			
14:45-15:00	Fu Wang	Tianjin Center, China Geological Survey, China		
15:00-15:15	morphodynamic	morphodynamics on the intertidal-dune s and associated sediment transport in the open- flats, northern Gyeonggi Bay, west coast of Korea		
	Joohee Jo	Seoul National University, Korea		
15:15-15:30	Session discussio	ns		

Low latitude Indo-Pacific marginal seas: variabilities in paleoclimatology and paleoceanography and their implications Conveners: Sanmin Hyun, Rina Zurida

	14:00-14:15	Importance of low-Latitude Indo-Pacific paleoceanographic and paleoclimatic study: review and an introduction to ongoing Indo-Pacific project by KIOST			
		Sangmin Hyun Korea Institute of Ocean Science and Technology			
	14:15-14:30	Multi-decadal to centennial-scale variability in Australian- Indonesian monsoon intensity over the past two millennia			
		Stephan Steinke Xiamen University, China			
	14:30-14:45	Multi-proxies evidence for abrupt climate change events at 8.2 ka simulations			
	14:50-14:45	Eko Yulianto Institut Teknologi Bandung, Indonesia			
		Isotopic evidence for twentieth-century weakening of the Pacific Walker circulation			
	14:45-15:00	Zhongfang Liu Tongji University, China			
	15:00-15:15	Environmental Changes off Aru Island, Molucca, Indonesia, during Holocene			
		Rina Zuraida Marine Geological Institute of Indonesia			
	15:15-15:30	Stability of the glacial Kuroshio path with large meander in Shikoku Basin, NW Pacific			
15:15-1	13.13-13.30	Minoru Ikehara Kochi University, Japan			



Seafloor sediment acoustics Conveners: Baohua Liu, Gil Young Kim, Guangming Kan, Guanbao Li

14:00-14:15	Geoacoustic provinces of surface sediments in the southern part of the East Sea, Korea			
14:00-14:15	So-Ra Kim	Korea Institute of Geoscience Mineral Resources		
14:15-14:30	In situ and laboratory sound velocities of various seafloor sediments in the East Sea			
14:15-14:50	Kiju Park	Korea Institute of Geoscience Mineral Resources		
14.20 14.45	Geoacoustic provinces of velocity predicted by grain size of surficial sediments in the Northern South China Sea			
14:30-14:45	Yuhang Tian	South China sea Institute of oceanology, Chinese Academy of Sciences, China		
14:45-15:00	Laboratory Measurements of Sound Speed and Attenuation Dispersion in Calcareous Sediments from Coral Reefs			
14:45-15:00		First Institute of Oceanography, China		
15:00-15:15	experimental resu	dband high frequency sub-bottom profiler and alts		
15:00-15:15	Xinghui Cao	Institute of Deep-sea Science and Engineering, Chinese Academy of Sciences, China		
15:15-15:30 Session discussions		ns		

S15 Deep-Sea Sedimentary Processes: from Observations to Geological Records

W02 Particle Flux in the Oceans: Recent Progress and Future Perspectives

Co-chairs: Yanwei Zhang, Benjamin Kneller

14.00.14.15	The Source-to-Sink systems from Taiwan Island to the trenches of Manila and Ryukyu			
14:00-14:15	Kan-Hsi Hsiung R&D Center for Ocean Drilling Science, JAMSTEC, Japan			
14:15-14:30	Recurrence of large tsunamis at the southern Ryukyu arc: A deep-sea turbidite evidence			
14:15-14:50	Ken Ikehara Geological Survey of Japan			
	Mixed sedimentary processes within the upper segment of Pearl River canyon, South China Sea			
14:30-14:45	Xingxing Wang			
14:45-15:00	Identification of sediment provenance in the Bellingshausen Sea and southern Drake Passage during glacial-interglacial period			
14:45-15:00	Young Kyu Park Yonsei University, Korea			
15:00-15:15	Miocene-Pliocene deep-sea sedimentary environment evolution of the northern South China Sea: Record of high-resolution terrigenous grain size of ODP Site 1148			
	Yijie Wang Tongji University, China			
15:15-15:30	Thickness and Facies Trends along Depositional Dip in Turbidite Sand Sheets (Cerro Toro Formation, Magallanes Basin, Chile) ——Any Implication for Allogenic Cycles?			
	Jianan Wu University of Aberdeen, UK			



Seafloor Failures: Triggering Mechanisms, Processes and Sedimentological Records Conveners: Chih-Chieh Su, Jing-Yi Lin, Yi-Ching Yeh, Ho-Han Hsu

14:00-14:15	Submarine landslide: A case study from the southwestern of Taiwan offshore			
14:00-14:15	Trong-Van Nguyen National Central University, Taiwan, China			
14:15-14:30	Styles of an isolated, latest Quaternary slope-failure system revealed from sedimentary features of downslope mass-transport deposits in the western margin of Ulleung Basin, East Sea (Japn Sea)			
	Sang Hoon Lee Korea Institute of Ocean Science and Technology			
14.20 14.45	Modern sedimentation and extreme event in the South China Sea			
14:30-14:45	Yu-Huang Chen National Taiwan University, Taiwan, China			
14:45-15:00	Scissor-like spreading model and the jump of the oceanic ridge in the center basin of the South China Sea			
14:45-15:00	Yan Qiu Guangzhou Marine Geological Survey, China			
15:00-15:15	Shear-wave velocity of marine sediments offshore Taiwan using ambient seismic noise			
15:00-15:15	Jing-Yi Lin National Central University, Taiwan, China			
15 15 15 20	Seafloor instability in nearshore area of western Taiwan: evidence with High-Resolution Seafloor mapping			
15:15-15:30	Chih-Chieh Su National Taiwan University, Taiwan, China			

S09 Sediment Gravity Flows: Processes, Products, and Implications to Resource Explorations

S14 When and how clastic detritusare transported from shelf-edge staging areasinto deep-waterareas: From a source-to-sink perspective

Co-chairs: Guangfa Zhong, Jingping Xu

14:00-14:15	Sedimentary budget of the Northwest Sub-basin, South China Sea: Controlling factors and geological implications			
14:00-14:15	Yanmei Wu Key Laboratory of Submarine Geoscience, China			
14:15-14:30	Marine litter in a submarine canyon to the north of Xisha Trough, northern South China Sea			
14:15-14:50	Guangfa Zhong Tongji University, China			
14:30-14:45	Drainage control of Eocene to Miocene sedimentary records in the southeastern margin of Eurasian Plate $$			
14.50-14.45	Yuchi Cui Tongji University, China			
14:45-15:00	Comparison of incised valley estuary and tectonically-controlled estuary in the Brent Delta of the northern North Sea			
14.45-15.00	Xiaojie Wei Chinese Academy of Geological Sciences, China			
15:00-15:15	Variations in slope channel architecture and fill from outcrop, Jurassic Neuquen Basin, Argentina			
15:00-15:15	Yuqian Gan University of Texas at Austin, USA			
15:15-15:30	Session discussions			



Preparing, Publishing and Reviewing a Scientific paper or

Special Issue Conveners: Gert J. de Lange, Shu Gao, Chun-Feng Li, Zhifei Liu

\$09//1\$49c/ Wpen and free discussions

In this Workshop we aim to give a basic introduction into all aspects of writing, submitting, revising, evaluating, and publishing a scientific paper. In addition, we will explain common differences between types of research papers, and will outline what is needed to submit, manage, and produce a successful Special Issue. Although pertinent examples will be given as related to Marine Geology, the general outlines are applicable to most other scientific Journals.

We will start with a general introduction followed by more detailed outlines on relevant topics. Subsequently, we hope to move into a more interactive mode, where specific questions from participants will help to improve understanding of the functioning of creation and evaluation of scientific papers. Although the workshop is intended in particular for young scientists, certain aspects may also be relevant for more senior researchers.

15 50 16 20	The Role of Aquatic Critical Zones in Coastal Carbon Cycling		
15:50-16:20	Thomas S. Bianchi	University of Florida, U.S.A	
16 20 16 50	Long-term in situ processes	observations of deep-sea sedimentary dynamic	
16:20-16:50	Zhifei Liu	Tongji University, China	

16:50-17:20

Closing Ceremony and Awards

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POSTER Session

Ground floor, Zhonghe Building



* indicates graduate student presentor legal candidate for the Best Student Poster

S01

ID	Title	Author	Affiliation
S01-P01- A0414	Source of the YZ02 hole in the South Yellow Sea shelf since the MIS6	Ling Zhang	Nanjing University, China
Mineral chemistry of clinopyroxene in basaltic pyroclastic rocks from kilometer-scale drilling in the northwestern South China Sea Diagenetic stages prediction based on diagenesis process: An example from the west of Bozhong sag Coral geochemical record of submarine groundwater discharge back to 1870 in the northern South China Sea		Yu Zhang	Guangxi University, China
		Wendao Qian	Yangtze University, China
		Wei Jiang	Guangxi University, China
S01-P05- A1953	Reconstruction of sea surface temperature in the northern South China Sea using Sr/Ca ratio of corals	Penglei Chai	Nanjing University, China
S01-P06- A2657	Multi-planning integration advancing coastal resources management: a case study from Hainan Island, China	Xin Zhao	Nanjing University , China

Posters

ID	Title	Author	Affiliation
S01-P07- A3010 Mineral composition and elemental geochemical characteristics of polymetallic nodules from the southwestern area off Dongsha Islands, northern continental margin of South China Sea		Xingjian Liu	South China Sea Institute of Oceanology, Chinese Academy of Sciences; Qingdao National Laboratory for Marine Science and Technology, China
S01-P08- A3650	Responses of δ 18O and δ 13C of well CK2 in Xisha, northern South China Sea to the evolution of East Asian monsoon during the past 1800 ka	Shendong Xu	Guangxi University, China
S01-P09- A3957*	A study on comparison and analysis of detailed bathymetry in the southern nearshores of the Dongdo and the Seodo of Dokdo, in the East Sea	Myoung Hoon Lee	Korea Institute of Ocean Science & Technology
S01-P10- A4246*	Grain-size characteristics of Lime-sand islands in the South China Sea and its significance for the development of Sand Island	Zhenqiang Ji	Nanjing University, China
S01-P11- A4563*	Environment and Resource Features of Weizhou Island and Analysis of Its Strategic Position	Minjing Wang	Nanjing University, China
S01-P12- A4797*	Species diversity and community characteristics of scleractinian coral in Nansha Islands, South China Sea	Liyao Yang	Nanjing University, China



POSTER Session

ID	Title	Author	Affiliation
S03-P01- A0052	Distribution and Sources of Polycyclic Aromatic Hydrocarbons (PAHs) in Sediments of Indian Sundarban Mangrove in Gangetic Delta : An Approach to Remedial Measure	Santosh Sarkar	University of Calcutta, India
S03-P02- A0116	Attention to multi-component land subsidence of Me Kong delta, considering interaction of natural and antropogenic processes	Huy Giao Pham	Asian Institute of Technology, Thailand
S03-P03- A0915	Study on geomorphologic changes in the Pearl River Delta, 1850 – 2015	Ziyin Wu	Second Institute of Oceanography,China
S03-P04- A1019	Progress of a Marine Environmental Information System (MEIS) using Scientific data on Land – Sea Interaction in the Nakdong River Estuary, South Korea	Jun-Ho Lee	Korea Institute of Ocean Science & Technology
S03-P05- A1458*	Differentiating the effects of advection and resuspension on suspended sediment concentrations in a turbid estuary	Yuan Li	Nanjing University, China
S03-P06- A2455	The evolution process of Qingshuigou, an abandoned distributary channel of (Huanghe) Yellow River	Shuai Cong	Ocean University of China

S04

ID	Title	Author	Affiliation
S04-P01- A3308	Holocene sea level change in the west coast of Bohai Bay	Hong Wang	Tianjin Centre, China Geological Survey, China

S05

S05-P01- A1616	A giant linear tidal sand ridge off the Garolim Bay mouth, macrotidal midwestern coast of Korea: morphologic response to human impacts and implications for the maintenance	Tae Soo Chang	Korea Maritime and Ocean University
S05-P02- A3463	Delta development during marine isotope stage 5 in the offshore area of Shandong Peninsula, western South Yellow Sea	Jiandong Qiu	Qingdao Institute of Marine Geology, China
S05-P03- A3787	Morphology and internal architecture of a banner bank of Chengshan Headland, Shandong Peninsula	Liangyong Zhou	Qingdao Institute of Marine Geology, China



POSTER Session

ID	Title	Author	Affiliation
S06-P01- A0727	Influence of seepage flows on the erodibility of fluidized silty sediments: parameterization and mechanisms: parameterization and mechanisms	Yonggang Jia	Ocean University of China
S06-P02- A1228	Changes in the Coastal Depositional Condition by new Seawall Construction for Harbor Development in the West Coast of Korea	Tae-Jin Choi	Kunsan National University, Korea
S06-P03- A1242*	Modelling the Mophodynamics of a Beach at Qinhuangdao, China under storm waves using XBeach	Xuejian Han	Tongji University, China
S06-P04- A1515	Seasonal variations of sedimentary processes in the Nakdong River Estuary, Busan, South Korea	Han JunWoo	Korea Institute of Ocean Science & Technology
S06-P05- A1523	Investigation on Oscillatory Boundary Layer Flow over Rippled Bed through Three- Dimensional Lattice Boltzmann Simulation	Qinghe Zhang	Tianjin University, China
S06-P06- A1952*	Comprehensive analysis on the sediment movement process along the deep-water channel of the Yangtze estuary	Qixiong Liu	Zhejiang University, China
S06-P07- A2068*	Development of a three- dimensional hydrodynamic and sediment transport model for sandy beach evolution simulation	Chao Ji	Tianjin University, China
S06-P08- A2140	The flow in a Storm Surge Caused by Cold Air and its influence on channel siltation in Bohai bay	Bing Yan	Tianjin Research Institute of Water Transport Engineering, Ministry of Transport, China
S06-P09- A2184	Turbulence, sediment induced stratification, and mixing under macrotidal estuarine conditions (Qiantang Estuary, China)	Junbiao Tu	Tongji University, China

S06

ID	Title	Author	Affiliation
S06-P10- A2348	Storm response of sand waves in the Taiwan Shoal	Jingjing Bao	Third Institute Of Oceanography, China
S06-P11- A2426	Study on Dynamical Forces of Flexible Turbidity Curtain Structure Using Physical Model and Numerical Model Tests	Shaowu Li	Tianjin University, China
S06-P12- A2430	Wave Overtopping of Vertical Sea Dike on a Laboratory Fringing Reef	Shaowu Li	Tianjin University, China
S06-P13- A2456	Study on the movement of fluid mud in the channel under the action of Typhoon	Zhang Na	Tianjin University, China
S06-P14- A3120*	Morphological response of channel-shoal system on an open coast to a major storm	Huidi Liang	Tongji University, China
S06-P15- A3194	Numerical study on wave damping performance of an arc- type plate breakwater	Xueyan Li	Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, China
S06-P16- A3214	Dynamic evolution and sustainable development strategy of sandy beach in Rizhao, Shandong, China	Nan Wang	Ocean University of China
S06-P17- A3258	Increasing threat of typhoons to coastal area in the western North Pacific between 1980 and 2015	Hongyuan Shi	Ludong University, China
S06-P18- A3431*	Role of waves and tides on high suspended sediment concentration in coastal waters of the Yellow Sea	Renfu Fan	Tianjin University, China
S06-P19- A3625*	Numerical Simulation of Strom- induced Coastal Dune Erosion	Hong Wang	Dalian University of Technology, China
S06-P20- A3678*	The distribution characters of surface sediments in tidal flat zone of Lingshan Bay, Qingdao	Lieyan Cao	China University of Petroleum, Beijing
S06-P21- A3844*	Wave skewness and asymmetry effects on sediment transport on a dissipative beach profile	Zhaoyan Xu	Ocean University of China

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POSTER Session

ID	Title	Author	Affiliation
S06-P22- A3947	Spatial and temporal sensitivities of key parameters in SWAN model: an example for CHAN- HOM typhoon waves in the East China Sea	Yao Xu	Zhejiang University, China
S06-P23- A4076	Design of Gravel Beach Profile and Investigation of Its Stability via Physical Experiments	Jiawen Sun	National Marine Environmental Monitoring Center, China
S06-P24- A4080	Influences of seasonal wave variation on nearshore wave- induced currents and beach evolution	Jiawen Sun	National Marine Environmental Monitoring Center, China
S06-P25- A4499	Numerical simulation of solitary wave transformation over reef profile based on SPH	Jiawen Sun	National Marine Environmental Monitoring Center, China
S06-P26- A4785*	Field Investigation of Beach Stability on the Coast of Yantai	Bin Li	Ludong University, China
S06-P27- A4867*	In-situ Experimental Investigation of Geotextile Sand Bag Performance for Protection of Coastal Shoreline from Recession	Zaijin You	Ludong University, China
S06-P28- A4905	Coastal Inundation Assessment: Case Study for a Power Plant in South-Eastern Bangladesh	Xu Zhao	Tianjin Research Institute for Water Transport Engineering, Ministry of Transport, China
S06-P29- A4997*	Application of light backscattering method in observation of sediment concentration in surf and swash zone.	Bingchen Liang	Ocean University of China

S08

ID	Title	Author	Affiliation
S08-P01- A0389*	Flow structure modification and drag reduction induced by sediment stratification in coastal tidal bottom boundary layers	Yun Peng	Nanjing University, China
S08-P02- A0512*	Seasonal Changes of Tidal Flat Profile in the Middle Jiangsu Coast, China	Yiyang Fan	Nanjing University, China
S08-P03- A1074*	Tide-induced residual bedload transport in two-dimensional tidal field	Zhiyun Du	Nanjing University, China
S08-P04- A2066	Variations in the transport, distribution and budget of 210Pb in sediment over the estuarine and inner shelf areas of the East China Sea due to Changjiang catchment changes	Jianhua Gao	Nanjing University, China
S08-P05- A2133*	Variation of net primary productivity in Arabian sea and Bay of Bengal using remote sensing data	Vinaya P	Mangalore University, India
S08-P06- A3579	Dynamic and geomorphic process in a transition zone of salt marsh and mudflat	Dezhi Chen	Nanjing University, China
S08-P07- A3860*	Formation and growth of a sand spit at Changhua River mouth, southern China	Yali Qi	Nanjing University, China
S08-P08- A4378	Tidal Flat Dynamics Influenced by Along-coast Tidal Currents	Qian Yu	Nanjing Univseisity, China



POSTER Session

ID	Title	Author	Affiliation
S09-P01- A1374*	Sedimentary characteristics of submarine gravity flow in Baiyun Sag deep-water area, Pearl River Mouth Basin	Zhao Chen	China University of Geosciences, China
S09-P02- A2377	Characteristics of Gravity Flow in Chang 7 Oil Formation in Southeast Ordos Basin, China	Qiang Fu	Tongji University, China
S09-P03- A4086	Turbidite sequences recoreded in sediment cores from the Manila Trench, South China Sea	Lisha Hu	Ocean University of China
S09-P04- A4329	High-concentration basal layers in oceanic turbidity currents	Zhiwen Wang	Ocean University of China
S09-P05- A4538*	Seismic characteristics of hydraulic jumps in the northern South China Sea basin	Biwen Wang	Tongji University, China

S10

ID	Title	Author	Affiliation
S10-P01- A1186	A Field and Numerical Study on the Occurrence of Hyperpycnal Flow off the Mouths of Small Mountainous Rivers	Jia-Lin Chen	National ChengKung University,Taiwan, China
S10-P02- A1215*	Identification of diverse particle types in the water column on the Gaoping shelf, SW Taiwan	Peter Jue	National Sun Yat-sen University, Taiwan, China
S10-P03- A1443*	Response of the Changjiang River plume under a typhoon event	Zhiwei Zhang	East China Normal University, China
S10-P04- A2030*	Mild enrichment of redox- sensitive elements in core sediments off the Changjiang Estuary: controlling mechanisms and environmental implications	Yijing Wu	Tongji University, China
S10-P05- A2972*	Comparative Study on Cohesive Sediment Parameters Test and Computional methods in the Lingdingyang Estuary	Haoyan Dong	Sun Yat-Sen University, China
S10-P06- A2973*	Effects of the Flood Events on the sediment transport and waterway sedimentation in the Lingdingyang Estuary, Pearl River Delta, China	Zixiao He	Yen-sat University, Taiwan, China
S10-P07- A5363	New spatial-temporal distribution of superlobes in the Yellow River Delta Complex: a revised hypothesis	Lei He	Qingdao Institute of Marine Geology, China



POSTER Session

S11

ID	Title	Author	Affiliation
S11-P01- A1087	Lower silicate weathering degree of sediments in the northern Okinawa Trough during the Holocene than that in the late last glacial	Debo Zhao	Institute of Oceanology, Chinese Academy of Sciences, China

S12-P01- A0317	Temporal and spatial characteristics of sediment sources on the southern Yangtze shoal over the Holocene	Chao Cao	Third Institute of Oceanography, China
S12-P02- A0395	Magnetic compositions of the East China Sea and its implications on provenance study	Yan Zheng	Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences, China
S12-P03- A0552	Holocene evolution of the shelf mud deposits in the north- western South China Sea	Gang Li	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China
S12-P04- A0658*	Experimental investigation of sediment dynamics in response to shoaling high-frequency internal solitary wave packets over a steep slope	Xiujun Guo	Ocean University of China
S12-P05- A0687	Discrimination of sediment provenances in the central Bay of Bengal and climate control since 25 ka	Jingrui Li	First Institute of Oceanography, China

S12

ID	Title	Author	Affiliation
S12-P06- A0743*	Testing contrasting models of formation of the Yellow River using heavy-mineral data from the Yinchuan Basin drill core	Haobo Zhang	Lanzhou University, China
S12-P07- A0882	Evolution and chronology of prograding lowstand wedges in the Korea strait	Dong-Geun Yoo	Korea Institute of Geoscience and Mineral Resources
S12-P08- A0888*	Seasonal variation of turbidity in Bohai sea	Xingmin Liu	Ocean University of China
S12-P09- A1022	Yangtze River-derived sediments in the southwestern South Yellow Sea: provenance discrimination and transport mechanism analysis	Jian Lu	Institute of Oceanology, Chinese Academy of Sciences, China
S12-P10- A1070	The detrital garnet chemistry of the Changjiang (Yangtze River) sediments and their provenance implication	Zhongbo Wang	Qingdao Institute of Marine Geology, China
S12-P11- A1199	Comminution age defined by 234U/238U disequilibrium and its application in contraining the time scale of sediment evolution in East Asia continental margin	Chao Ji	State Key Laboratory of Marine Geology, China
S12-P12- A1209*	Seismic stratigraphy and depositional history at the eastern Yellow Sea shelf since the Last Glacial Maximum	Bo Ram Lee	Korea Institute of Geoscience and Mineral Resources
S12-P13- A1382*	The evolution of hypoxia off the Changjiang estuary for the	Fahui Ren	Tongji University, China
S12-P14- A1534	High-resolution reconstruction of historical flood events in the Changjiang River estuary based on Sr-Nd isotopic signatures, Zr/ Rb ratios and biomarkers	Rui Zhang	Institute of Oceanology, Chinese Academy of Sciences, China
S12-P15- A1645	Pyrite formation in mud sediments constrained by sedimentary environment on the East China Sea inner shelf	Xiting Liu	Ocean University of China

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POSTER Session

ID	Title	Author	Affiliation
S12-P16- A1901	Re-assessment of Contamination from Dispersed Elements in Sediments of Yangtze Estuary	Xiaoyu Zhang	Zhejiang University, China
\$12-P17- A2227	Persisting impact of human activities to trace metals (Pb, Zn, Cu, Cr and As) in the sediment cores of Yangtze River estuary and adjacent areas during the last 60 years	Xueshi Sun	Ocean University of China
S12-P18- A2817*	Source and Sedimentary System of the First Member of Shahejie Formation in No.5 Tectonic Zone, Nanpu Sag, Bohai Bay Basin, Northeast China	Tianhao Gong	China University of Geosciences, China
S12-P19- A2943	Impact of the Three Gorge Dam construction on silicate weathering in the Changjiang Basin (China): evidence from major elements and Li isotopes	Chengfan Yang	Tongji University, China
S12-P20- A3153	The Ordovician-Silurian tectonic evolution of the northeastern margin of the Tarim block, NW China: Constraints from integrated depositional and geochronological records	Shunli Dong	Chengdu University of Technology, China
S12-P21- A3282	Application of the optically stimulated luminescence (OSL) technique in the Yangtze River delta of China	Xiaomei Nian	East China Normal University, China
S12-P22- A3310*	Clay mineral compositions in surface sediments of the Ganges- Brahmaputra-Meghna river system of the Bengal Basin, Bangladesh	Md Hafijur Rahaman Khan	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China
S12-P23- A3407*	Response to changing in sediment load of the Yellow River of subaqueous clinoform off Shandong Peninsula, South Yellow Sea	Lijian Yang	Institute of Oceanology, Chinese Academy of Sciences; University of Chinese Academy of Sciences, China

ID	Title	Author	Affiliation
S12-P24- A3497*	Large fractionations of REE compositions observed in the Sediments from Small Rivers Draining Southeast China	Yulong Guo	Tongji University, China
S12-P25- A3637	Geochemistry of Holocene sediments from Beibu Gulf, South China Sea: Provenance and Paleoenvionment	Cui'ang Zhen	Guangzhou Marine Geology Survey, China
S12-P26- A3649	Sediment transport processes in the Pearl River Estuary as revealed by grain-size end- member modeling and sediment trend analysis	Tao Li	Guangzhou Marine Geology Survey, China
S12-P27- A3696	Detrital zircon U-Pb ages of surface sediment in the East China Sea: implications for provenance analysis and sediment budgeting	Xiangtong Huang	Tongji University, China
S12-P28- A3758*	Behavior of Li isotopes in the processes of continental weathering and riverine tranport	Xiaodan Wang	Tongji University, China
S12-P29- A4192*	Characterization of turbidity channel in continental shelf basin and its source-to-sink influence: taking the first member of Huangliu Formation in Dongfang area of Yinggehai Basin as an example	Tanqiao Ping	Xi'an Shiyou University, China
S12-P30- A4233	Evolution of sedimentary environment and provenance since the late Pleistocenein the central Bohai Sea	Ying Wang	Nanjing University, China
S12-P31- A4496	Rare earth element characteristics of Pahang River and Kelantan River sediments and their tracing implication	Kaikai Wu	First Institution of Oceanography; National Oceanography Laboratory, China



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S12-P32- A4534*	Sediment source-to-sink of the northern Manila subduction zone near Taiwan	Kalyani Nayak	Department of Earth Sciences, China
S12-P33- A4737*	Early Miocene birth of modern Pearl River recorded low-relief, high-elevation surface formation of SE Tibetan Plateau	Licheng Cao	Tongji University, China
S12-P34- A4778	Provenance discrimination of the mud wedge on the East China Sea continental shelf: a review	Anchun Li	Institute of Oceanology, Chinese Academy of Sciences, China
S12-P35- A4901	Tectonic and Oceanographic Controls on Sediment Dispersal and Accumulation off the Ayeyarwady River Delta	Steven Kuehl	Xiamen University, China
S12-P36- A5138	Foraminiferal evolution and response to the channel diversion and discharge fluctuation of the Yellow River in the north Yellow Sea during the past century	Shiwen Zheng	Ocean University of China

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S14-P02- A2666	An integrated sequence stratigraphic analysis in three- dimensional perspective: A seismic case study of the Pearl River Mouth Basin, northern South China Sea	Shaohua Xu	Chongqing University of Science and Technology, China
S14-P03- A3495*	Application of 3D visualization technology in the Orient waterway system in Yinggehai Basin	Tanqiao Ping	Xi'an Shiyou University, China
S14-P04- A3514*	Discussion on sediment source and main controlling factors of the Quaternary in Dongfang area, Yinggehai Basin	Peng Zhang	Xi'an Shiyou University, China
S14-P05- A3891*	Genesis and evolution of the mass-transport deposits in the middle segment of the Pearl River canyon, South China Sea	Xingxing Wang	Zhejiang University, China
S14-P06- A4213	Growth-fault Controlled Outer Shelf Conduits near the Pliocene Orinoco Shelf-edge	Si Chen	China University of Geosciences, China



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S15-P02- A2356*	An overview of the sedimentary process of the Bengal Fan	Chun Yan	Hangzhou Institute of Petroleum Geology, China
S15-P03- A2433	Deposition dynamics of alkenone in the deep sea and the construction of time series on alkenone proxy of sea surface temperatures since the Last Glacial Maximum in the northern abyssal plain of the South China Sea	Jiangyong Zhang	Guangzhou Marine Geological Survey, Ministry of Natural Resources, China
S15-P04- A2968	Seasonal variations of radiolarian shells in the deep water from the northern South China Sea	Lanlan Zhang	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China
S15-P05- A5208	Antarctic Circumpolar Circulation variability and frontal migration during the past glacial- interglacial cycles	Xufeng Zheng	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China

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S16-P02- A4085	Reconstructing the thermal structure of the upper ocean in the western Philippine Sea over the last four glacial cycles	Qi Jia	First Institute of Oceanography, China
S16-P03- A4164	Heat transport processes of the Indonesian throughflow in the Western Pacific since the last interglacial	Xuan Ding	China University of Geosciences, China

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S17-P01- A1014*	The Sunda Shelf – a carbon sink during the last glacial period?	Jinlan Li	Tongji University, China
S17-P02- A1243*	The Holocene vegetation composition reconstruction supports the inference that shifts in Chinese stalagmite § 18O represent changes in regional monsoon rainfall	Fenghao Liu	Tongji University, China
S17-P03- A1716*	A 16 Myr record of GDGTs and alkenone biomarkers from IODP Site U1337.	Jingjing Liu	Tongji University, China
S17-P04- A2671*	The relationship between late Miocene ocean carbon shift and productivity related to coccolithophore in the Western Equator Pacific	Fangzhou Li	Tongji University, China
S17-P05- A3131*	Modeling the Late Miocene Carbon Shift using a box-model: Ocean carbon reservior under terrigenous flux forcing	Jinlong Du	Tongji University, China



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S17-P07- A3663	Coral reef record of climate and environment changes in the northern South China Sea since Pliocene	Wei Jiang	Guangxi University, China
S17-P08- A3818	Morphological diversity of Quercus fossil pollen in the northern South China Sea during the last glacial maximum and its paleoclimatic implication	Lu Dai	Ningbo University, China
S17-P09- A3822*	Cd/Ca record from U1337 benthic foraminiferas questions the hypothesis that the strengthening of NADW leads to the Late Miocene Carbon Isotope Shift	Yu Feng	Australian National University, Australia
S17-P10- A3973	Abruptly intensified vertical mixing in the deep South China Sea during the late Miocene: Evidence from non-conservative fish teeth Neodymium isotope record	Ke Li	Tongji University; Second Institute of Oceanography, China
S17-P11- A4044	Monsoon precipitation and temperature controls on the abundance of C4 plants in subtropical East Asia during the Pleistocene	Yunru Chen	Shanghai Jiao Tong University, China
S17-P12- A4686	Ocean redox during the Cryogenian interglaciation	Yuntao Ye	China National Petroleum Corporation

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S18-P02- A3146	Silica characteristics of the Longmaxi Formation black shale at the southwestern Yangtze Platform and its geological significance	Shaoze Zhao	Chengdu University of Technology, China
S18-P03- A3962	Distribution and source of sedimentary organic matter in the Yellow Sea	Daun Kim	Hanyang University, Korea
S18-P04- A3963*	Paleoenvironment reconstruction using multi proxies of terrestrial organic matter records for past 25,000 years in the Ryukyu trench	Gurpreet Kaur	Soka University Japan, Japan
S18-P05- A4245	Molecular distribution and composition of sedimentary organic matter from the Gulf of Thailand: assessment of OM sources and environmental implications	Yazhi Bai	First Institute of Oceanography, China

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S19-P02- A1626*	Anthropogenic alternation of natural vegetation process began thousands of years ago in southern China	Zhongjing Cheng	Tongji university, China
S19-P03- A2319	Paleoceanography of turbiditic sediments in the central South China Sea: IODP 349 records	Qianyu Li	Tongji University, China
S19-P04- A2335	Grain Size Inter-comparison Project on South China Sea Sediments – An Introduction	Jie Huang	Institute of Oceanology, Chinese Academy of Sciences, China
S19-P05- A2558	Eocene-Oligocene Calcareous Nannofossil Biostratigraphy and Paleoceanographic study in the northern South China Sea	Ruigang Ma	Tongji university, China
S19-P06- A2577*	Obliquity-paced thermocline water temperature change in the western equatorial Pacific across the mid-Pleistocene transition	Xingxing Wang	Tongji University, China
S19-P07- A2660*	A 450-kyr planktonic foraminiferal assemblage record of IODP site U1352 and its implications for the migration of the subtropical front in the southwest Pacific	Yingying Wu	China University of Geosciences, China
S19-P08- A2871*	Miocene paleoenvironmental evolution based on benthic foraminiferal assemblages in the Lufeng Sag, northern South China Sea	Liyuan Xue	China University of Geosciences, China
S19-P09- A3909	Fire history in the Yangtze River basin since 7 ka and implications for linkages to climate, vegetation and human activities	Wenqiang Pei	Institute of Oceanology, Chinese Academy of Sciences, China
S19-P10- A4287	The deep-water oxygenation changes in the South China Sea since the last glacial period	Gang Li	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China

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9	S19-P12- A4383	Deep water carbonate ion concentrations in the South China Sea during the last glacial- interglacial cycle: Implications for the effect of ocean alkalinity and carbon transfer	Kanglin Chen	Sun Yat-sen University, China
5	S19-P13- A4680	Evolution of the Southern Yellow Sea Cold Water Mass During the Last 7 ka: Benthic Foraminiferal Evidence	Rong Xiang	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China
	S19-P14- A4774*	Sea level and climatic controls on turbidite occurrence for the past 26 kyr on the flank of the Gaoping Canyon off SW Taiwan	Shun-Wen Yu	National Central University, Taiwan, China



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S21-P02- A2257	REE geochemistry and paleoenvironmental characteristics in the Ulleung Basin, East Sea (Sea of Japan), over the past 120 kyr BP	Jeongwon Kang	Korea Institute of Ocean Science and Technology
S21-P03- A2266	Carbon isotope and n-alkanes records from the nearby Mahakam delta and Arafura Sea, Indonesia: implications of Holocene paleoenvironmental changes	Sangmin Hyun	Korea Institute of Ocean Science and Technology
S21-P04- A4311*	Middle to Late Pliocene Molluscan Assemblages from Ilocos Sur, northern Philippines and their Paleoenvironmental Implications	David Policarpio	National Institute of Geological Sciences, Quezon City, Philippines
S21-P05- A4938	Investigating The Precession Responses Of Tropical Indo- pacific Hydroclimate Since The Last Glacial	Ziye Li	Ocean University of China
S21-P06- A5099	Holocene condition off aru and surrounding, molucca, indonesia, revealed from microfaunal assemblages	Luli Gustiantini	Marine Geological Institute of Indonesia
S21-P07- A5286*	Foraminifera as an Effective and Affordable Proxy to Reveal Paleoclimate and Paleoceanography on Indo- Pacific Tropical Region	Ryan Dwi Wahyu Ardi	Institut Teknologi Bandung, Indonesia

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\$23-P02- A0247*	Late Oligocene tectonic inversion in the Liaodong Bay Subbasin, Bohai Bay Basin, China and its tectonic significance—insights from thin shell FE modelling	Panpan Hu	Tongji University, China
\$23-P03- A0686*	Stratigraphy of the backarc basin fills that record early tectonic inversion: an example from the Miocene of Eastern Shimane in Southwest Japan	Hikari Matsuzawa	Shimane University, Japan
S23-P04- A0870	Magma-magma interaction in the mantle recorded by megacrysts from Cenozoic basalts in eastern China	Xun Yu	Tongji University, China
S23-P05- A1754*	Tectonic evolution and fault system characteristics of Wanan Basin, South China Sea	Yang Wan	China University of Geosciences, China
S23-P06- A3419	Late Cenozoic subsidence and sedimentary features of the basins in the northwestern South China Sea: implications for the development of the deep anomalous progress	Mei Chen	Guangzhou Marine Geological Survey, China
S23-P07- A4243*	The anisotropic structure of the South China Sea by forward modeling of PKS phase	Ting Wang	Tongji University, China
S23-P08- A4252*	Seismic Anisotropy in Izu-Bonin Subduction Zone using data from the Seafloor Observation Network DONET	Yuan Liu	Tongji University, China
S23-P09- A4294*	Sedimentary and tectonic features of the Caroline Ridge and its implication for rifting model, from the latest geophysical survey	Dongdong Dong	Institute of Oceanology, Chinese Academy of Sciences, China



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S23-P11- A4667*	Comparison of structural differences and stretch patterns in the continental margin of the south China sea	Wenlong Wang	Institute of oceanology, Chinese Academy of Sciences, China

S24-P01- A0478	Implementation of Machine Learning and data mining in Geo-acoustic study	Zhengyu Hou	South China Sea Institute of Oceanology Chinese Academy of Sciences, China
S24-P02- A0513*	Acoustic backscattering measurement at 6 - 24 kHz from sandy seafloor in the Yellow Sea	Guangming Kan	First Institute of Oceanography, China
S24-P03- A0527	Relationship between porosity and sound speed of seafloor surface sediments	Dapeng Zou	Guangdong University of Technology, China
S24-P04- A0532	Primary study on characteristics of shear wave dispersion in Porites	Zhengyu Hou	South China Sea Institute of Oceanology Chinese Academy of Sciences, China
S24-P05- A0937*	A study on the distribution of surface sediments in the southern Korean Peninsula using data of Acoustic Sound Measurement System	Shin Yu	Korea Institute of Geoscience and Mineral Resources
S24-P06- A2748	The geoacoustic characteristics of transition layer in the Beibu Gulf, northern South China Sea	Cheng Tang	Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, China
S24-P07- A3756	In situ and laboratory acoustic attenuation measured in the sediments of the southern Yellow Sea	Xiangmei Meng	First Institute of Oceanography, China

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S25-P02- A0677	Fangliao Slide — a large slope failure in the upper Kaoping Slope off southwest Taiwan	Song-Chuen Chen	Central Geological Survey, Ministry of Economic Affairs, Taiwan, China
S25-P03- A0780	Geophysical Investigation of Shallow Subsurface Stress State on the Accretionary Prism off Southwest Taiwan	Win-Bin Cheng	Jinwen University of Science and Technology, Taiwan, China
S25-P04- A2358	Causal Factors of Seafloor Instability in Taiwan Strait - Sedimentary and Structural Characteristics of the Western Taiwan Foreland Basin	Ho-Han Hsu	National Taiwan University, Taiwan, China

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S26-P02- A4593*	Characterizing the offshore segment of the wrench fault system in the eastern border of the Zambales Mountains, Northwest Luzon, Philippines	Paul Caesar Flores	University of the Philippines



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S27-P01- A0635	The stable isotope fingerprint of chemosymbiosis in the shell organic matrix of seep-dwelling bivalves	Dong Feng	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China
S27-P02- A1521	The effect of diagenesis and fluid migration on rare earth element and organic matter distribution in sediments of South China Sea	Niu Li	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China
S27-P03- A1526	Porewater geochemistry of shallow sediments in the Beikang Basin of the southern South China Sea: implication for methane seepage	Junxi Feng	Guangzhou Marine Geological Survey, China
S27-P04- A1617	An areal quantitative study of subseafloor carbon cycling in cold seeps and hydrate-occurring areas in the northern South China Sea	Yanping Zhang	Shanghai Ocean University, China
S27-P05- A2345*	A comparative study of authigenic carbonates from oil and methane seep environments	Yuedong Sun	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China

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S27-P06- A2759*	Distribution and Genesis Mechanism of Submarine Landslides in the Northeastern South China Sea	Kun Zhang	Tongji University, China
S27-P07- A2760	Dissolved methane distributions and air-sea flux from hydrocarbon seeps in the Lintou Promontory seep field, Northern South Sea	Pengfei Di	Sourh China Sea Institute of Oceanology, Chinese Academy of Sciences, China
S27-P08- A2778	The thermodynamic characteristics of mud diapir fluid and its influence on hydrate accumulation	Zhifeng Wan	Sun Yat-sen University, China
S27-P09- A3039*	Triple sulfur isotope relationships during sulfate driven anaerobic oxidation of methane	Shanggui Gong	Louisiana State University, USA.
S27-P10- A3379*	Types and characteristics of the morphological parameters of the columnar seismic anomalies, implications for the columnar fluid flow structures and fluid activities	Boda Zhang	Sun Yat-sen University, China
S27-P11- A3711	Gas hydrate migration and accumulation system (GHMAS): Key factors controlling the formation and distribution for marine gas hydrate	Ming Su	Sun Yat-sen University, China
S27-P12- A3949	Microbial Diversity of two cold seep systems in gas hydrate- bearing sediments at Site GMGS2-08 in the South China Sea	Hongpeng Cui	China University of Geosciences, China
S27-P13- A3975*	Precipitation of low-magnesium calcite in today "s" Aragonite Sea' at SS296 and GC53 of the Gulf of Mexico	Huiwen Huang	South China Sea Institute of Oceanology, Chinese Academy of Sciences, China
S27-P14- A4124	Study on Authigenic Minerals Formation in Marine Cold Seep: Insight from the Laboratory Test	Congming Wei	Key Laboratory Submarine Geosciences & Second Institute of Oceangraphy, China



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S27-P16- A4413	Foraminifera from gas hydrate- bearing sediments of the northeastern South China Sea: proxy evaluation and application for methane release activity	Sui Wan	Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, China
S27-P17- A4539	Seepage environments recorded by dolomite from the Gulf of Mexico	Hongpeng Tong	Shanghai Ocean University, China
S27-P18- A4900	Numerical simulation of gas composition differentiation during gas hydrate accumulation	Yuncheng Cao	Shanghai Ocean University, China

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S28-P02- A1550	The progress in China of the REE geochemical study for REE- bearing sediments in the Pacific Ocean	Chengzhu Jiang	Development and Research Center of China Geological Survey, China
S28-P03- A3664	A study on depositional characteristics of the Jurassic and sedimentary model in Chaoshan Sub-basin, northern South China Sea	Kunsheng Qiang	Guangzhou Marine Geological Survey, China
S28-P04- A3768*	Shipboard magnetic and rock- magnetic characterization of hydrothermal activities in the North Fiji basin	Gyuha Hwang	Korea Institute of Ocean Science & Technology
S28-P05- A4592	The axial valley morphology and related hydrothermal activities at the Central Spreading Ridge, the North Fiji basin	Sang-Joon Pak	Korea Institute of Ocean Science & Technology

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S29-P01- A0603	Rare earth elements in the sediments from the Chukchi and East Siberian seas	Valentina Sattarova	V.I.Il'ichev Pacific Oceanological Institute (POI), Russia
S29-P02- A1230*	Neogloboquadrina pachyderma in the modern Arctic Ocean: a potential for its morophological variation for paleoceanographic reconstruction	Yeong-Ju Son	Korea Polar Research Institute
S29-P03- A1320	Towards an improved sediment stratigraphy and Better understanding of the Pleistocene glacial history in the western Arctic Ocean	Seung-Il Nam	Korea Polar Research Institute

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S29-P05- A2500	Enhanced ventilation in the abyssal Southern Ocean at recent five glacial terminations	Li Wu	Tongji University, China
S29-P06- A2532*	Foraminiferal assemblages in the Western Arctic surface sediments and their paleoenvironment implications	Defang You	Tongji University, China
S29-P07- A2691*	Evolution of (sub) surface water properties in the Nordic Seas since the Last Glacial Maximum	Jiali Hong	Tongji University, China
S29-P08- A3461	Size-dependent δ ¹⁸ O and δ ¹⁵ C variations in a planktic foraminiferal Neogloboquadrina pachyderma (sinistral) record from Chukchi Plateau: implications for (sub) surface water conditions in the western Arctic Ocean over the past ~50 ka	Rujian Wang	Tongji University, China
S29-P09- A4355*	Distribution patterns of coarse-grain clasts in the western Arctic Ocean surface Sediments: implications for their provenances and transportation pathways	Taoliang Zhang	Tongji University, China

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S30-P02- A0141	Indian summer monsoon variability during the past 6,000 years	Saravanan P	Indian Institute of Technology Kharagpur, India
S30-P03- A0315	Petrophyscial characteristics and correlation of volcanic and volcaniclastic rocks at IODP Site U1513, Expedition 369, offshore SW Australia	Eun Young Lee	Chonnam National University, Korea
S30-P04- A1615	Palaeoclimatic reconstruction of East Asia deduced from provenance changes of detrital material based on ESR signal intensity of quartz	Ke Wang	The University of Tokyo



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S32-P02- A0463*	Mineralogical characteristics of Larsen ice shelf regions, Antarctic Peninsula	Jaewoo Jung	Yonsei University, Korea
S32-P03- A0534	Review of Late Pleistocene- Holocene Sequence stratigraphy on the southern Vietnam Shelf	Trung Thanh Nguyen	Institute of Marine Geology and Geophysics, Vietnam
S32-P04- A0548	Geo-Cultural Heritage Conservation For Sustainable Geo-Tourism : Management of Marine Caves in India	Kalpana Chaudhari	Institute For Sustainable Development and Research, India
S32-P05- A0954	Riverine supplies to eastern Mediterranean during the last interglacial sapropel event – A basin-wide perspective	Jiawang Wu	Tongji University, China
S32-P06- A1133	Periodic marine incursion and the interruption of Neolithic dwelling in the southeast Yangtze coastal plain during the middle Holocene	Zhanghua Wang	East China Normal University, China
S32-P07- A1460	Evolution and characteristics of Late Oligocene-Miocene shallow water carbonates in the southern continental margin of the South China Sea	Yuantao Liao	China University of Geosciences, China
S32-P08- A1765	Dimorphism of Bicornucythere bisanensis in the East China Sea and its implication for speciation through paedomorphosis	Yunan Wang	Shanghai Natural History Museum, China
S32-P09- A1846*	Development of a modern calibration between the chemical composition of marine shells and environmental parameters in coastal marine waters	Maximiliano Rodriguez	The University of Hong Kong, Hongkong, China

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S32-P11- A2463*	Sustainable groundwater resources in Precambrian basement aquifers of Aravalli terrane, North Gujarat, India: a structural approach	Rudra Mohan Pradhan	Indian Institute of Technology Bombay, India
S32-P12- A3296	Architecture and controlling factors of the Miocene carbonate platforms in Bekang Basin, southern South China Sea	Wei Yan	Key Laboratory of Marine Mineral Resources, China
S32-P13- A3500*	Geochemistry indicates human activities intesively altered the natural sediment routing processes in the Huanghe (Yellow River)	Yulong Guo	Tongji University, China
S32-P14- A3507*	Reconstruction of Tectonic- lithofacies Palaeogeography of the late Sinian Dengying Formation in the Yangtze Craton	Xiaofeng Zhou	Tongji University, China
S32-P15- A3765	Mid-Holocene hydrology change in the south Taihu area of the Yangtze delta plain, China, and its relationship to the development of Neolithic cultures	Zhanghua Wang	East China Normal University, China
S32-P16- A3912	The stable water isotopes over the marginal china seas	Ergang Lian	Tongji University, China
S32-P17- A3919*	When did coccolithophores bloom during the late Pleistocene?	Hongrui Zhang	Tongji University, China; ETH Zurich, Switzerland
S32-P18- A4756*	Paleoproductivity Records in South China Sea during the Late Miocene	Chuanlian Liu	Tongji University, China



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S32-P20- A5175*	Bioturbated carbonate reservoir heterogeneity: A case study from Cretaceous K2 Zone, A Oilfield, Iraq	Yingchu Shen	Peking University, China
S32-P21- A5339	Seasonal Distribution of Modern Foraminifera in the South China Sea: Plankton Tow and Sediment Trap Records at SEATS	Hui-Ling Lin	National Sun Yat-Sen University, Taiwan, China

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W01-P02- A0971	Evaluate the Relationship between Sediment Physical Properties and Hydrate Production Efficiency in South China Sea	Qiang Chen	Qingdao Institute of Marine Geology, China
W01-P03- A2135	Study of the surface morphology of gas hydrate using cryo-SEM	Jianye Sun	Qingdao Institute of Marine Geology, China
W01-P04- A2288	Methane Flux Effect on Hydrate Formation and its Acoustic Responses in Natural Sands	Qingtao Bu	Qingdao Institute of Marine Geology, China
W01-P05- A2744	Laboratory Analytical Strategy of Hydrate-Bearing Cores from both Marine and Terrestrial Regions in China	Qingguo Meng	Qingdao Institute of Marine Geology, China
W01-P06- A2908*	Investigation on the multi- parameter of hydrate-bearing sands using nano-focus X-ray computed tomography	Chengfeng Li	Qingdao Institute of Marine Geology, China
W01-P07- A3866	Geomorphological-geological- geophysical signatures of high- flux fluid flows in the eastern Pearl River Mouth Basin and effects on gas hydrate accumulation	Fang Liu	Ocean University of China
W01-P08- A3910	Occurrence and control factors of the active cold seepages in the western sea area of the Pearl River Mouth Basin, South China Sea	Chengzhi Yang	Guangzhou Marine Geological Survey, China
W01-P09- A4090	Numerical simulation of gas hydrate formation rate in Shenhu sea area	Yunxin Fang	Shanghai Ocean University, China
W01-P10- A5050	A fractal theory based permeability model of hydrate- bearing sediments	Zhun Zhang	Qingdao Institute of Marine Geology, China

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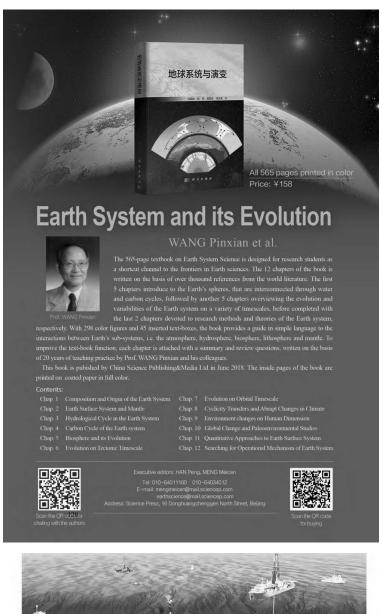
POSTER Session

W02

ID	Title	Author	Affiliation
ID	Tiuc	Autioi	Allillation
W02-P01- A3299	The distribution of trace metal in the south China sea	Lin Sun	Hamburger University, Germany
W02-P02- A4906	Response of Sinking Biogenic Fluxes to Monsoon, Eddy and Dust Events in the Northwestern South China Sea	Jingjing Zhang	Second Institute of Oceanography, China
W02-P03- A4991	Asymmetric response of sinking biogenic flux to ENSO oscillation in the central South China Sea	Hongliang Li	Second Institute of Oceanography, China
W02-P04- A5349	Dinoflagellate cysts in the surface sediment of Van Phong Bay, Khanh Hoa province	Tan Luom Phan	Graduate University of Science and Technology, VAST, Vietnam

W03

W03-P01- A0993*	Late Pleistocene-Holocene Stratigraphy and Depositional History in the Jeju Strait, Korea	Bo-Ram Lee	Korea Institute of Geoscience and Mineral Resources
W03-P02- A1123*	Sedimentary facies and depositional processes of the Postglacial incised-valley fills beneath a wave-dominated coast, Kujukuri Plain, central Japan	Junko Komatsubara	Geological Survey of Japan, AIST
W03-P03- A4346*	Time gap in Holocene stratigraphy of Imja-do tidalflat, southwest coast of Korea	Hyun Ho Yoon	Korea Institute of Geoscience and Mineral Resources





*Introduction

 $The \, State \, Key \, Laboratory \, of \, Marine \, Geology \, at \, Tongji \, \, University \, was \, established \, in \, 2006 \, with \, the \, endorsement \, and \, control of the endorsement \, and \, con$ from the Ministry of Science and Technology of China (MOST). Its main research areas are Paleoceanography and Paleoenvironment, Marine Sedimentology, Oceanic Lithosphere Evolution, Submarine Resources and Geophysics, Marine Biogeochemistry, Seafloor Process and Observation. The Goal of the Laboratory is to investigate environmental change and natural resources in global oceans and neighboring continental regions, with a strong focus on basic research in $As ian\ marginal\ seas.\ By\ actively\ involving\ in\ ocean\ drilling\ and\ observatories, and\ other\ large\ international\ research$ programs, the Laboratory is committed to understanding the comprehensive earth system science and the interaction between ocean and Earth's other spheres at various spatial and temporal scales.

School of Ocean and Earth Science State Key Laboratory of Marine Geology **Tongji University**





Global Recruitment

Contact Person: Ms. CHEN Phone: 0086 21 65983790 Email: cys@tongji.edu.cn Website: http://mgg.tongji.edu.cn

http://mlab.tongji.edu.cn



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AT THE EXHIBITION HALL IN ZHONGHE BUILDING. 368 (2017)

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radoratory of manife Georgy hiversity ing Road, Shanghai 200092, China +86-21-6598 8404 iodp_china@mail.tongji.edu.cn www.iodp-china.org



Introduction

Established in 2008, School of Marine Sciences is located along the coast of beautiful Zhuhal. With good academic atmosphere and comfortable research environment, School of Marine Sciences has its own features and advantages in Marine Biological Resources and Deep-Sea Biology, Marine Power and Substances Transport Process, Marine Environment and Ecological Dynamic Process, and Marine Mineralization and Accumulation Mechanism and Exploration, building a talent training system including marine science for undergraduate program, master degree programs in first-level disciplines and post-doctoral program. The overall assessment of first-level disciplines ranked fourth in the third round of China University Subject Rankings(CUSR) held by the Ministry of Education evaluation, and ranked third in the fourth round of CUSR.

School of Marine Sciences has over 120 faculties, including 26 professors and researchers, 61 associate professors and deputy researchers. There are 3 national Distinguished Young Scholars, 3 New Century Excellent Talents funded by Ministry of Education, 2 national Excellent Young Scholars, 1 Pearl River Scholar of Guangdong Province, 2 Excellent Youth of

Guangdong Province, and 4 Pearl River New Star of Science and Technology. Supported by 390 million research funds, we have established 12 national, provincial and ministeriallevel innovation platforms, hosted and participated over 140 national-level scientific research projects, published more than 750 papers, in which 400 were included in SCI, and obtained or applied for more than 100 patents.

Under the background of national strategy to accelerate the implementation of building a "Maritime Power", rooted in the South China Sea and embracing seas and oceans, Sun Yat-sen University re-adjusted its academic layout in 2015, and decided to build over ten schools or disciplines based on ocean in Zhuhai campus. Supported by "Tianhe-2" supercomputer, 6,000 tons of marine scientific research vessels (built) and a large number of large-scale infrastructure facilities such as School of Marine Sciences Building, which is over 60,000 square meters, School of Marine Sciences will attract high level scientists worldwide. strengthen the training of technical personnel, enhance our core technology, and build an internationally well-known and domestic leading marine science discipline.

Disciplines

- Marine Power and Substances Transport Process
- Marine Biological Resources and Deep-Sea Biology

 Marine Environment
- and Ecological Dynamic
- Process

 Marine Mineralization and Accumulation Mechanism

Scientific Platforms

- South China Sea Marine Biotechnology National Engineering Research Center
- China-ASEAN Center for Joint Research and Promotion of Marine Aquaculture Technology
- Hekou Water Conservancy Technology National Joint Engineering Center
- National Marine Natural Product Compound Library
- Guangdong South China Sea Resources Development and Protection of Collaborative
- Innovation Center
 Guangdong Key Laboratory of Marine Resources and Nearshore Engineering
- Guangdong Key Laboratory of wraine Resources and Nearshore Engineering
 Guangdong Coast and Island Reef Engineering Technology Research Center
 Guangdong Hekou Water Conservancy Engineering Laboratory
 Key Laboratory of Offshore OffExploration and Development in Guangdong Province
 Key Laboratory of Marine Microbial Flunctional Molecules in Guangdong Province
 Key Laboratory of Marine Biological Resources and Environment of Zhuhai

- Zhuhal South China Sea Resources Development and Protection Collaborative Innovation

Website: http://marine.syst

Tel: +86-020-39332159 E-mail: hanmox@mail.sysu.edu.cn

Autonomous Underwater Vehicle Yumeiruka interactions among and between the ocean, the Earth, life, and human activities. We promote innovation related to marine resource utilization, marine biotechnological progress, and more advanced marine earth data and information reservices. JAMSTEC is committed to promoting the most advanced research and rechnological development projects not instact not instact. Hakuhomaru Shinseimaru Remotely Operated Vehicle

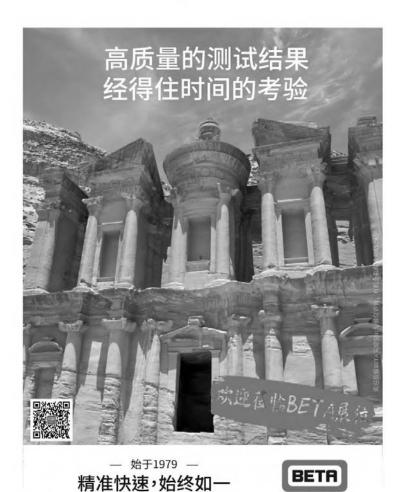
Hyper-Dolphin 4.14 4 The Earth is unique in the solar system as the only planet blessed with liq. The Japan Agency for Marine-Earth Science and Technology (JAMSTEC) a played by the oceans in the Earth system, as part of an integrated inves interactions among and between the ocean, the Earth, life, and human related to marine resource utilization, marine blotechnological progress, okosuka Kaime Deep Ocean Floor Survey System Deep Tow 1000000 Urashima Kaire Autonomous Underwater Vehicle ' **Otohime** Kaiko Fleet Chikyu anned Research Submersibl Shinkai 6500



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Beta Analytic

铂悦仪器(上海)有限公司 Boyue Instruments (shanghai)Co.,Ltd



WEX射线荧光成像光谱仪 - M4TORNADO

M4 TORNADO 特点

微区X射线荧光光谱分析仪技术是对不均匀样品、不规则样品、甚至小件样品室 可以放置各种尺寸的样品和包裹物进行高灵敏度的、非破坏性的元素分析的首 选方法。采用多导毛细血管聚焦镜将激发光聚焦到非常小的区域,以获得极佳 的空间分辨率,进行快速分析。任何类型的样品都可以通过简单的样品制备甚 至不制备直接进行分析。

地质行业应用:

1、地质薄片应用 2、陨石应用 3、沉积学岩心应用 4、石榴石应用

常见行业应用:

1、地球科学 2、材料科学 3、质量控制与故障分析 4、发动部件、电机润滑油

5、司法鉴定 6、科技考古学 7、生物科学



OOX 瑞典Itrax XRF岩芯扫描分析仪

——是和海洋、湖底沉积物样芯、钻探岩石岩心样品及其他树木,柱状样品的快速XFF 元素分析及X光射线成像扫描和高清晰光学扫描

瑞典Cox Analytical System公司与英国Southampton Oceanographic Centre(南安普敦海洋中心)合作开发的Itrax沉积物岩芯扫描分析仪(又称Itrax岩芯密度 与元素分析系统、Itrax岩芯XRF扫描仪等)结合了微观X射线荧光分析(X-ray Fluorescence)、数字X射线成像(digital x-ray micro radio-graphy)和光学成像三种技术,用于沉积物样柱(样芯)的非接触式扫描分析,提供高质量、高 精度数据,不破坏样品,保持样品的原始性和完整性。



mauxen 布鲁克手持式 XRF分析仪 SI TITAN

● 采矿和勘探 Bruke S1 TITAN采矿分析仪是一款运行快速,测量精准且操作 简单的手持式XRF,其应用涵盖了采矿作业的所有领域,并提供整体解决方案。 此數分析仅可对矿层表面和钻孔岩心进行现场地址化学分析,且仅需几分钟时间 就可以达到传统实验室分析需要数天才能得到的分析结果,可大大提高生产效率不仅如此,采用S1 TITAN进行实时勘测,可以快速确定矿体边界,识别具有最高潜 在价值的区域、现场使用制备好的标样更能进一步提高精度。

佐点 - 現場地质化学分析 - GPS/绘图 快速 准确、便于使用 - 坚固耐用。 防止防水设计 (IP54) - 可測量多达45种元素,包括镁、铝、硅、螺和硫 - TITAN防扎探測器 - 透配桌面或台面支架

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GROUND TRANSPORTATION

There are two international airports in Shanghai, the Pudong International Airport (airport code PVG) and the Hongqiao International Airport (airport code SHA). Please be aware at which airport you will be landing. You can reach the Tongji University from the airports by taxi, Maglev (high-speed magnetic levitation line, for PVG only), or metro (subway), or their combinations.

From the Pudong International Airport (PVG):

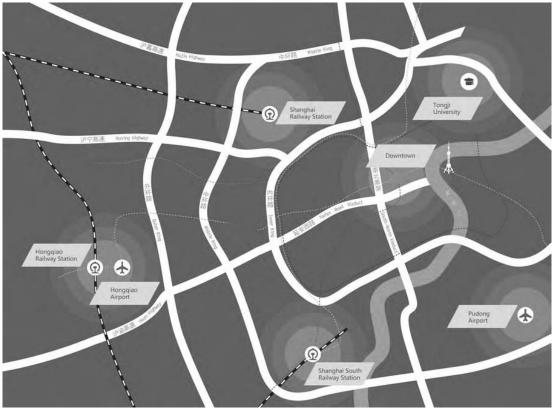
- 1. Taxi (recommend if you have large luggage and/or arrive at evening): Please take a taxi at the airport directly to the hotel. It takes about 50 minutes and costs about 160 yuan (RMB).
- 2. Maglev + taxi: Take the Maglev at the Pudong Airport, get off the Maglev at the Longyang Station (terminal of Maglev). Then, take a taxi to the hotel. Ticket of Maglev: 40 yuan each by showing your flight ticket or boarding pass. Taxi costs about 60 yuan
- 3. Maglev + Metros: This is a cheaper but more complicated choice. Take Maglev at the Pudong Airport, transit to Metro Line 2 at the Longyang Station (terminal of Maglev), then change to Metro Line 10 at the "East Nanjing Road" Station, and get off at the "Tongji University" Station. It costs ~50 Yuan for this option.
- 4. Metros only: Take Metro Line 2 at the Pudong Airport, transit to Metro Line 10 at the "East Nanjing Road" Station, and get off at the "Tongji University" Station. It costs only ~10 Yuan for this option but you need ~2 hr to get to the campus.

From the Hongqiao International Airport (SHA):

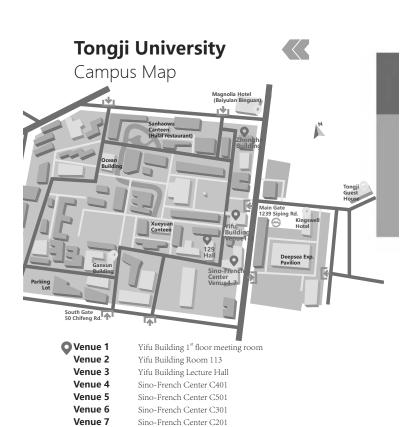
- 1. Taxi: It takes you about 40 minutes and costs ~100 yuan. There are also Airport buses, but none of those comes close to Tongji.
- 2. Metro (recommended): Take Metro Line 10 at the Hongqiao Airport, and get off at the "Tongji University" Station. It costs ~6 Yuan and takes ~1.0 hr to get to the hotel.

Shanghai CityTraffic Map





Note: There are Shanghai Maps at at http://www.chinatouristmaps.com/city/shanghai.html for foreigners to make their tourism in Shanghai easier.



Halal restaurant located in Sanhaowu Canteen 1^{st} floor Parking Lot on campus, 200 Chifeng Rd.

Accommodations

Exhibition Hall



Zhonghe Building - Ground Floor



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ADDRESS

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- Website icamg-9.tongji.edu.cn

