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# 2015 年港灣環境資訊網觀測資料年報 (金門海域觀測海氣象資料)



交通部運輸研究所

中華民國 106 年 9 月

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著者：蘇青和、李俊穎、陳明宗、劉清松  
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摘要： <p style="text-align: center;">本港灣環境資訊網觀測海氣象資料年報，包括金門海域2015年觀測風力、波浪、潮汐及海流等資料之觀測記錄表及逐時資料歷線圖。</p>			
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KEY WORDS: Harbor Environment Information Website, 2015, Annual Report, Kin-Men Off-shoe Region, Oceanographical Observation Data			
ABSTRACT:  <p style="text-align: center;">This Annual report 2015 of Harbor Environment Information Website(HEIV) covers the observation data of winds, waves, tides and currents near Kin-Men offshoe region in Taiwan. The contents in this Annual report include the records of observation and the time series of data.</p>			
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## 誌 謝

2015 年港灣環境資訊網觀測風力資料，蒐集之金門海域風力資料，除本中心自行觀測之外，在金門水頭氣象站(測站 E) 觀測風力資料，係交通部中央氣象局(CWB)提供。金門料羅氣象站(測站 H)、金門水頭氣象站(測站 I)、金門海上浮標(測站 Y)等觀測風力資料，係經濟部水利署(WRA)提供。金門后江灣海上浮標(測站 Z) 觀測風力資料，係國立成功大學水文中心(COMC)裝設，謹致謝忱。

2015 年港灣環境資訊網觀測波浪資料，蒐集之金門海域波浪資料，除本中心自行觀測之外，在金門海上浮標(測站 Y)觀測波浪資料，係經濟部水利署(WRA)提供。金門后江灣海上浮標(測站 Z) 觀測波浪儀，係國立成功大學水文中心(COMC)裝設，謹致謝忱。

2015 年港灣海氣象觀測潮汐資料，蒐集之金門海域潮汐觀測資料，除本中心自行觀測之外，在金門水頭(測站 J) 及料羅(測站 F) 等觀測潮汐資料，係經濟部水利署提供，謹致謝忱。

2015 年港灣環境資訊網觀測海流資料，蒐集之金門海域海流資料，除本中心自行觀測之外，在金門海上浮標(測站 Y)觀測海流資料，係經濟部水利署(WRA)提供。金門后江灣海上浮標(測站 Z) 觀測海流儀，係國立成功大學水文中心(COMC)裝設，謹致謝忱。

## 第一章 2015 年金門海域觀測風力資料

金門海域風力之觀測係 2010 年 12 月本中心(IHMT)安裝風速計於金門港水頭港區辦事處大樓樓頂(測站 W)，其位置如附圖 1。2012 年 8 月本中心另安裝風速計於金門港料羅港區辦事處大樓樓頂(測站 B)。2014 年 2 月本中心安裝風速計於金門港九宮港區(測站 C)。

料羅氣象站(測站 H)及水頭氣象站(測站 I)之風速儀屬水利署(WRA)所有。金門料羅港南方海域(測站 Y)外海浮標站之風速儀也屬水利署(WRA)所有。後江灣小浮標(測站 Z)之風速儀屬近海水文中心(COMC)設置。水頭氣象站(測站 E)之風速儀屬中央氣象局(CWB)所有。各測站歷年觀測風資料蒐集概況如表 1。

本中心測站風資料之蒐集係採取每小時測定十分鐘之風速、風向數據加以平均，而得出該小時之平均風速、平均風向、最大陣風風速、最大陣風風向、最大陣風之發生時間。風力資料以取平均風速及平均風向為主。其他測站觀測風速、風向資料也是平均風速(m/s)及風向(度)。

本風力年報以取經檢核或修補後之 Y 站資料作為主要觀測站，2015 年各觀測站修補前(後)每月觀測之風資料記錄期間統計表，如表 1.1，主要觀測站修補前後每月風力歷線比較圖，如圖 1.1，主要觀測站與次要觀測站(或其他觀測站)每月風力歷線比較圖，如圖 1.2 以後。

表 1 金門海域觀測風力資料蒐集概況表(統計時間至 2015 年 11 月)

測站	緯度	經度	觀測期間	觀測單位	備註
W	24°24'54"N	118°17'13"E	2010/12-2015/11(觀測中)	港研中心	水頭港區
B	24°24'29"N	118°25'46"E	2012/08-2015/11(觀測中)	港研中心	料羅港區
C	24°25'30"N	118°15'48"E	2014/02-2015/11(觀測中)	港研中心	九宮港區
E	24°24'26"N	118°17'21"E	2004/01-2015/11(觀測中)	中央氣象局	水頭氣象站
Y	23°43'37"N	119°33'07"E	2001/01-2015/11(觀測中)	水利署	金門資料浮標
Z	24°30'27"N	118°22'24"E	2013/01-2014/06	水文中心	后江灣小浮標
H	24°24'32"N	118°25'58"E	2001/01-2015/11(觀測中)	水利署	料羅氣象站
I	24°25'16"N	118°17'21"E	2013/09-2015/11(觀測中)	水利署	水頭氣象站



圖 1 金門海域風力觀測站位置示意圖

表 1.1a 2015年每月金門海域修補前各測站觀測風力資料紀錄統計表

年/月 港區	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域
測站	W	Y	B	C	E	Z	H	I
2014/12月	744 (100%)	730 (98.1%)	743 (99.9%)	744 (100%)	744 (100%)	*	744 (100%)	744 (100%)
2015/ 1月	744 (100%)	703 (94.5%)	744 (100%)	744 (100%)	743 (99.9%)	*	744 (100%)	744 (100%)
2015/ 2月	672 (100%)	670 (99.7%)	671 (99.9%)	672 (100%)	672 (100%)	*	672 (100%)	672 (100%)
2015/ 3月	744 (100%)	741 (99.6%)	744 (100%)	744 (100%)	744 (100%)	*	744 (100%)	744 (100%)
2015/ 4月	720 (100%)	719 (99.9%)	720 (100%)	720 (100%)	720 (100%)	*	720 (100%)	720 (100%)
2015/ 5月	744 (100%)	742 (99.7%)	743 (99.9%)	743 (99.9%)	744 (100%)	*	744 (100%)	742 (99.7%)
2015/ 6月	720 (100%)	713 (99.0%)	719 (99.9%)	701 (97.4%)	720 (100%)	*	720 (100%)	719 (99.9%)
2015/ 7月	744 (100%)	740 (99.5%)	742 (99.7%)	743 (99.9%)	744 (100%)	*	744 (100%)	744 (100%)
2015/ 8月	744 (100%)	742 (99.7%)	744 (100%)	740 (99.5%)	744 (100%)	*	704 (94.6%)	741 (99.6%)
2015/ 9月	718 (99.7%)	718 (99.7%)	713 (99.0%)	706 (98.1%)	720 (100%)	*	718 (99.7%)	716 (99.4%)
2015/10月	744 (100%)	732 (98.4%)	744 (100%)	722 (97.0%)	744 (100%)	*	744 (100%)	743 (99.9%)
2015/11月	720 (100%)	714 (99.2%)	719 (99.9%)	704 (97.8%)	720 (100%)	*	720 (100%)	719 (99.9%)
2015/冬季	2160 (100%)	2103 (97.4%)	2158 (99.9%)	2160 (100%)	2159 (100.0%)	*	2160 (100%)	2160 (100%)
2015/春季	2208 (100%)	2202 (99.7%)	2207 (100.0%)	2207 (100.0%)	2208 (100%)	*	2208 (100%)	2206 (99.9%)
2015/夏季	2208 (100%)	2195 (99.4%)	2205 (99.9%)	2184 (98.9%)	2208 (100%)	*	2168 (98.2%)	2204 (99.8%)
2015/秋季	2182 (99.9%)	2164 (99.1%)	2176 (99.6%)	2132 (97.6%)	2184 (100%)	*	2182 (99.9%)	2178 (99.7%)
2015/整年	8758 (100.0%)	8664 (98.9%)	8746 (99.8%)	8683 (99.1%)	8759 (100.0%)	*	8718 (99.5%)	8748 (99.9%)
起始年月	2014/12	2014/12	2014/12	2014/12	2014/12	*	2014/12	2014/12
結束年月	2015/11	2015/11	2015/11	2015/11	2015/11	*	2015/11	2015/11

表 1.1b 2015年每月金門海域修補後各測站風力資料統計表

年/月 港區	金門海域		金門海域		金門海域		金門海域		金門海域		金門海域	
測站	W	Y	B	C	E	Z	H	I				
2014/12月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*	744 (100%)	744 (100%)				
2015/ 1月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*	744 (100%)	744 (100%)				
2015/ 2月	672 (100%)	672 (100%)	672 (100%)	672 (100%)	672 (100%)	*	672 (100%)	672 (100%)				
2015/ 3月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*	744 (100%)	744 (100%)				
2015/ 4月	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	*	720 (100%)	720 (100%)				
2015/ 5月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*	744 (100%)	744 (100%)				
2015/ 6月	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	*	720 (100%)	720 (100%)				
2015/ 7月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*	744 (100%)	744 (100%)				
2015/ 8月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*	744 (100%)	744 (100%)				
2015/ 9月	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	*	720 (100%)	720 (100%)				
2015/10月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*	744 (100%)	744 (100%)				
2015/11月	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	*	720 (100%)	720 (100%)				
2015/冬季	2160 (100%)	2160 (100%)	2160 (100%)	2160 (100%)	2160 (100%)	*	2160 (100%)	2160 (100%)				
2015/春季	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	*	2208 (100%)	2208 (100%)				
2015/夏季	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	*	2208 (100%)	2208 (100%)				
2015/秋季	2184 (100%)	2184 (100%)	2184 (100%)	2184 (100%)	2184 (100%)	*	2184 (100%)	2184 (100%)				
2015/整年	8760 (100%)	8760 (100%)	8760 (100%)	8760 (100%)	8760 (100%)	*	8760 (100%)	8760 (100%)				
起始年月	2014/12	2014/12	2014/12	2014/12	2014/12	*	2014/12	2014/12				
結束年月	2015/11	2015/11	2015/11	2015/11	2015/11	*	2015/11	2015/11				

# Wind Speed in Kin-Men seas of KMY0 at 2015

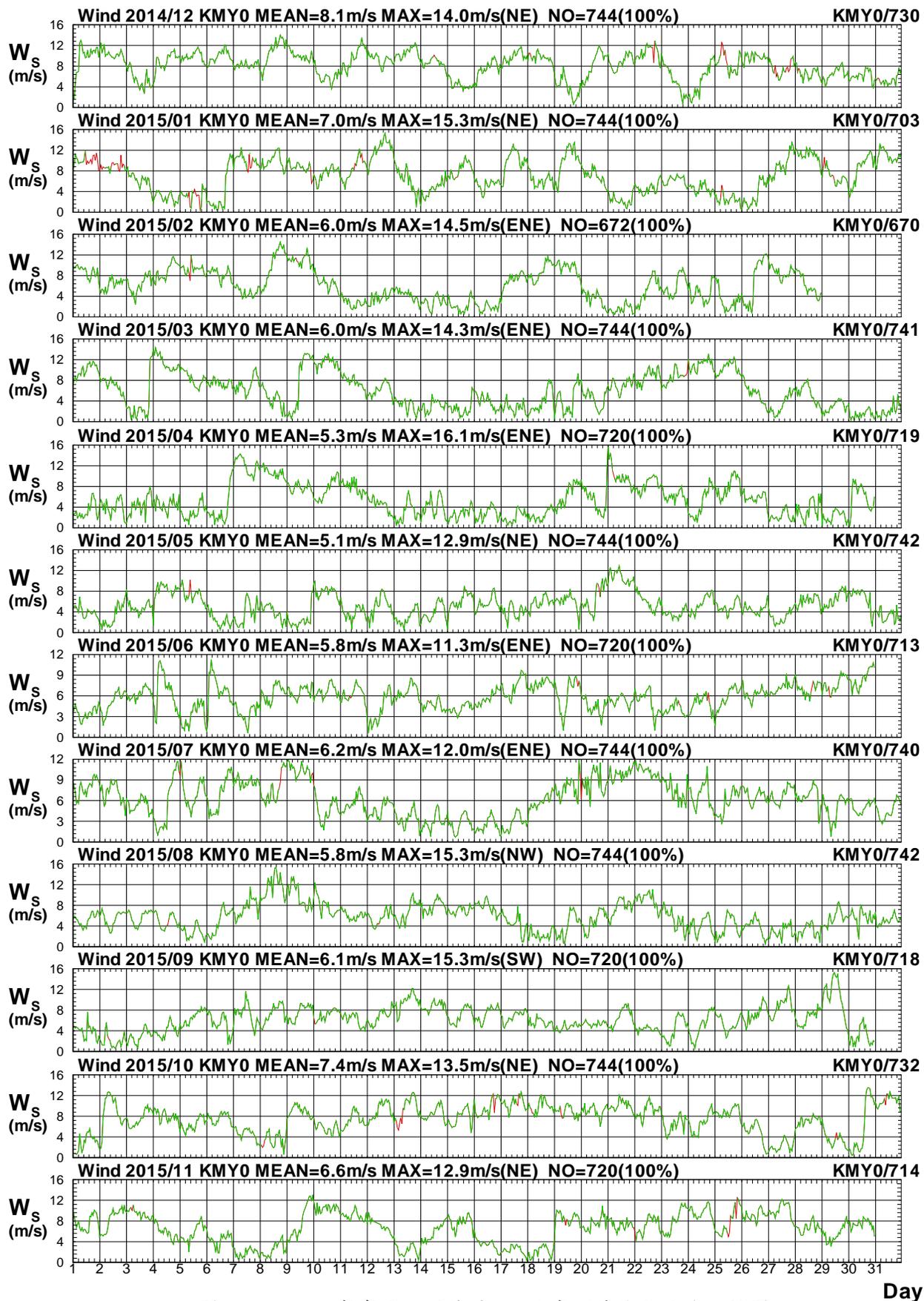


圖 1.1a 2015年每月金門海域 Y 站修補前後之風速比較圖

W14CKMY0.1HA W14CKMY0.1H0 W151KMY0.1HA W151KMY0.1H0 W152KMY0.1HA W152KMY0.1H0  
 W153KMY0.1HA W153KMY0.1H0 W154KMY0.1HA W154KMY0.1H0 W155KMY0.1HA W155KMY0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

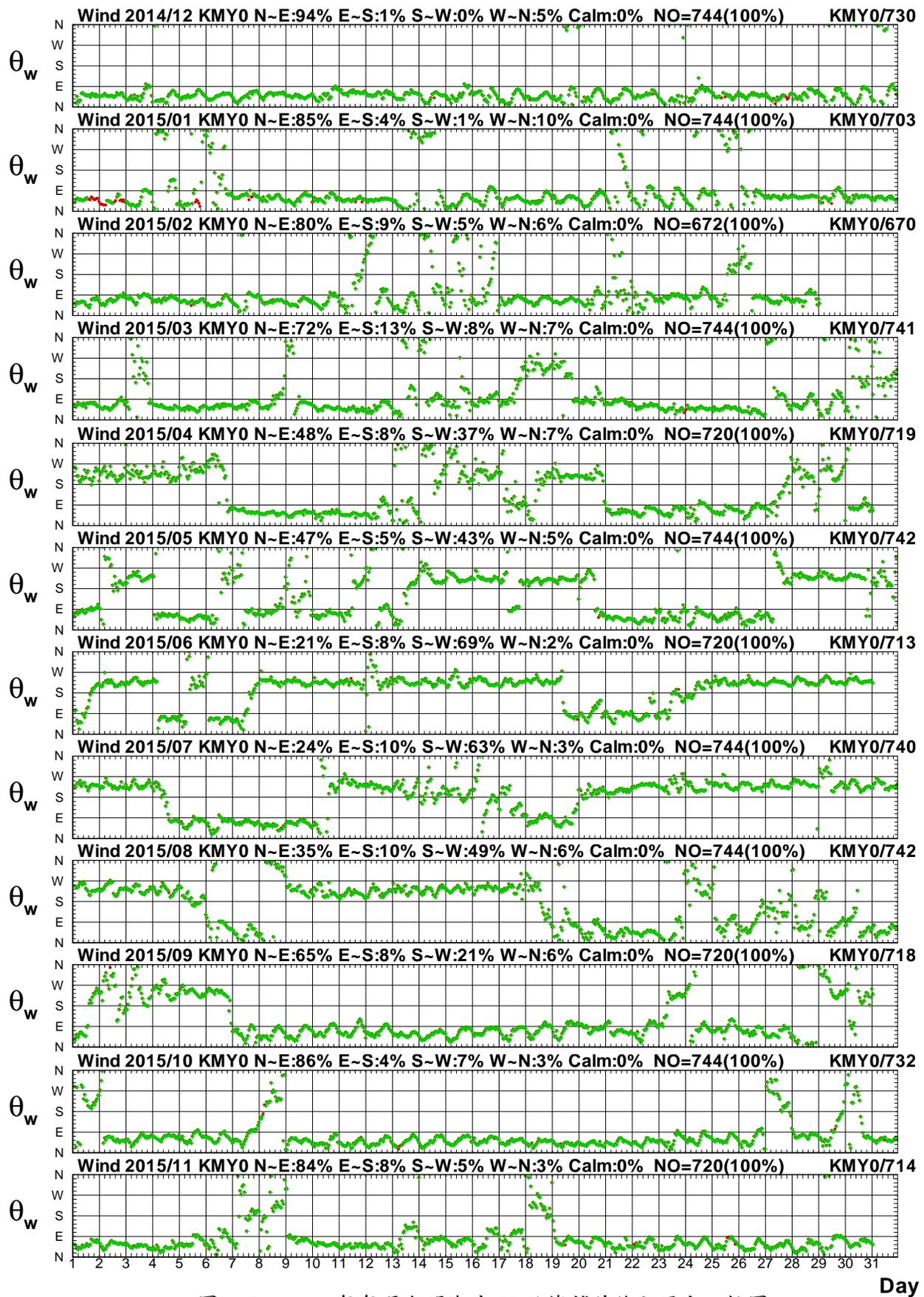


圖 1.1b 2015年每月金門海域 Y 站修補前後之風向比較圖

W14CKMY0.1HA W14CKMY0.1H0 W151KMY0.1HA W151KMY0.1H0 W152KMY0.1HA W152KMY0.1H0  
 W153KMY0.1HA W153KMY0.1H0 W154KMY0.1HA W154KMY0.1H0 W155KMY0.1HA W155KMY0.1H0

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# Wind Speed in Kin-Men seas of KMY0 at 2015

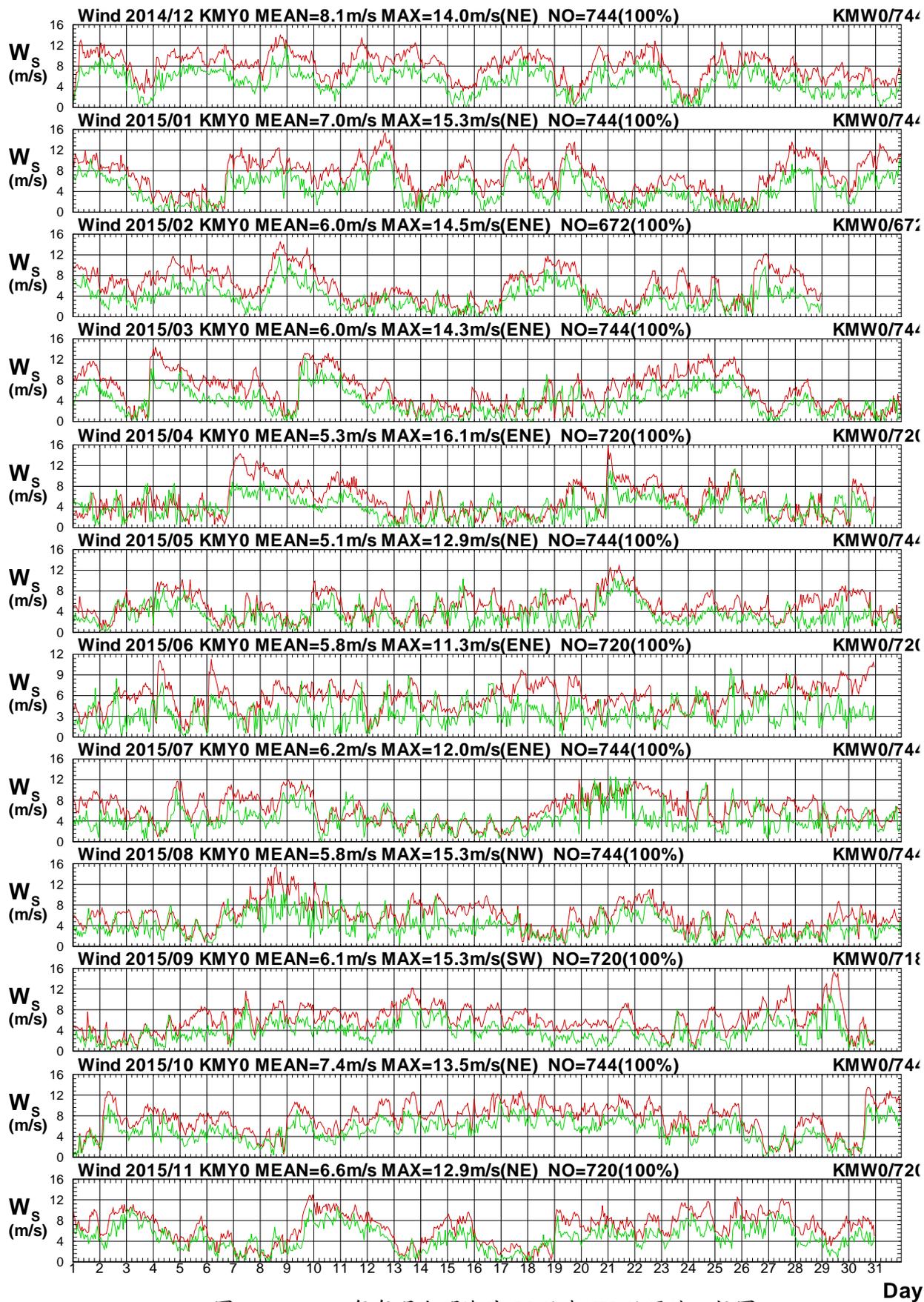


圖 1.2a 2015年每月金門海域 Y 站與 W 站風速比較圖

W14CKMY0.1HA W14CKMW0.1HO W151KMY0.1HA W151KMW0.1HO W152KMY0.1HA W152KMW0.1HO  
 W153KMY0.1HA W153KMW0.1HO W154KMY0.1HA W154KMW0.1HO W155KMY0.1HA W155KMW0.1HO

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# Wind Direction in Kin-Men seas of KMY0 at 2015

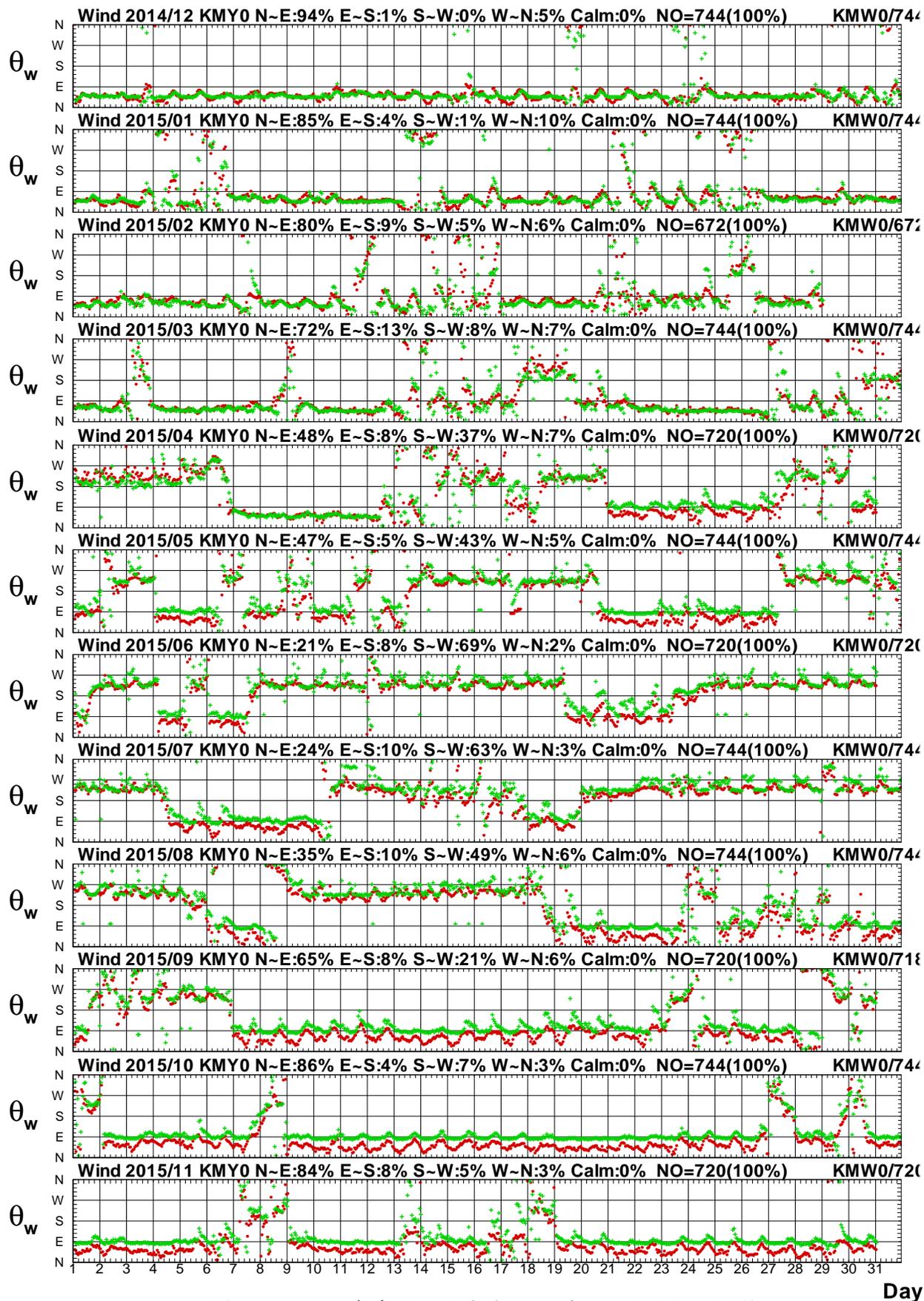


圖 1.2b 2015年每月金門海域 Y 站與 W 站風向比較圖

W14CKMY0.1HA W14CKMW0.1H0 W151KMY0.1HA W151KMW0.1H0 W152KMY0.1HA W152KMW0.1H0  
 W153KMY0.1HA W153KMW0.1H0 W154KMY0.1HA W154KMW0.1H0 W155KMY0.1HA W155KMW0.1H0

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# Wind Speed in Kin-Men seas of KMY0 at 2015

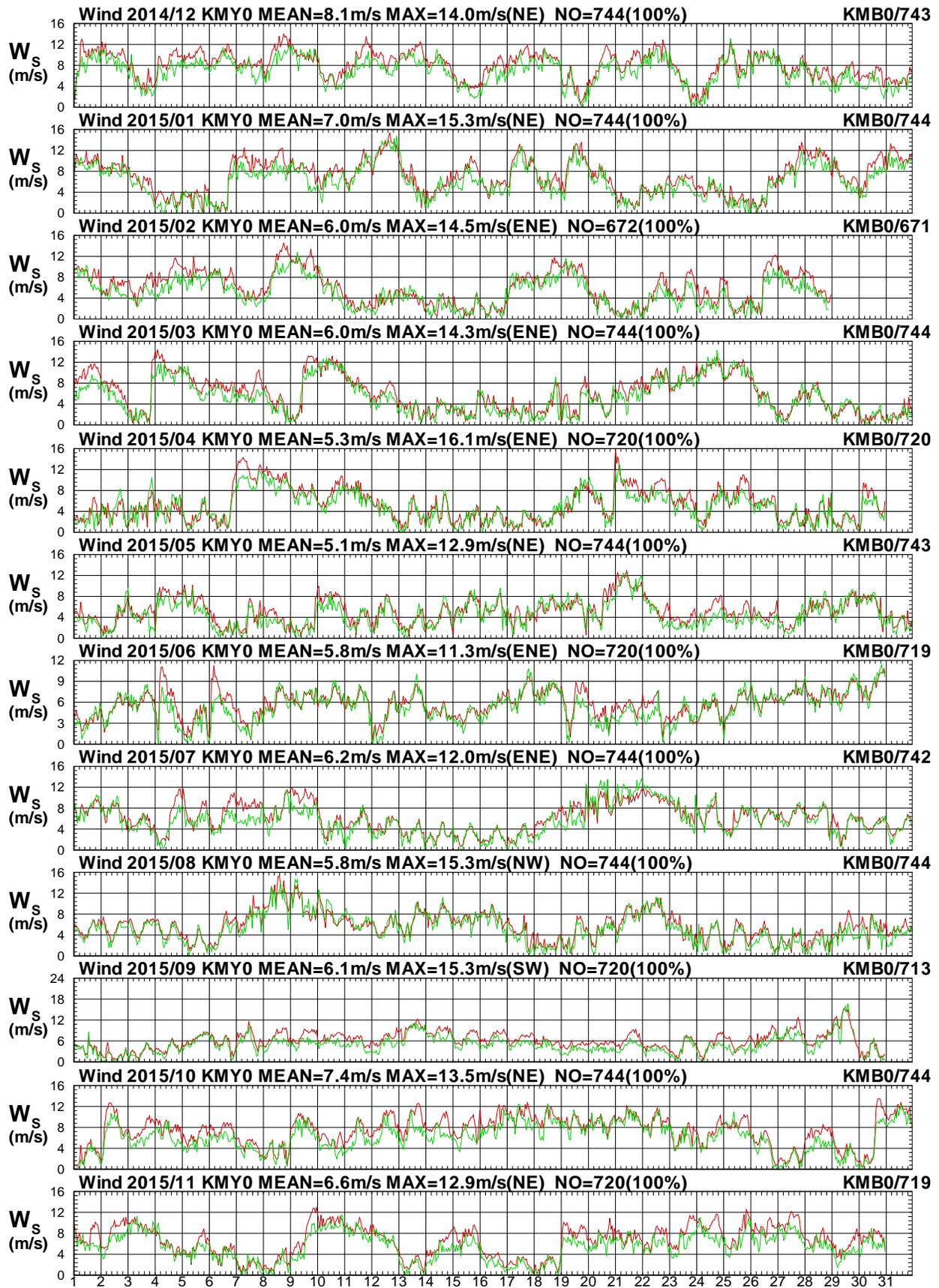


圖 1.3a 2015年每月金門海域 Y 站與 B 站風速比較圖

W14CKMY0.1HA W14CKMB0.1HO W151KMY0.1HA W151KMB0.1HO W152KMY0.1HA W152KMB0.1HO  
 W153KMY0.1HA W153KMB0.1HO W154KMY0.1HA W154KMB0.1HO W155KMY0.1HA W155KMB0.1HO

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# Wind Direction in Kin-Men seas of KMY0 at 2015

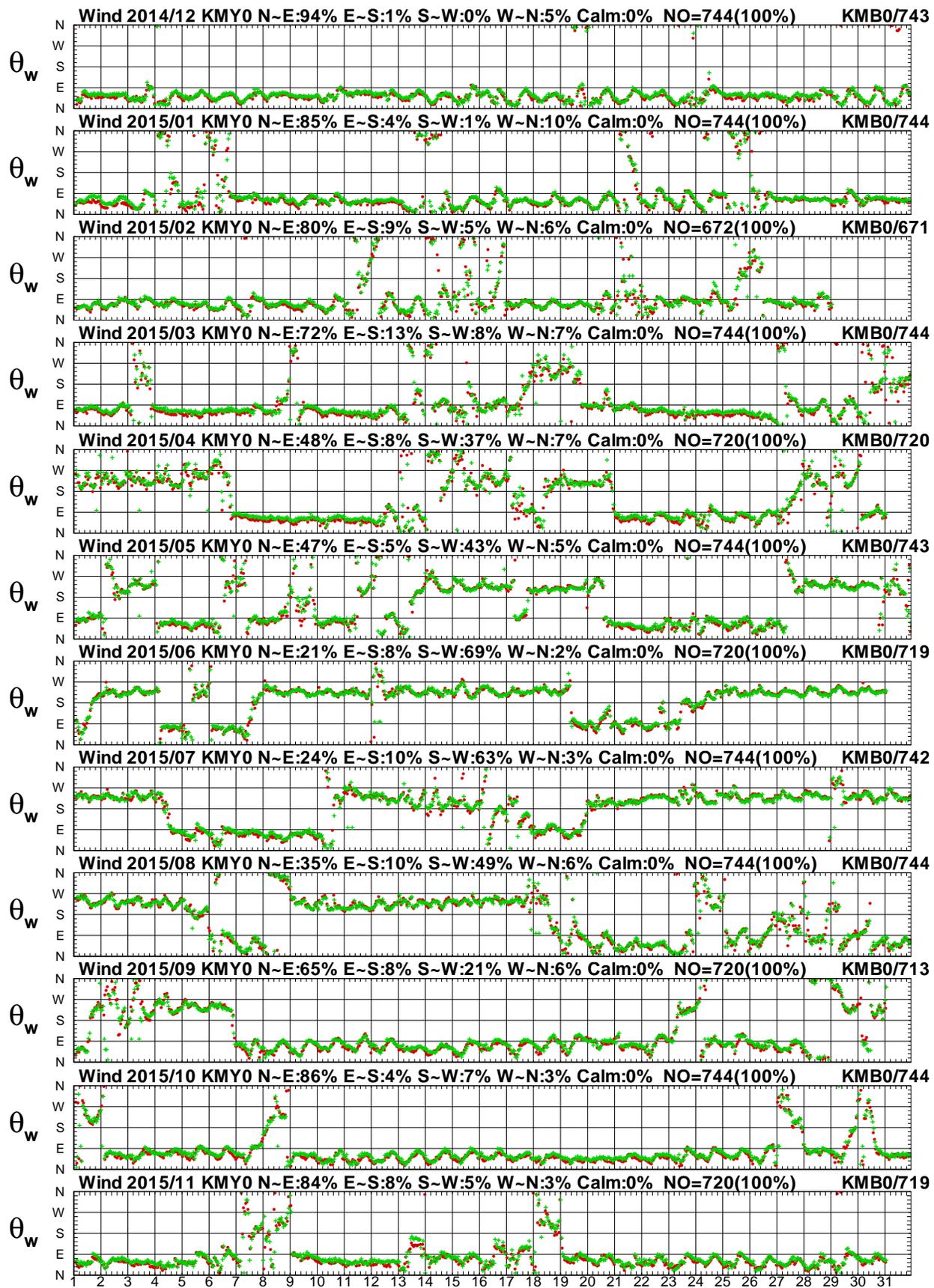


圖 1.3b 2015年每月金門海域 Y 站與 B 站風向比較圖

W14CKMY0.1HA W14CKMB0.1HO W151KMY0.1HA W151KMB0.1HO W152KMY0.1HA W152KMB0.1HO  
 W153KMY0.1HA W153KMB0.1HO W154KMY0.1HA W154KMB0.1HO W155KMY0.1HA W155KMB0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

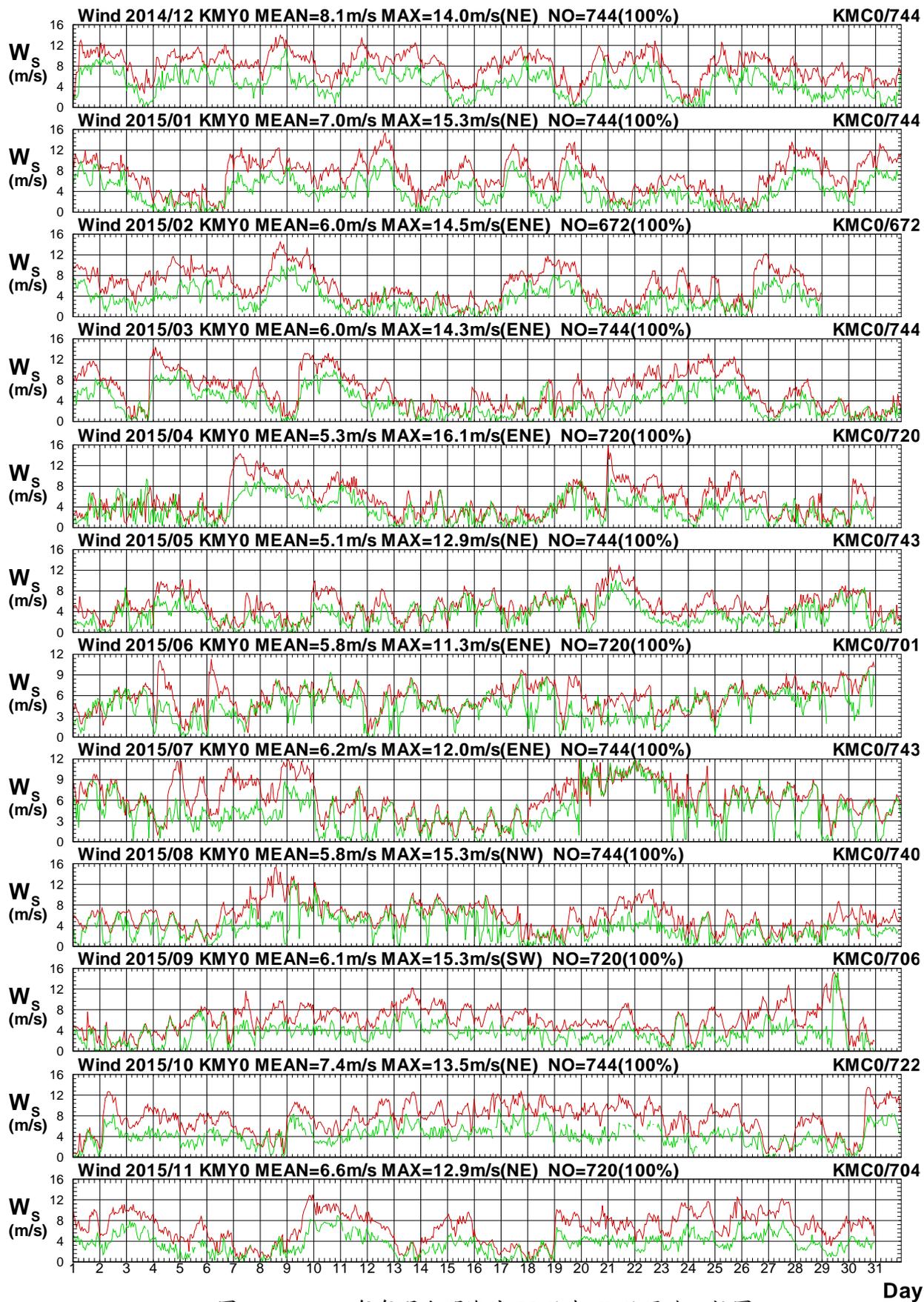


圖 1.4a 2015年每月金門海域 Y 站與 C 站風速比較圖

W14CKMY0.1HA W14CKMC0.1HO W151KMY0.1HA W151KMC0.1HO W152KMY0.1HA W152KMC0.1HO  
 W153KMY0.1HA W153KMC0.1HO W154KMY0.1HA W154KMC0.1HO W155KMY0.1HA W155KMC0.1HO

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# Wind Direction in Kin-Men seas of KMY0 at 2015

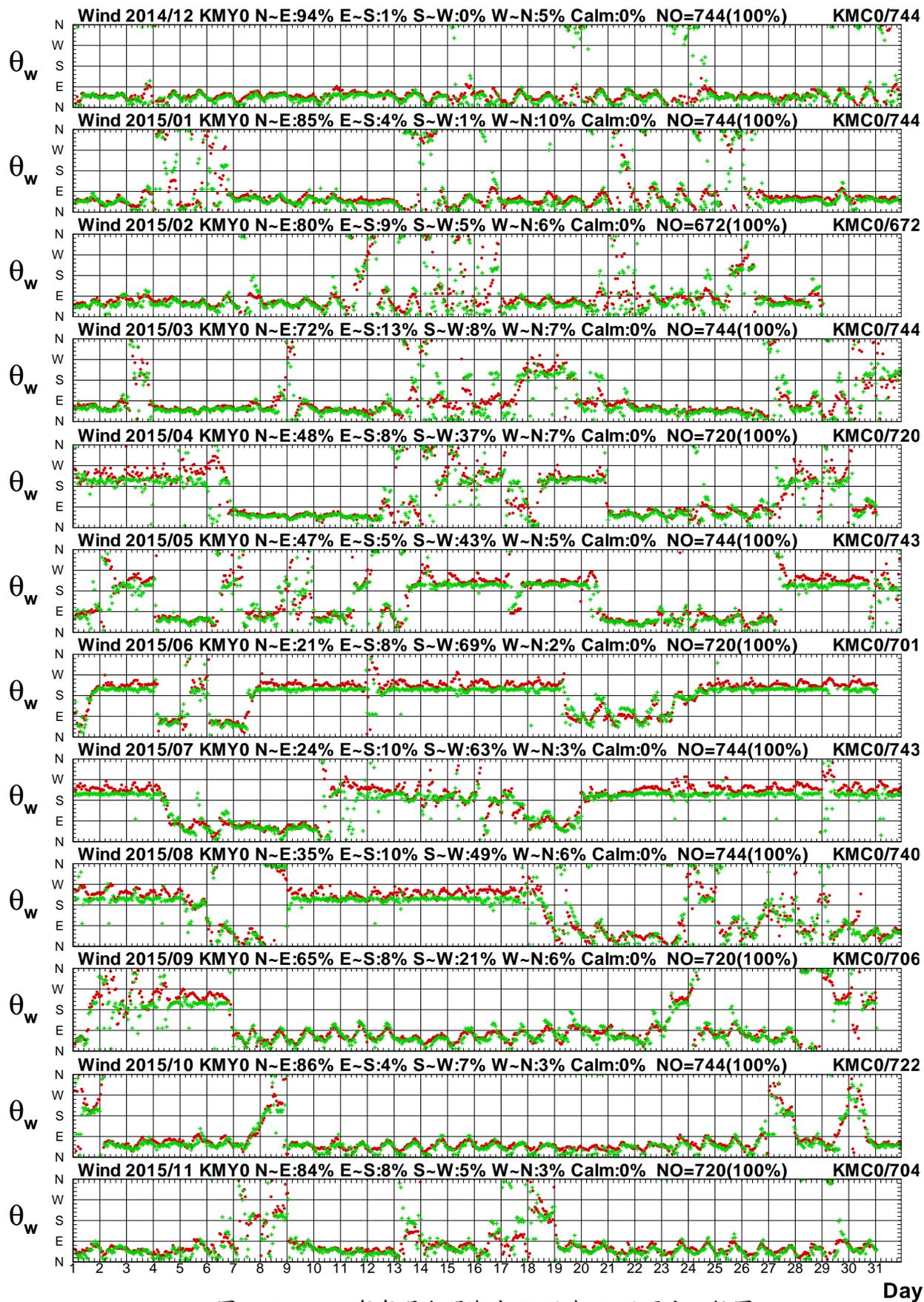


圖 1.4b 2015年每月金門海域 Y 站與 C 站風向比較圖

W14CKMY0.1HA W14CKMC0.1HO W151KMY0.1HA W151KMC0.1HO W152KMY0.1HA W152KMC0.1HO  
 W153KMY0.1HA W153KMC0.1HO W154KMY0.1HA W154KMC0.1HO W155KMY0.1HA W155KMC0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

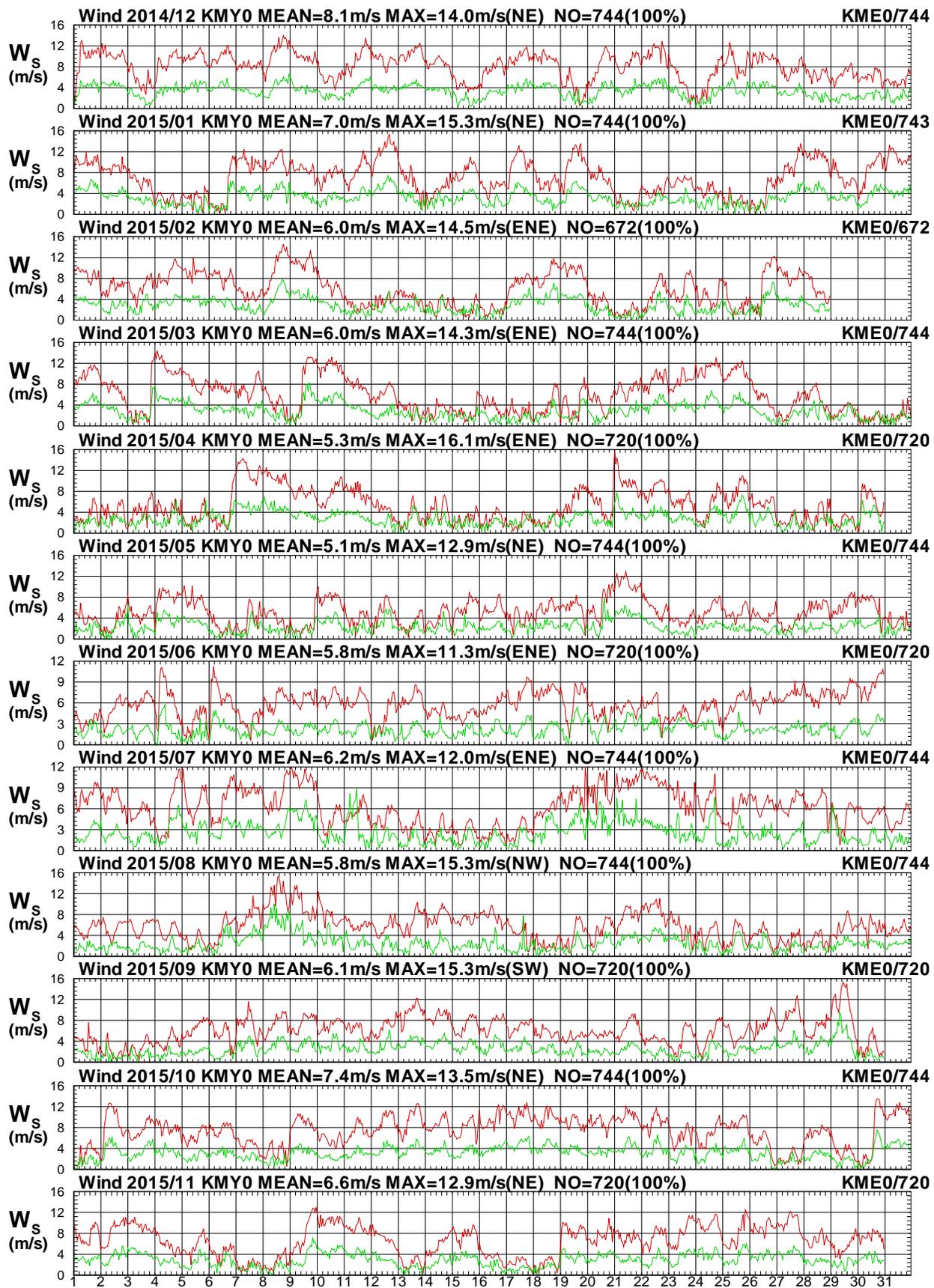


圖 1.5a 2015年每月金門海域 Y 站與 E 站風速比較圖

W14CKMY0.1HA W14CKME0.1HO W151KMY0.1HA W151KME0.1HO W152KMY0.1HA W152KME0.1HO  
 W153KMY0.1HA W153KME0.1HO W154KMY0.1HA W154KME0.1HO W155KMY0.1HA W155KME0.1HO

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# Wind Direction in Kin-Men seas of KMY0 at 2015

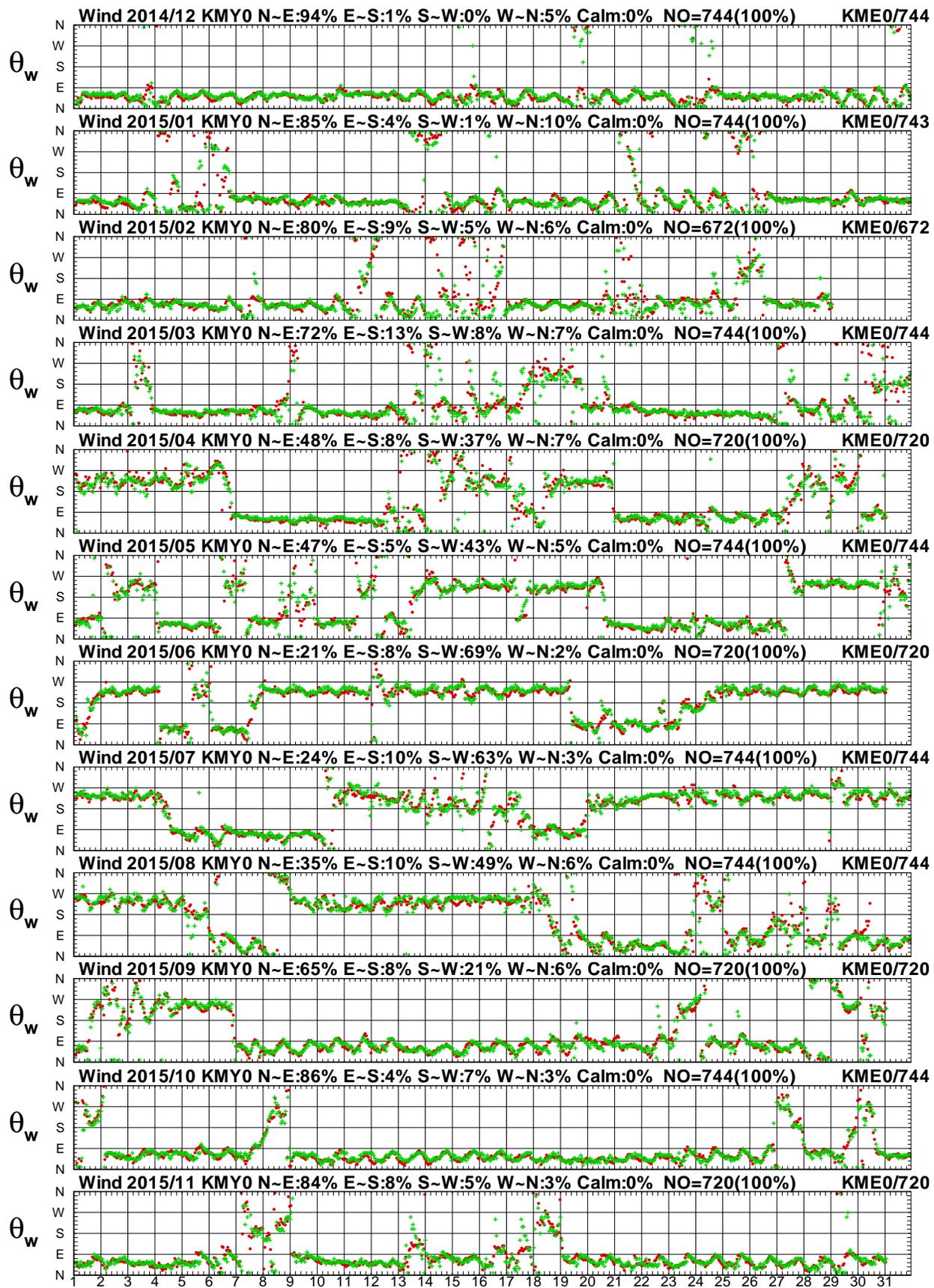


圖 1.5b 2015年每月金門海域 Y 站與 E 站風向比較圖

W14CKMY0.1HA W14CKME0.1HO W151KMY0.1HA W151KME0.1HO W152KMY0.1HA W152KME0.1HO  
 W153KMY0.1HA W153KME0.1HO W154KMY0.1HA W154KME0.1HO W155KMY0.1HA W155KME0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

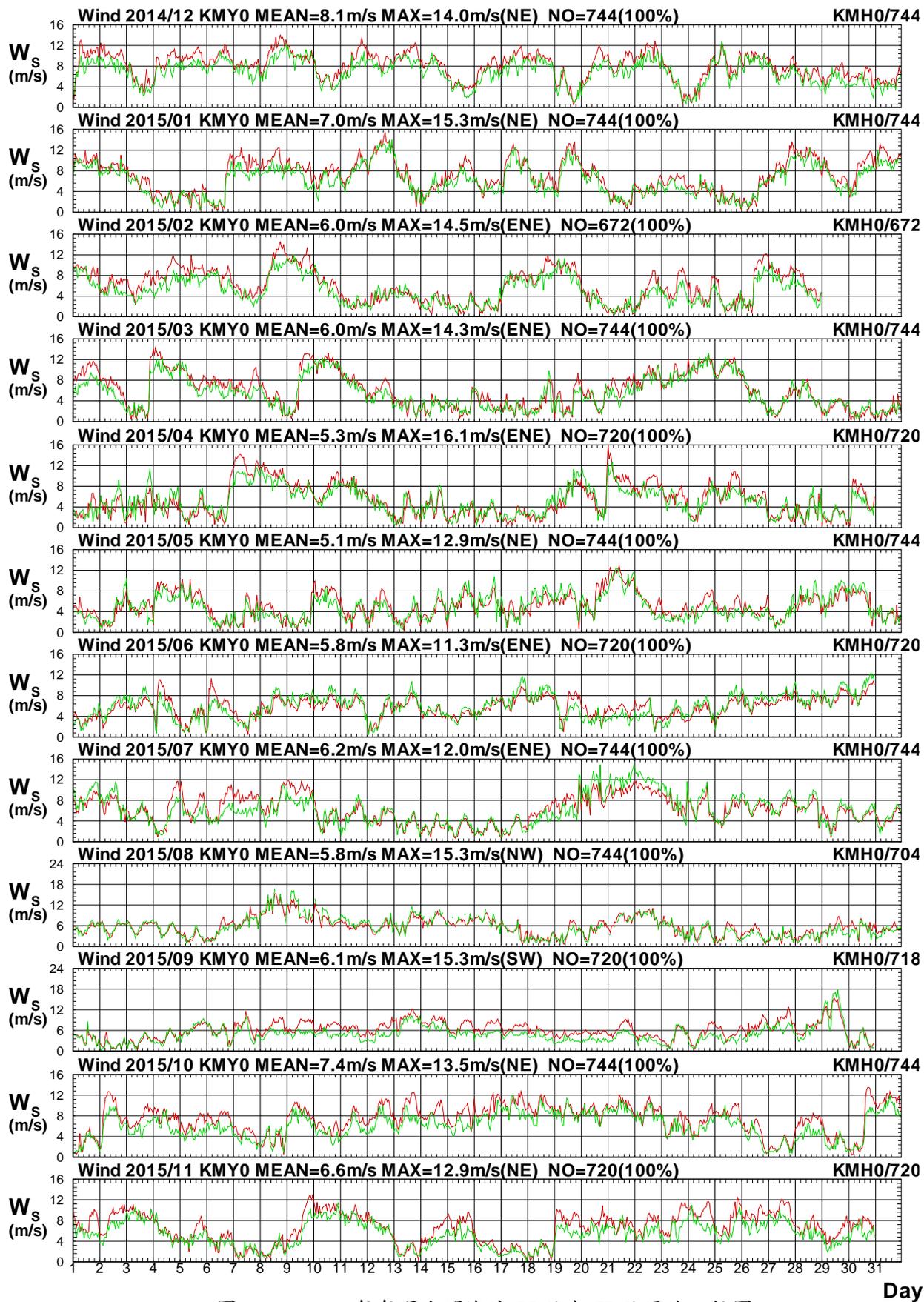


圖 1.6a 2015年每月金門海域 Y 站與 H 站風速比較圖

W14CKMY0.1HA W14CKMH0.1HO W151KMY0.1HA W151KMH0.1HO W152KMY0.1HA W152KMH0.1HO  
 W153KMY0.1HA W153KMH0.1HO W154KMY0.1HA W154KMH0.1HO W155KMY0.1HA W155KMH0.1HO

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# Wind Direction in Kin-Men seas of KMY0 at 2015

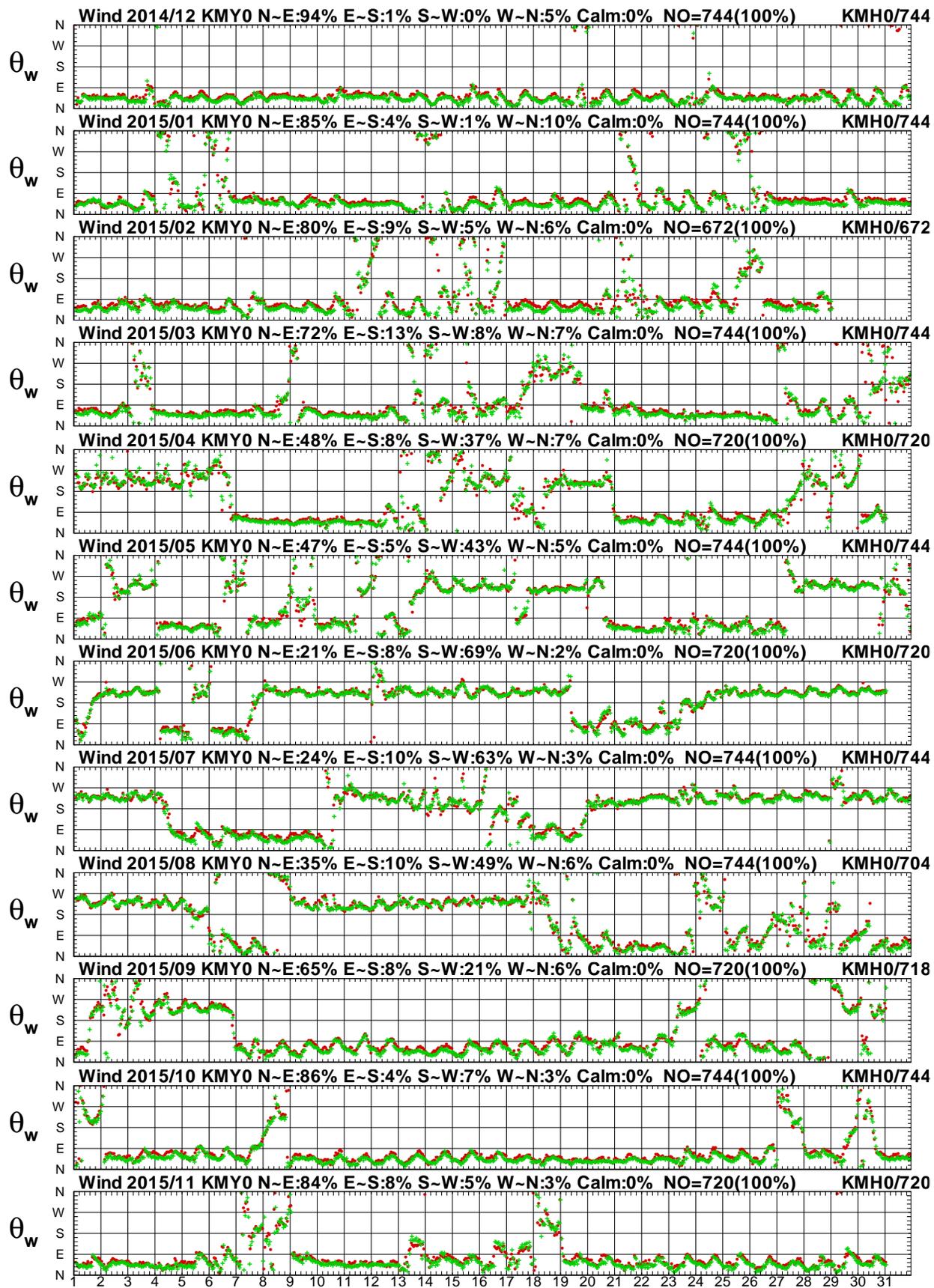


圖 1.6b 2015年每月金門海域 Y 站與 H 站風向比較圖

W14CKMY0.1HA W14CKMH0.1HO W151KMY0.1HA W151KMH0.1HO W152KMY0.1HA W152KMH0.1HO  
 W153KMY0.1HA W153KMH0.1HO W154KMY0.1HA W154KMH0.1HO W155KMY0.1HA W155KMH0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

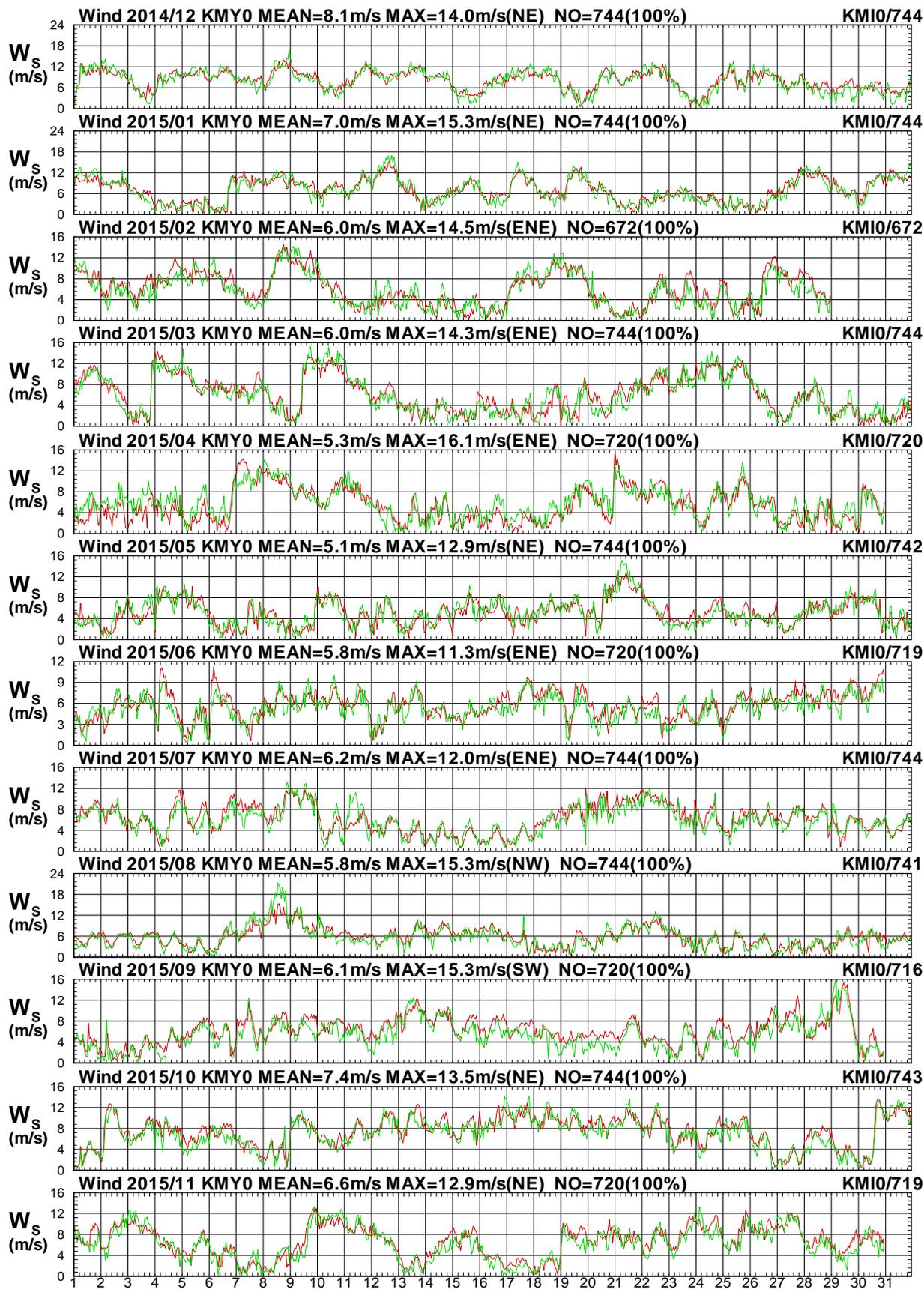


圖 1.7a 2015年每月金門海域 Y 站與 I 站風速比較圖

W14CKMY0.1HA W14CKMI0.1H0 W151KMY0.1HA W151KMI0.1H0 W152KMY0.1HA W152KMI0.1H0  
 W153KMY0.1HA W153KMI0.1H0 W154KMY0.1HA W154KMI0.1H0 W155KMY0.1HA W155KMI0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

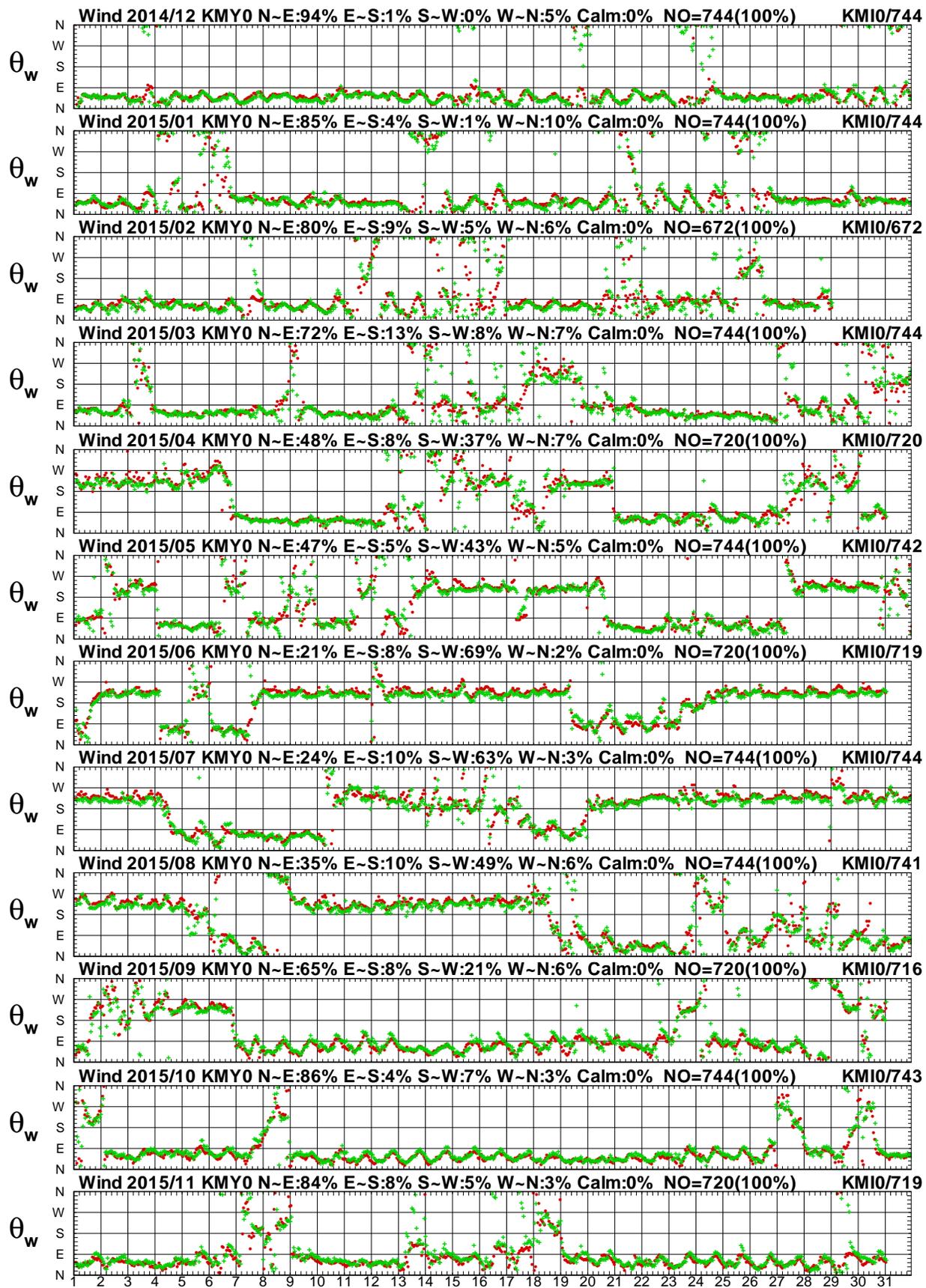


圖 1.7b 2015年每月金門海域 Y 站與 I 站風向比較圖

W14CKMY0.1HA W14CKMI0.1HO W151KMY0.1HA W151KMI0.1HO W152KMY0.1HA W152KMI0.1HO  
 W153KMY0.1HA W153KMI0.1HO W154KMY0.1HA W154KMI0.1HO W155KMY0.1HA W155KMI0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

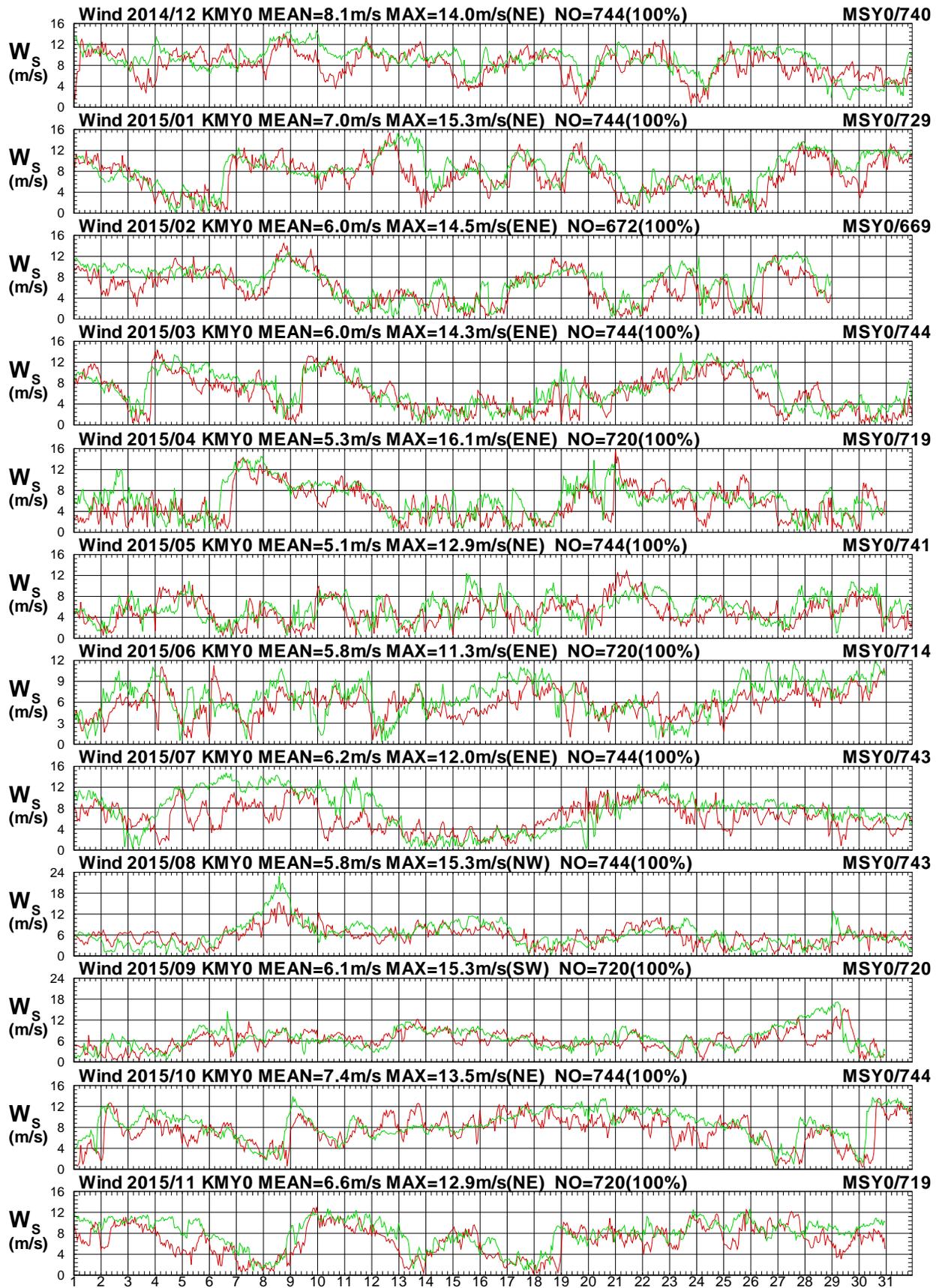


圖 1.8a 2015年每月金門海域 Y 站與馬祖海域 Y 站風速圖

W14CKMY0.1HA W14CMSY0.1H0 W151KMY0.1HA W151MSY0.1H0 W152KMY0.1HA W152MSY0.1H0  
 W153KMY0.1HA W153MSY0.1H0 W154KMY0.1HA W154MSY0.1H0 W155KMY0.1HA W155MSY0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

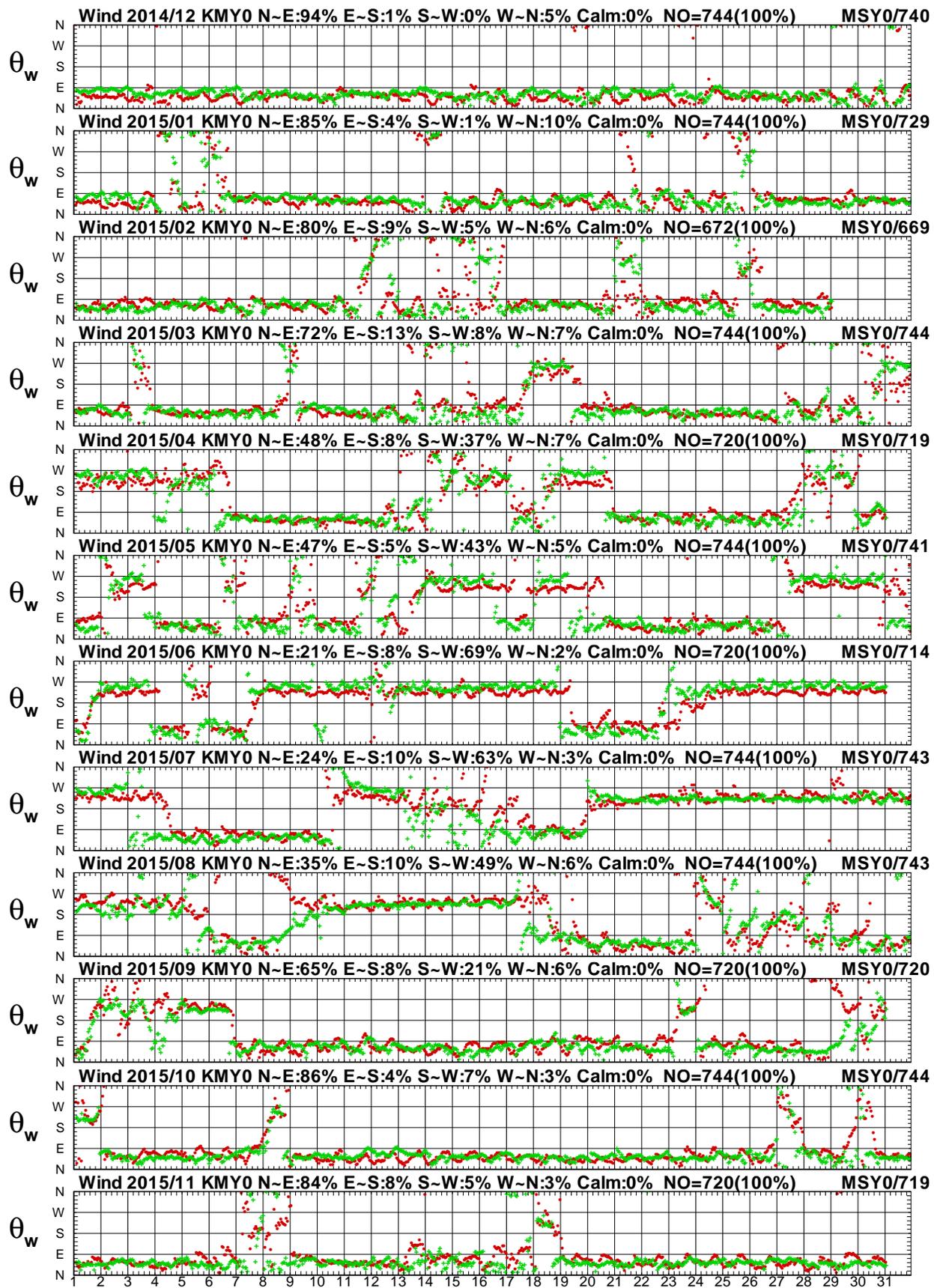


圖 1.8b 2015年每月金門海域 Y 站與馬祖海域 Y 站風向圖

W14CKMY0.1HA W14CMSY0.1HO W151KMY0.1HA W151MSY0.1HO W152KMY0.1HA W152MSY0.1HO  
 W153KMY0.1HA W153MSY0.1HO W154KMY0.1HA W154MSY0.1HO W155KMY0.1HA W155MSY0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

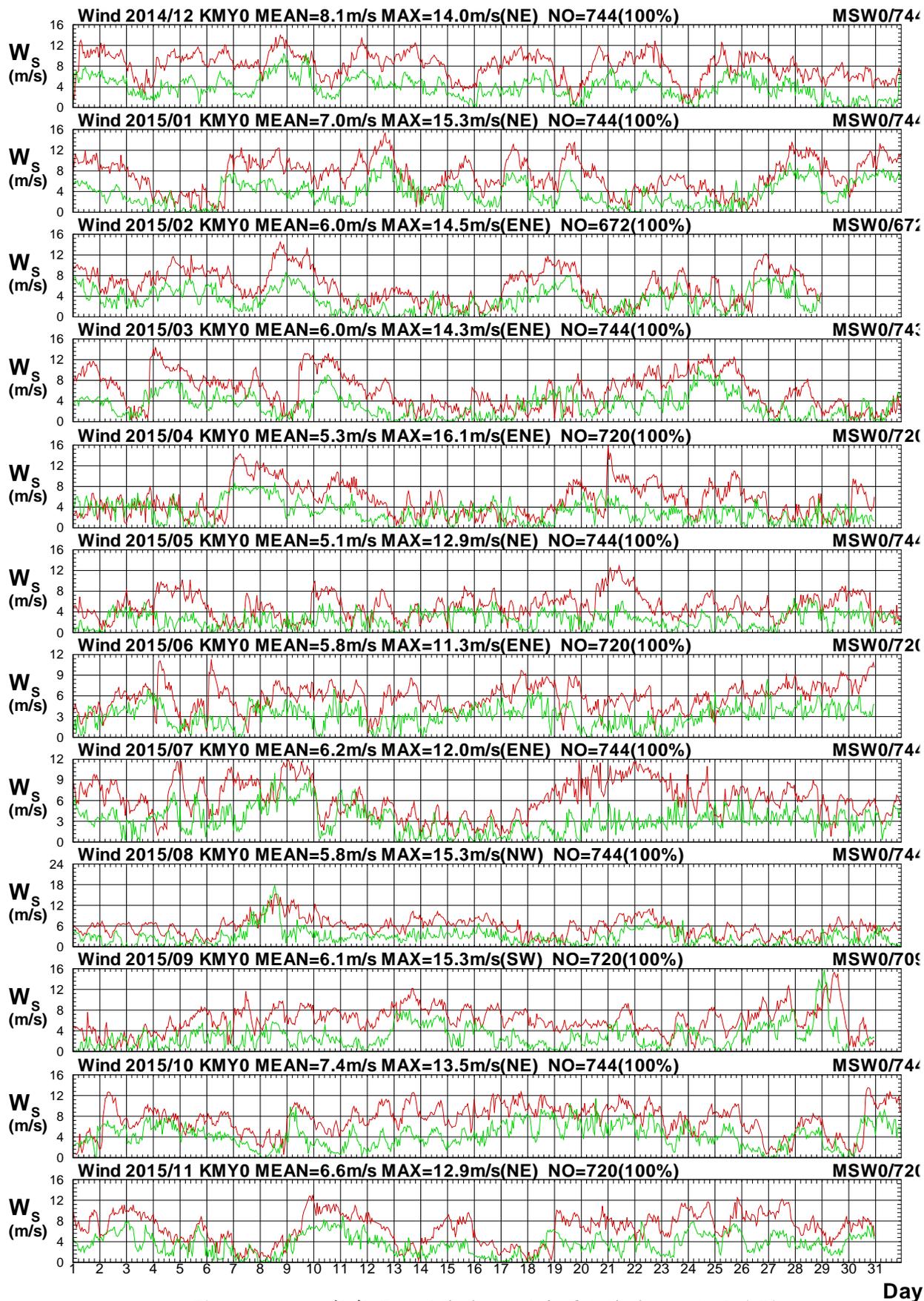


圖 1.9a 2015年每月金門海域 Y 站與馬祖海域 W 站風速圖

W14CKMY0.1HA W14CMSW0.1H0 W151KMY0.1HA W151MSW0.1H0 W152KMY0.1HA W152MSW0.1H0  
 W153KMY0.1HA W153MSW0.1H0 W154KMY0.1HA W154MSW0.1H0 W155KMY0.1HA W155MSW0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

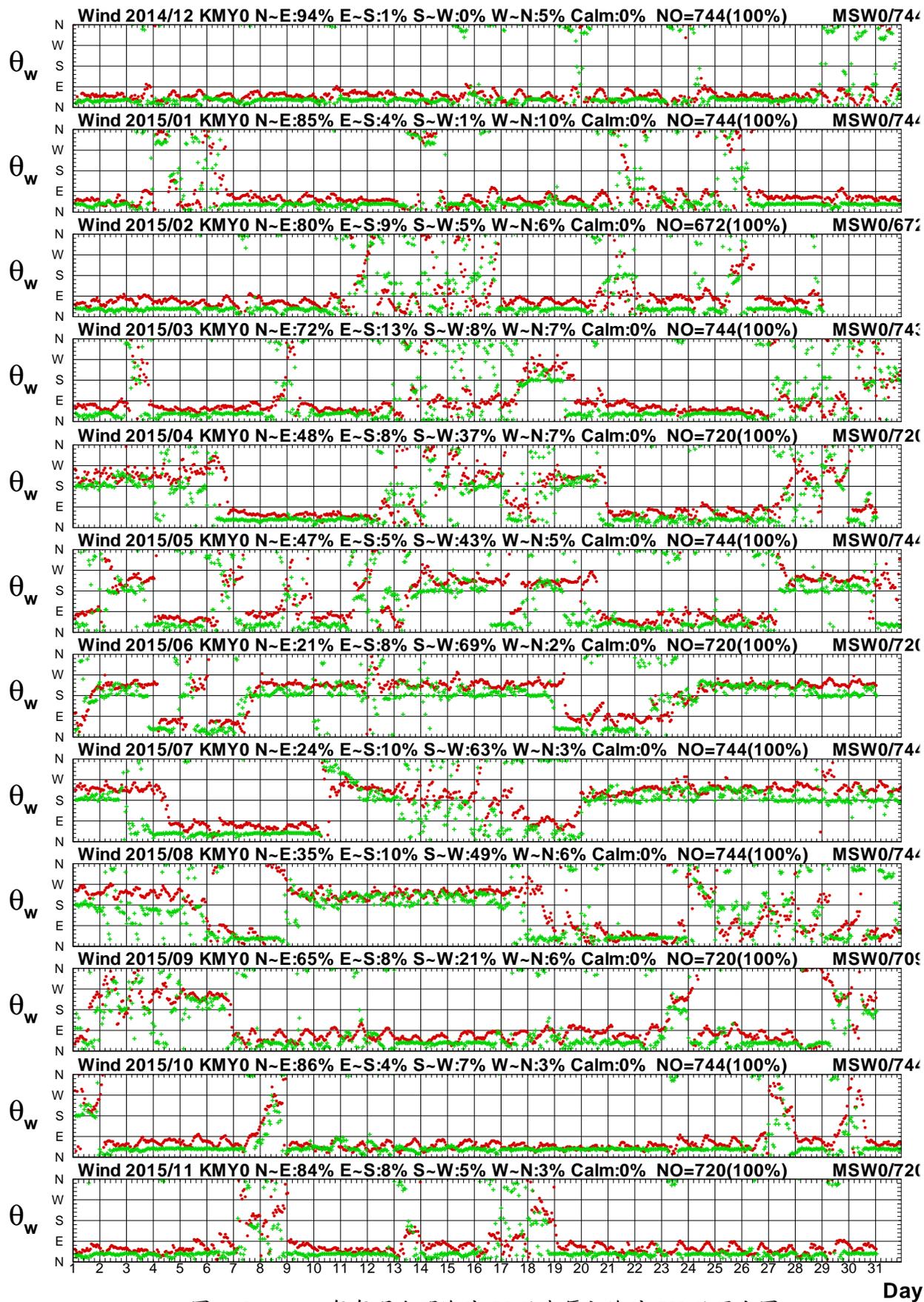


圖 1.9b 2015年每月金門海域 Y 站與馬祖海域 W 站風向圖

W14CKMY0.1HA W14CMSW0.1H0 W151KMY0.1HA W151MSW0.1H0 W152KMY0.1HA W152MSW0.1H0  
 W153KMY0.1HA W153MSW0.1H0 W154KMY0.1HA W154MSW0.1H0 W155KMY0.1HA W155MSW0.1H0

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# Wind Speed in Kin-Men seas of KMY0 at 2015

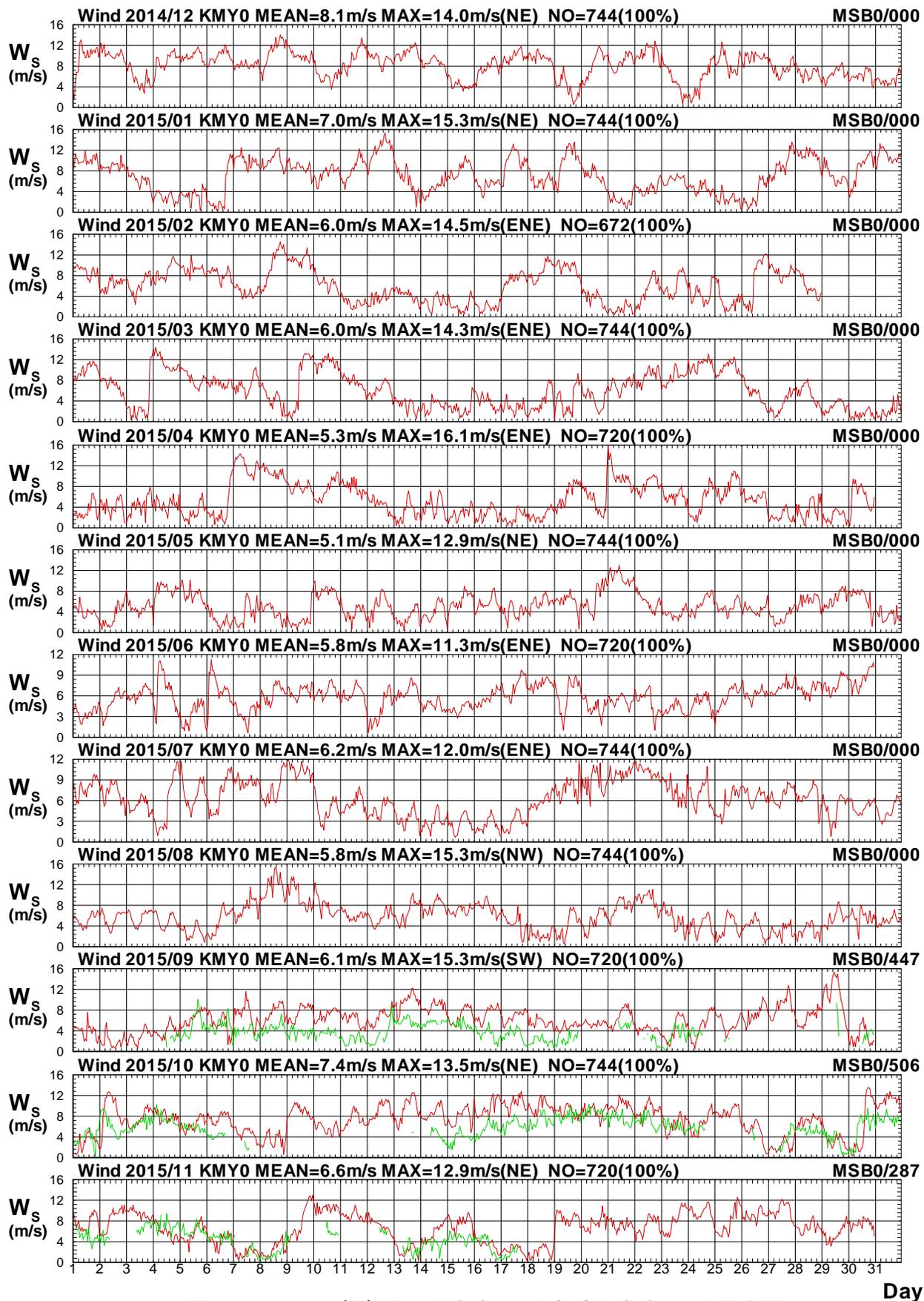


圖 1.10a 2015年每月金門海域 Y 站與馬祖海域 B 站風速圖

W14CKMY0.1HA W14CMSB0.1H0 W151KMY0.1HA W151MSB0.1H0 W152KMY0.1HA W152MSB0.1H0  
 W153KMY0.1HA W153MSB0.1H0 W154KMY0.1HA W154MSB0.1H0 W155KMY0.1HA W155MSB0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

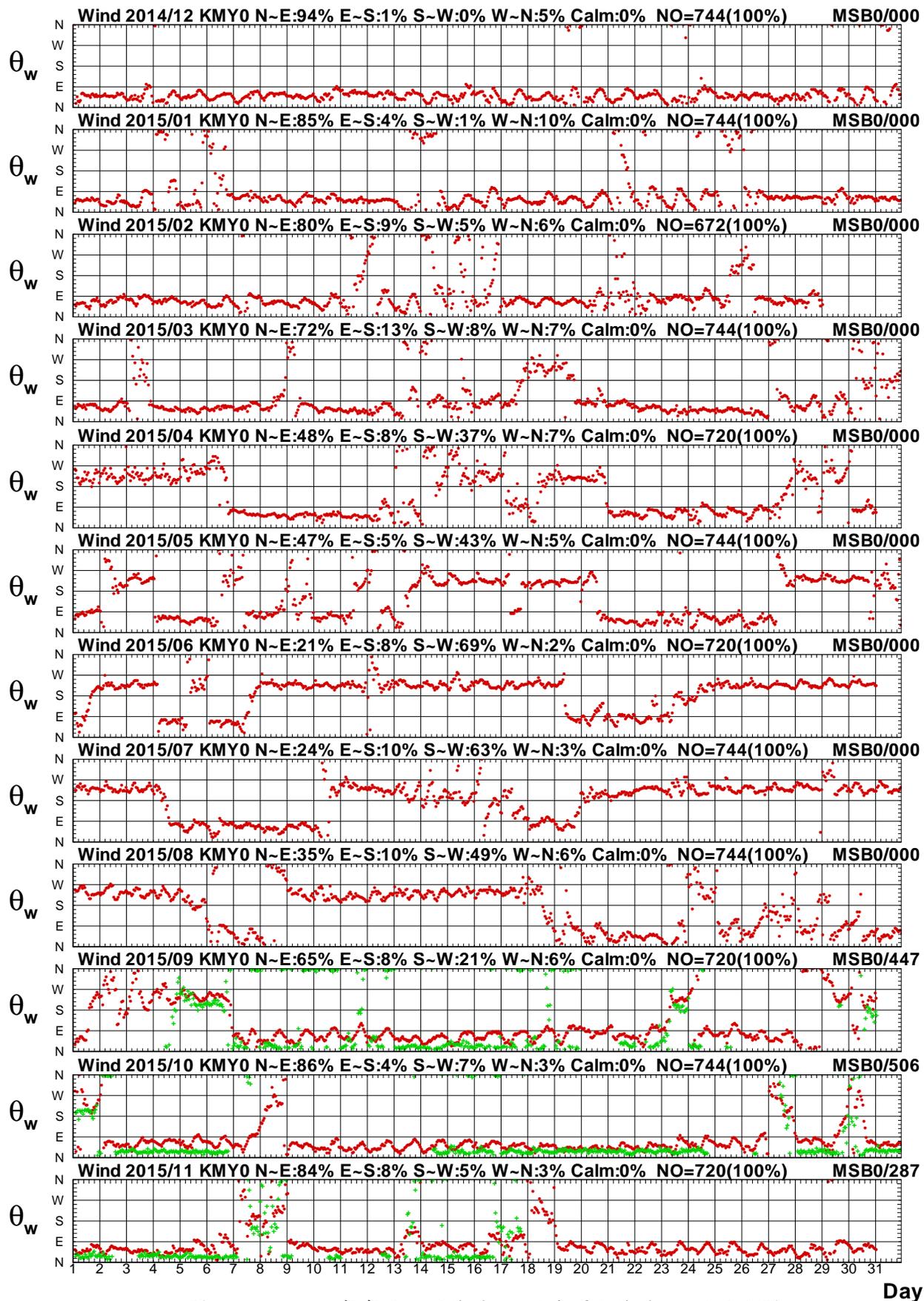


圖 1.10b 2015年每月金門海域 Y 站與馬祖海域 B 站風向圖

W14CKMY0.1HA W14CMSB0.1HO W151KMY0.1HA W151MSB0.1HO W152KMY0.1HA W152MSB0.1HO  
 W153KMY0.1HA W153MSB0.1HO W154KMY0.1HA W154MSB0.1HO W155KMY0.1HA W155MSB0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

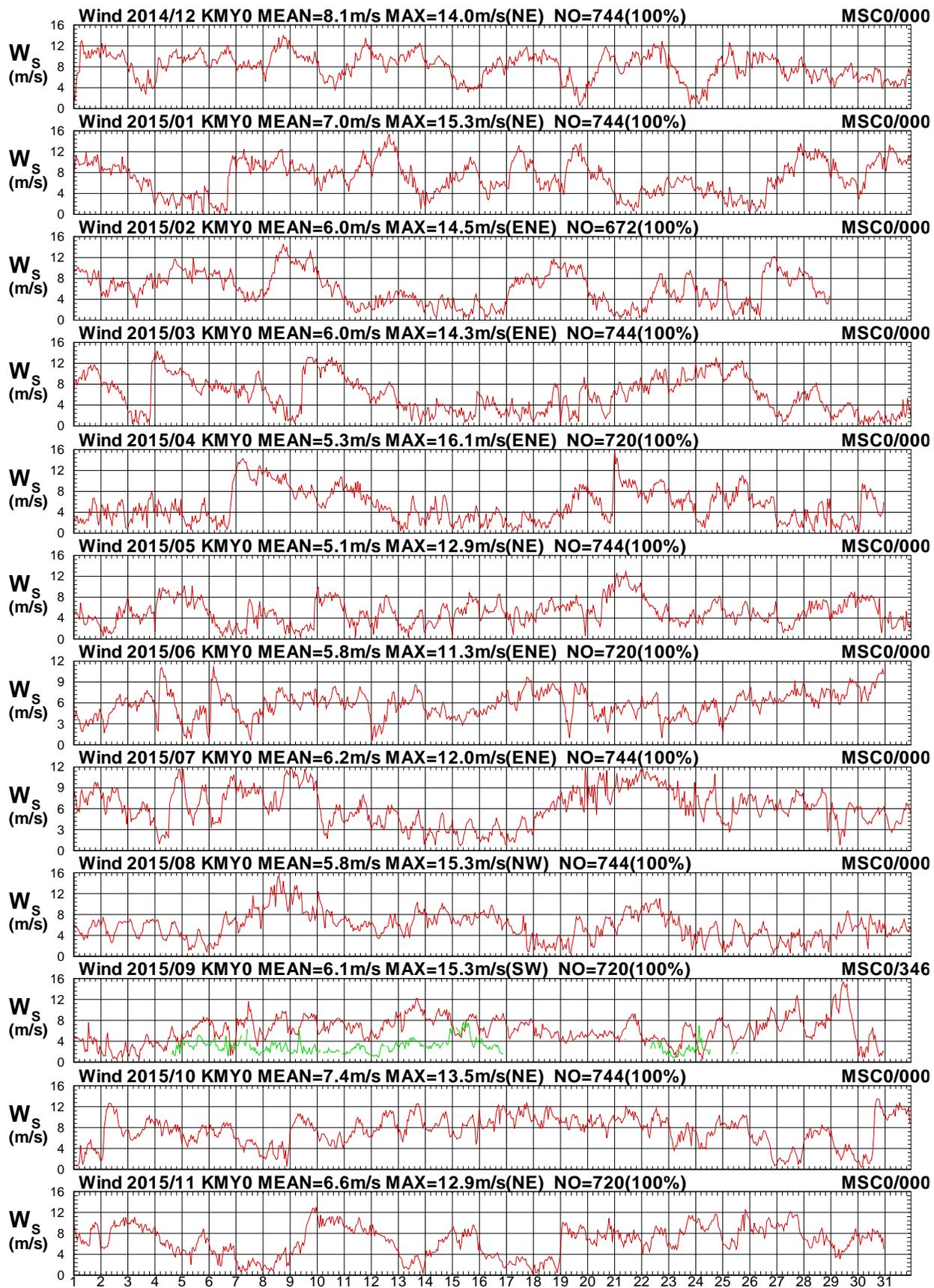


圖 1.11a 2015年每月金門海域 Y 站與馬祖海域 C 站風速圖

W14CKMY0.1HA W14CMSC0.1HO W151KMY0.1HA W151MSC0.1HO W152KMY0.1HA W152MSC0.1HO  
 W153KMY0.1HA W153MSC0.1HO W154KMY0.1HA W154MSC0.1HO W155KMY0.1HA W155MSC0.1HO

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# Wind Direction in Kin-Men seas of KMY0 at 2015

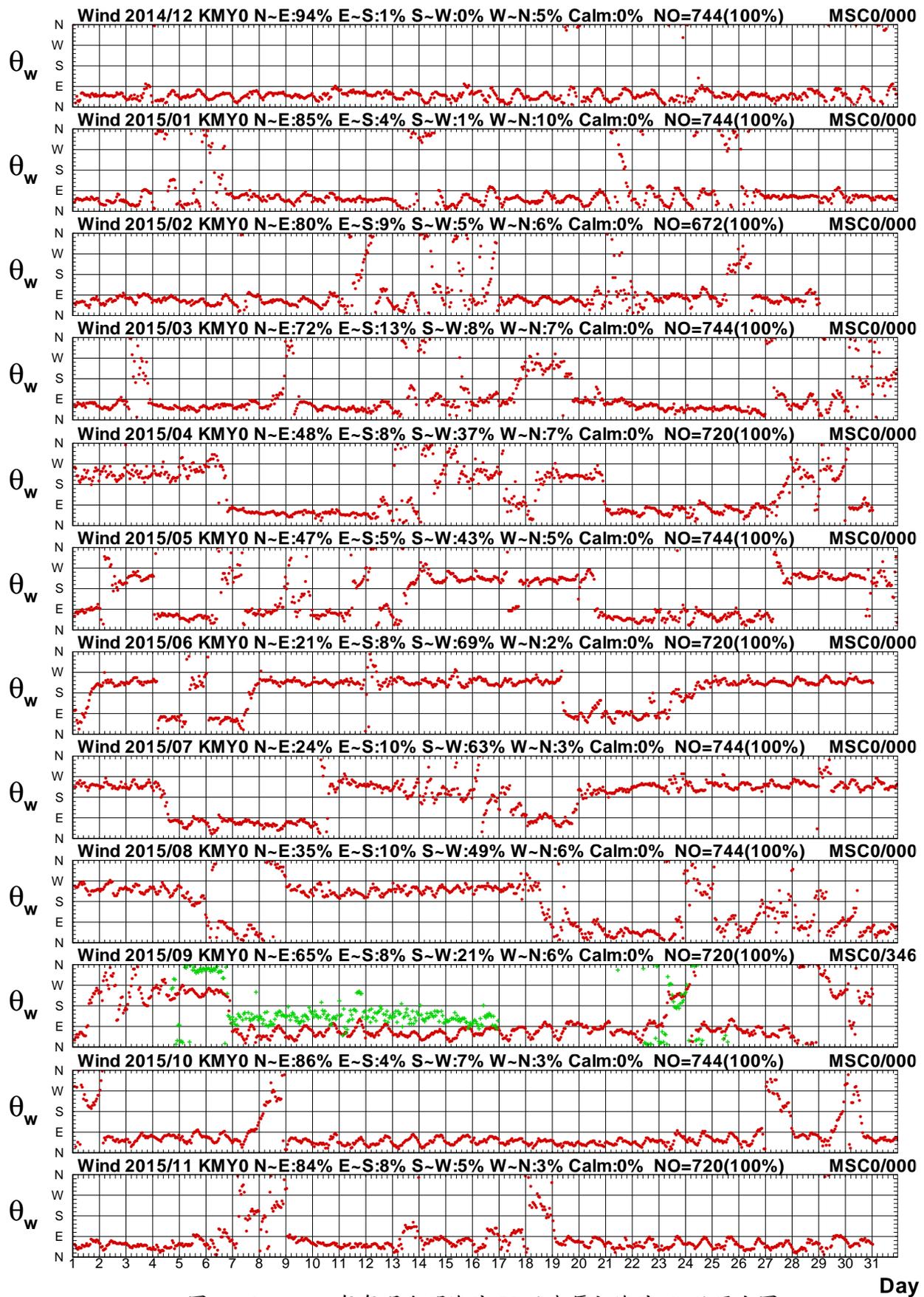


圖 1.11b 2015年每月金門海域 Y 站與馬祖海域 C 站風向圖

W14CKMY0.1HA W14CMSC0.1HO W151KMY0.1HA W151MSC0.1HO W152KMY0.1HA W152MSC0.1HO  
 W153KMY0.1HA W153MSC0.1HO W154KMY0.1HA W154MSC0.1HO W155KMY0.1HA W155MSC0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

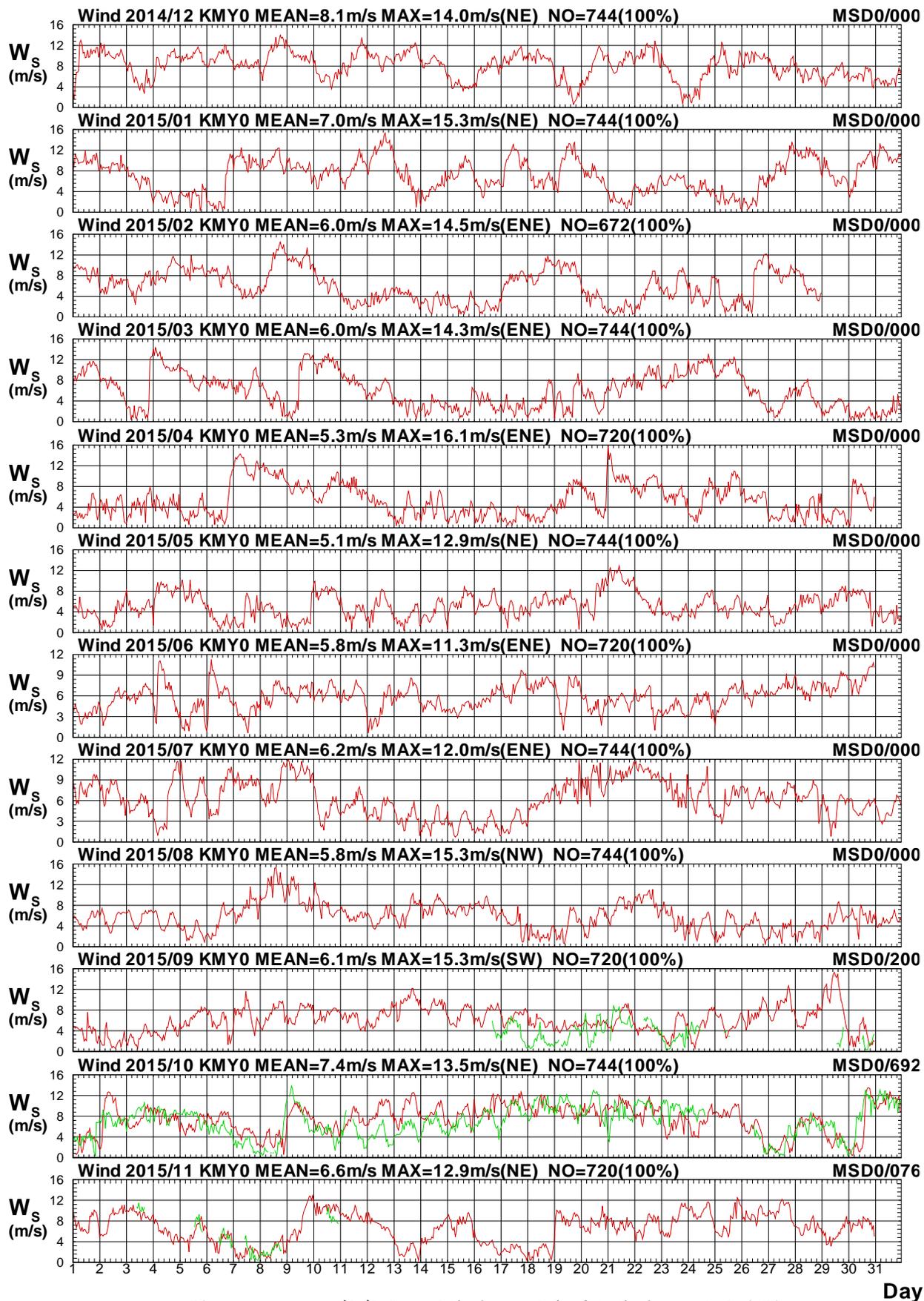


圖 1.12a 2015年每月金門海域 Y 站與馬祖海域 D 站風速圖

W14CKMY0.1HA W14CMSD0.1H0 W151KMY0.1HA W151MSD0.1H0 W152KMY0.1HA W152MSD0.1H0  
 W153KMY0.1HA W153MSD0.1H0 W154KMY0.1HA W154MSD0.1H0 W155KMY0.1HA W155MSD0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

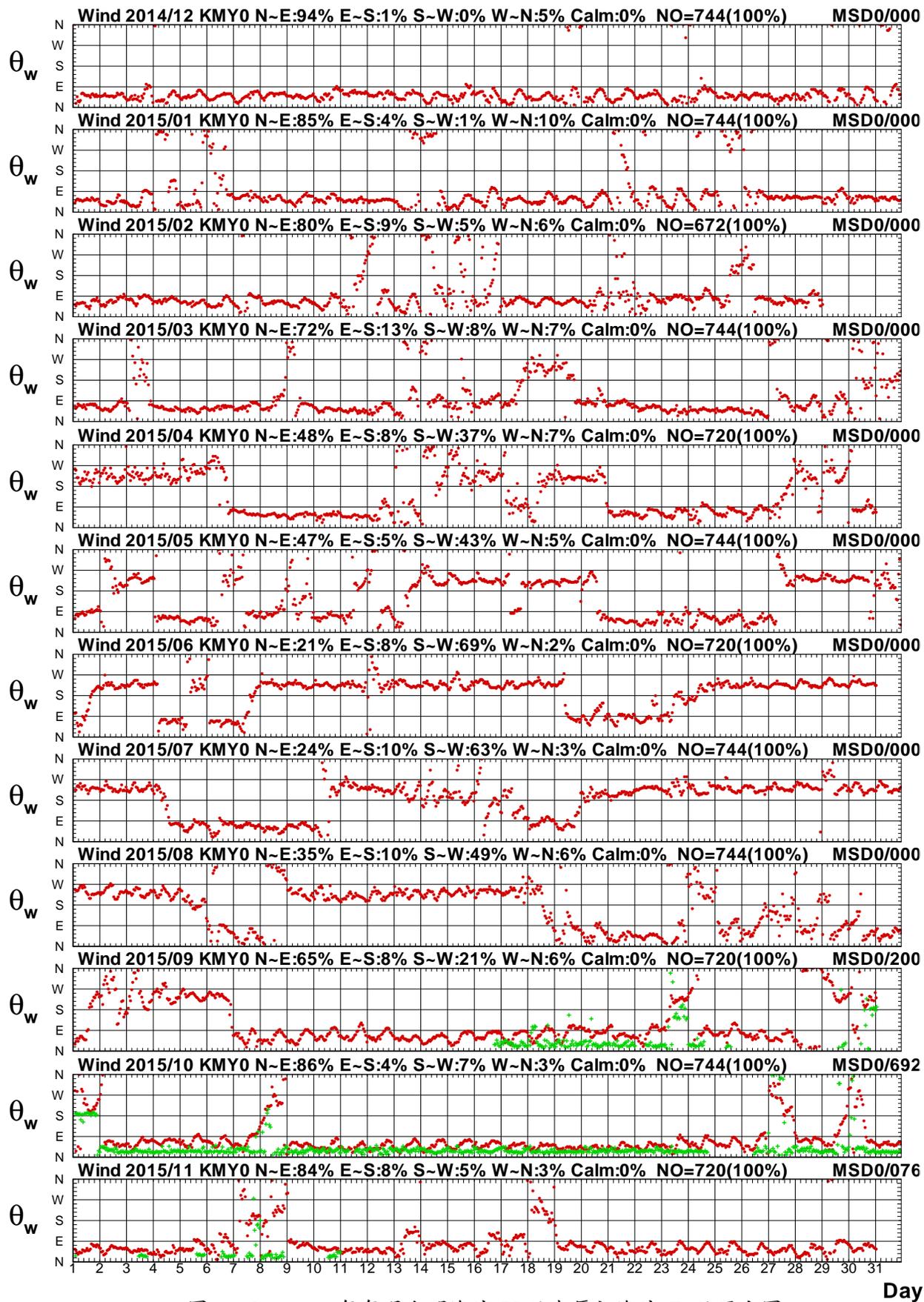


圖 1.12b 2015年每月金門海域 Y 站與馬祖海域 D 站風向圖

W14CKMY0.1HA W14CMSD0.1H0 W151KMY0.1HA W151MSD0.1H0 W152KMY0.1HA W152MSD0.1H0  
 W153KMY0.1HA W153MSD0.1H0 W154KMY0.1HA W154MSD0.1H0 W155KMY0.1HA W155MSD0.1H0

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# Wind Speed in Kin-Men seas of KMY0 at 2015

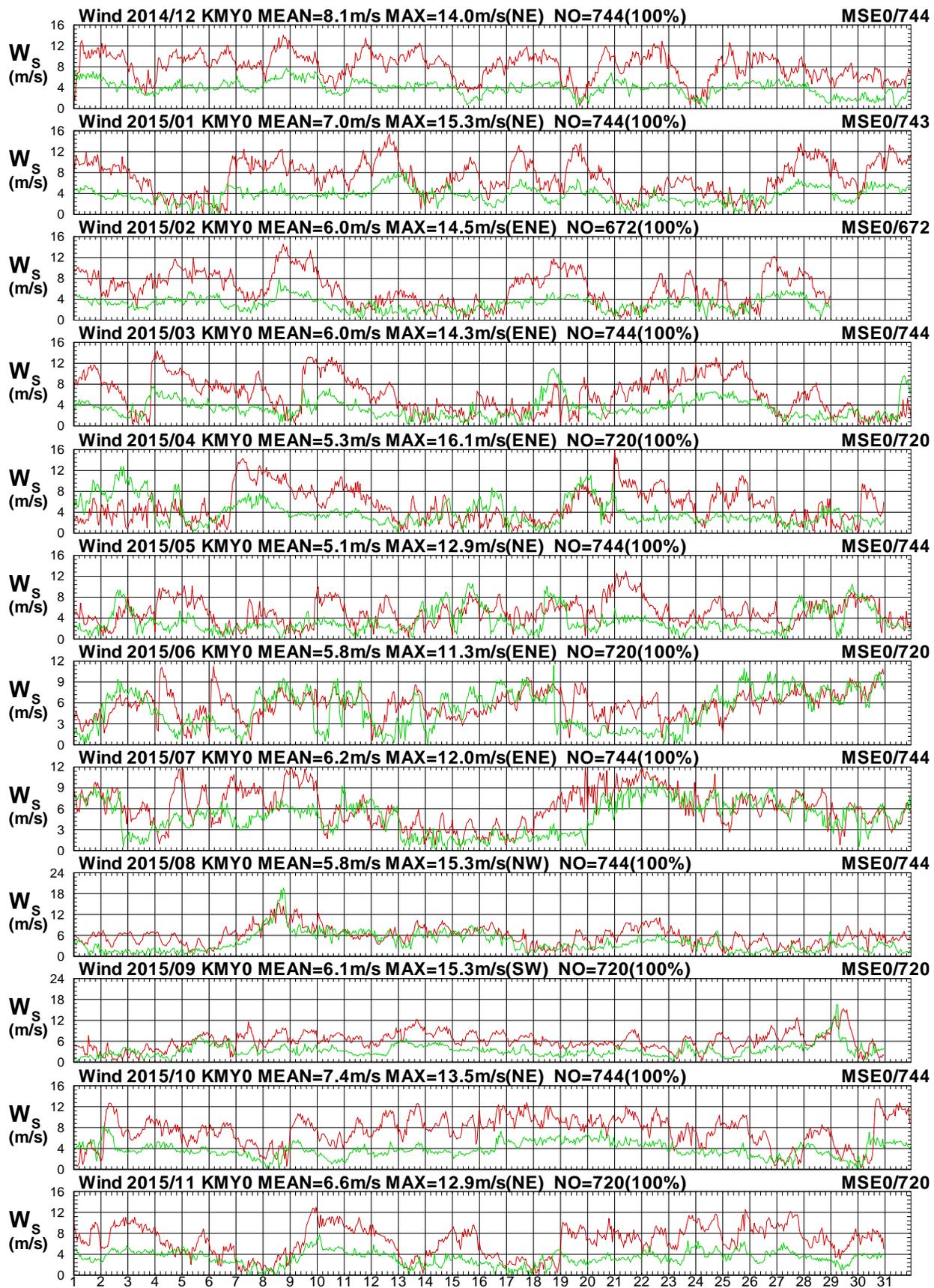


圖 1.13a 2015年每月金門海域 Y 站與馬祖海域 E 站風速圖

W14CKMY0.1HA W14CMSE0.1H0 W151KMY0.1HA W151MSE0.1H0 W152KMY0.1HA W152MSE0.1H0  
 W153KMY0.1HA W153MSE0.1H0 W154KMY0.1HA W154MSE0.1H0 W155KMY0.1HA W155MSE0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

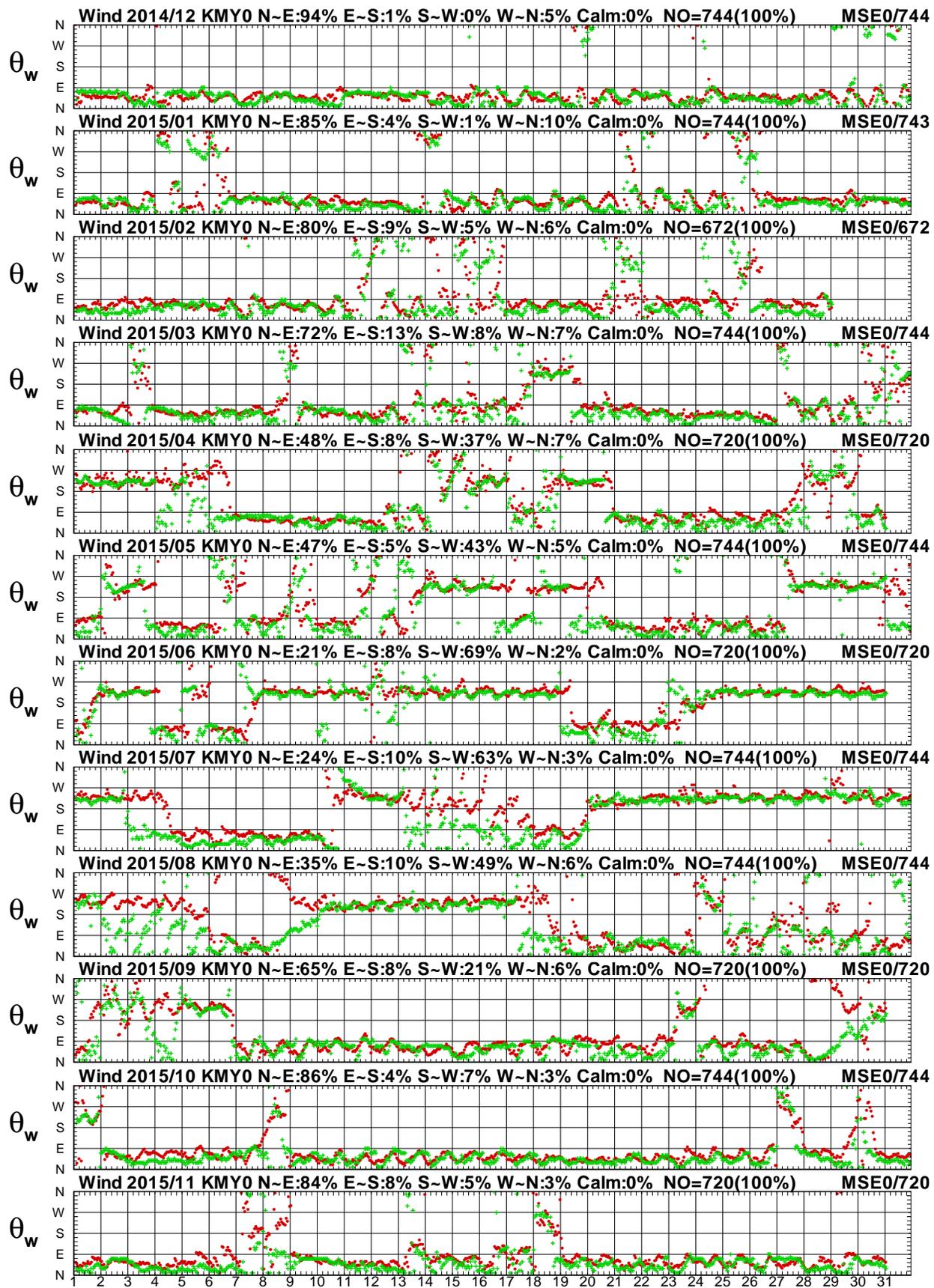


圖 1.13b 2015年每月金門海域 Y 站與馬祖海域 E 站風向圖

W14CKMY0.1HA W14CMSE0.1H0 W151KMY0.1HA W151MSE0.1H0 W152KMY0.1HA W152MSE0.1H0  
 W153KMY0.1HA W153MSE0.1H0 W154KMY0.1HA W154MSE0.1H0 W155KMY0.1HA W155MSE0.1H0

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# Wind Speed in Kin-Men seas of KMY0 at 2015

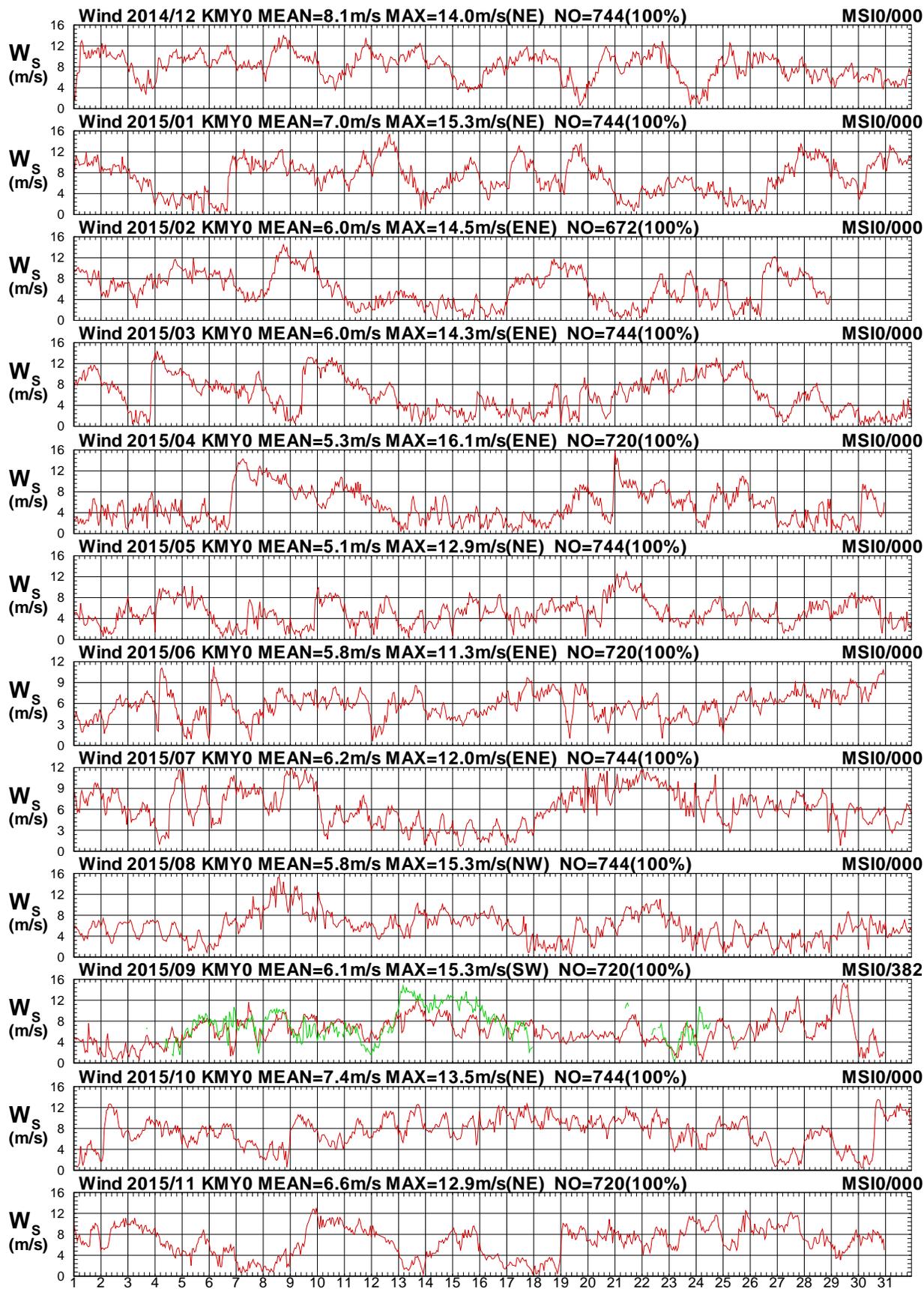


圖 1.14a 2015年每月金門海域 Y 站與馬祖海域 I 站風速圖

W14CKMY0.1HA W14CMSIO.1H0 W151KMY0.1HA W151MSIO.1H0 W152KMY0.1HA W152MSIO.1H0  
 W153KMY0.1HA W153MSIO.1H0 W154KMY0.1HA W154MSIO.1H0 W155KMY0.1HA W155MSIO.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

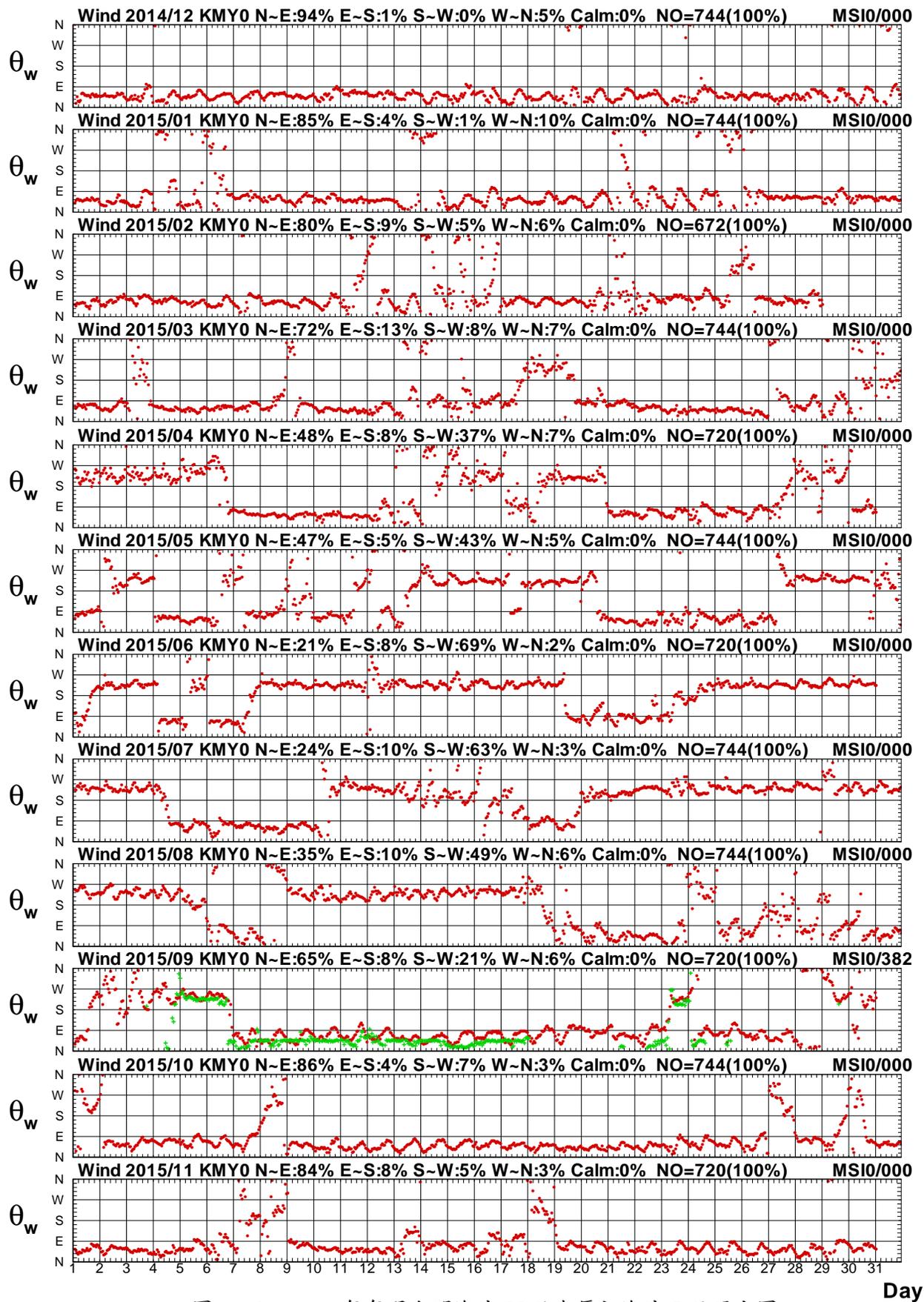


圖 1.14b 2015年每月金門海域 Y 站與馬祖海域 I 站風向圖

W14CKMY0.1HA W14CMSI0.1H0 W151KMY0.1HA W151MSI0.1H0 W152KMY0.1HA W152MSI0.1H0  
 W153KMY0.1HA W153MSI0.1H0 W154KMY0.1HA W154MSI0.1H0 W155KMY0.1HA W155MSI0.1H0

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# Wind Speed in Kin-Men seas of KMY0 at 2015

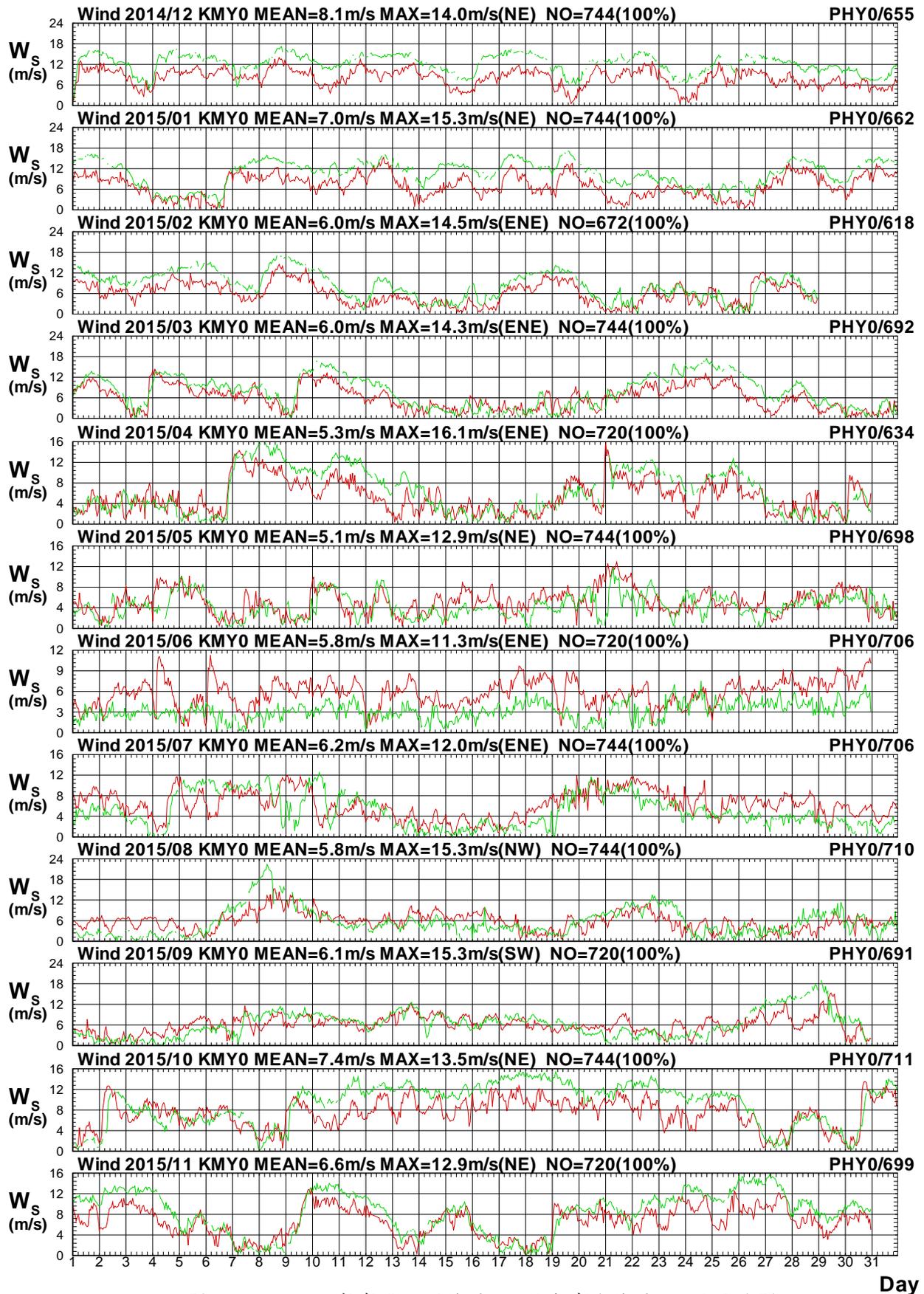


圖 1.15a 2015年每月金門海域 Y 站與澎湖海域 Y 站風速圖

W14CKMY0.1HA W14CPHY0.1H0 W151KMY0.1HA W151PHY0.1H0 W152KMY0.1HA W152PHY0.1H0  
 W153KMY0.1HA W153PHY0.1H0 W154KMY0.1HA W154PHY0.1H0 W155KMY0.1HA W155PHY0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

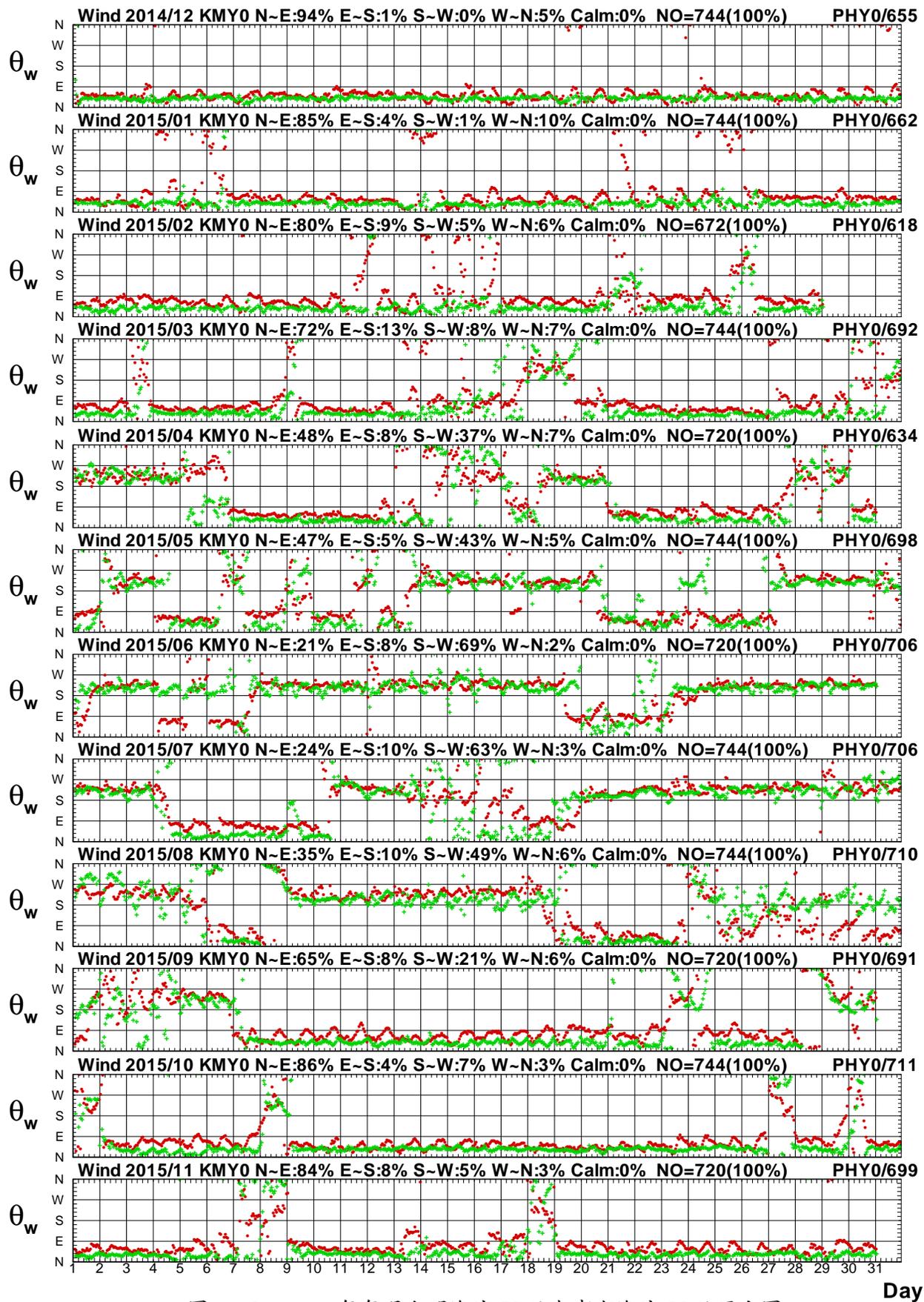


圖 1.15b 2015年每月金門海域 Y 站與澎湖海域 Y 站風向圖

W14CKMY0.1HA W14CPHY0.1HO W151KMY0.1HA W151PHY0.1HO W152KMY0.1HA W152PHY0.1HO  
 W153KMY0.1HA W153PHY0.1HO W154KMY0.1HA W154PHY0.1HO W155KMY0.1HA W155PHY0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

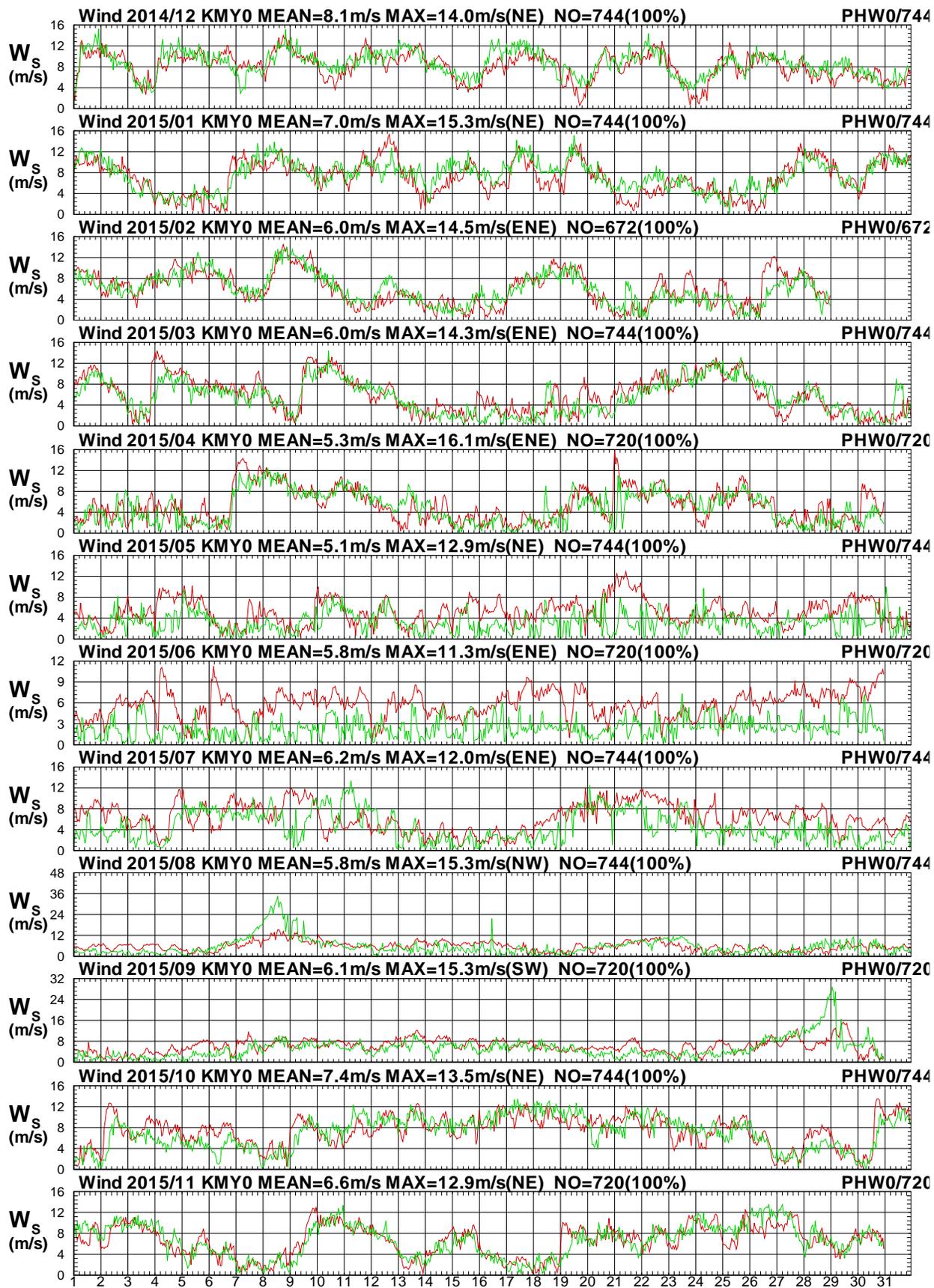


圖 1.16a 2015年每月金門海域 Y 站與澎湖海域 W 站風速圖

W14CKMY0.1HA W14CPHW0.1H0 W151KMY0.1HA W151PHW0.1H0 W152KMY0.1HA W152PHW0.1HD  
 W153KMY0.1HA W153PHW0.1H0 W154KMY0.1HA W154PHW0.1H0 W155KMY0.1HA W155PHW0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

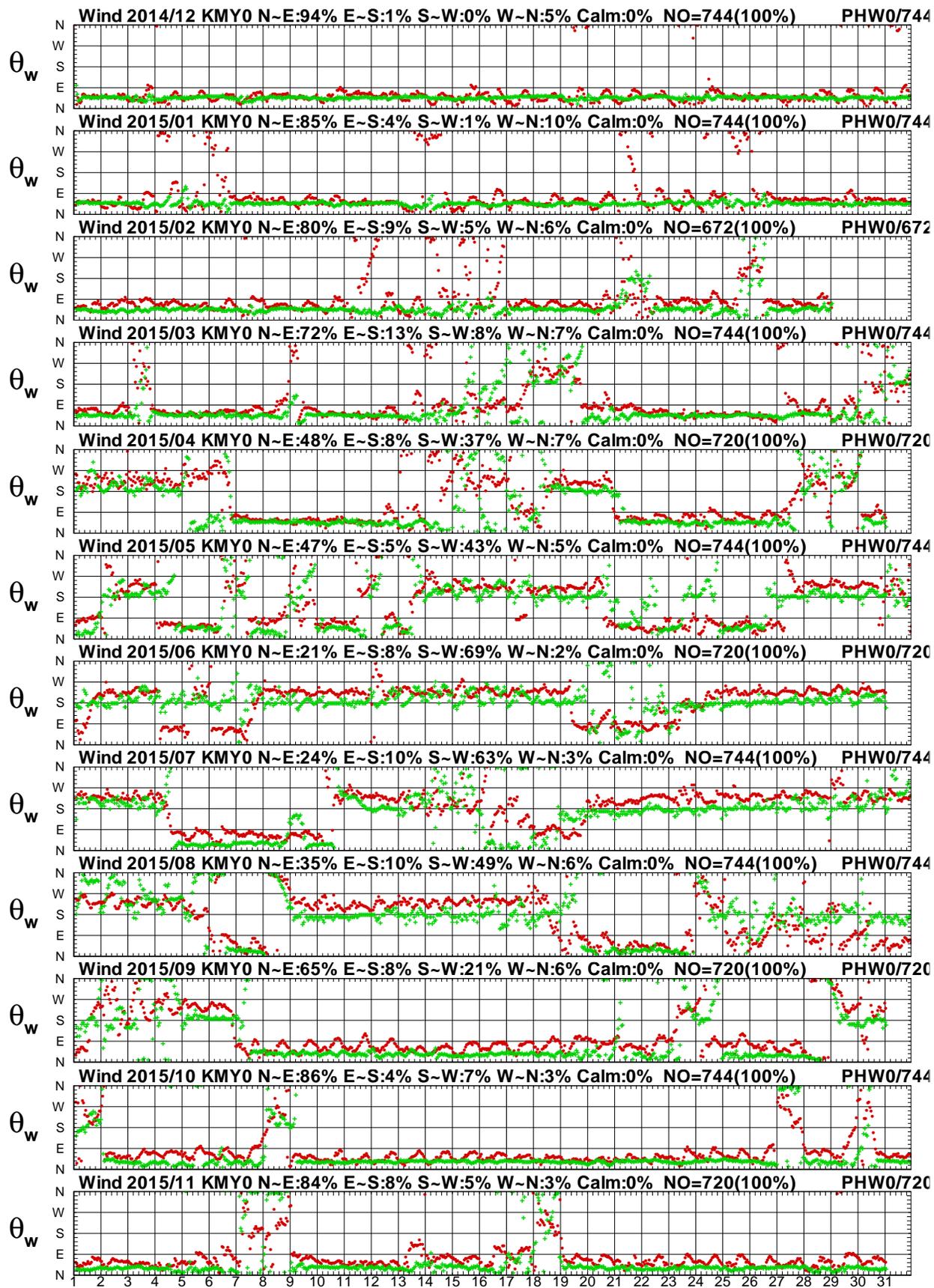


圖 1.16b 2015年每月金門海域 Y 站與澎湖海域 W 站風向圖

W14CKMY0.1HA W14CPHW0.1H0 W151KMY0.1HA W151PHW0.1H0 W152KMY0.1HA W152PHW0.1HD  
 W153KMY0.1HA W153PHW0.1H0 W154KMY0.1HA W154PHW0.1H0 W155KMY0.1HA W155PHW0.1H0

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# Wind Speed in Kin-Men seas of KMY0 at 2015

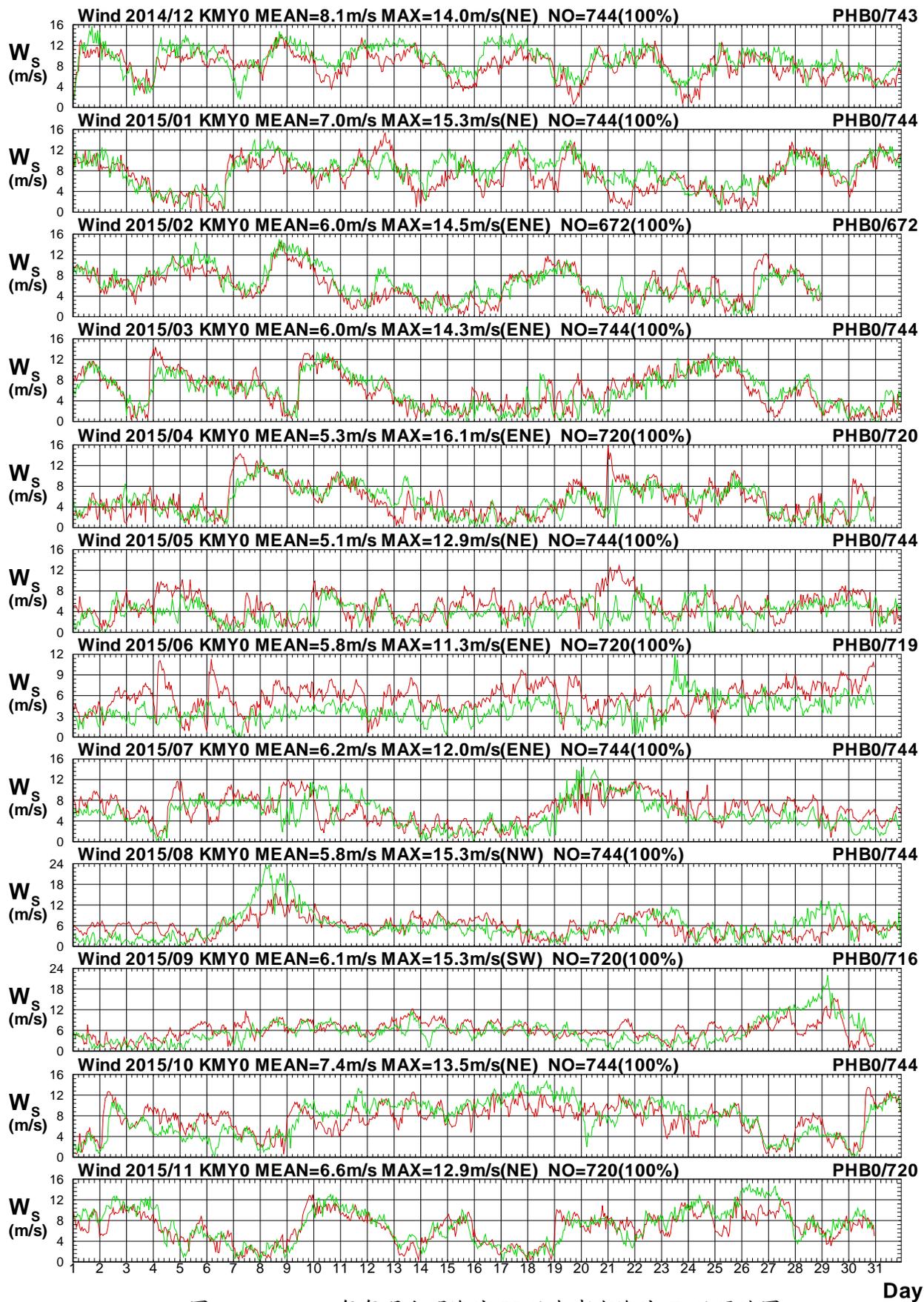


圖 1.17a 2015年每月金門海域 Y 站與澎湖海域 B 站風速圖

W14CKMY0.1HA W14CPHB0.1HO W151KMY0.1HA W151PHB0.1HO W152KMY0.1HA W152PHB0.1HO  
 W153KMY0.1HA W153PHB0.1HO W154KMY0.1HA W154PHB0.1HO W155KMY0.1HA W155PHB0.1HO

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# Wind Direction in Kin-Men seas of KMY0 at 2015

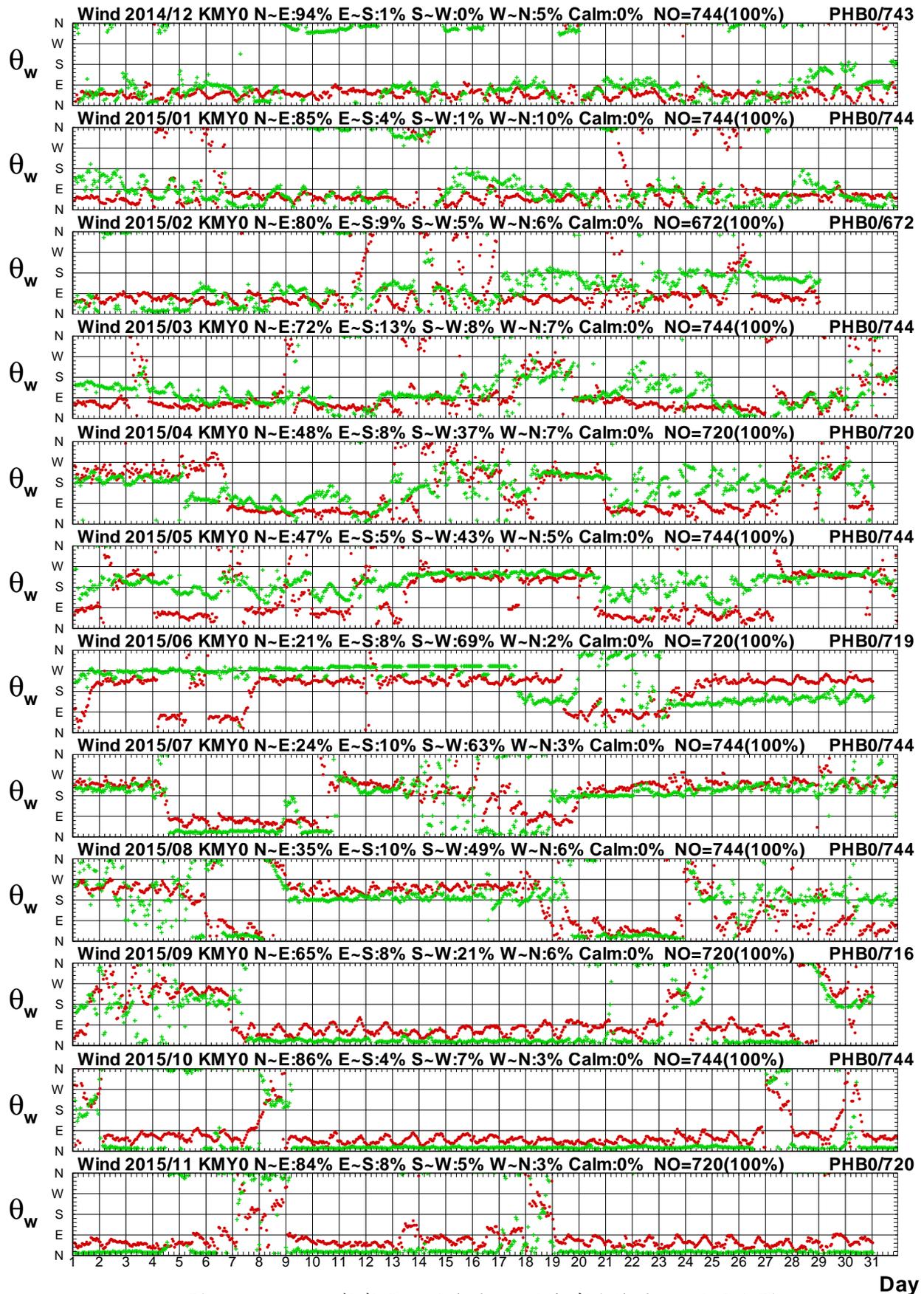


圖 1.17b 2015年每月金門海域 Y 站與澎湖海域 B 站風向圖

W14CKMY0.1HA W14CPHB0.1HO W151KMY0.1HA W151PHB0.1HO W152KMY0.1HA W152PHB0.1HO  
 W153KMY0.1HA W153PHB0.1HO W154KMY0.1HA W154PHB0.1HO W155KMY0.1HA W155PHB0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

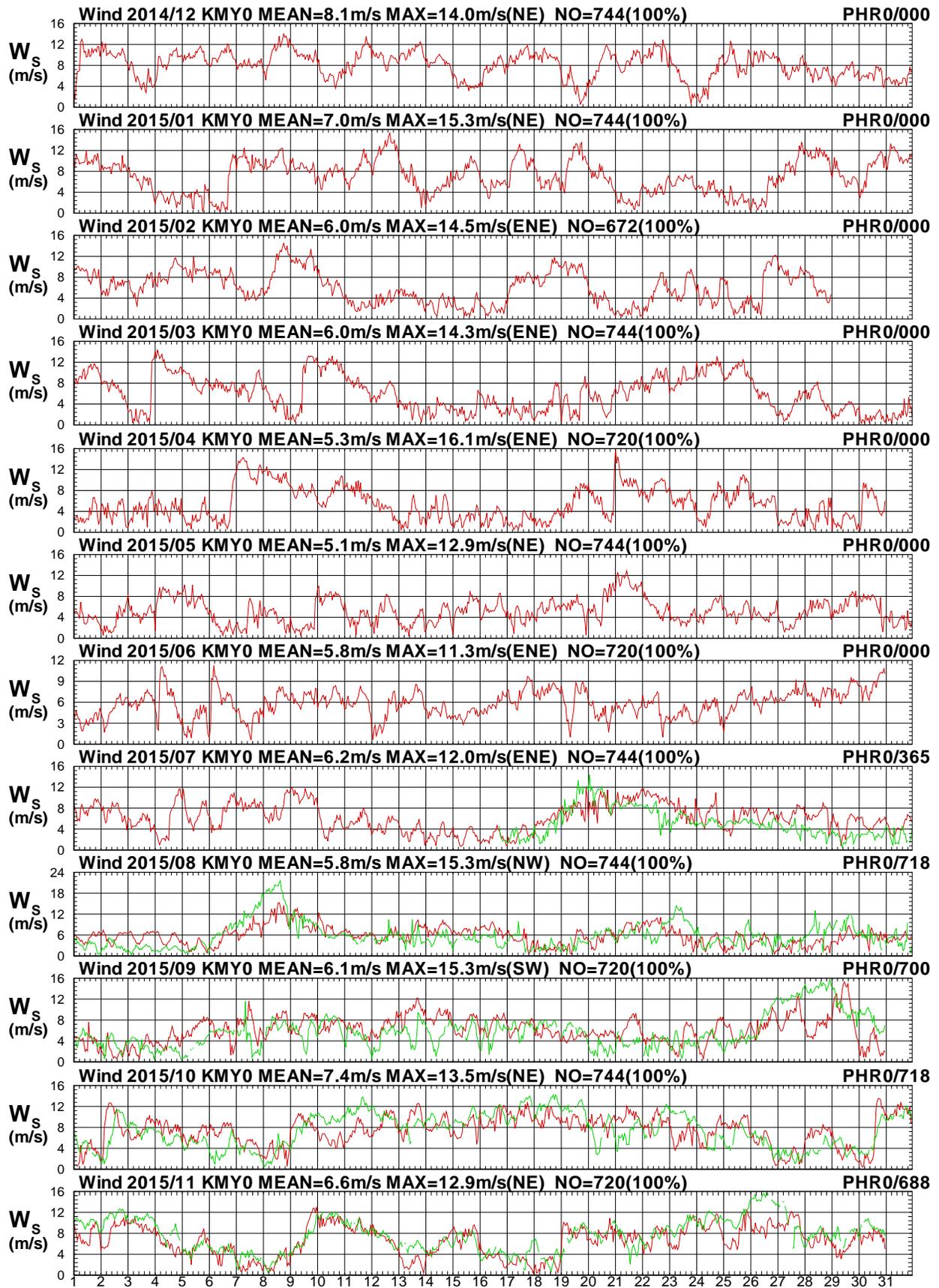


圖 1.18a 2015年每月金門海域 Y 站與澎湖海域 R 站風速圖

W14CKMY0.1HA W14CPhR0.1H0 W151KMY0.1HA W151PhR0.1H0 W152KMY0.1HA W152PhR0.1H0  
 W153KMY0.1HA W153PhR0.1H0 W154KMY0.1HA W154PhR0.1H0 W155KMY0.1HA W155PhR0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

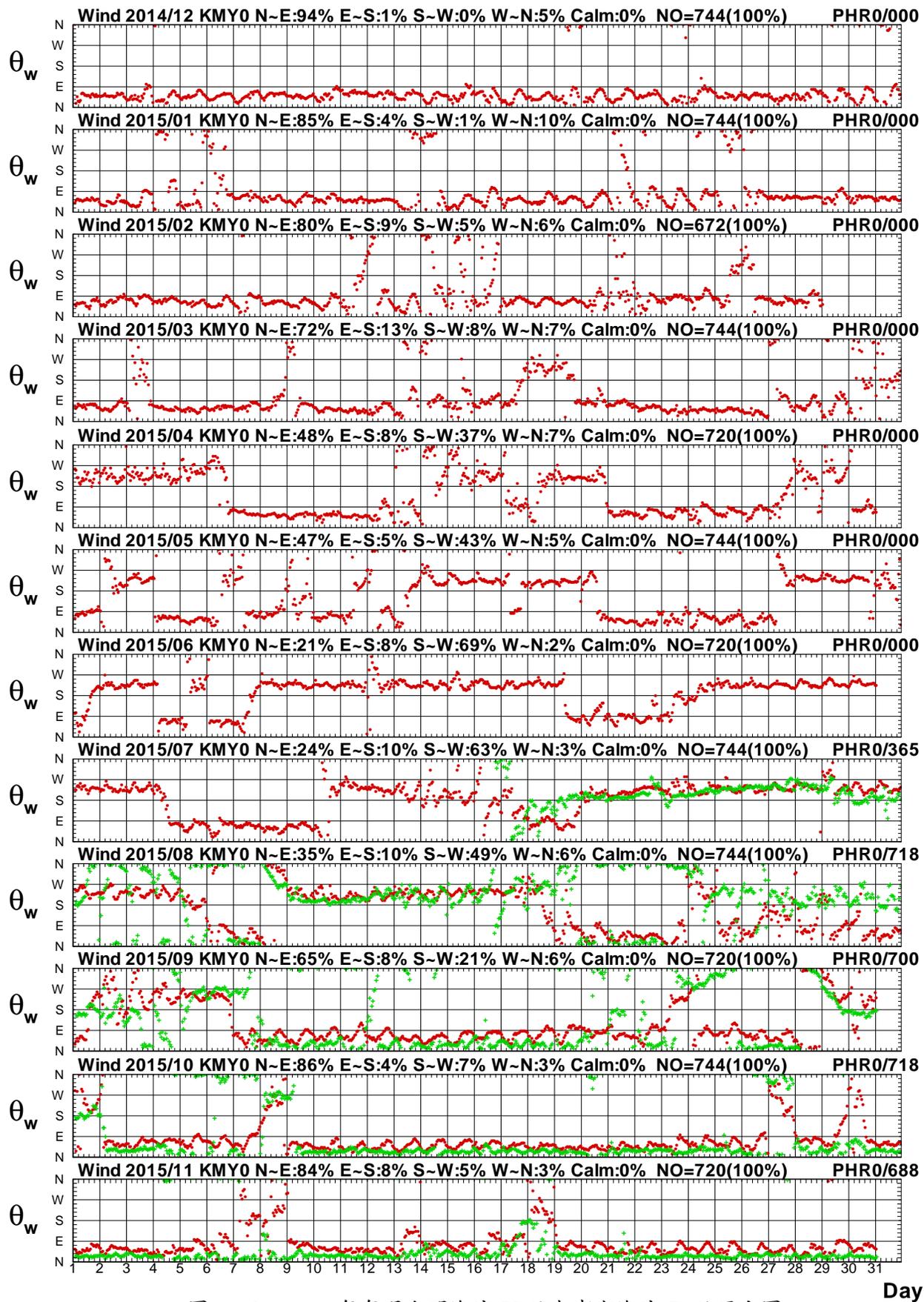


圖 1.18b 2015年每月金門海域 Y 站與澎湖海域 R 站風向圖

W14CKMY0.1HA W14CPHR0.1HO W151KMY0.1HA W151PHR0.1HO W152KMY0.1HA W152PHR0.1HO  
 W153KMY0.1HA W153PHR0.1HO W154KMY0.1HA W154PHR0.1HO W155KMY0.1HA W155PHR0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

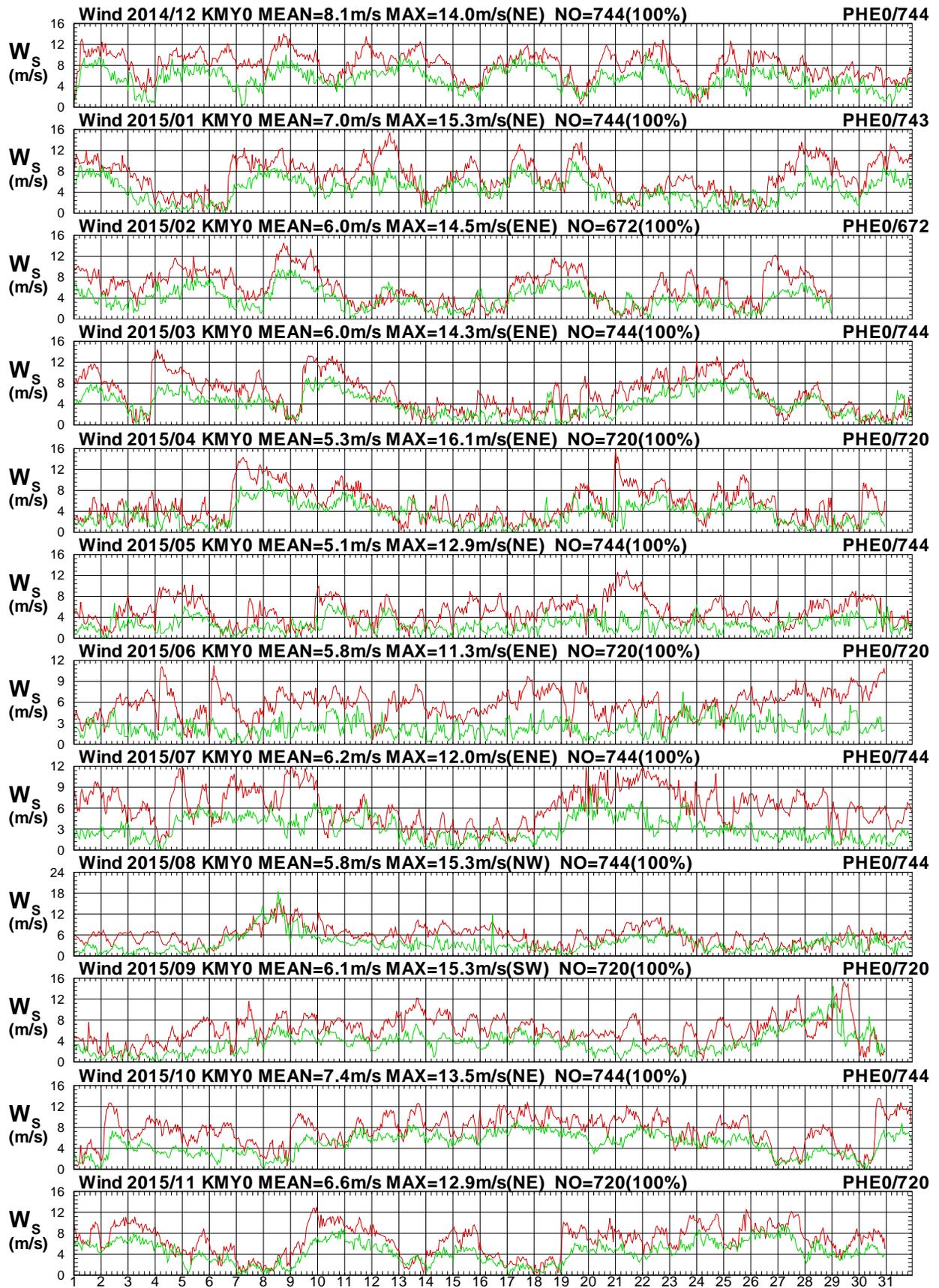


圖 1.19a 2015年每月金門海域 Y 站與澎湖海域 E 站風速圖

W14CKMY0.1HA W14CPHE0.1H0 W151KMY0.1HA W151PHE0.1H0 W152KMY0.1HA W152PHE0.1H0  
 W153KMY0.1HA W153PHE0.1H0 W154KMY0.1HA W154PHE0.1H0 W155KMY0.1HA W155PHE0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

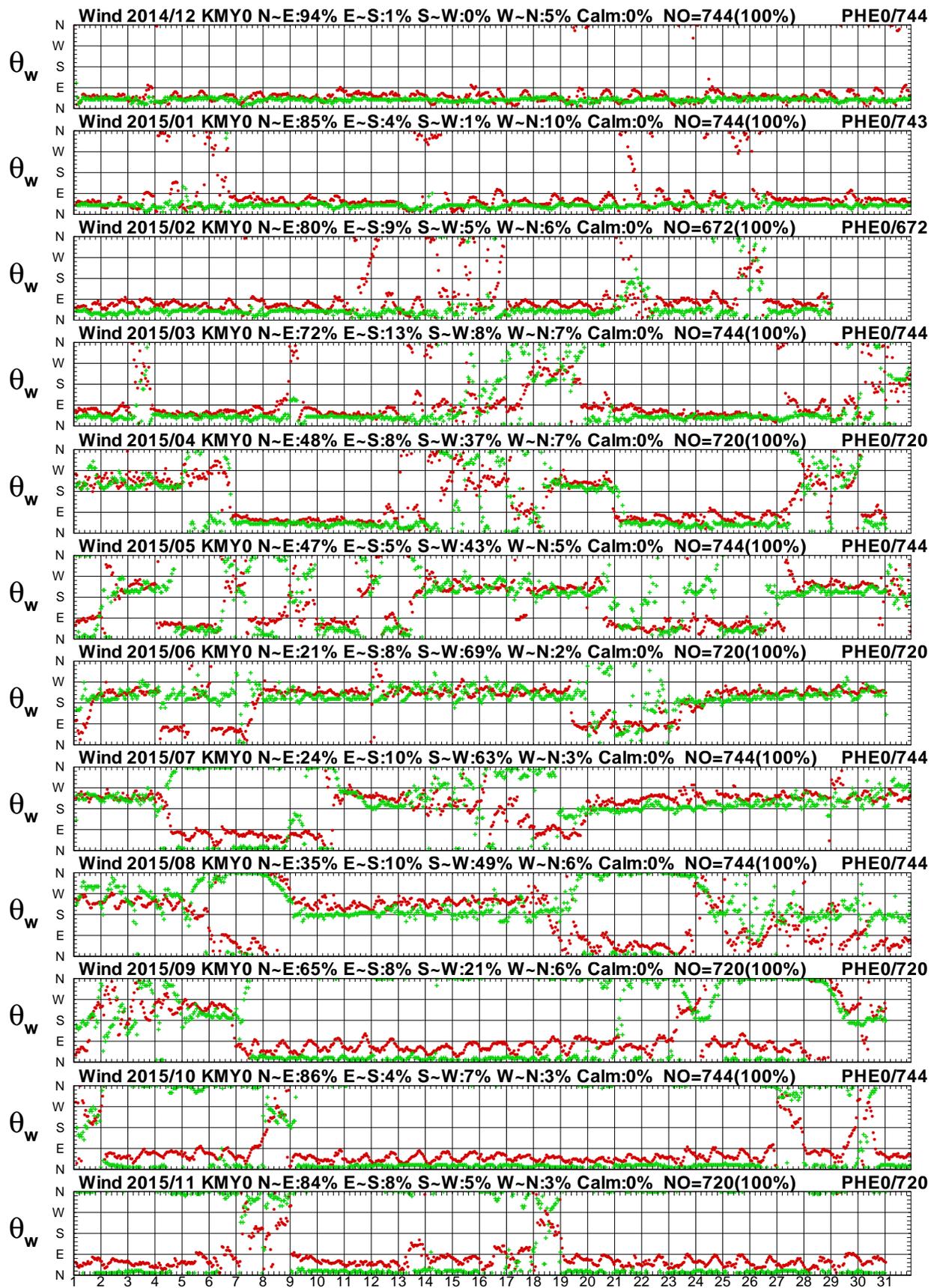


圖 1.19b 2015年每月金門海域 Y 站與澎湖海域 E 站風向圖

W14CKMY0.1HA W14CPHE0.1HO W151KMY0.1HA W151PHE0.1HO W152KMY0.1HA W152PHE0.1HO  
 W153KMY0.1HA W153PHE0.1HO W154KMY0.1HA W154PHE0.1HO W155KMY0.1HA W155PHE0.1HO

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# Wind Speed in Kin-Men seas of KMY0 at 2015

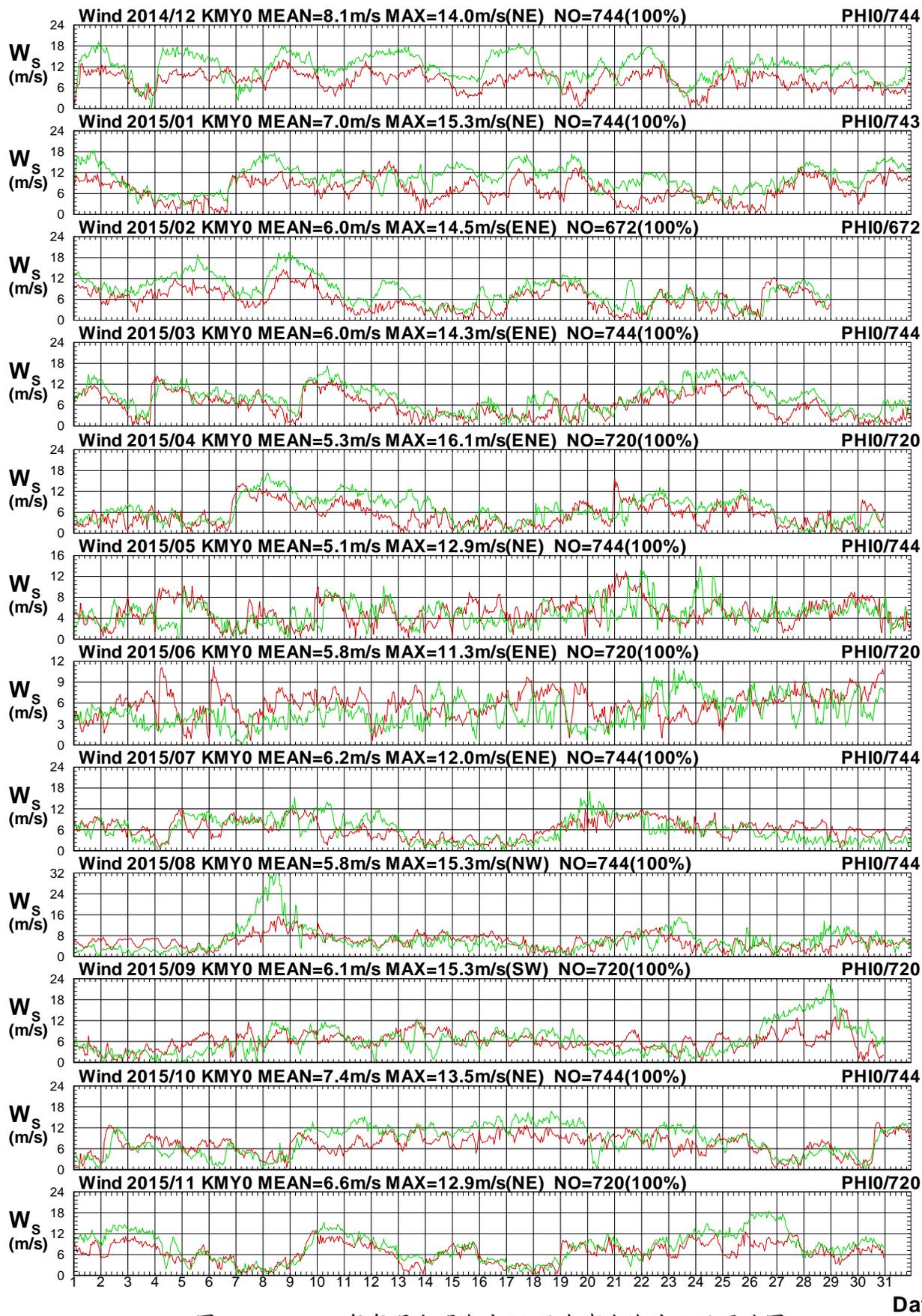


圖 1.20a 2015年每月金門海域 Y 站與澎湖海域 I 站風速圖

W14CKMY0.1HA W14CPHI0.1H0 W151KMY0.1HA W151PHI0.1H0 W152KMY0.1HA W152PHI0.1H0  
 W153KMY0.1HA W153PHI0.1H0 W154KMY0.1HA W154PHI0.1H0 W155KMY0.1HA W155PHI0.1H0

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# Wind Direction in Kin-Men seas of KMY0 at 2015

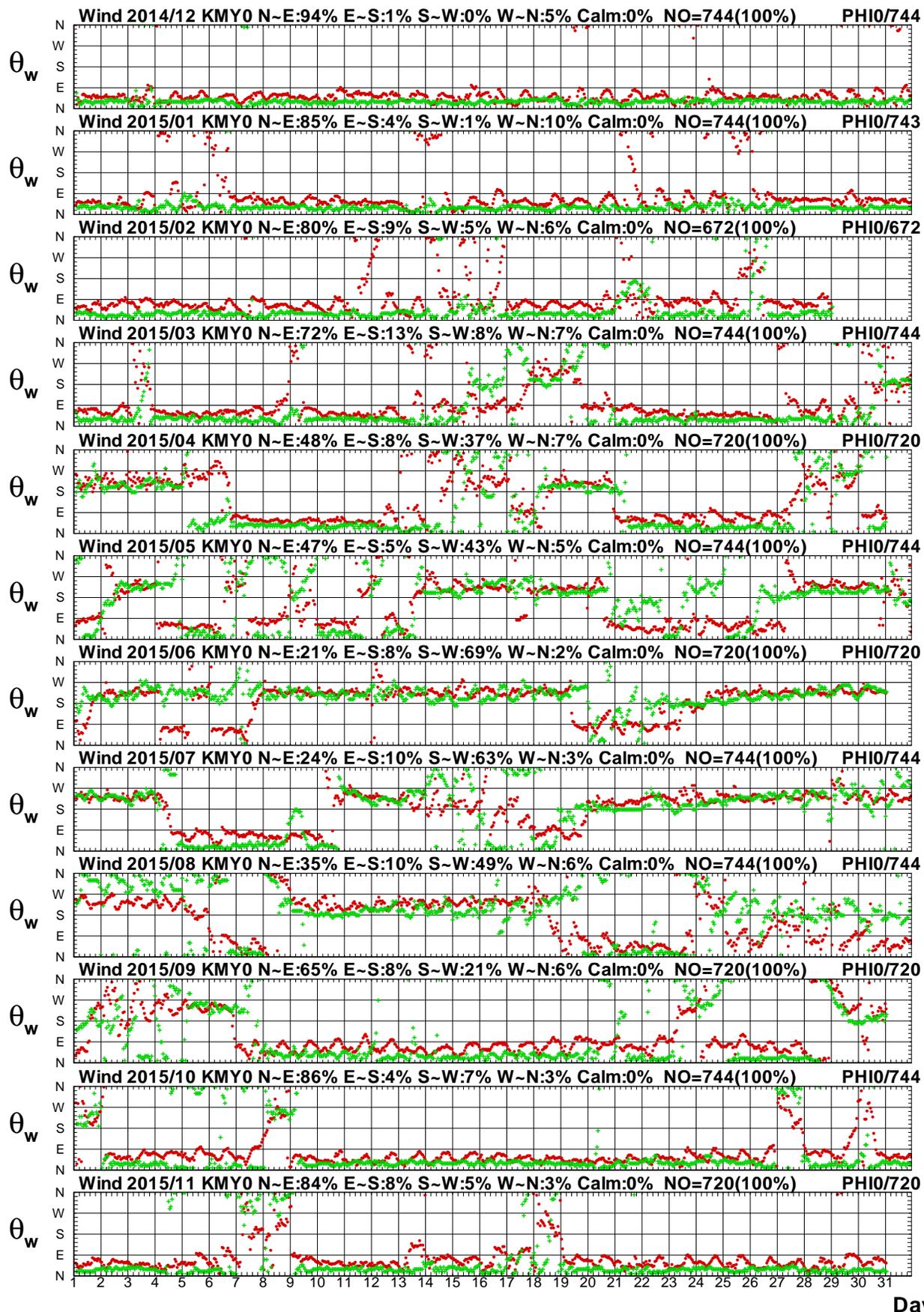


圖 1.20b 2015年每月金門海域 Y 站與澎湖海域 I 站風向圖

W14CKMY0.1HA W14CPHI0.1H0 W151KMY0.1HA W151PHI0.1H0 W152KMY0.1HA W152PHI0.1H0  
 W153KMY0.1HA W153PHI0.1H0 W154KMY0.1HA W154PHI0.1H0 W155KMY0.1HA W155PHI0.1H0

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## 第二章 2015 年金門海域觀測波浪資料

金門海域波浪之觀測 2013 年 12 月本中心(IHMT)安裝挪威 NORTEK 公司表面波浪監測系統於金門港料羅港區(測站 X)及水頭港區(測站 A)，其位置如附圖 2。

測站 Y 外海浮標站之波浪儀屬水利署(WRA)所有，測站 Z 外後江灣小浮標之波浪儀屬近海水文中心(COMC)設置。金門海域各測站歷年觀測波浪資料蒐集概況如表 2。

波浪觀測 AWCP 系統有兩個分離波高量測模式：一個是對平靜波浪時，當資料由傳統式壓力感應器量測時將會因儀器佈放的深度而受很大的影響。此時，表面高度必須用一個聲波式的高度感應器量測波高。AWCP 波向量測範圍：波向的量測從海面下 3 米以上的流向資料與波高資料計算轉換而得。對攪動的海況來說；用於轉換波向的該層深度應該自動被調整為平均水位也就是  $H_{max}/2$ 。量測的參數為：平均波向及波向分佈，波向單位為度。

本波浪年報以取經檢核或修補後之 Y 站資料作為**主要觀測站**，2015 年各觀測站修補前(後)每月觀測之波浪資料記錄期間統計表，如表 2.1，**主要觀測站修補前後**每月波浪歷線比較圖，如圖 2.1，**主要觀測站**與**次要觀測站**(或**其他觀測站**)每月波浪歷線比較圖，如圖 2.2 以後。

表 2 金門海域觀測波浪資料蒐集概況表(統計時間至 2015 年 11 月)

測站	緯度	經度	觀測期間	觀測單位	備註
X	24°24'17"N	118°25'19"E	2014/02-2015/11(觀測中)	港研中心	羅港港區外海
A	24°25'8"N	118°16'41"E	2014/02-2015/11(觀測中)	港研中心	水頭港區外海
Y	23°43'37"N	119°33'07"E	2000/07-2015/11(觀測中)	水利署	金門資料浮標
Z	24°30'27"N	118°22'24"E	2013/12-2014/07	水文中心	后江灣小浮標

# 金門海域

-  IHMT 波潮流站
-  WRA 浮標波浪站
-  COMC 浮標波浪站



圖 2 金門海域波浪觀測站位置示意圖

表 2.1a 2015 年每月金門海域修補前各測站觀測波浪資料紀錄統計表

年/月 港區	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域
測站	Y	X	A	Z				
2014/12 月	727 (97.7%)	709 (95.3%)	725 (97.4%)	*	*	*	*	*
2015/ 1 月	691 (92.9%)	685 (92.1%)	742 (99.7%)	*	*	*	*	*
2015/ 2 月	665 (99.0%)	657 (97.8%)	663 (98.7%)	*	*	*	*	*
2015/ 3 月	736 (98.9%)	741 (99.6%)	719 (96.6%)	*	*	*	*	*
2015/ 4 月	711 (98.8%)	714 (99.2%)	683 (94.9%)	*	*	*	*	*
2015/ 5 月	740 (99.5%)	743 (99.9%)	739 (99.3%)	*	*	*	*	*
2015/ 6 月	711 (98.8%)	719 (99.9%)	718 (99.7%)	*	*	*	*	*
2015/ 7 月	731 (98.3%)	595 (80.0%)	743 (99.9%)	*	*	*	*	*
2015/ 8 月	736 (98.9%)	732 (98.4%)	736 (98.9%)	*	*	*	*	*
2015/ 9 月	665 (92.4%)	632 (87.8%)	716 (99.4%)	*	*	*	*	*
2015/10 月	694 (93.3%)	729 (98.0%)	655 (88.0%)	*	*	*	*	*
2015/11 月	653 (90.7%)	719 (99.9%)	679 (94.3%)	*	*	*	*	*
2015/冬季	2083 (96.4%)	2051 (95.0%)	2130 (98.6%)	*	*	*	*	*
2015/春季	2187 (99.0%)	2198 (99.5%)	2141 (97.0%)	*	*	*	*	*
2015/夏季	2178 (98.6%)	2046 (92.7%)	2197 (99.5%)	*	*	*	*	*
2015/秋季	2012 (92.1%)	2080 (95.2%)	2050 (93.9%)	*	*	*	*	*
2015/整年	8460 (96.6%)	8375 (95.6%)	8518 (97.2%)	*	*	*	*	*
起始年月	2014/12	2014/12	2014/12	*	*	*	*	*
結束年月	2015/11	2015/11	2015/11	*	*	*	*	*

表 2.1b 2015年每月金門海域修補後各測站波浪資料統計表

年/月 港區	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域
測站	Y	X	A	Z				
2014/12月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 1月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 2月	672 (100%)	672 (100%)	672 (100%)	*	*	*	*	*
2015/ 3月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 4月	720 (100%)	720 (100%)	720 (100%)	*	*	*	*	*
2015/ 5月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 6月	720 (100%)	720 (100%)	720 (100%)	*	*	*	*	*
2015/ 7月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 8月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 9月	720 (100%)	720 (100%)	720 (100%)	*	*	*	*	*
2015/10月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/11月	720 (100%)	720 (100%)	720 (100%)	*	*	*	*	*
2015/冬季	2160 (100%)	2160 (100%)	2160 (100%)	*	*	*	*	*
2015/春季	2208 (100%)	2208 (100%)	2208 (100%)	*	*	*	*	*
2015/夏季	2208 (100%)	2208 (100%)	2208 (100%)	*	*	*	*	*
2015/秋季	2184 (100%)	2184 (100%)	2184 (100%)	*	*	*	*	*
2015/整年	8760 (100%)	8760 (100%)	8760 (100%)	*	*	*	*	*
起始年月	2014/12	2014/12	2014/12	*	*	*	*	*
結束年月	2015/11	2015/11	2015/11	*	*	*	*	*

# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

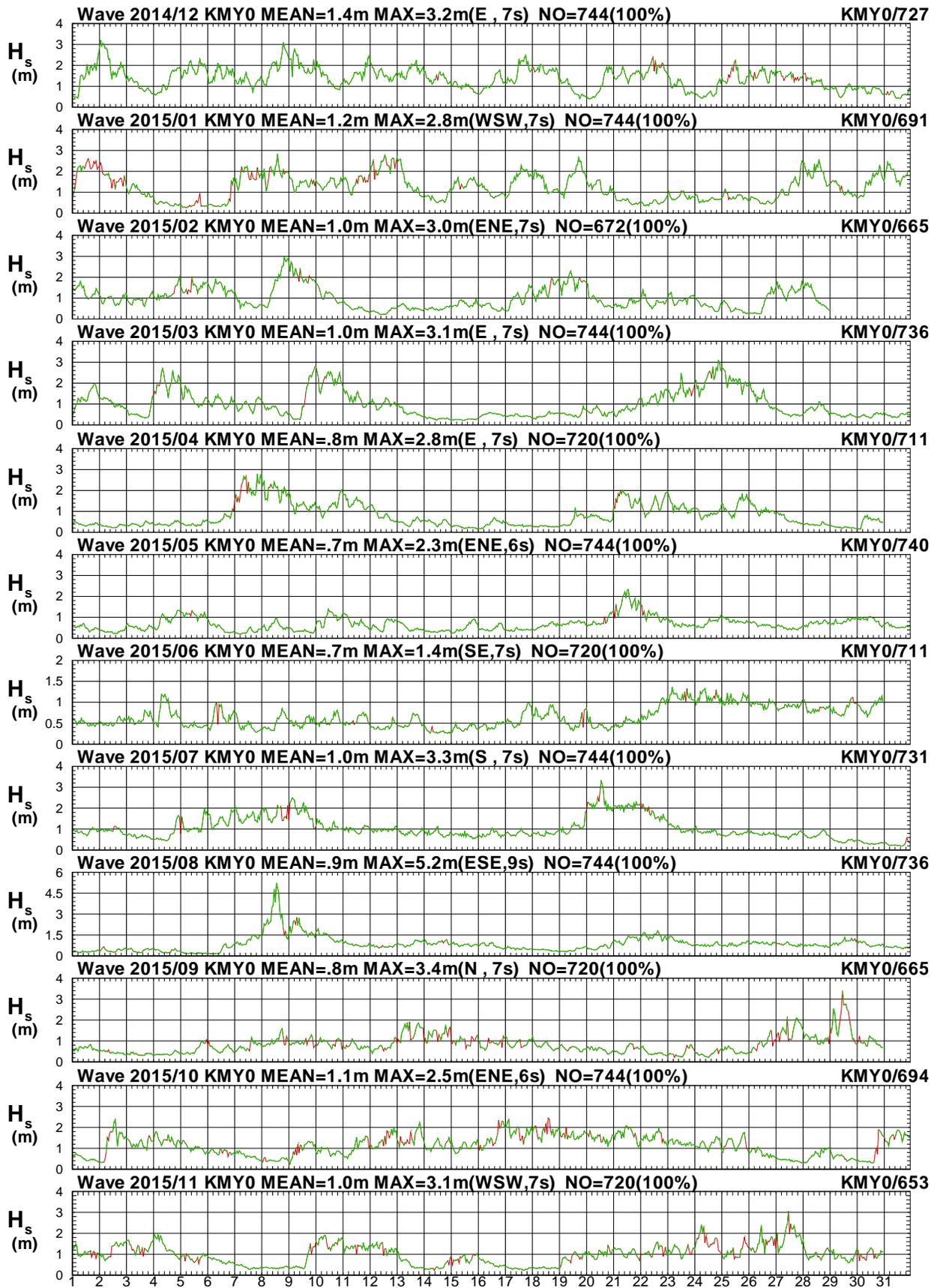


圖 2.1a 2015年每月金門海域 Y 站修補前後之波高比較圖

V14CKMY0.1HA V14CKMY0.1HO V151KMY0.1HA V151KMY0.1HO V152KMY0.1HA V152KMY0.1HO  
 V153KMY0.1HA V153KMY0.1HO V154KMY0.1HA V154KMY0.1HO V155KMY0.1HA V155KMY0.1HO

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

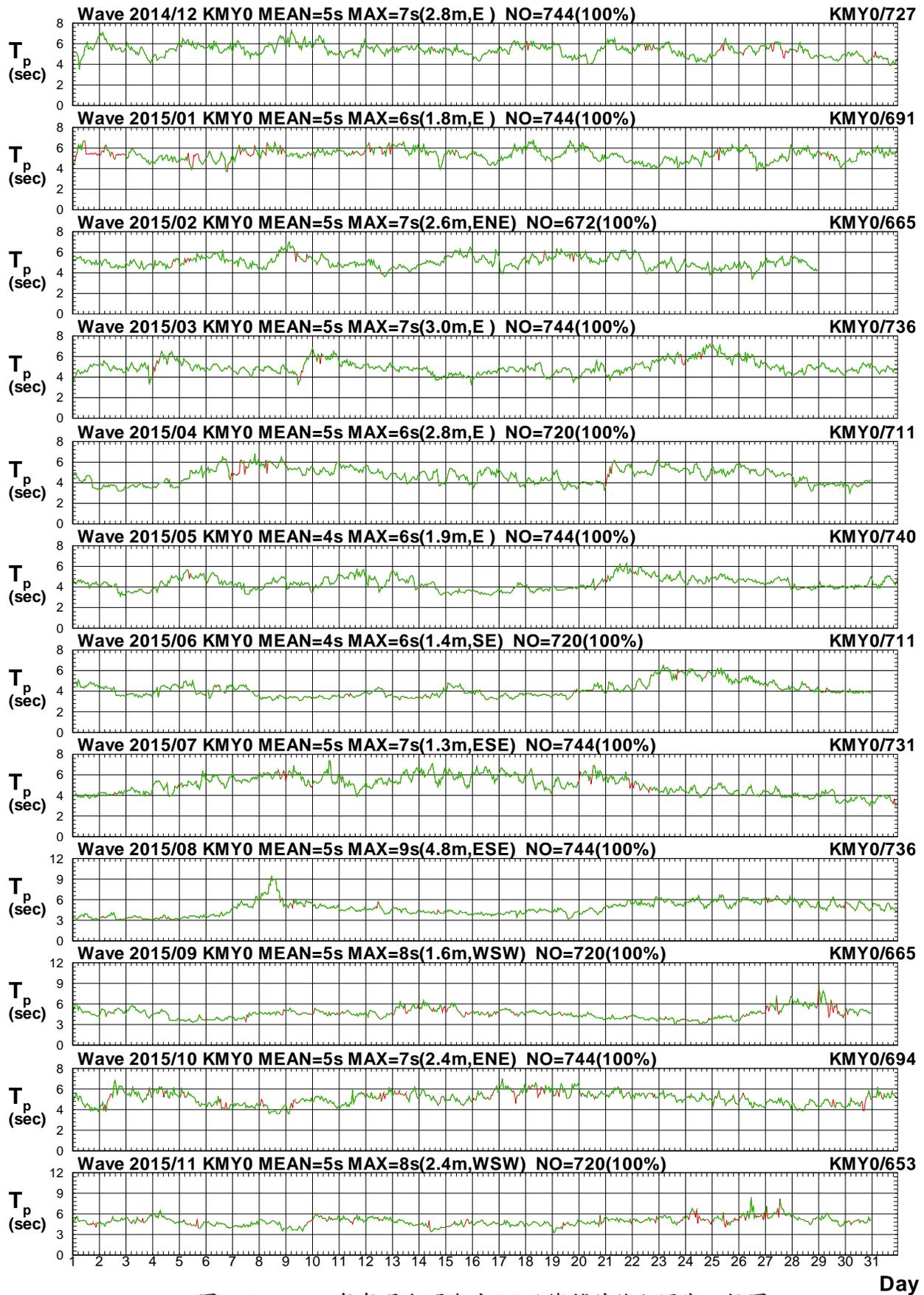


圖 2.1b 2015年每月金門海域 Y 站修補前後之週期比較圖

V14CKMY0.1HA V14CKMY0.1HO V151KMY0.1HA V151KMY0.1HO V152KMY0.1HA V152KMY0.1HO  
 V153KMY0.1HA V153KMY0.1HO V154KMY0.1HA V154KMY0.1HO V155KMY0.1HA V155KMY0.1HO

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# Wave Direction in Kin-Men seas of KMY0 at 2015

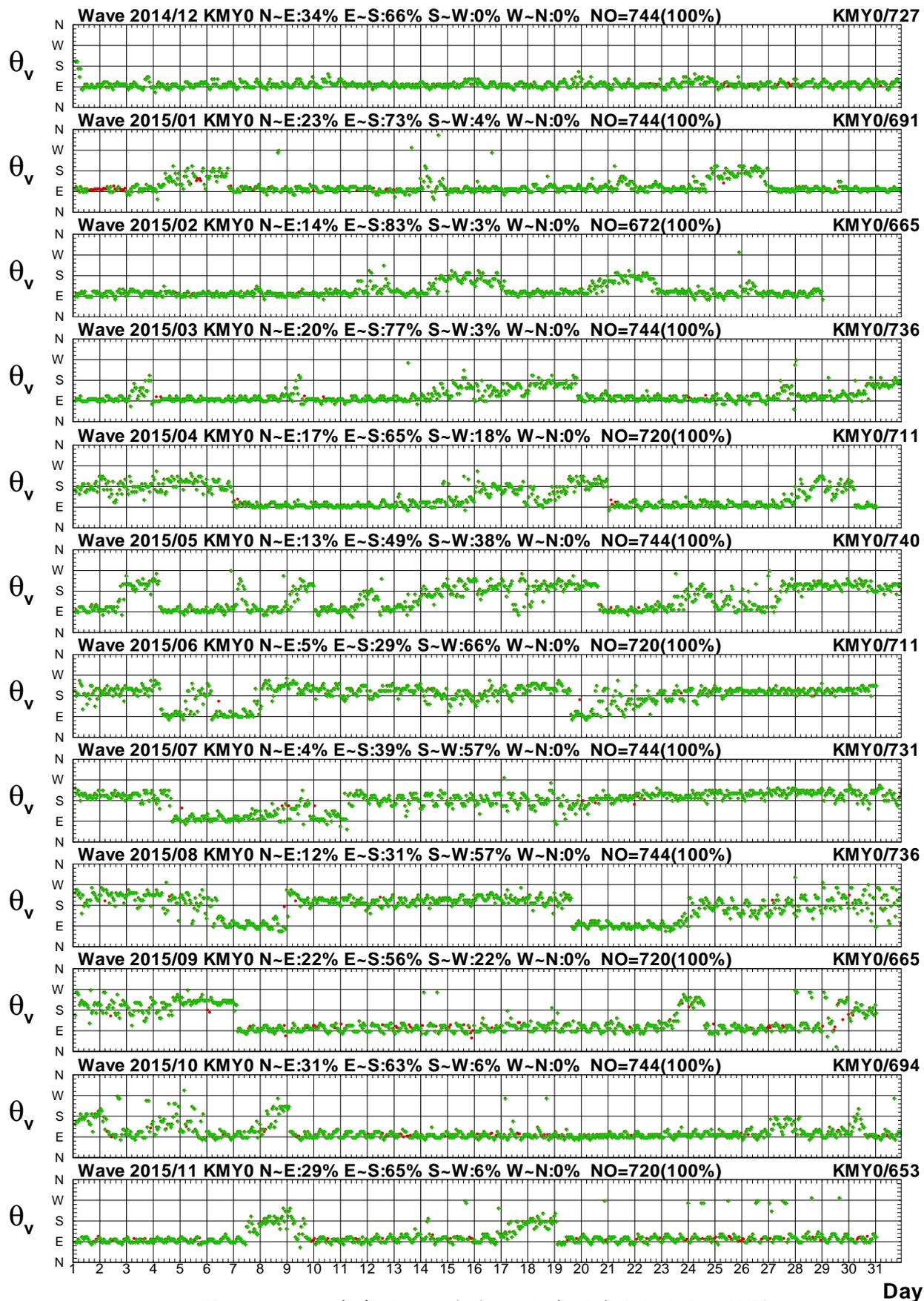


圖 2.1c 2015年每月金門海域 Y 站修補前後之波向比較圖

V14CKMY0.1HA V14CKMY0.1HO V151KMY0.1HA V151KMY0.1HO V152KMY0.1HA V152KMY0.1HO  
 V153KMY0.1HA V153KMY0.1HO V154KMY0.1HA V154KMY0.1HO V155KMY0.1HA V155KMY0.1HO

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

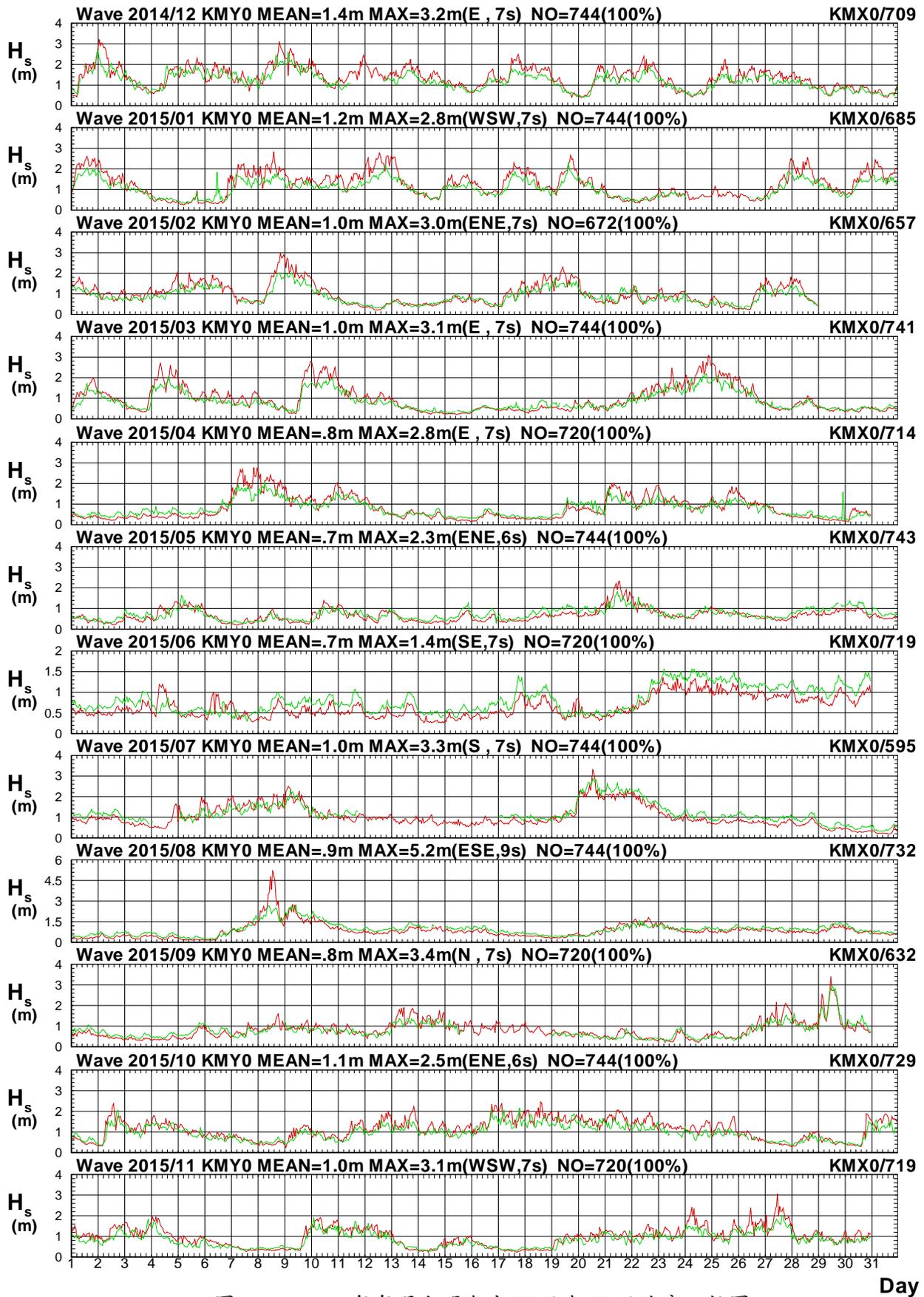


圖 2.2a 2015年每月金門海域 Y 站與 X 站波高比較圖

V14CKMY0.1HA V14CKMX0.1H0 V151KMY0.1HA V151KMX0.1H0 V152KMY0.1HA V152KMX0.1H0  
 V153KMY0.1HA V153KMX0.1H0 V154KMY0.1HA V154KMX0.1H0 V155KMY0.1HA V155KMX0.1H0

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

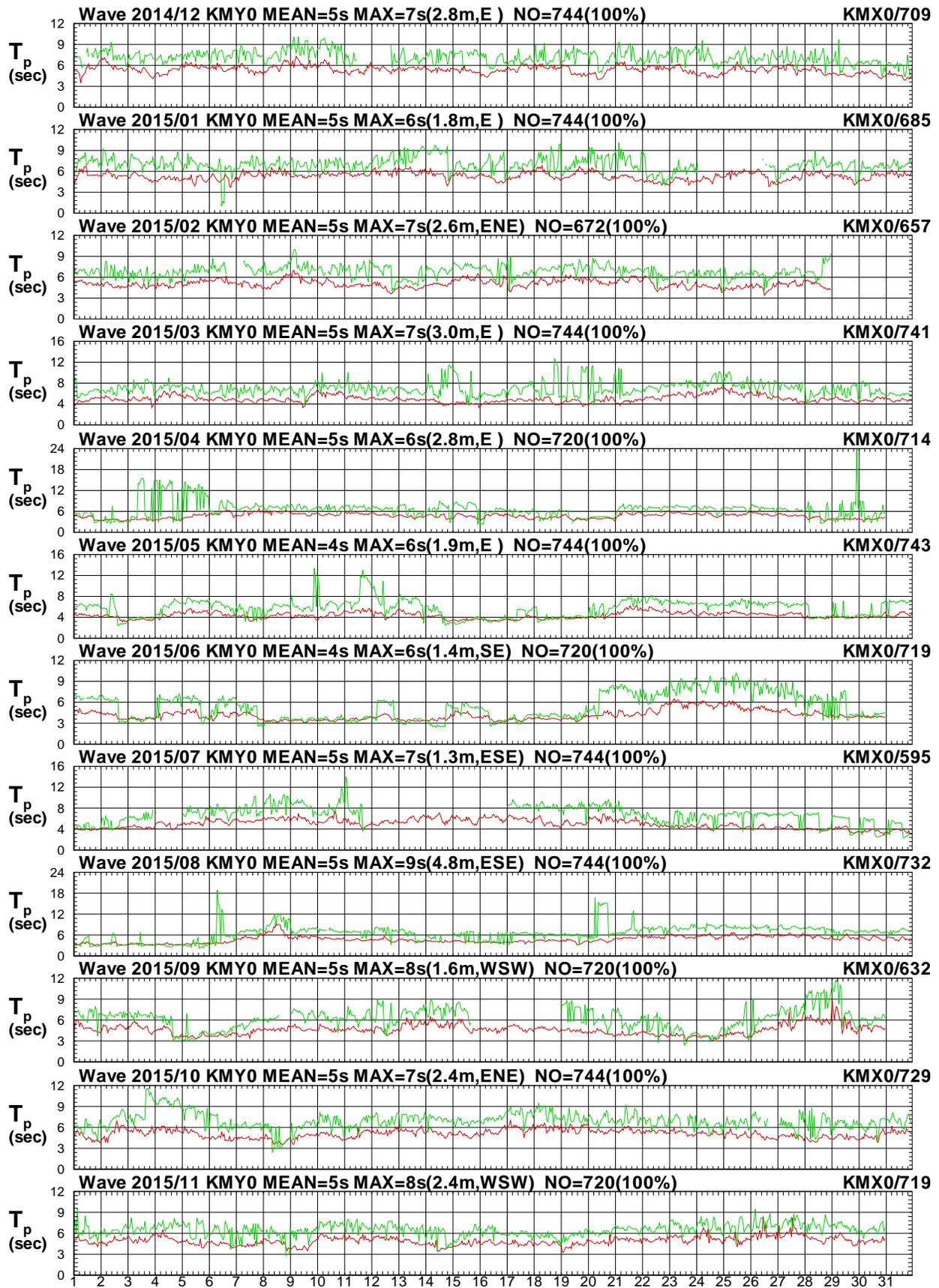


圖 2.2b 2015年每月金門海域 Y 站與 X 站週期比較圖

V14CKMY0.1HA V14CKMX0.1H0 V151KMY0.1HA V151KMX0.1H0 V152KMY0.1HA V152KMX0.1H0  
 V153KMY0.1HA V153KMX0.1H0 V154KMY0.1HA V154KMX0.1H0 V155KMY0.1HA V155KMX0.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

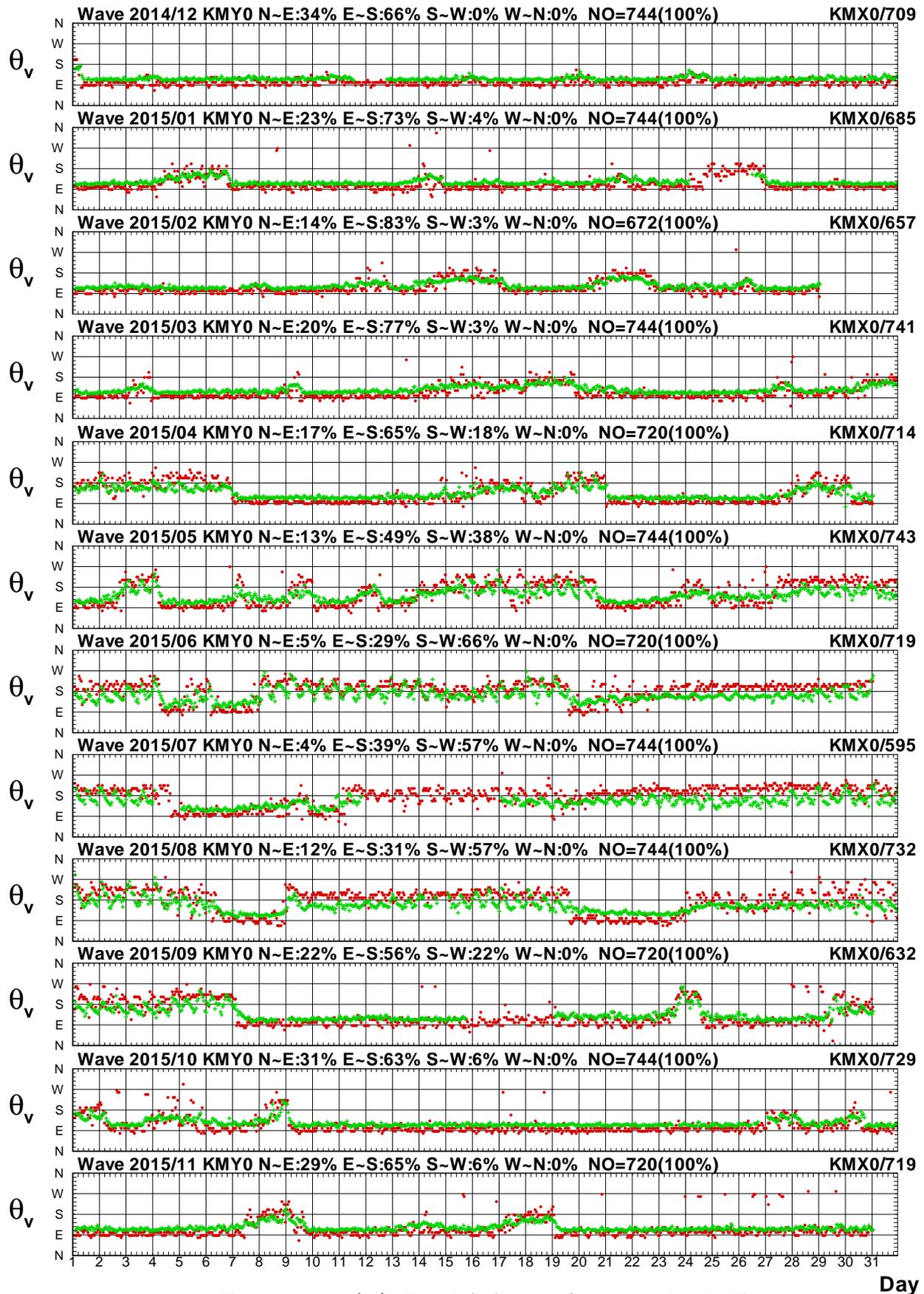


圖 2.2c 2015年每月金門海域 Y 站與 X 站波向比較圖

V14CKMY0.1HA V14CKMX0.1H0 V151KMY0.1HA V151KMX0.1H0 V152KMY0.1HA V152KMX0.1H0  
 V153KMY0.1HA V153KMX0.1H0 V154KMY0.1HA V154KMX0.1H0 V155KMY0.1HA V155KMX0.1H0

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

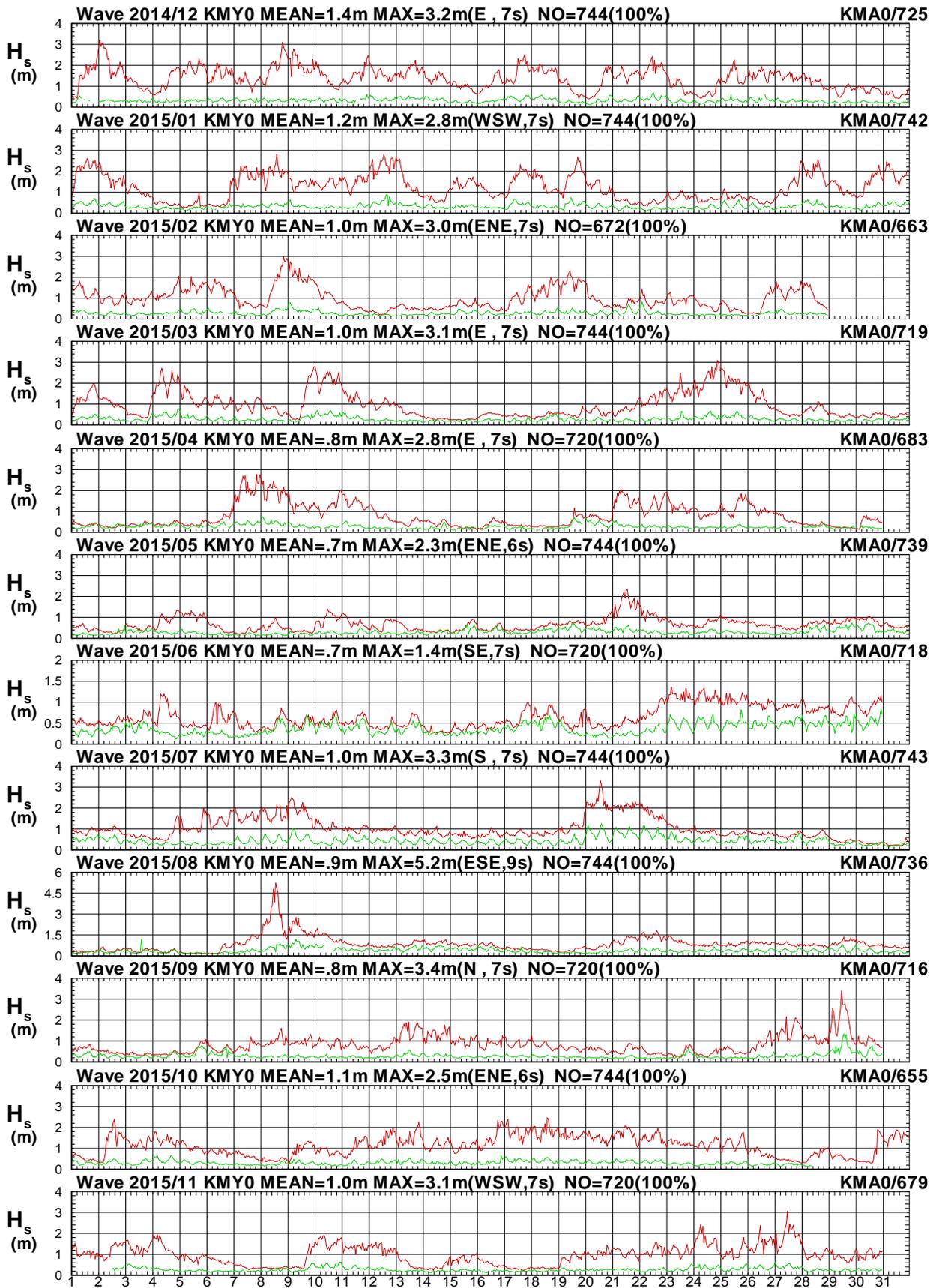


圖 2.3a 2015年每月金門海域 Y 站與 A 站波高比較圖

Day

V14CKMY0.1HA V14CKMA0.1H0 V151KMY0.1HA V151KMA0.1H0 V152KMY0.1HA V152KMA0.1H0  
 V153KMY0.1HA V153KMA0.1H0 V154KMY0.1HA V154KMA0.1H0 V155KMY0.1HA V155KMA0.1H0

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

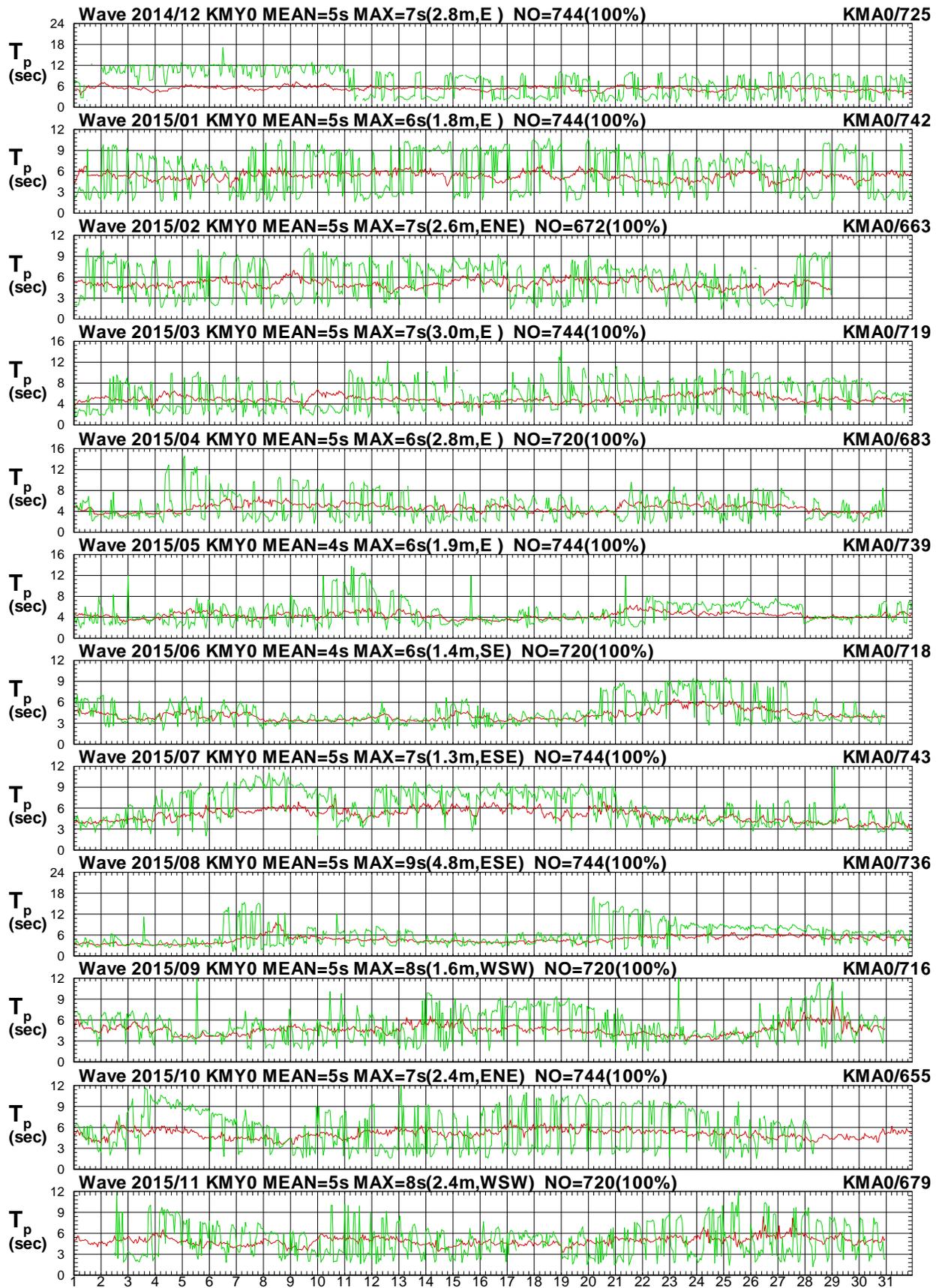


圖 2.3b 2015年每月金門海域 Y 站與 A 站週期比較圖

V14CKMY0.1HA V14CKMA0.1H0 V151KMY0.1HA V151KMA0.1H0 V152KMY0.1HA V152KMA0.1H0  
 V153KMY0.1HA V153KMA0.1H0 V154KMY0.1HA V154KMA0.1H0 V155KMY0.1HA V155KMA0.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

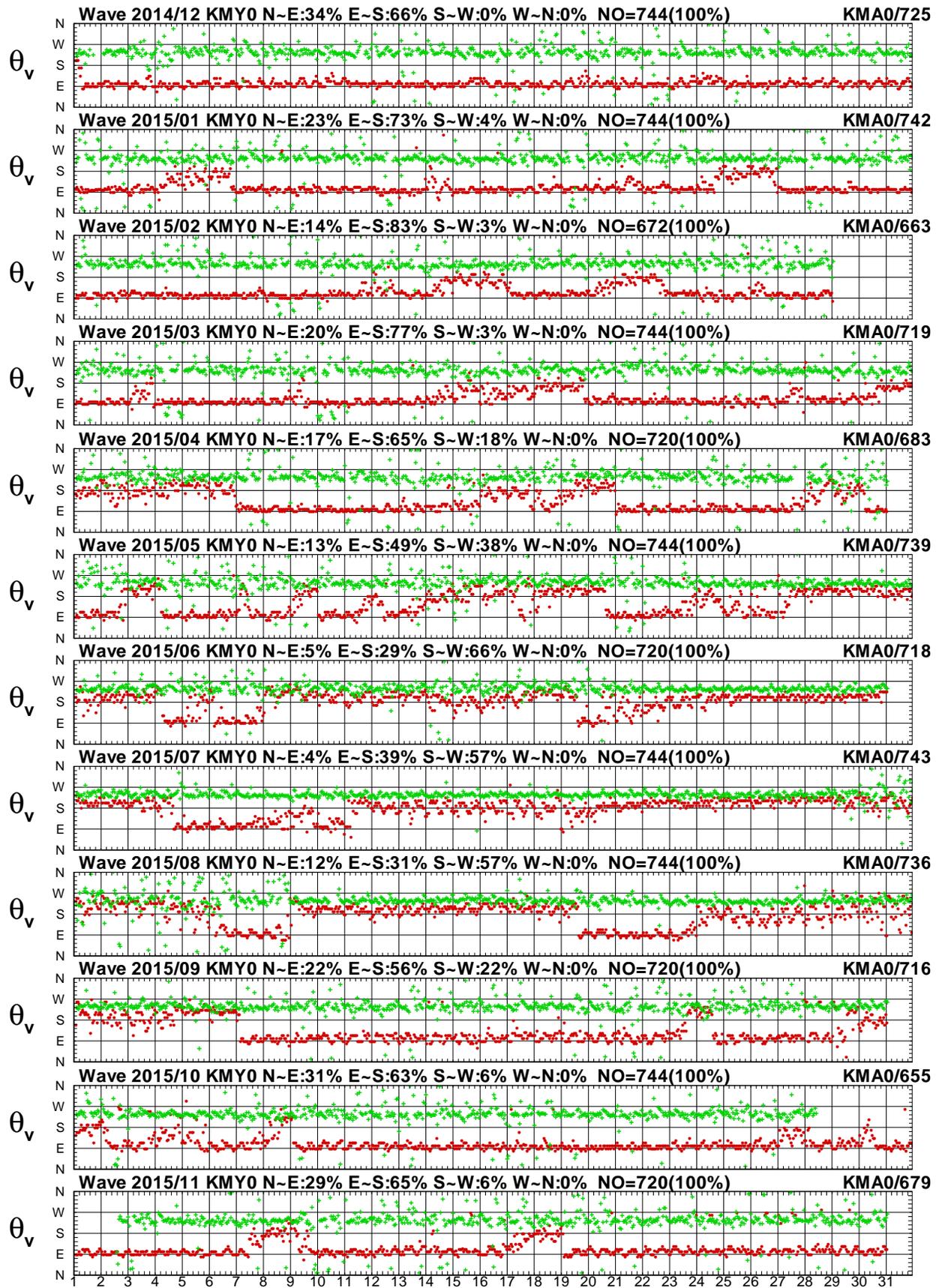


圖 2.3c 2015年每月金門海域 Y 站與 A 站波向比較圖

V14CKMY0.1HA V14CKMA0.1HO V151KMY0.1HA V151KMA0.1HO V152KMY0.1HA V152KMA0.1HO  
 V153KMY0.1HA V153KMA0.1HO V154KMY0.1HA V154KMA0.1HO V155KMY0.1HA V155KMA0.1HO

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

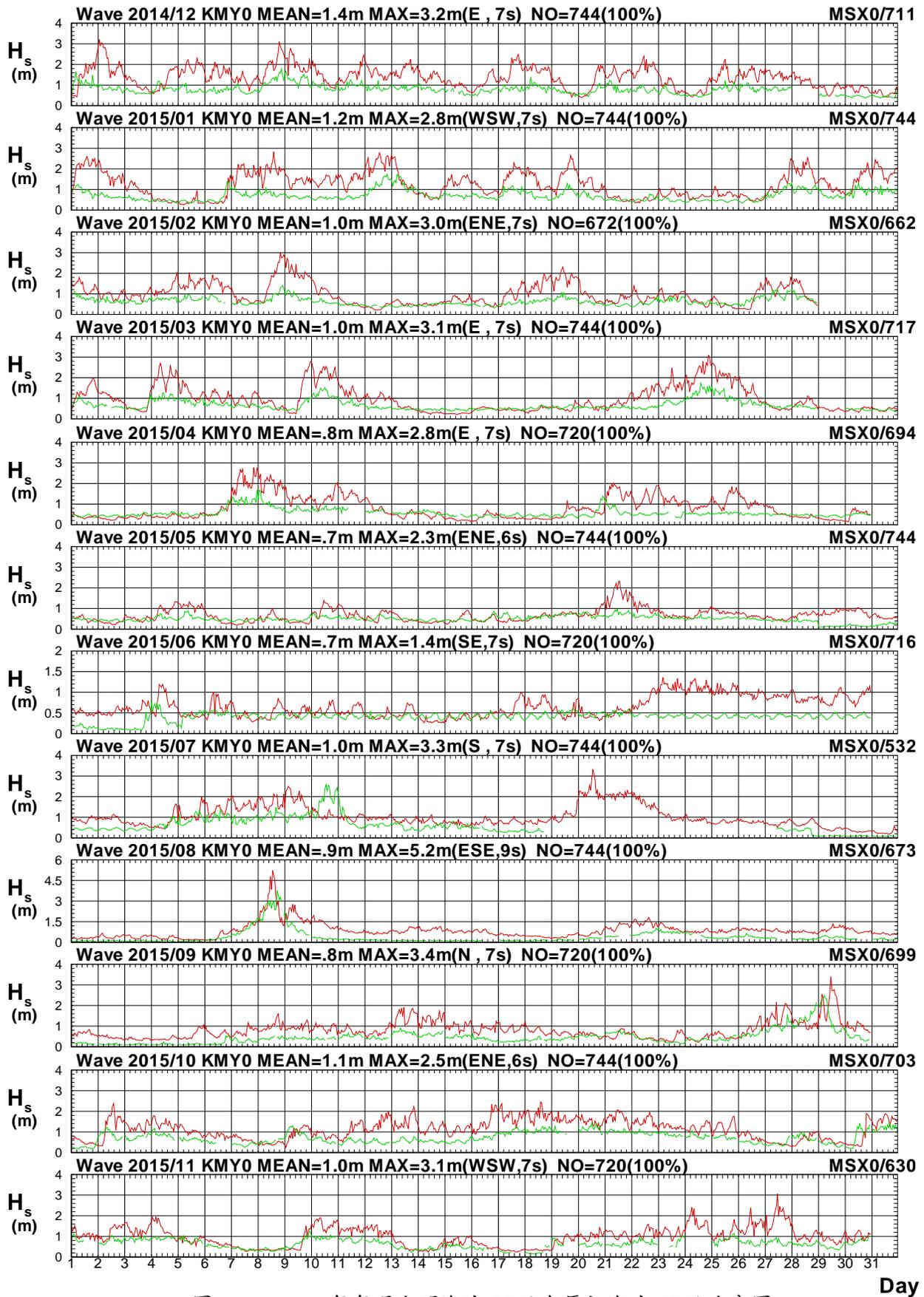


圖 2.4a 2015年每月金門海域 Y 站與馬祖海域 X 站波高圖

V14CKMY0.1HA V14CMSX0.1H0 V151KMY0.1HA V151MSX0.1H0 V152KMY0.1HA V152MSX0.1H0  
 V153KMY0.1HA V153MSX0.1H0 V154KMY0.1HA V154MSX0.1H0 V155KMY0.1HA V155MSX0.1H0

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

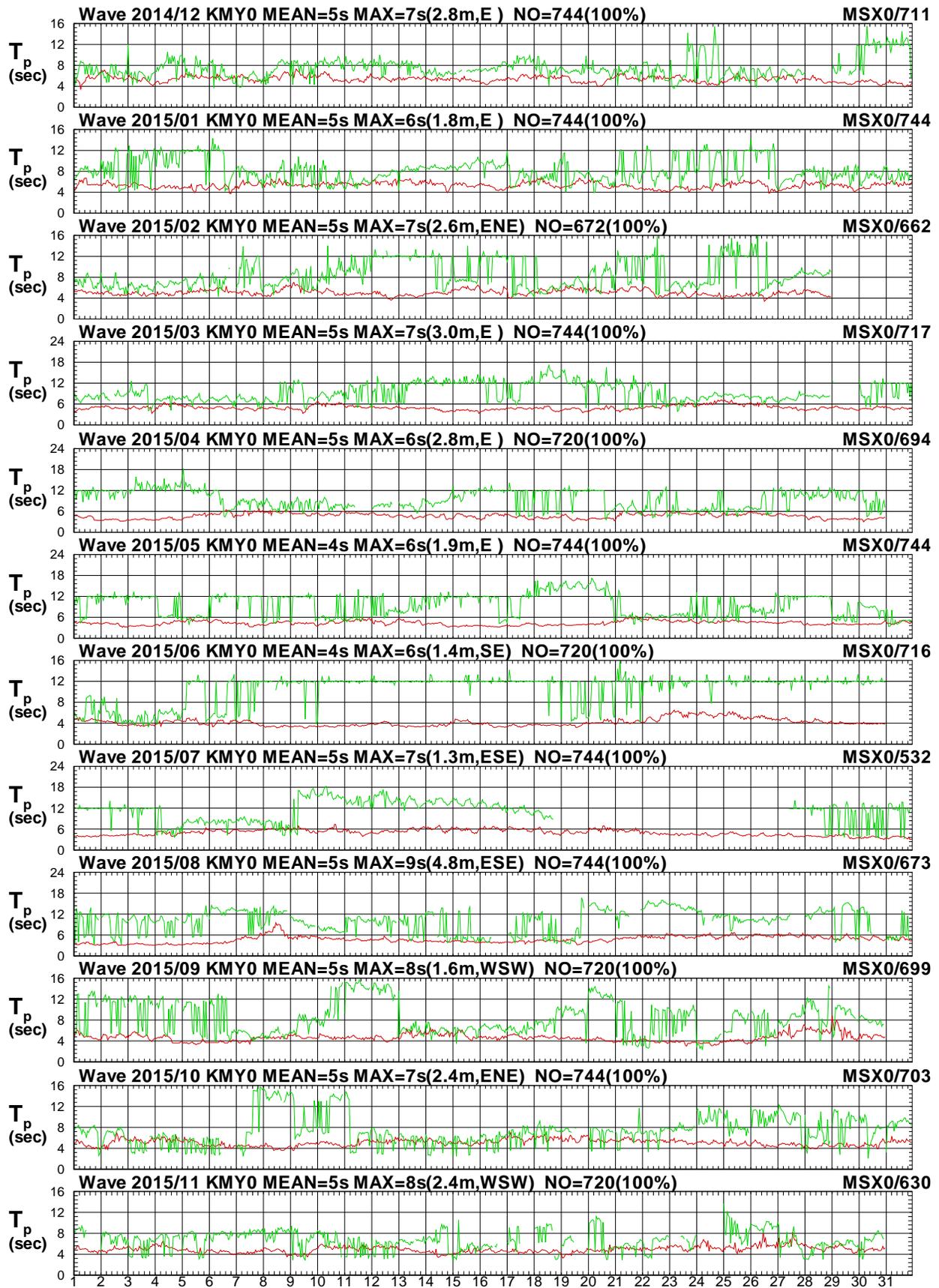


圖 2.4b 2015年每月金門海域 Y 站與馬祖海域 X 站週期圖

V14CKMY0.1HA V14CMSX0.1H0 V151KMY0.1HA V151MSX0.1H0 V152KMY0.1HA V152MSX0.1H0  
 V153KMY0.1HA V153MSX0.1H0 V154KMY0.1HA V154MSX0.1H0 V155KMY0.1HA V155MSX0.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

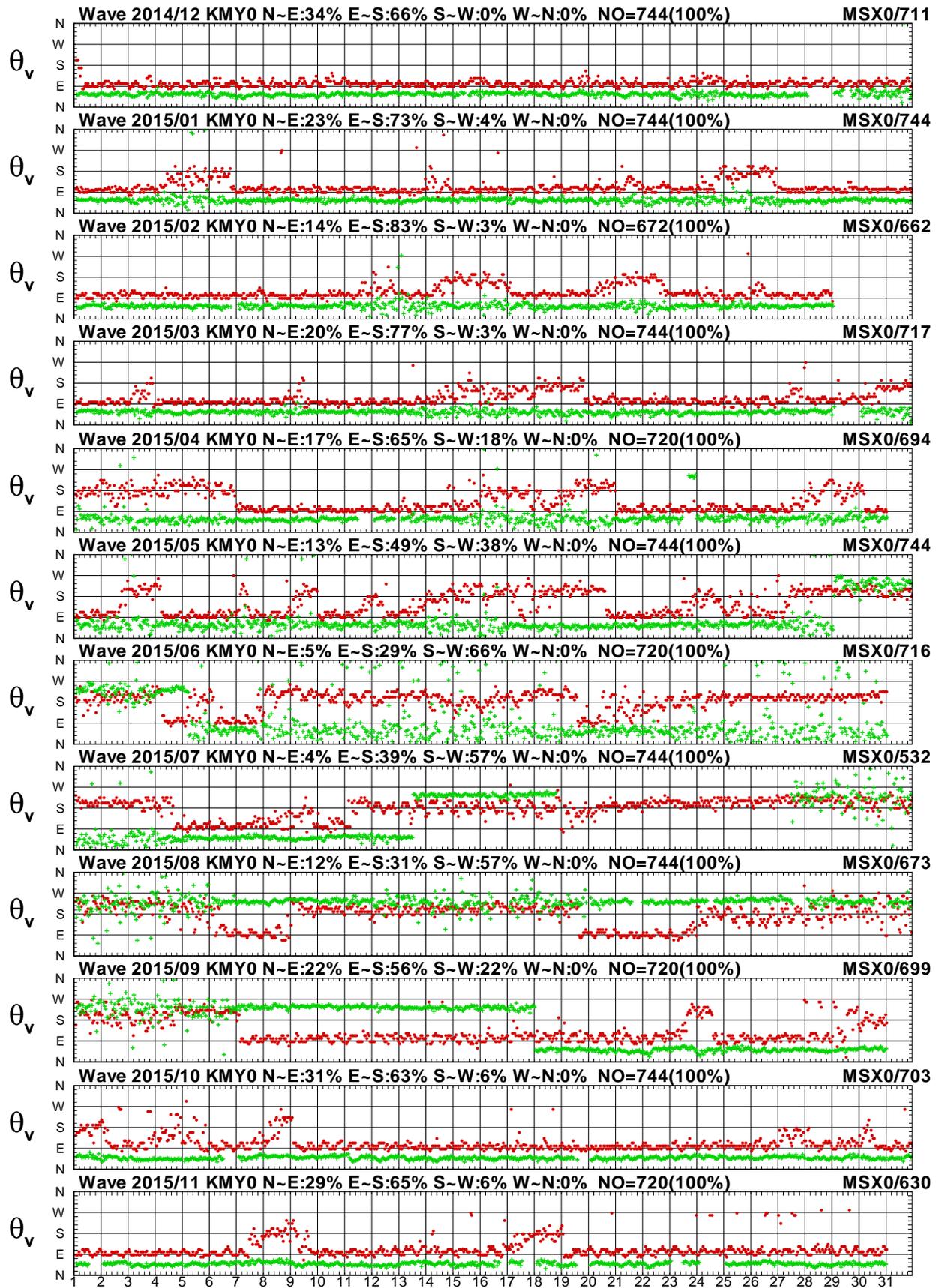


圖 2.4c 2015年每月金門海域 Y 站與馬祖海域 X 站波向圖

V14CKMY0.1HA V14CMSX0.1HO V151KMY0.1HA V151MSX0.1HO V152KMY0.1HA V152MSX0.1HO  
 V153KMY0.1HA V153MSX0.1HO V154KMY0.1HA V154MSX0.1HO V155KMY0.1HA V155MSX0.1HO

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

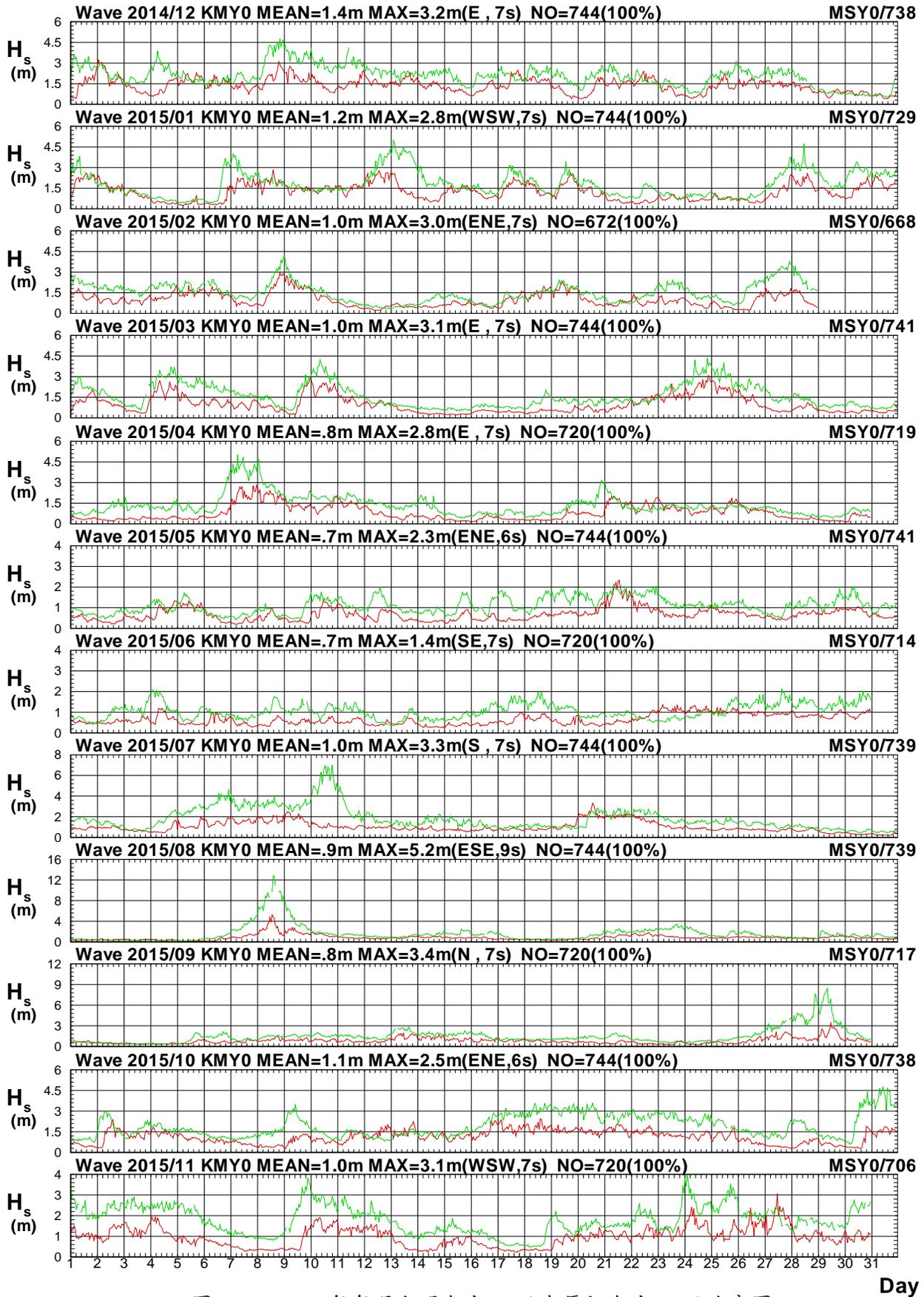


圖 2.5a 2015年每月金門海域 Y 站與馬祖海域 Y 站波高圖

V14CKMY0.1HA V14CMSY0.1H0 V151KMY0.1HA V151MSY0.1H0 V152KMY0.1HA V152MSY0.1H0  
 V153KMY0.1HA V153MSY0.1H0 V154KMY0.1HA V154MSY0.1H0 V155KMY0.1HA V155MSY0.1H0

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

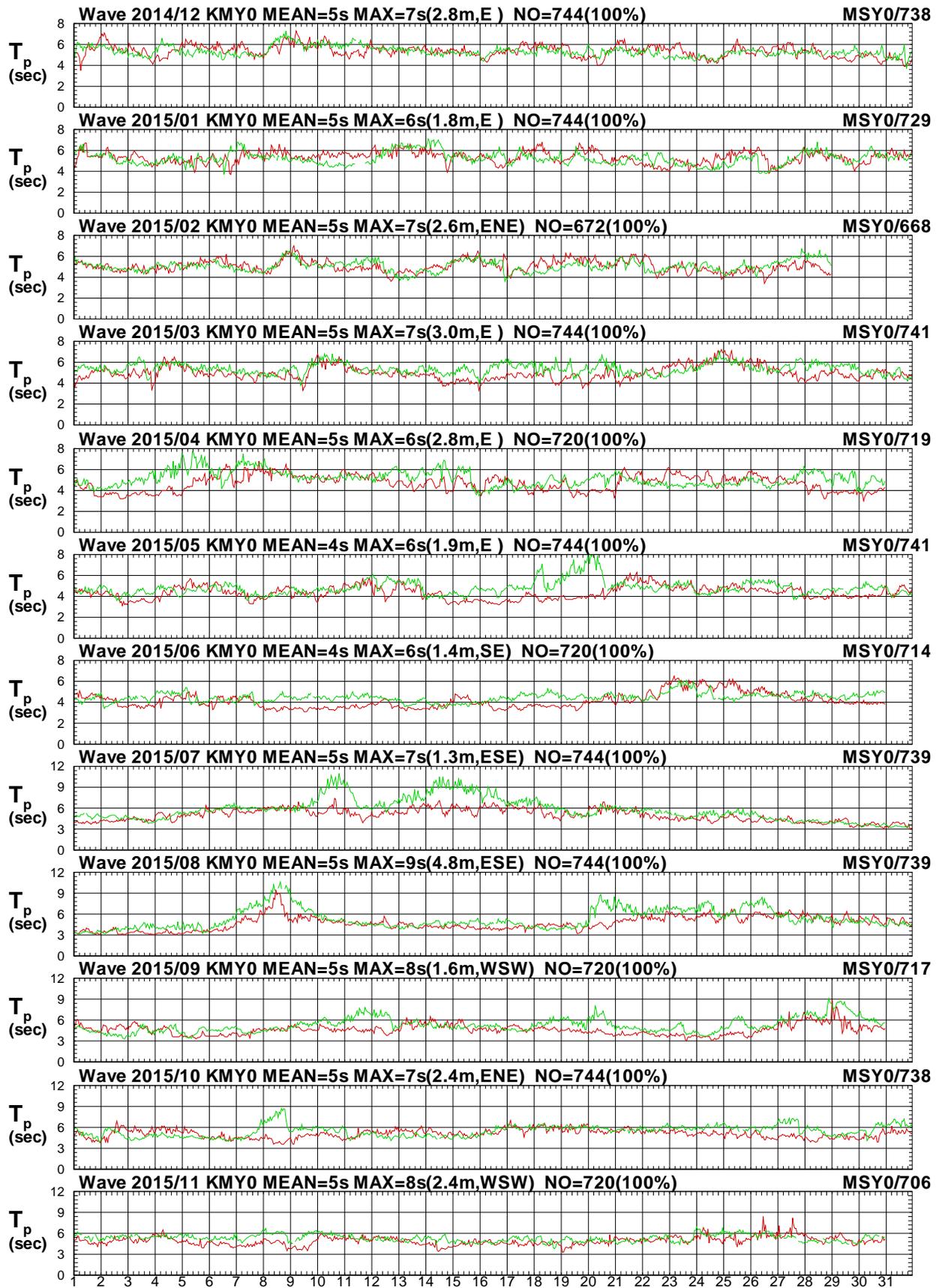


圖 2.5b 2015年每月金門海域 Y 站與馬祖海域 Y 站週期圖

V14CKMY0.1HA V14CMSY0.1H0 V151KMY0.1HA V151MSY0.1H0 V152KMY0.1HA V152MSY0.1H0  
 V153KMY0.1HA V153MSY0.1H0 V154KMY0.1HA V154MSY0.1H0 V155KMY0.1HA V155MSY0.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

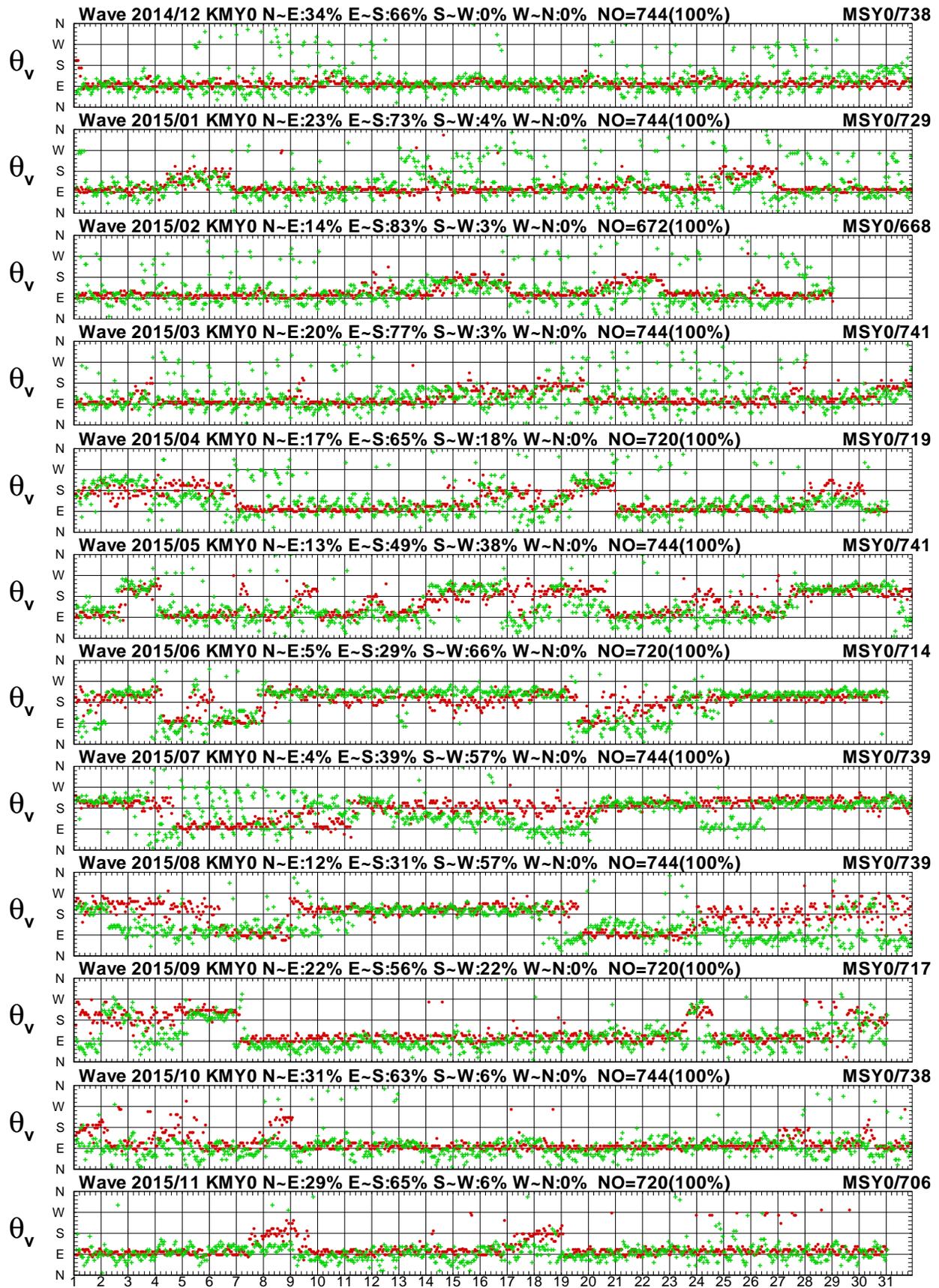


圖 2.5c 2015年每月金門海域 Y 站與馬祖海域 Y 站波向圖

V14CKMY0.1HA V14CMSY0.1H0 V151KMY0.1HA V151MSY0.1H0 V152KMY0.1HA V152MSY0.1H0  
 V153KMY0.1HA V153MSY0.1H0 V154KMY0.1HA V154MSY0.1H0 V155KMY0.1HA V155MSY0.1H0

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

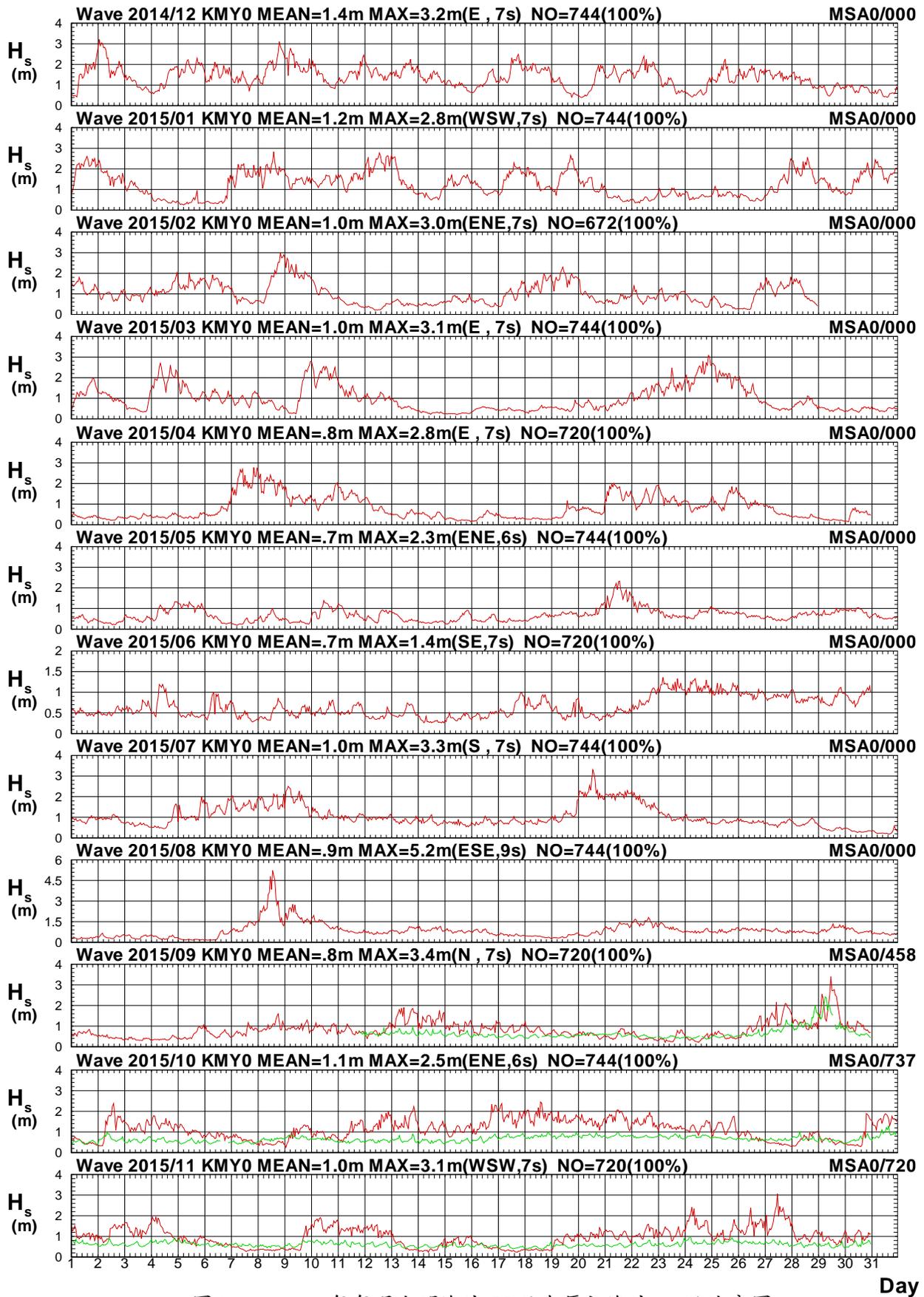


圖 2.6a 2015年每月金門海域 Y 站與馬祖海域 A 站波高圖

V14CKMY0.1HA V14CMSA0.1H0 V151KMY0.1HA V151MSA0.1H0 V152KMY0.1HA V152MSA0.1H0  
 V153KMY0.1HA V153MSA0.1H0 V154KMY0.1HA V154MSA0.1H0 V155KMY0.1HA V155MSA0.1H0

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

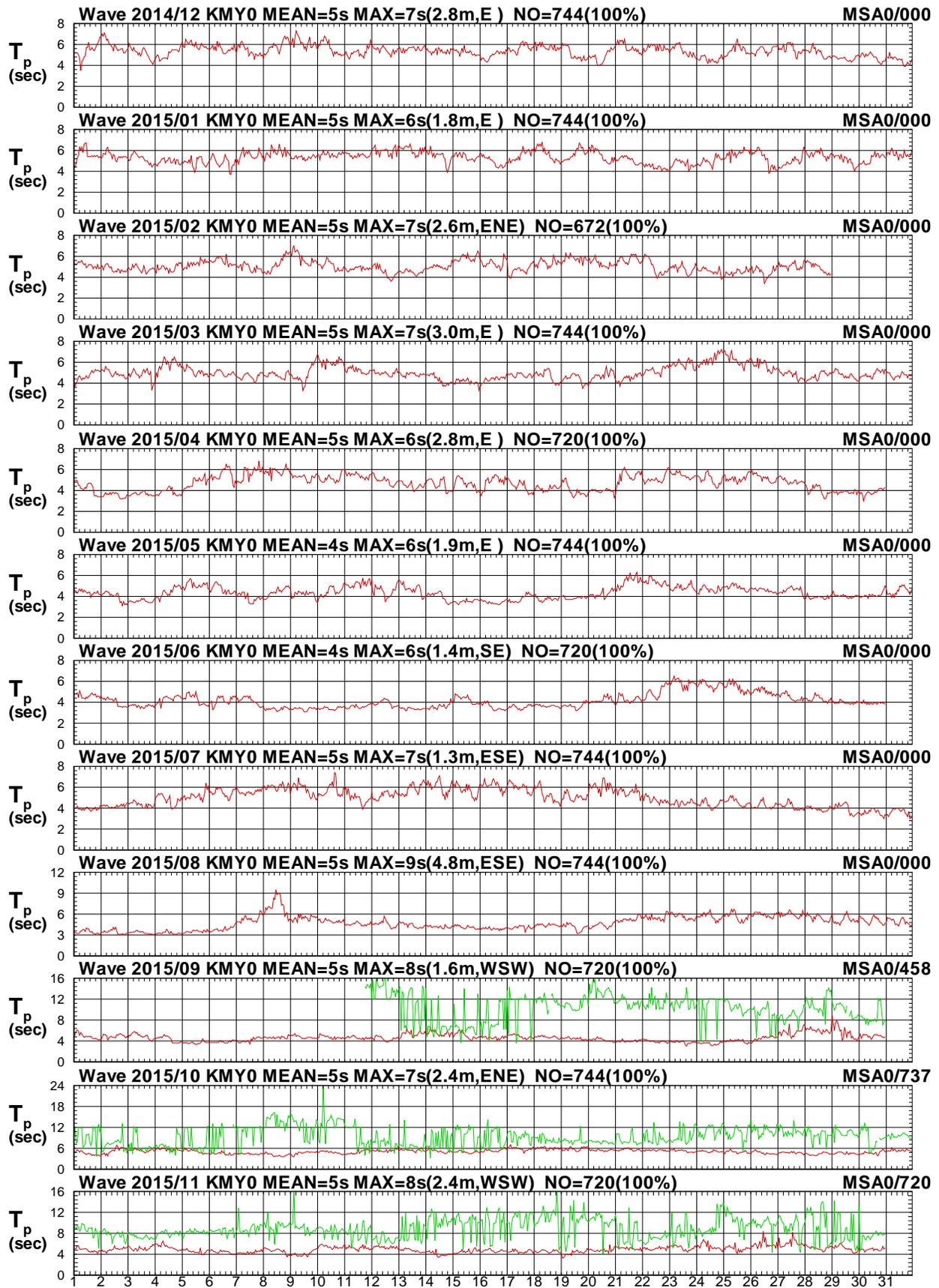


圖 2.6b 2015年每月金門海域 Y 站與馬祖海域 A 站週期圖

V14CKMY0.1HA V14CMSA0.1H0 V151KMY0.1HA V151MSA0.1H0 V152KMY0.1HA V152MSA0.1H0  
 V153KMY0.1HA V153MSA0.1H0 V154KMY0.1HA V154MSA0.1H0 V155KMY0.1HA V155MSA0.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

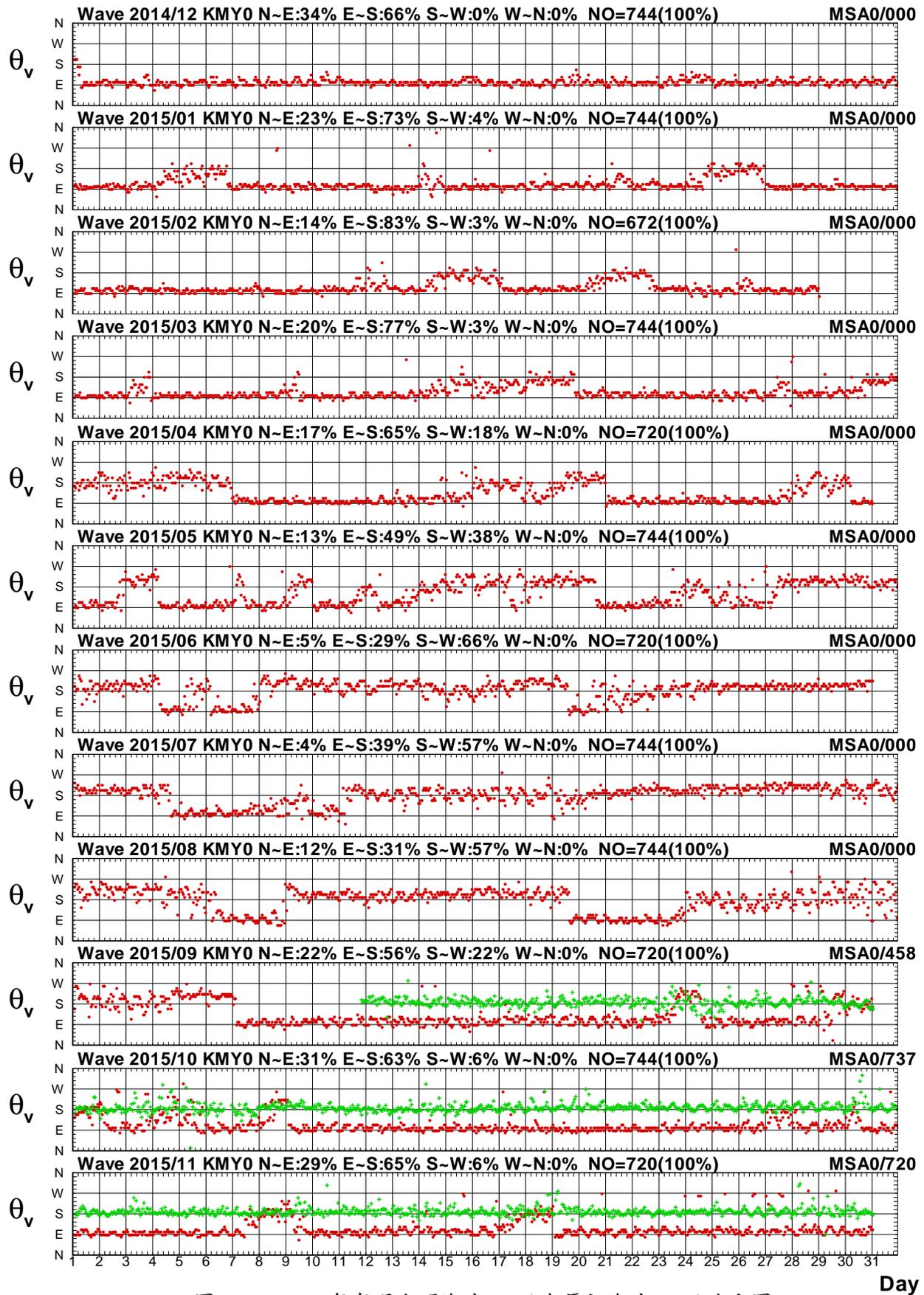


圖 2.6c 2015年每月金門海域 Y 站與馬祖海域 A 站波向圖

V14CKMY0.1HA V14CMSA0.1HO V151KMY0.1HA V151MSA0.1HO V152KMY0.1HA V152MSA0.1HO  
 V153KMY0.1HA V153MSA0.1HO V154KMY0.1HA V154MSA0.1HO V155KMY0.1HA V155MSA0.1HO

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

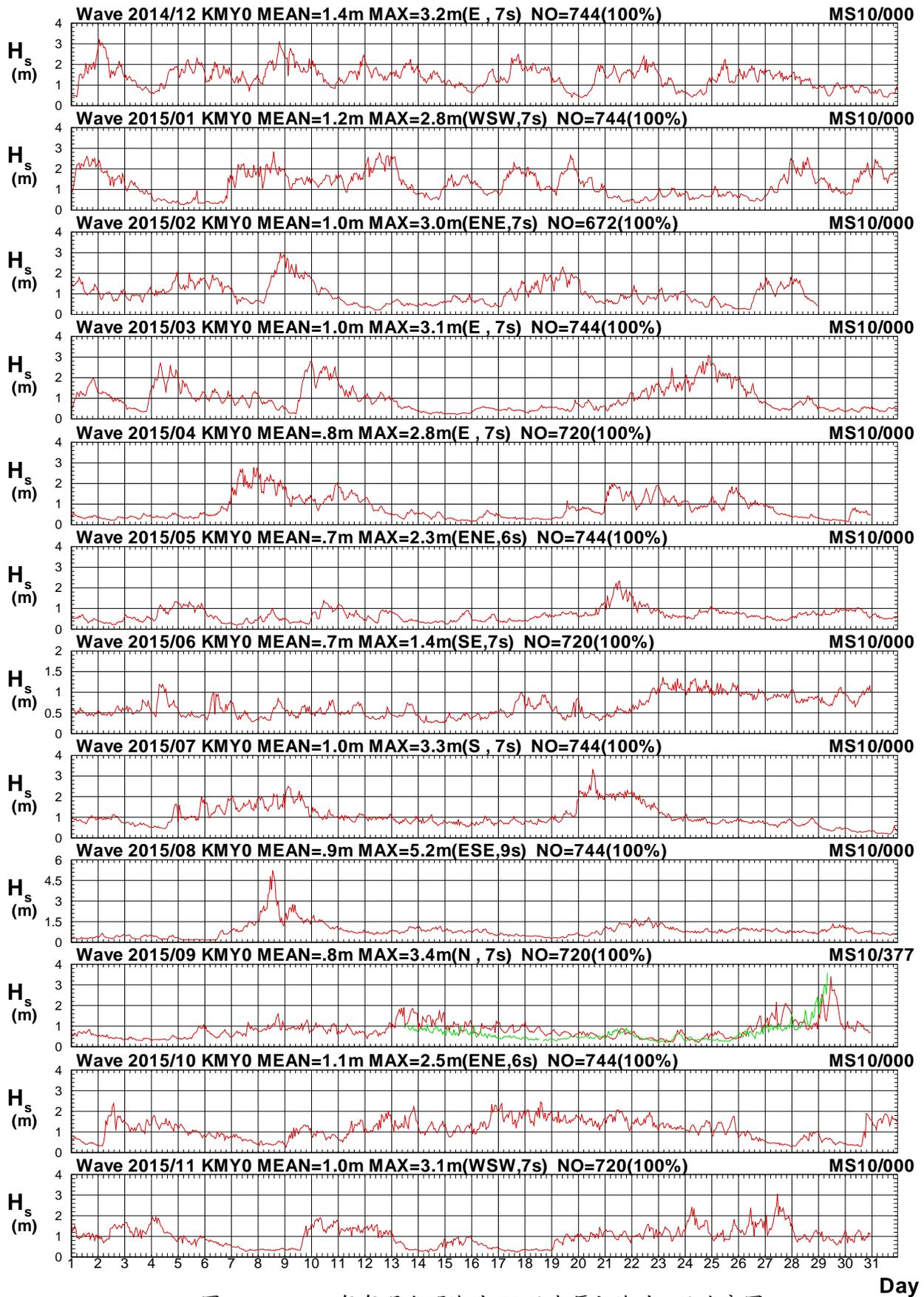


圖 2.7a 2015年每月金門海域 Y 站與馬祖海域 1 站波高圖

V14CKMY0.1HA V14CMS10.1H0 V151KMY0.1HA V151MS10.1H0 V152KMY0.1HA V152MS10.1H0  
 V153KMY0.1HA V153MS10.1H0 V154KMY0.1HA V154MS10.1H0 V155KMY0.1HA V155MS10.1H0

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

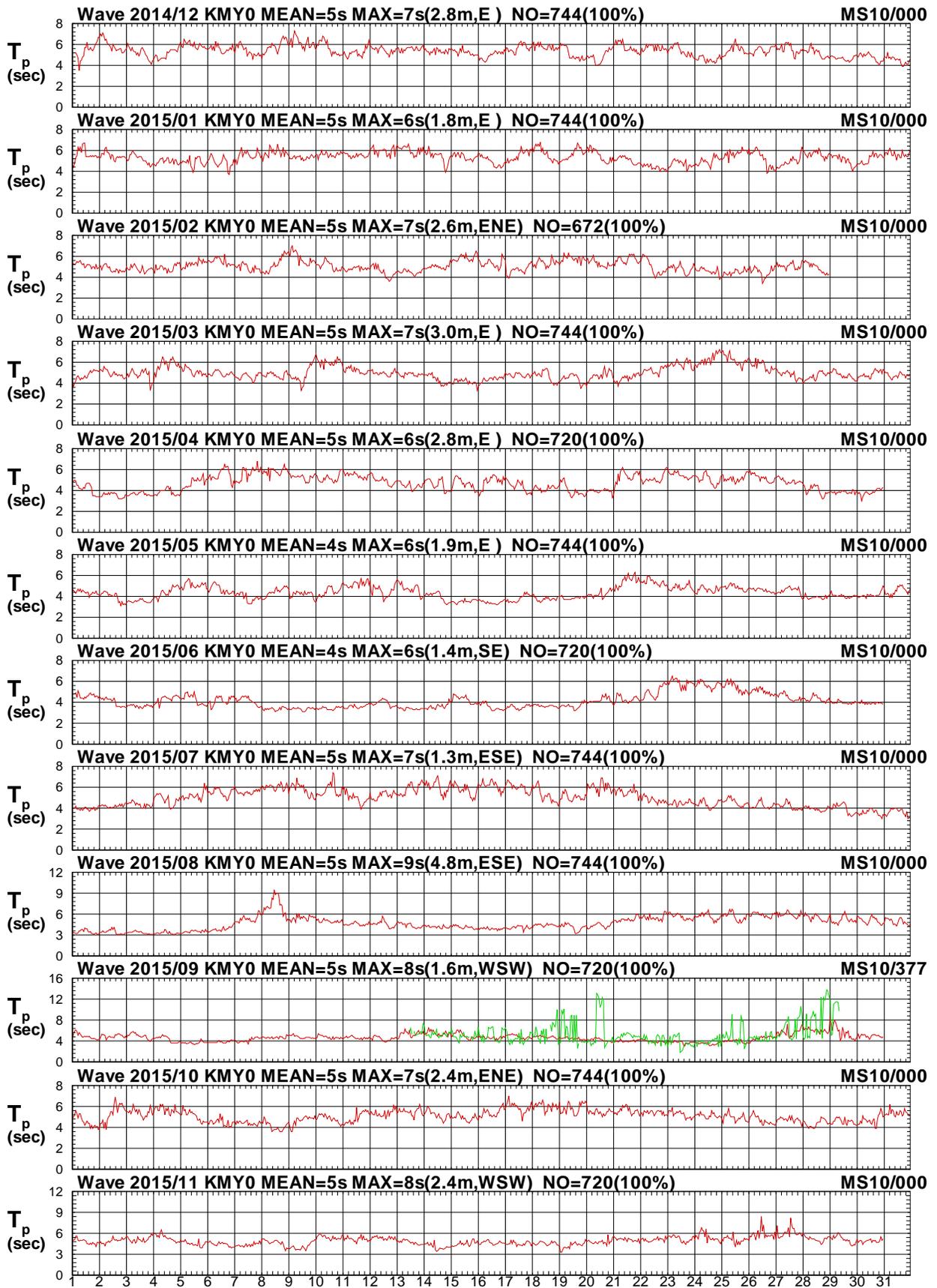


圖 2.7b 2015年每月金門海域 Y 站與馬祖海域 1 站週期圖

V14CKMY0.1HA V14CMS10.1H0 V151KMY0.1HA V151MS10.1H0 V152KMY0.1HA V152MS10.1H0  
 V153KMY0.1HA V153MS10.1H0 V154KMY0.1HA V154MS10.1H0 V155KMY0.1HA V155MS10.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

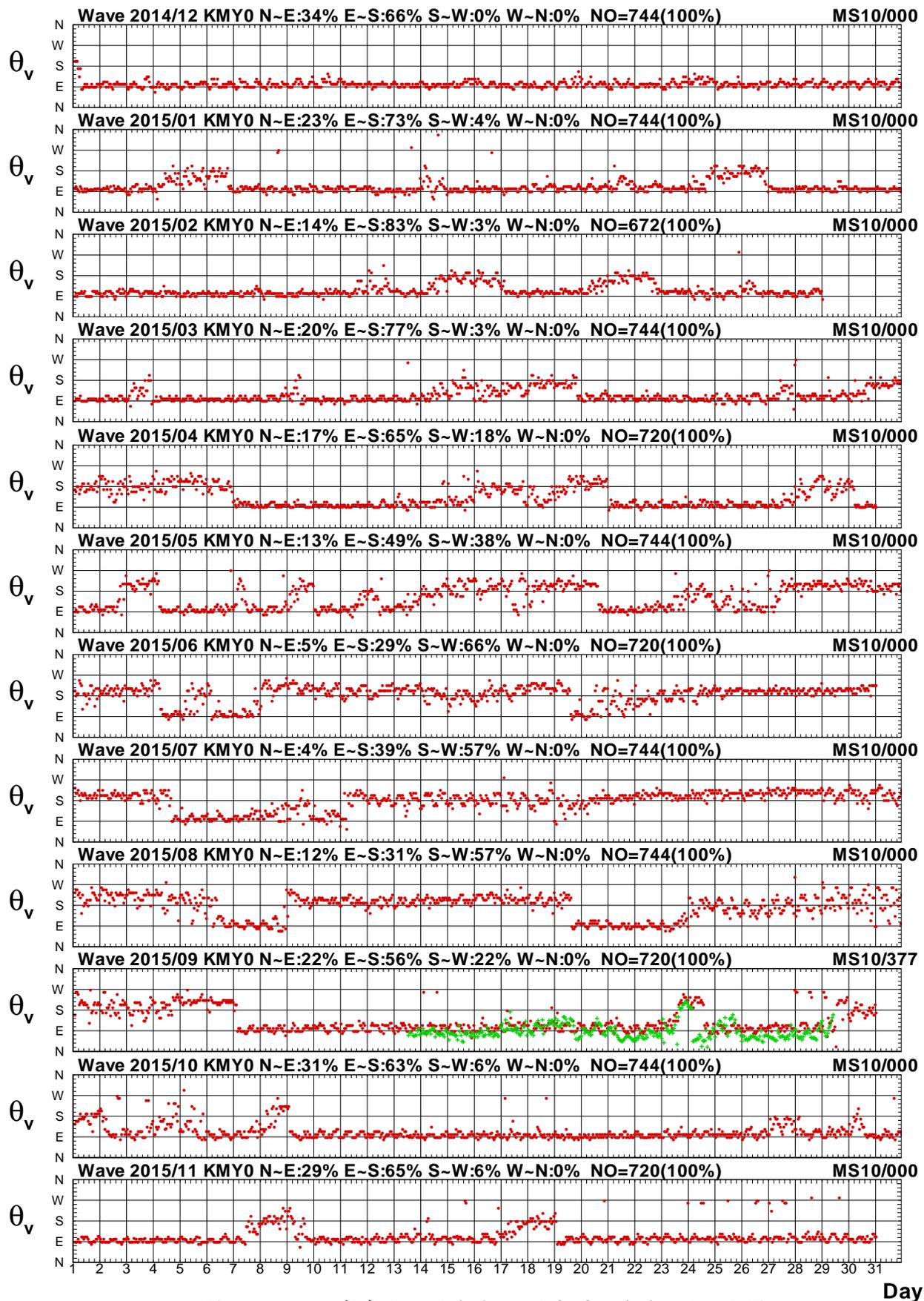


圖 2.7c 2015年每月金門海域 Y 站與馬祖海域 1 站波向圖

V14CKMY0.1HA V14CMS10.1H0 V151KMY0.1HA V151MS10.1H0 V152KMY0.1HA V152MS10.1H0  
 V153KMY0.1HA V153MS10.1H0 V154KMY0.1HA V154MS10.1H0 V155KMY0.1HA V155MS10.1H0

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

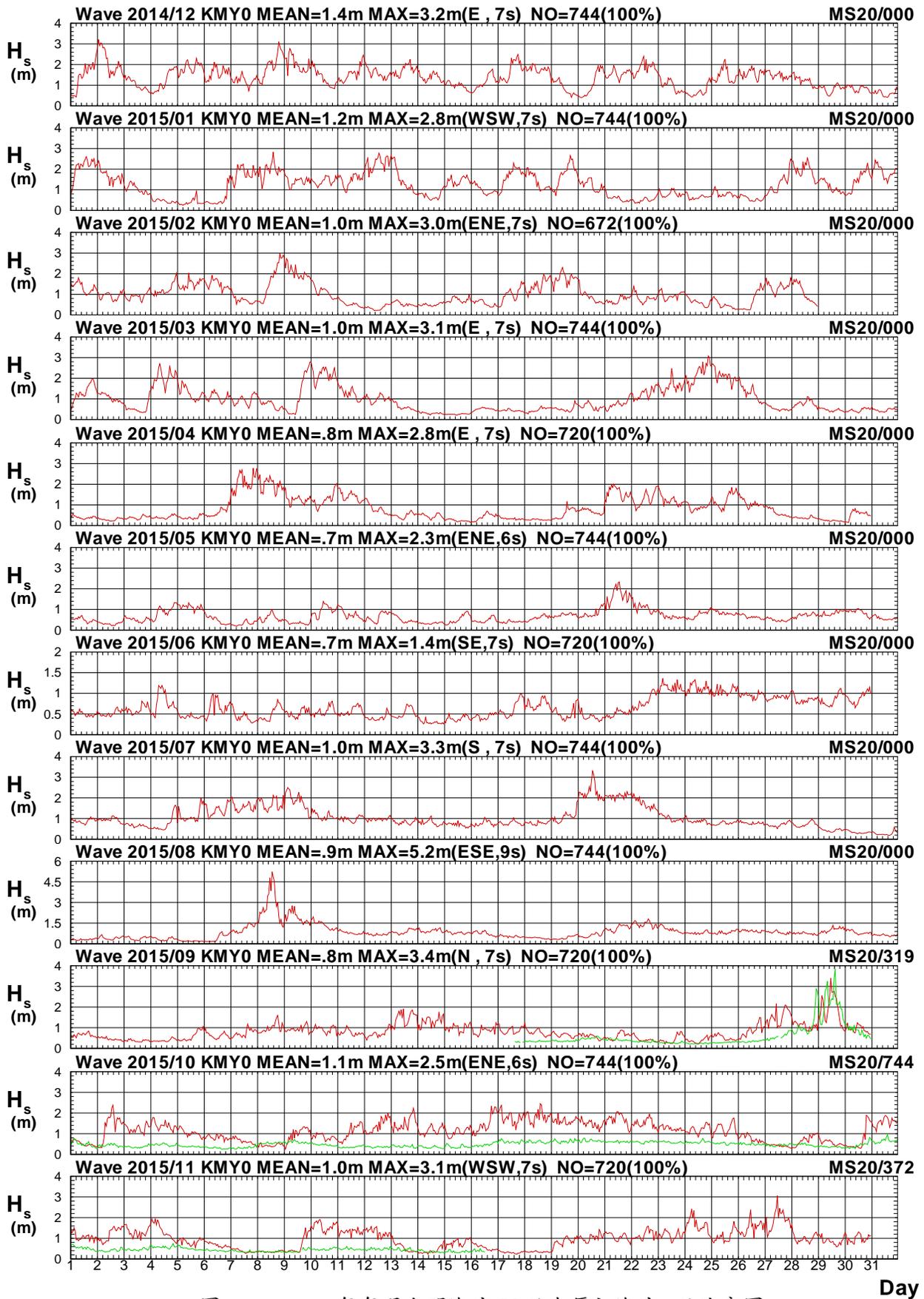


圖 2.8a 2015年每月金門海域 Y 站與馬祖海域 2 站波高圖

V14CKMY0.1HA V14CMS20.1H0 V151KMY0.1HA V151MS20.1H0 V152KMY0.1HA V152MS20.1H0  
 V153KMY0.1HA V153MS20.1H0 V154KMY0.1HA V154MS20.1H0 V155KMY0.1HA V155MS20.1H0

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

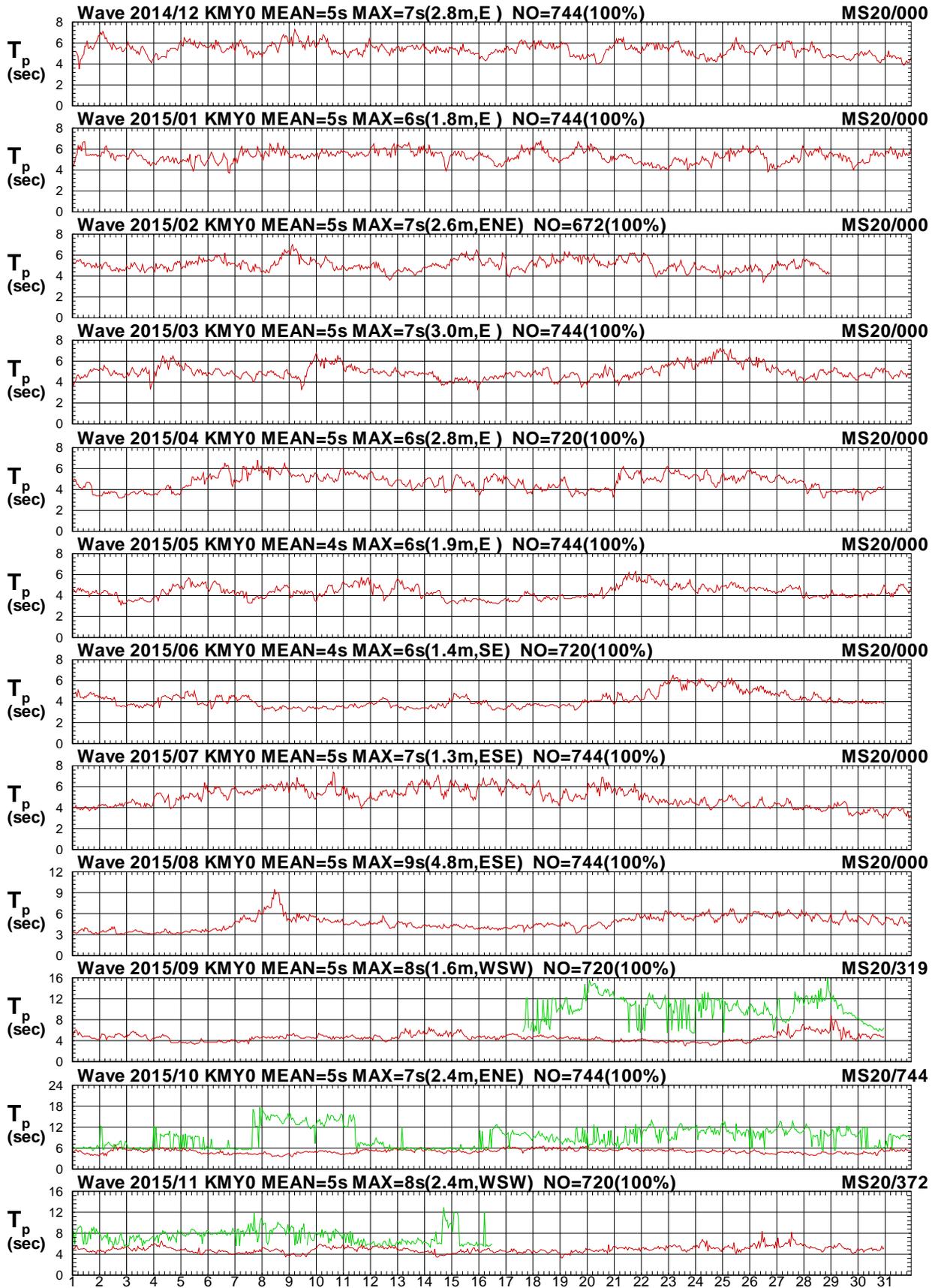


圖 2.8b 2015年每月金門海域 Y 站與馬祖海域 2 站週期圖

V14CKMY0.1HA V14CMS20.1H0 V151KMY0.1HA V151MS20.1H0 V152KMY0.1HA V152MS20.1H0  
 V153KMY0.1HA V153MS20.1H0 V154KMY0.1HA V154MS20.1H0 V155KMY0.1HA V155MS20.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

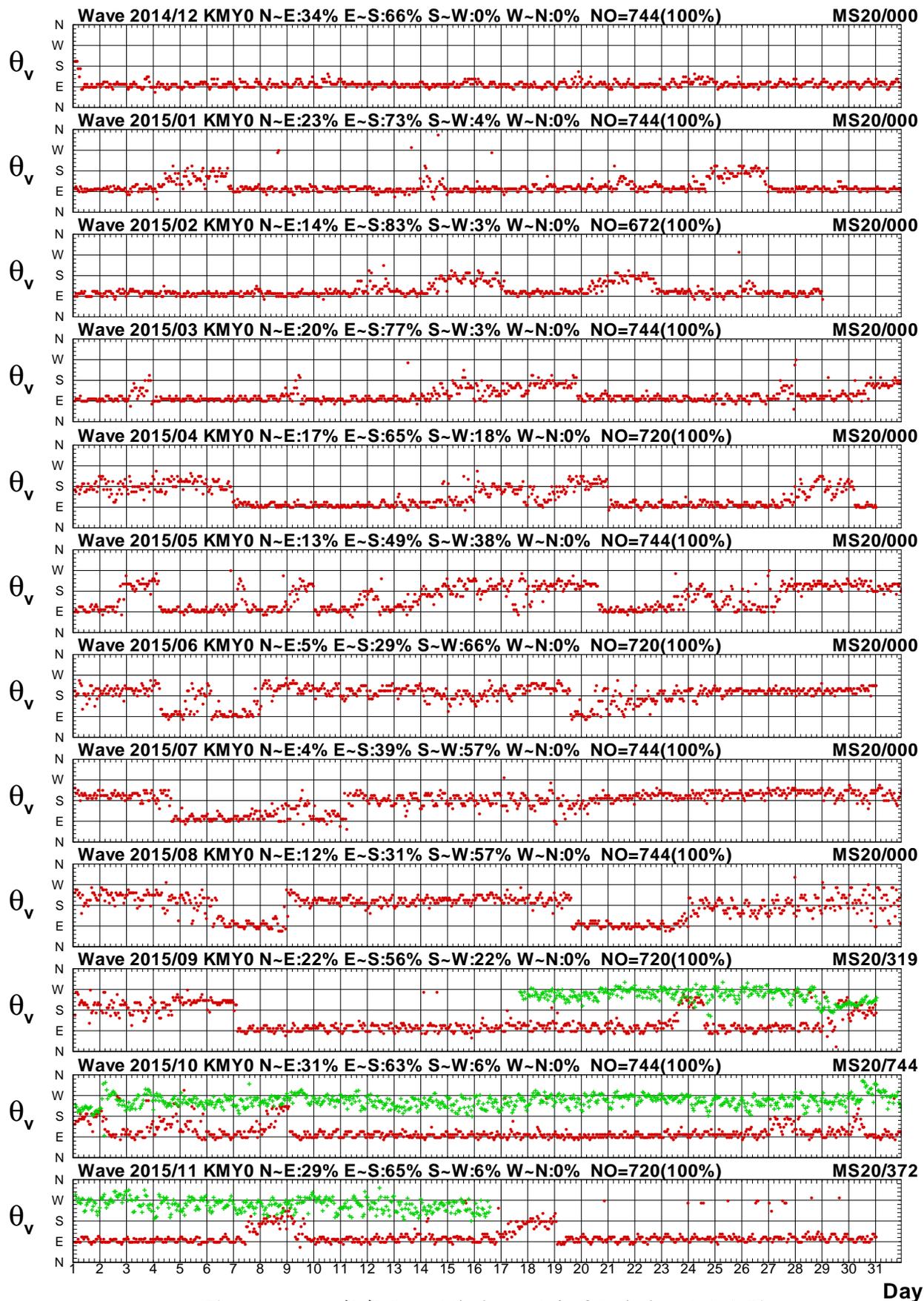


圖 2.8c 2015 年每月金門海域 Y 站與馬祖海域 2 站波向圖

V14CKMY0.1HA V14CMS20.1H0 V151KMY0.1HA V151MS20.1H0 V152KMY0.1HA V152MS20.1H0  
 V153KMY0.1HA V153MS20.1H0 V154KMY0.1HA V154MS20.1H0 V155KMY0.1HA V155MS20.1H0

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

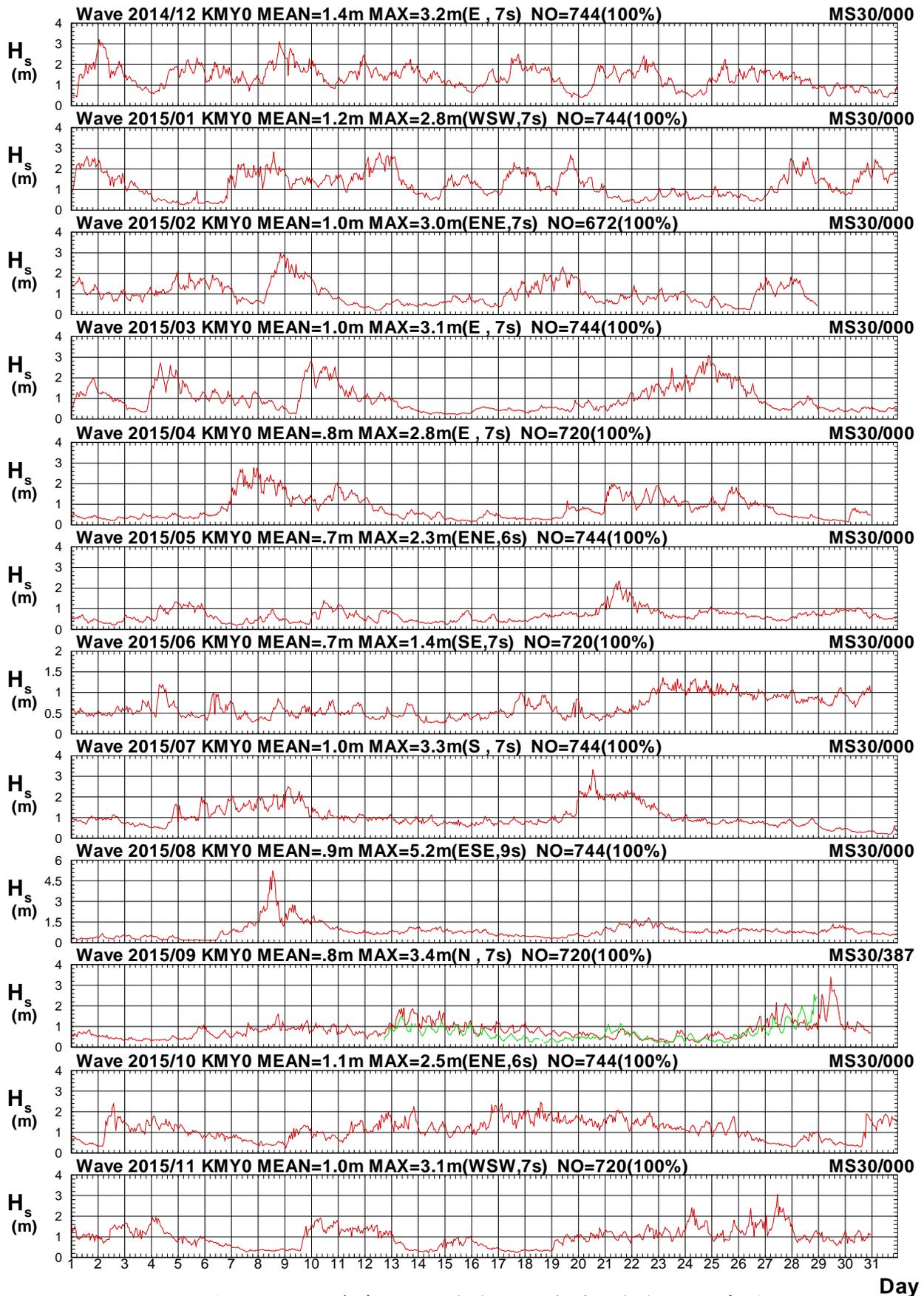


圖 2.9a 2015年每月金門海域 Y 站與馬祖海域3站波高圖

V14CKMY0.1HA V14CMS30.1H0 V151KMY0.1HA V151MS30.1H0 V152KMY0.1HA V152MS30.1H0  
 V153KMY0.1HA V153MS30.1H0 V154KMY0.1HA V154MS30.1H0 V155KMY0.1HA V155MS30.1H0

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

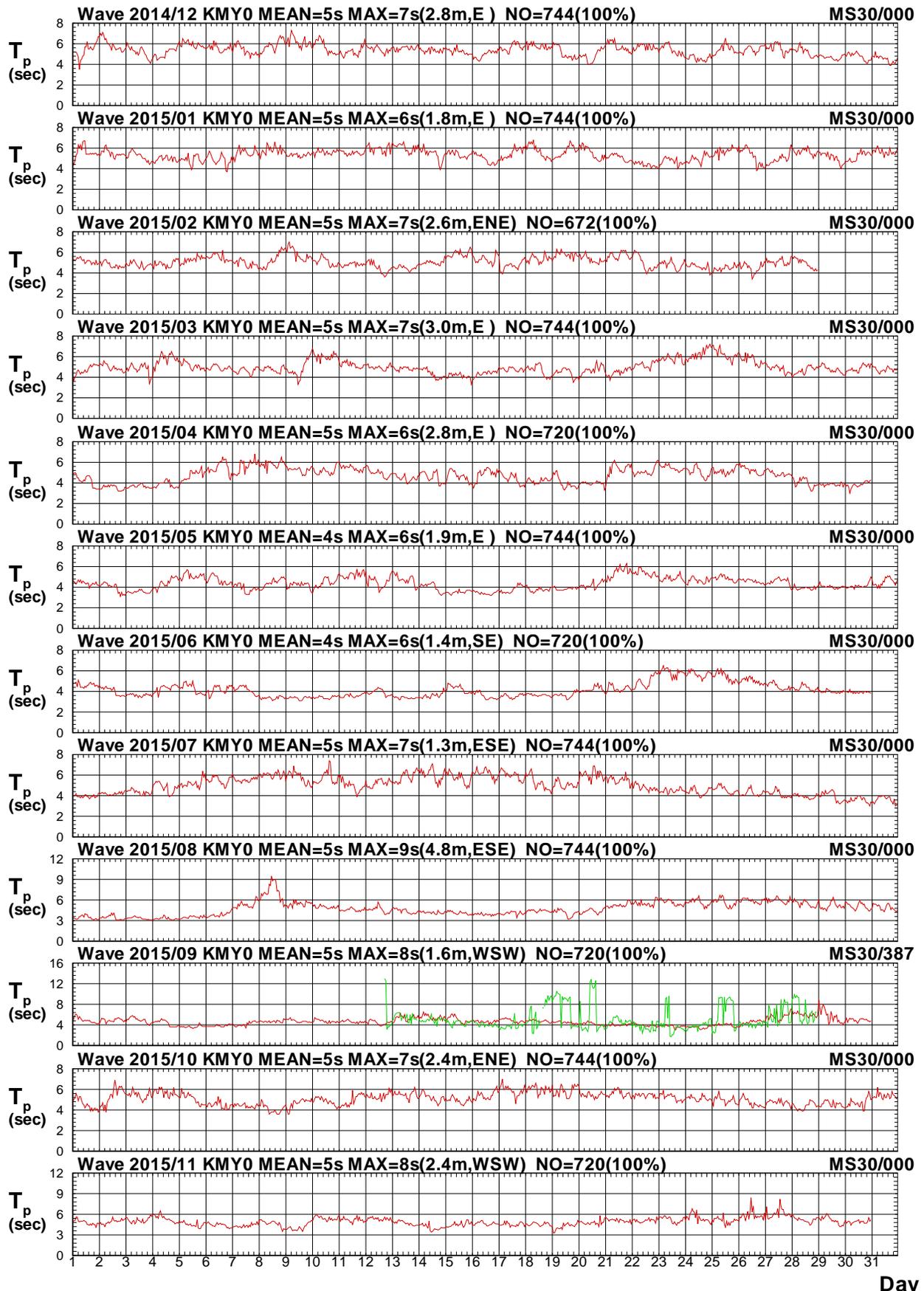


圖 2.9b 2015年每月金門海域 Y 站與馬祖海域3站週期圖

V14CKMY0.1HA V14CMS30.1H0 V151KMY0.1HA V151MS30.1H0 V152KMY0.1HA V152MS30.1H0  
 V153KMY0.1HA V153MS30.1H0 V154KMY0.1HA V154MS30.1H0 V155KMY0.1HA V155MS30.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

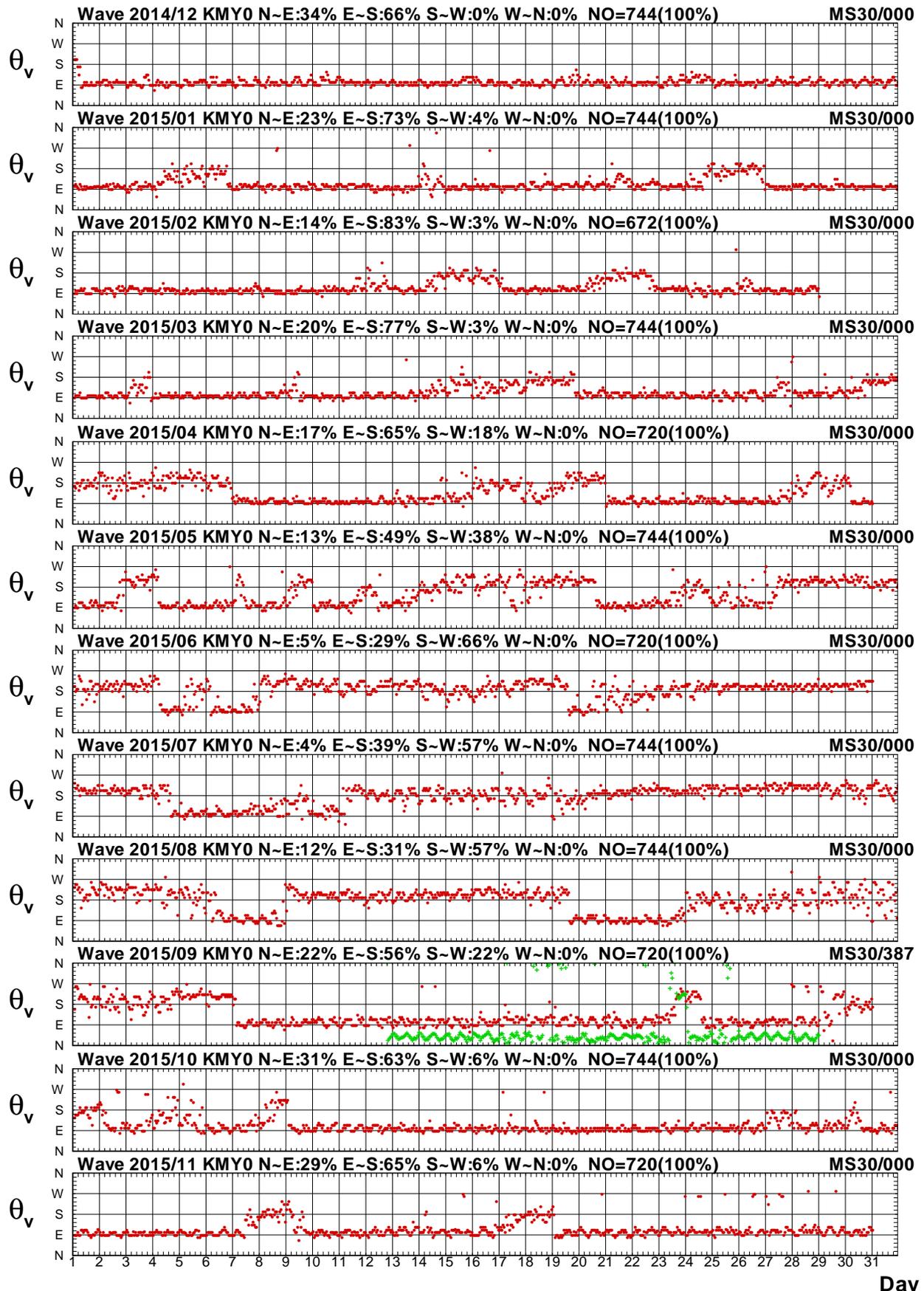


圖 2.9c 2015年每月金門海域 Y 站與馬祖海域3站波向圖

V14CKMY0.1HA V14CMS30.1H0 V151KMY0.1HA V151MS30.1H0 V152KMY0.1HA V152MS30.1H0  
 V153KMY0.1HA V153MS30.1H0 V154KMY0.1HA V154MS30.1H0 V155KMY0.1HA V155MS30.1H0

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

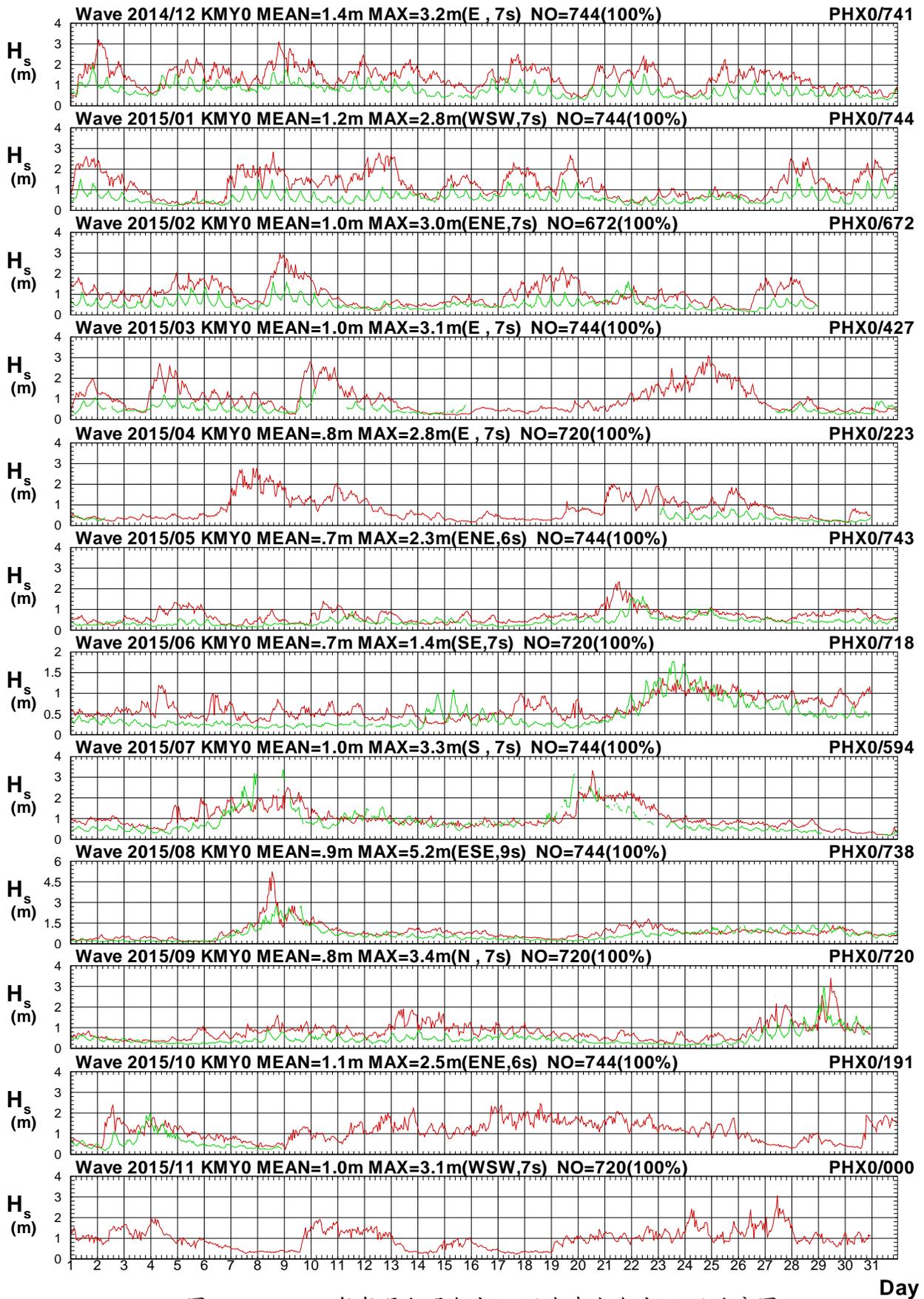


圖 2.10a 2015年每月金門海域 Y 站與澎湖海域 X 站波高圖

V14CKMY0.1HA V14CPHX0.1H0 V151KMY0.1HA V151PHX0.1H0 V152KMY0.1HA V152PHX0.1H0  
 V153KMY0.1HA V153PHX0.1H0 V154KMY0.1HA V154PHX0.1H0 V155KMY0.1HA V155PHX0.1H0

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

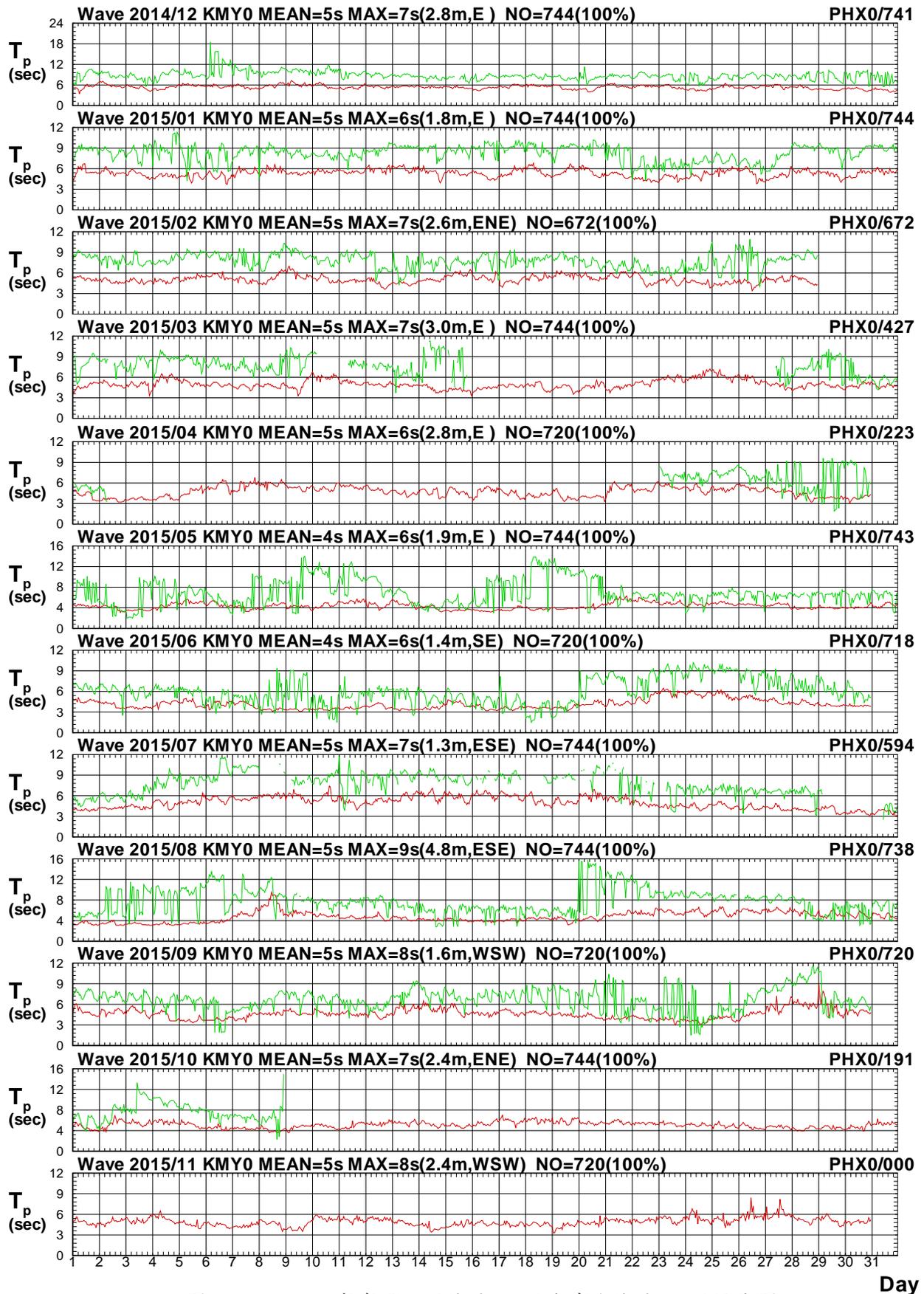


圖 2.10b 2015年每月金門海域 Y 站與澎湖海域 X 站週期圖

V14CKMY0.1HA V14CPHX0.1H0 V151KMY0.1HA V151PHX0.1H0 V152KMY0.1HA V152PHX0.1H0  
 V153KMY0.1HA V153PHX0.1H0 V154KMY0.1HA V154PHX0.1H0 V155KMY0.1HA V155PHX0.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

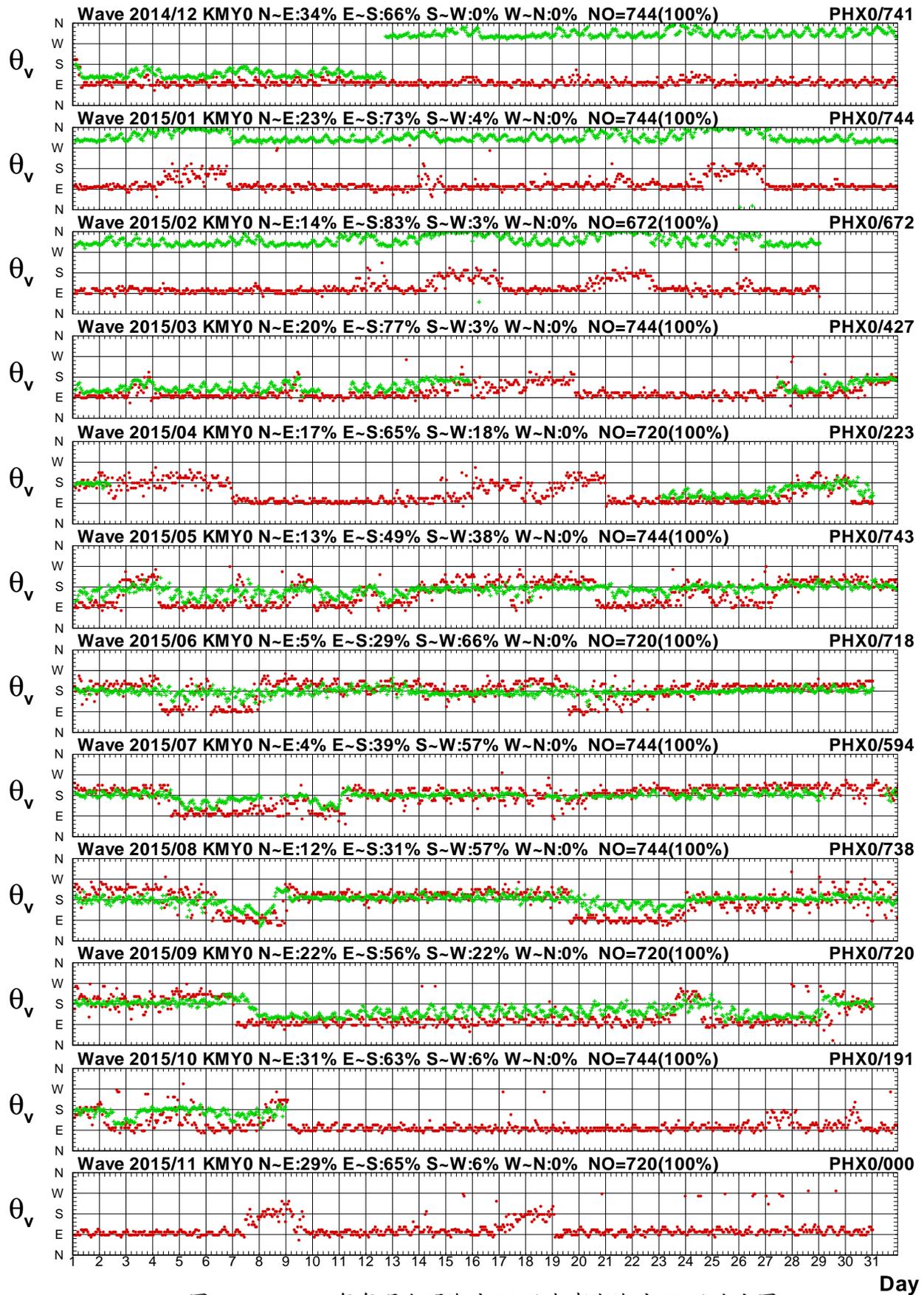


圖 2.10c 2015年每月金門海域 Y 站與澎湖海域 X 站波向圖

V14CKMY0.1HA V14CPHX0.1H0 V151KMY0.1HA V151PHX0.1H0 V152KMY0.1HA V152PHX0.1H0  
 V153KMY0.1HA V153PHX0.1H0 V154KMY0.1HA V154PHX0.1H0 V155KMY0.1HA V155PHX0.1H0

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

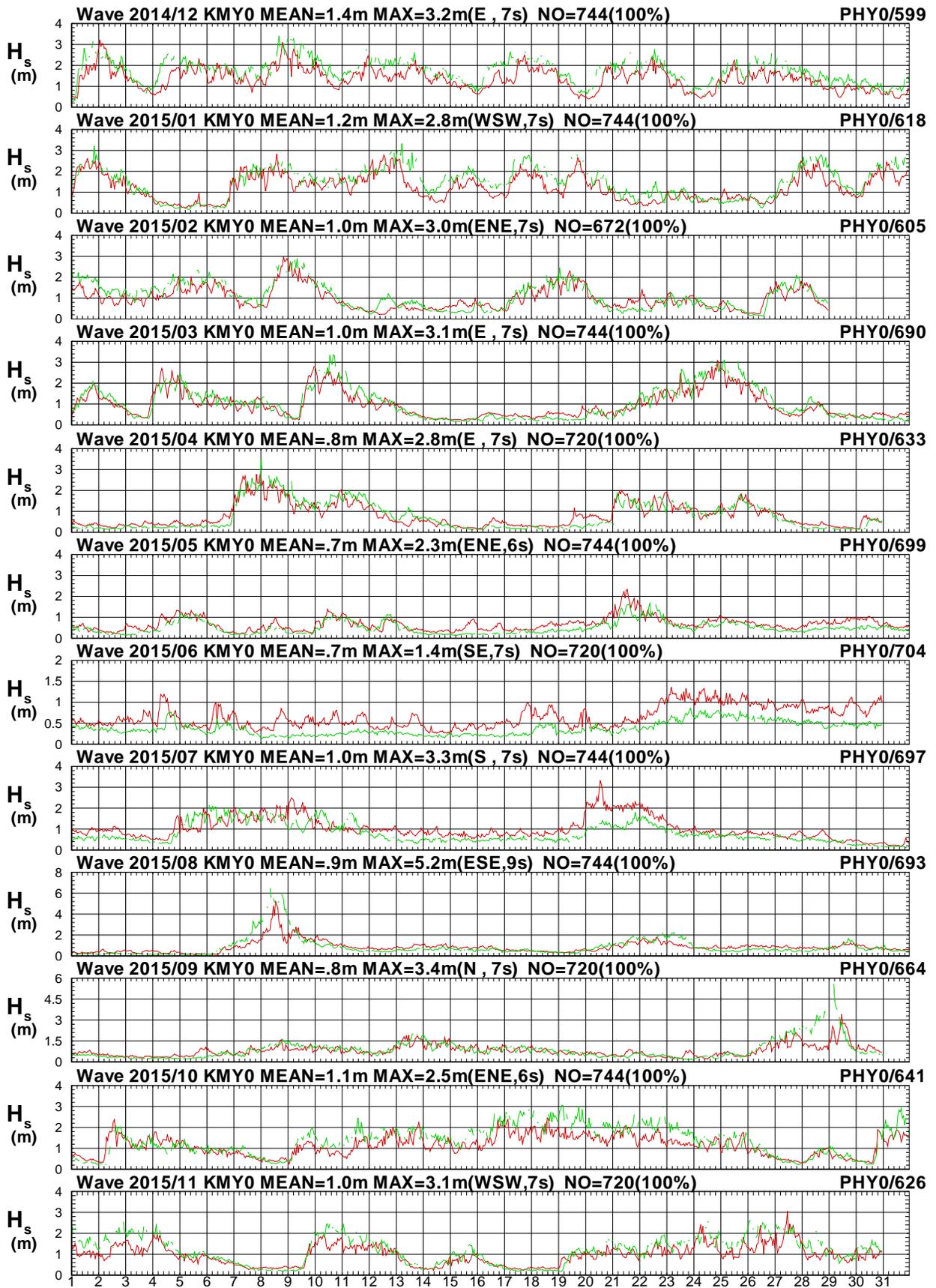


圖 2.11a 2015年每月金門海域 Y 站與澎湖海域 Y 站波高圖

V14CKMY0.1HA V14CPHY0.1H0 V151KMY0.1HA V151PHY0.1H0 V152KMY0.1HA V152PHY0.1H0  
 V153KMY0.1HA V153PHY0.1H0 V154KMY0.1HA V154PHY0.1H0 V155KMY0.1HA V155PHY0.1H0

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

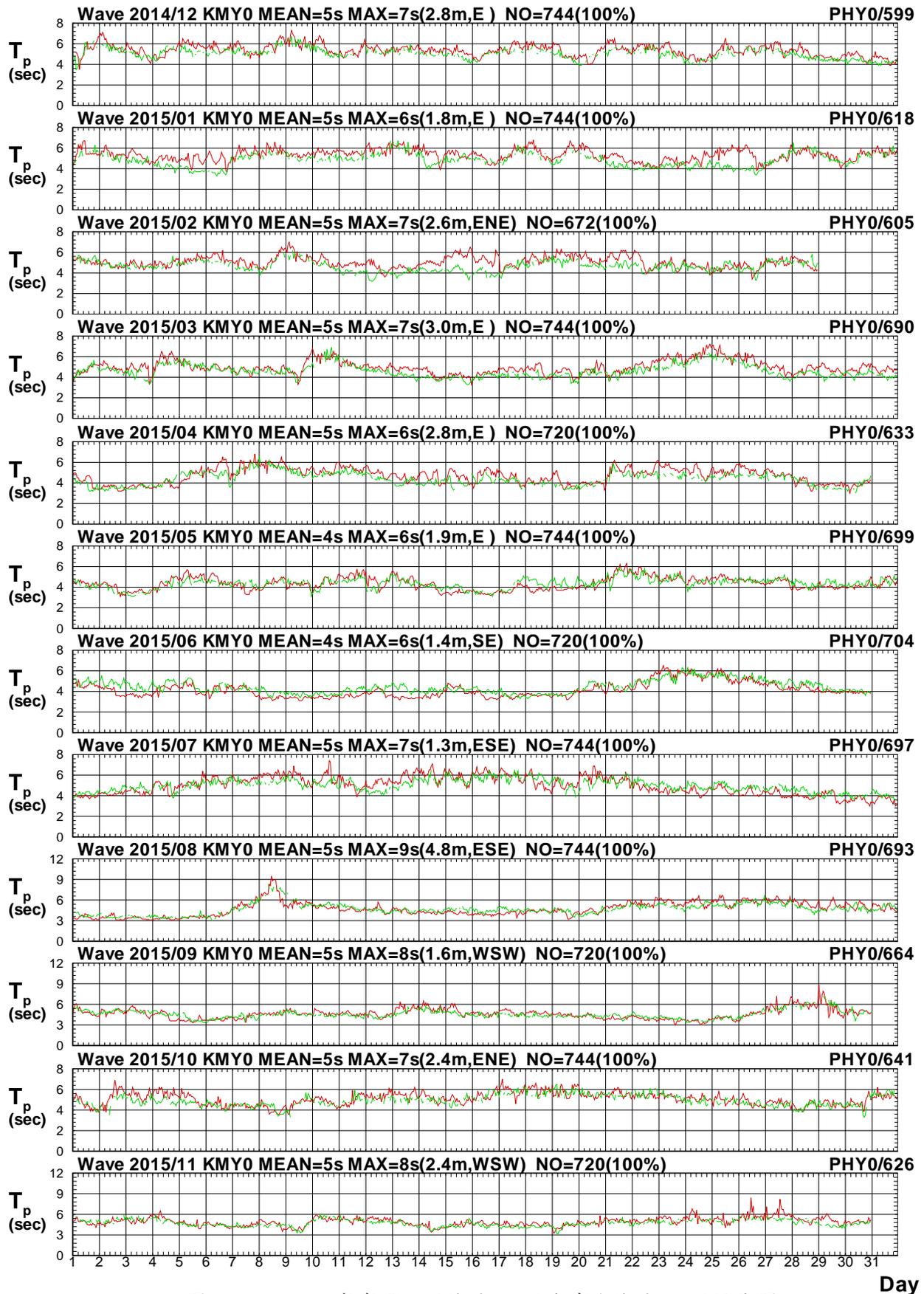


圖 2.11b 2015年每月金門海域 Y 站與澎湖海域 Y 站週期圖

V14CKMY0.1HA V14CPHY0.1H0 V151KMY0.1HA V151PHY0.1H0 V152KMY0.1HA V152PHY0.1H0  
 V153KMY0.1HA V153PHY0.1H0 V154KMY0.1HA V154PHY0.1H0 V155KMY0.1HA V155PHY0.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

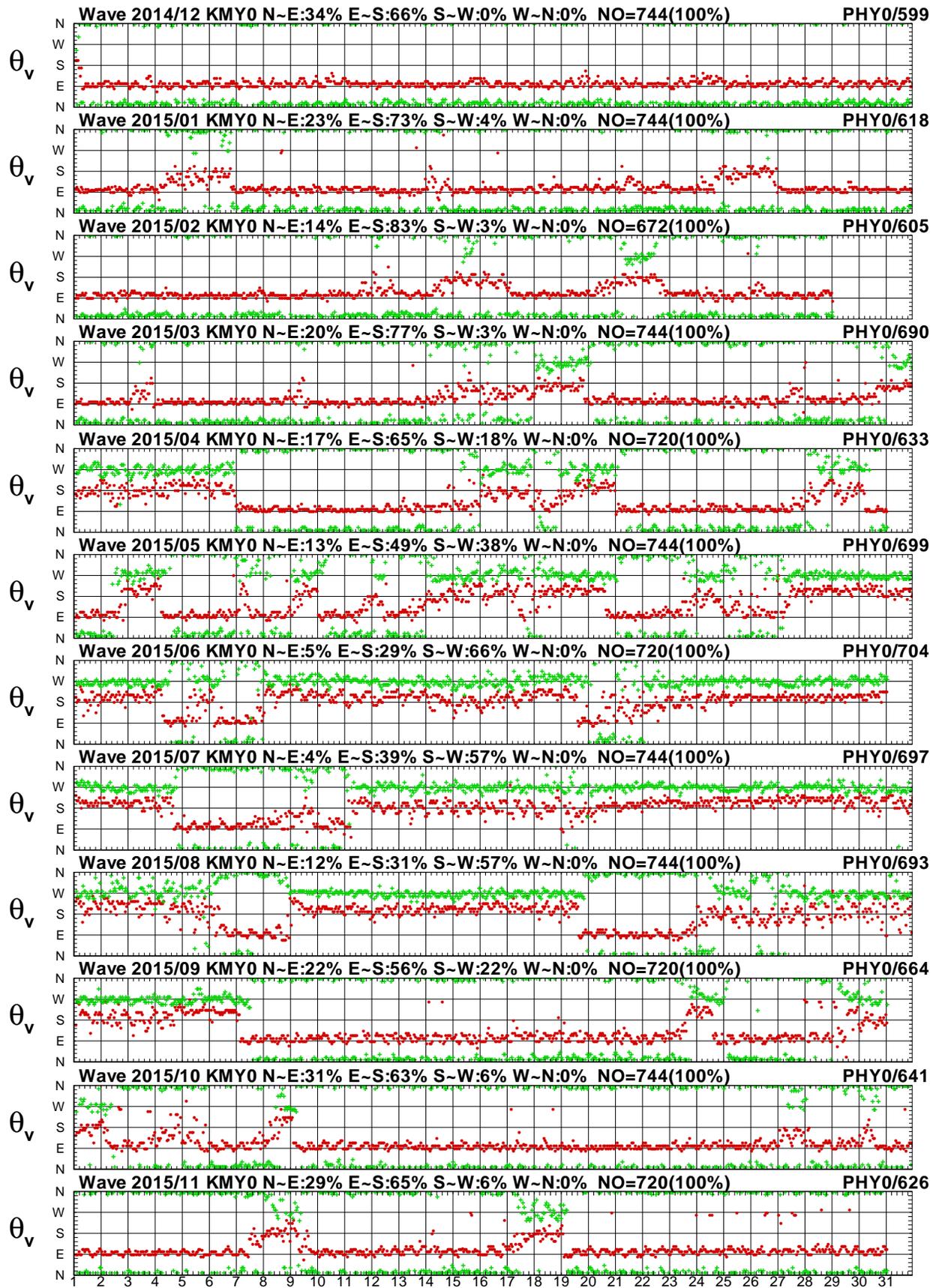


圖 2.11c 2015年每月金門海域 Y 站與澎湖海域 Y 站波向圖

V14CKMY0.1HA V14CPHY0.1HO V151KMY0.1HA V151PHY0.1HO V152KMY0.1HA V152PHY0.1HO  
 V153KMY0.1HA V153PHY0.1HO V154KMY0.1HA V154PHY0.1HO V155KMY0.1HA V155PHY0.1HO

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

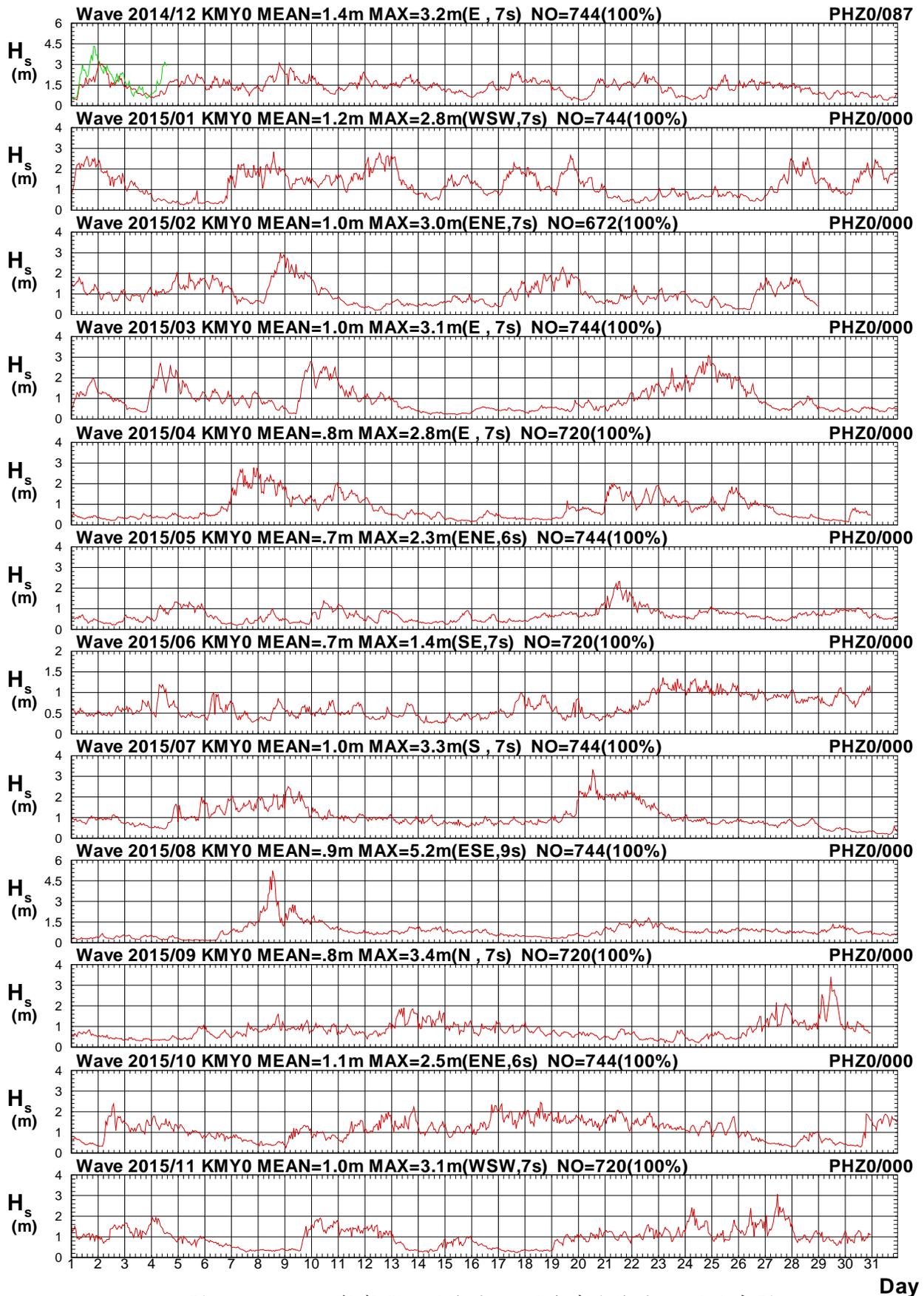


圖 2.12a 2015年每月金門海域 Y 站與澎湖海域 Z 站波高圖

V14CKMY0.1HA V14CPHZ0.1HO V151KMY0.1HA V151PHZ0.1HO V152KMY0.1HA V152PHZ0.1HO  
 V153KMY0.1HA V153PHZ0.1HO V154KMY0.1HA V154PHZ0.1HO V155KMY0.1HA V155PHZ0.1HO

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

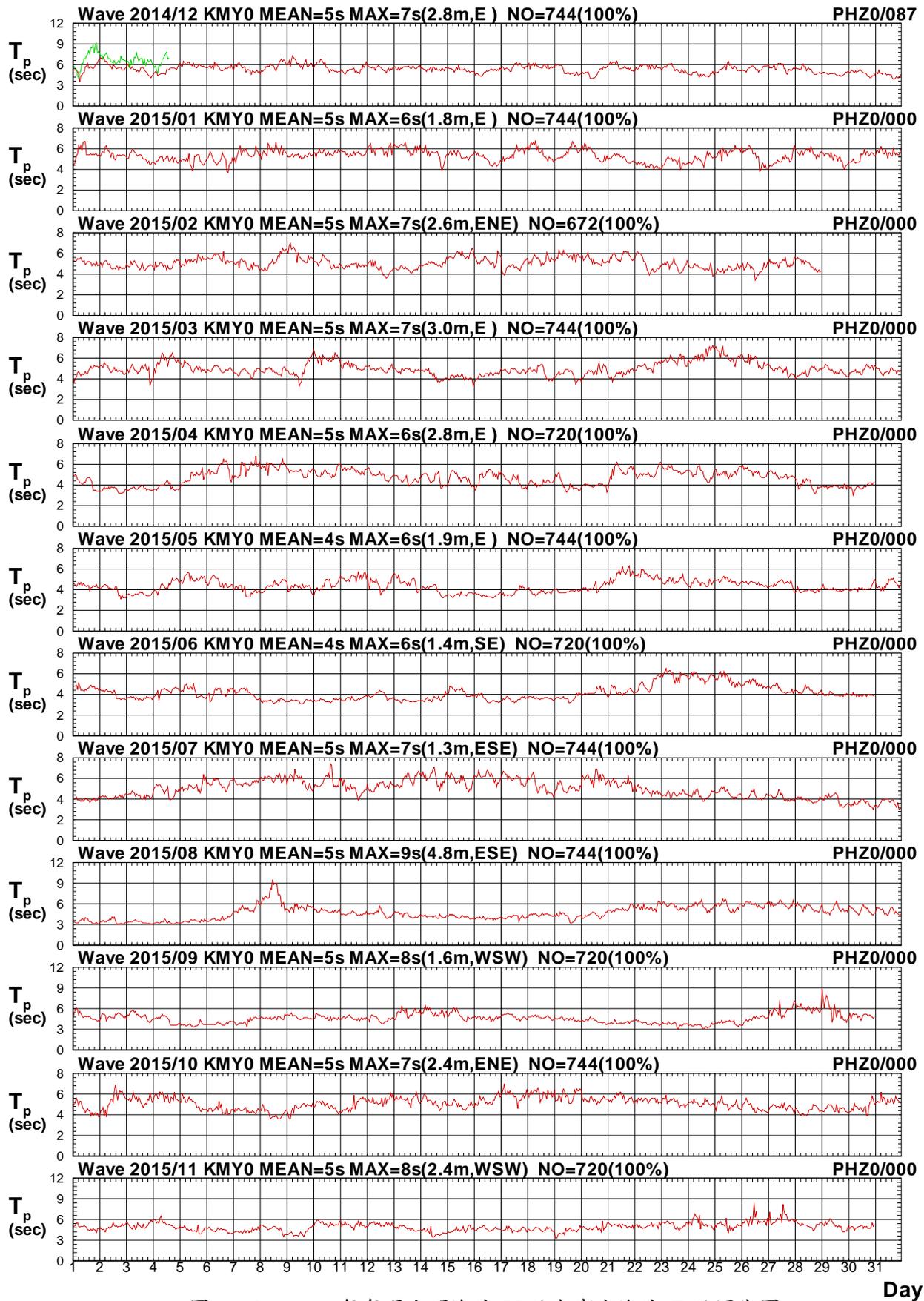


圖 2.12b 2015年每月金門海域 Y 站與澎湖海域 Z 站週期圖

Day

V14CKMY0.1HA V14CPHZ0.1H0 V151KMY0.1HA V151PHZ0.1H0 V152KMY0.1HA V152PHZ0.1H0  
 V153KMY0.1HA V153PHZ0.1H0 V154KMY0.1HA V154PHZ0.1H0 V155KMY0.1HA V155PHZ0.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

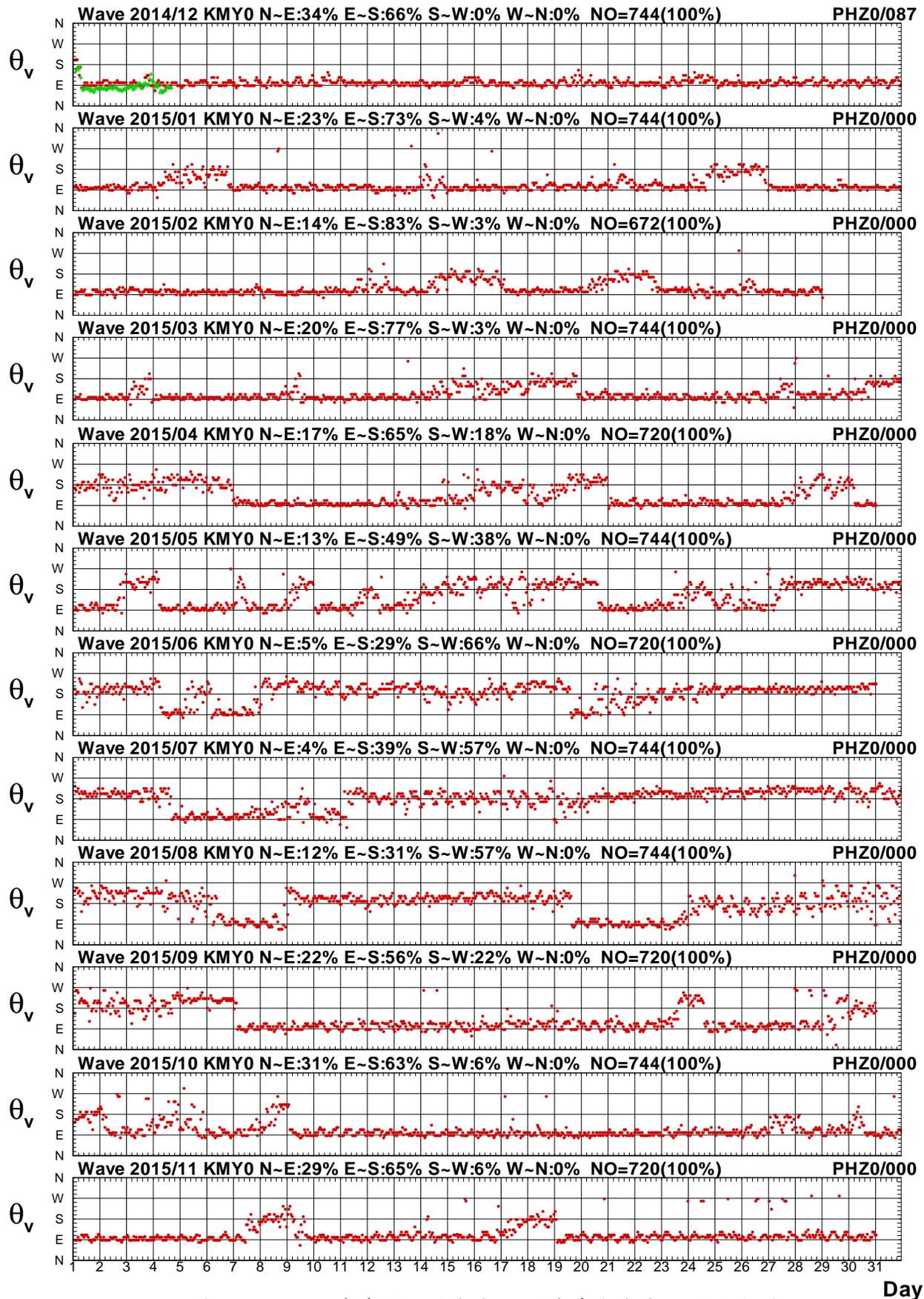


圖 2.12c 2015 年每月金門海域 Y 站與澎湖海域 Z 站波向圖

V14CKMY0.1HA V14CPHZ0.1H0 V151KMY0.1HA V151PHZ0.1H0 V152KMY0.1HA V152PHZ0.1H0  
 V153KMY0.1HA V153PHZ0.1H0 V154KMY0.1HA V154PHZ0.1H0 V155KMY0.1HA V155PHZ0.1H0

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# Wave H<sub>s</sub> in Kin-Men seas of KMY0 at 2015

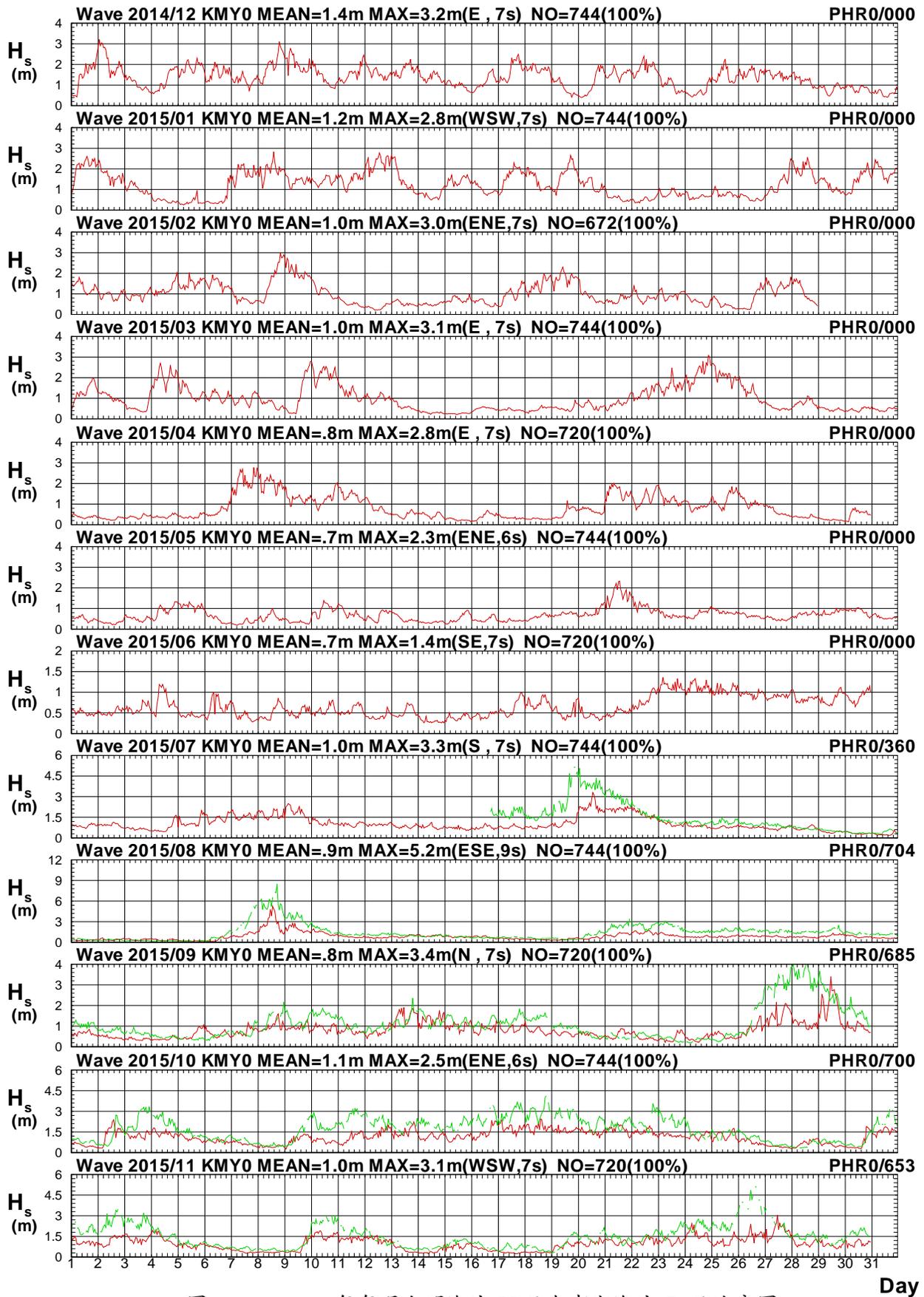


圖 2.13a 2015年每月金門海域 Y 站與澎湖海域 R 站波高圖

V14CKMY0.1HA V14CPHR0.1H0 V151KMY0.1HA V151PHR0.1H0 V152KMY0.1HA V152PHR0.1H0  
 V153KMY0.1HA V153PHR0.1H0 V154KMY0.1HA V154PHR0.1H0 V155KMY0.1HA V155PHR0.1H0

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# Wave $T_p$ in Kin-Men seas of KMY0 at 2015

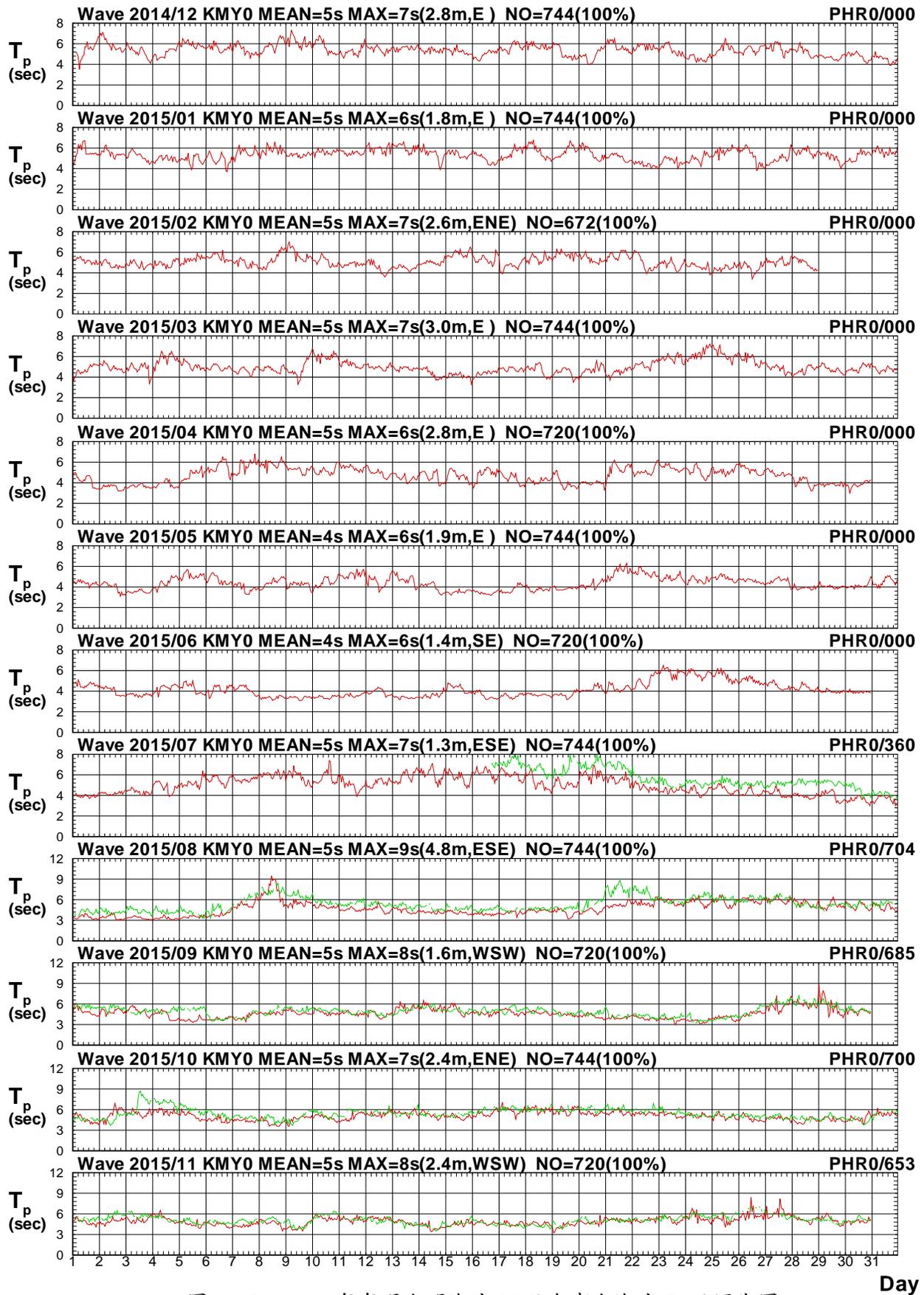


圖 2.13b 2015年每月金門海域 Y 站與澎湖海域 R 站週期圖

V14CKMY0.1HA V14CPHR0.1H0 V151KMY0.1HA V151PHR0.1H0 V152KMY0.1HA V152PHR0.1H0  
 V153KMY0.1HA V153PHR0.1H0 V154KMY0.1HA V154PHR0.1H0 V155KMY0.1HA V155PHR0.1H0

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# Wave Direction in Kin-Men seas of KMY0 at 2015

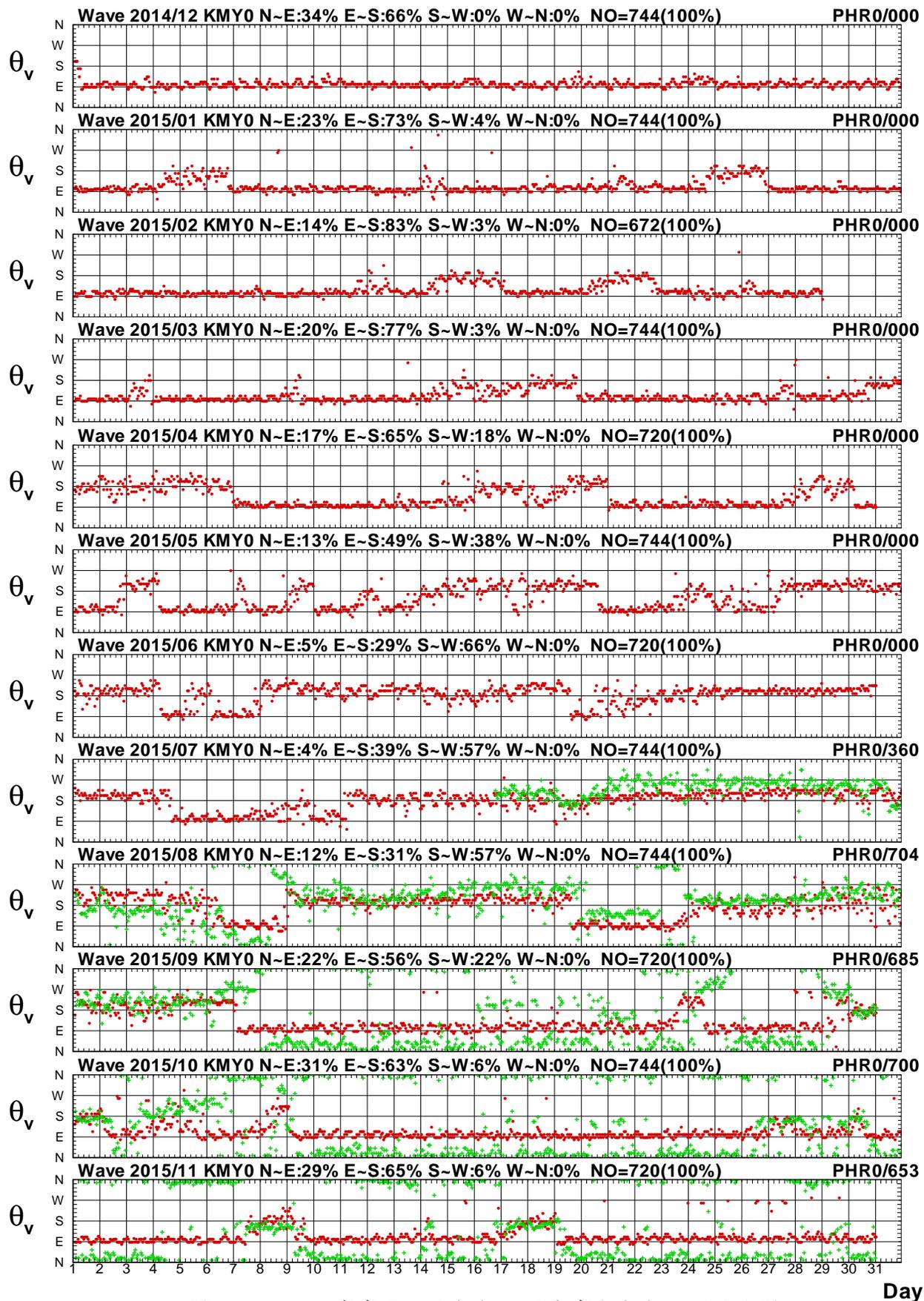


圖 2.13c 2015年每月金門海域 Y 站與澎湖海域 R 站波向圖

V14CKMY0.1HA V14CPHR0.1H0 V151KMY0.1HA V151PHR0.1H0 V152KMY0.1HA V152PHR0.1H0  
 V153KMY0.1HA V153PHR0.1H0 V154KMY0.1HA V154PHR0.1H0 V155KMY0.1HA V155PHR0.1H0

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### 第三章 2015 年金門海域觀測潮汐資料

金門海域潮汐之觀測係于 2010 年 12 月本中心於金門港水頭港區內碼頭安裝 Water Log 潮位計(稱**測站 T**)，位置如附圖 3，2014 年 2 月於金門港料羅港區內碼頭安裝潮位計(稱**測站 S**)，2014 年 11 月本中心另於金門港九宮港區內碼頭安裝潮位計(稱**測站 G**)。2013 年 12 月及，2014 年 2 月本中心分別安裝挪威 NORTEK 公司表面潮汐監測系統於金門港料羅港區(稱**測站 X**)及水頭港區(稱**測站 A**)，也具量測水位功能。料羅港區**測站 F**之潮位儀屬水利署所有，位於水頭港區**測站 J**之潮位儀也屬水利署所有。歷年各站觀測潮汐資料蒐集概況如表 3。

潮位**測站 X**潮波流儀，以壓力感測器測得水壓變化時間序列，取樣方式為每一小時取前 10 分鐘之水位變化，取樣頻率為 2Hz，然後加以平均得出該小時之平均水位值。潮位資料之平均水位以觀測水位資料之平均值為基準，未經高程量測，與一般固定式潮位計不同。**測站 T**潮位資料取樣方式為每 6 分鐘量測一次水位變化出該小時之平均水位值。**測站 F**及**J**資料由水利署提供。

本潮汐年報以取經檢核或修補後之**T**站資料作為**主要觀測站**，2015 年各觀測站修補前每月觀測潮汐資料記錄期間統計表，如表 3.1a，2015 年各觀測站修補後每月觀測潮汐資料記錄期間統計表，如表 3.1b，**主要觀測站修補前後**每月潮汐歷線比較圖，如圖 3.1.1，**主要觀測站與調和分析計算潮位**每月潮汐歷線比較圖，如圖 3.1.2，**主要觀測站與次要觀測站**每月潮汐歷線比較圖，如圖 3.1.3 以後。

表 3 金門海域觀測潮汐資料蒐集概況表(統計時間至 2015 年 11 月)

測站	緯度	經度	觀測期間	觀測單位	備註
T	24°25'16"N	118°17'22"E	2011/01-2015/11(觀測中)	港研中心	水頭港區
S	24°24'25"N	118°25'33"E	2014/02-2015/11(觀測中)	港研中心	料羅港區
G	24°25'33"N	118°15'51"E	2014/11-2015/11(觀測中)	港研中心	九宮港區
X	24°24'17"N	118°25'19"E	2014/02-2015/11(觀測中)	港研中心	料羅港區外海
A	24°25'8"N	118°16'41"E	2014/02-2015/11(觀測中)	港研中心	水頭港區外海
J	24°25'17"N	118°17'22"E	2004/05-2015/11(觀測中)	水利署	水頭潮位站
F	24°24'31"N	118°25'48"E	2001/01-2015/11(觀測中)	水利署	料羅潮位站



圖 3 金門海域潮位觀測站位置示意圖

表 3.1a 2015年每月金門海域修補前各測站觀測潮汐資料紀錄統計表

年/月 港區	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域
測站	T	X	F	J	A	S	G		
2014/12月	744 (100%)	709 (95.3%)	744 (100%)	743 (99.9%)	726 (97.6%)	744 (100%)	60 ( 8.1%)		*
2015/ 1月	743 (99.9%)	685 (92.1%)	744 (100%)	696 (93.5%)	743 (99.9%)	744 (100%)	208 (28.0%)		*
2015/ 2月	670 (99.7%)	657 (97.8%)	672 (100%)	631 (93.9%)	668 (99.4%)	672 (100%)	618 (92.0%)		*
2015/ 3月	738 (99.2%)	742 (99.7%)	741 (99.6%)	712 (95.7%)	738 (99.2%)	744 (100%)	349 (46.9%)		*
2015/ 4月	717 (99.6%)	716 (99.4%)	720 (100%)	686 (95.3%)	697 (96.8%)	720 (100%)	719 (99.9%)		*
2015/ 5月	741 (99.6%)	743 (99.9%)	744 (100%)	711 (95.6%)	744 (100%)	744 (100%)	743 (99.9%)		*
2015/ 6月	716 (99.4%)	719 (99.9%)	720 (100%)	691 (96.0%)	720 (100%)	720 (100%)	720 (100%)		*
2015/ 7月	742 (99.7%)	595 (80.0%)	744 (100%)	717 (96.4%)	744 (100%)	744 (100%)	743 (99.9%)		*
2015/ 8月	737 (99.1%)	732 (98.4%)	744 (100%)	695 (93.4%)	737 (99.1%)	744 (100%)	744 (100%)		*
2015/ 9月	701 (97.4%)	632 (87.8%)	720 (100%)	685 (95.1%)	717 (99.6%)	720 (100%)	719 (99.9%)		*
2015/10月	740 (99.5%)	729 (98.0%)	744 (100%)	718 (96.5%)	656 (88.2%)	744 (100%)	744 (100%)		*
2015/11月	375 (52.1%)	720 (100%)	720 (100%)	690 (95.8%)	684 (95.0%)	720 (100%)	719 (99.9%)		*
2015/冬季	2157 (99.9%)	2051 (95.0%)	2160 (100%)	2070 (95.8%)	2137 (98.9%)	2160 (100%)	886 (41.0%)		*
2015/春季	2196 (99.5%)	2201 (99.7%)	2205 (99.9%)	2109 (95.5%)	2179 (98.7%)	2208 (100%)	1811 (82.0%)		*
2015/夏季	2195 (99.4%)	2046 (92.7%)	2208 (100%)	2103 (95.2%)	2201 (99.7%)	2208 (100%)	2207 (100.0%)		*
2015/秋季	1816 (83.2%)	2081 (95.3%)	2184 (100%)	2093 (95.8%)	2057 (94.2%)	2184 (100%)	2182 (99.9%)		*
2015/整年	8364 (95.5%)	8379 (95.7%)	8757 (100.0%)	8375 (95.6%)	8574 (97.9%)	8760 (100%)	7086 (80.9%)		*
起始年月	2014/12	2014/12	2014/12	2014/12	2014/12	2014/12	2014/12		*
結束年月	2015/11	2015/11	2015/11	2015/11	2015/11	2015/11	2015/11		*

表 3.1b 2015年每月金門海域修補後各測站潮汐資料統計表

年/月 港區	金門海域	金門海域							
測站	T	X	F	J	A	S	G		
2014/12月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*
2015/ 1月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*
2015/ 2月	672 (100%)	672 (100%)	672 (100%)	672 (100%)	672 (100%)	672 (100%)	672 (100%)	672 (100%)	*
2015/ 3月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*
2015/ 4月	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	*
2015/ 5月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*
2015/ 6月	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	*
2015/ 7月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*
2015/ 8月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*
2015/ 9月	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	*
2015/10月	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	744 (100%)	*
2015/11月	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	720 (100%)	*
2015/冬季	2160 (100%)	2160 (100%)	2160 (100%)	2160 (100%)	2160 (100%)	2160 (100%)	2160 (100%)	2160 (100%)	*
2015/春季	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	*
2015/夏季	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	2208 (100%)	*
2015/秋季	2184 (100%)	2184 (100%)	2184 (100%)	2184 (100%)	2184 (100%)	2184 (100%)	2184 (100%)	2184 (100%)	*
2015/整年	8760 (100%)	8760 (100%)	8760 (100%)	8760 (100%)	8760 (100%)	8760 (100%)	8760 (100%)	8760 (100%)	*
起始年月	2014/12	2014/12	2014/12	2014/12	2014/12	2014/12	2014/12	2014/12	*
結束年月	2015/11	2015/11	2015/11	2015/11	2015/11	2015/11	2015/11	2015/11	*

# Tidal Level in Kin-Men seas of KMT0 at 2015

1 ○ 8 ● 15 ● 22 ●

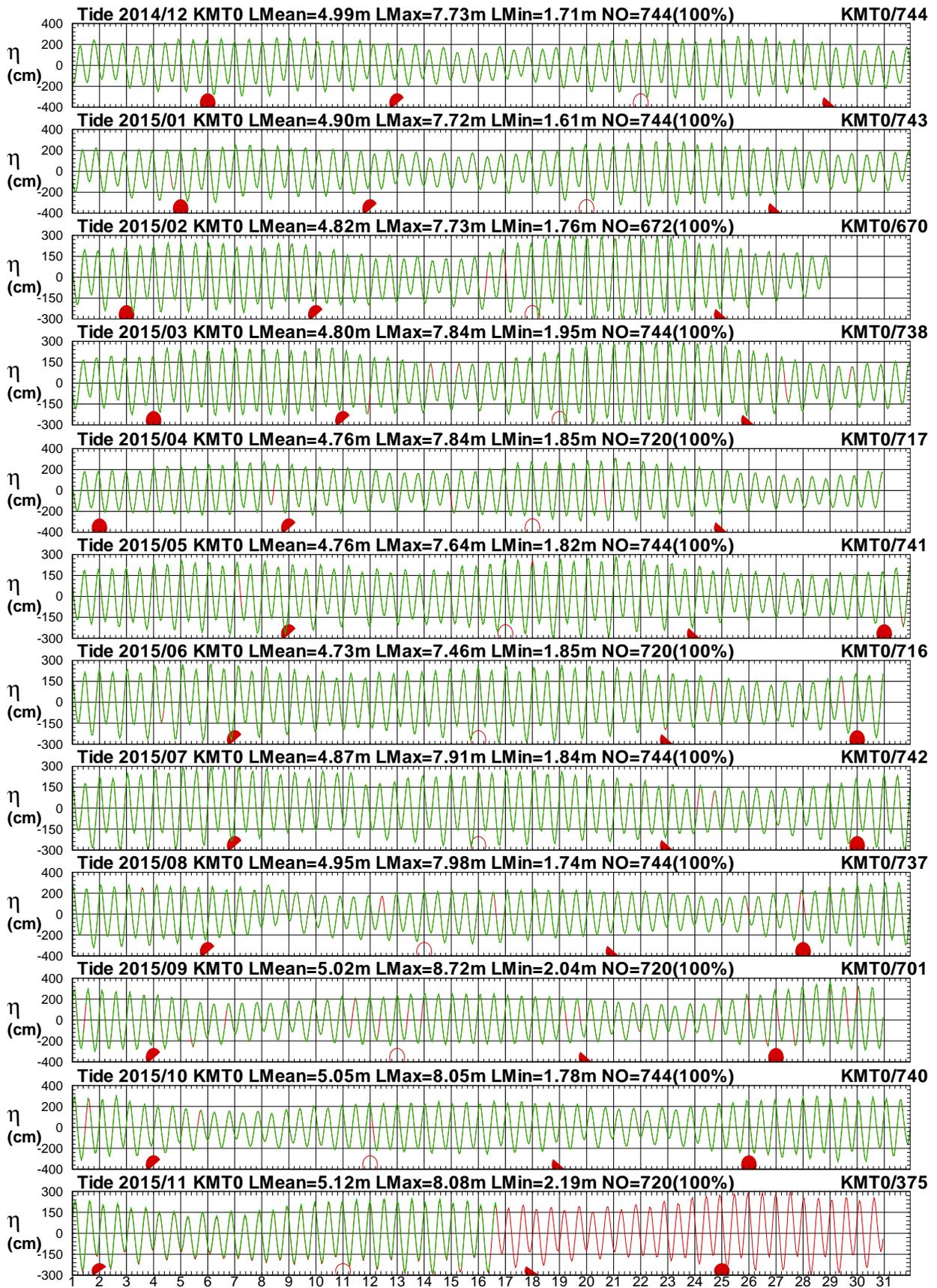


圖 3.1.1 2015年每月金門海域 T 站修補前後之潮位比較圖

Day

T14CKMT0.1HA T14CKMT0.1HO T151KMT0.1HA T151KMT0.1HO T152KMT0.1HA T152KMT0.1HO  
 T153KMT0.1HA T153KMT0.1HO T154KMT0.1HA T154KMT0.1HO T155KMT0.1HA T155KMT0.1HO

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# Tidal Level in Kin-Men seas of KMT0 at 2015

1 ○ 8 ● 15 ● 22 ●

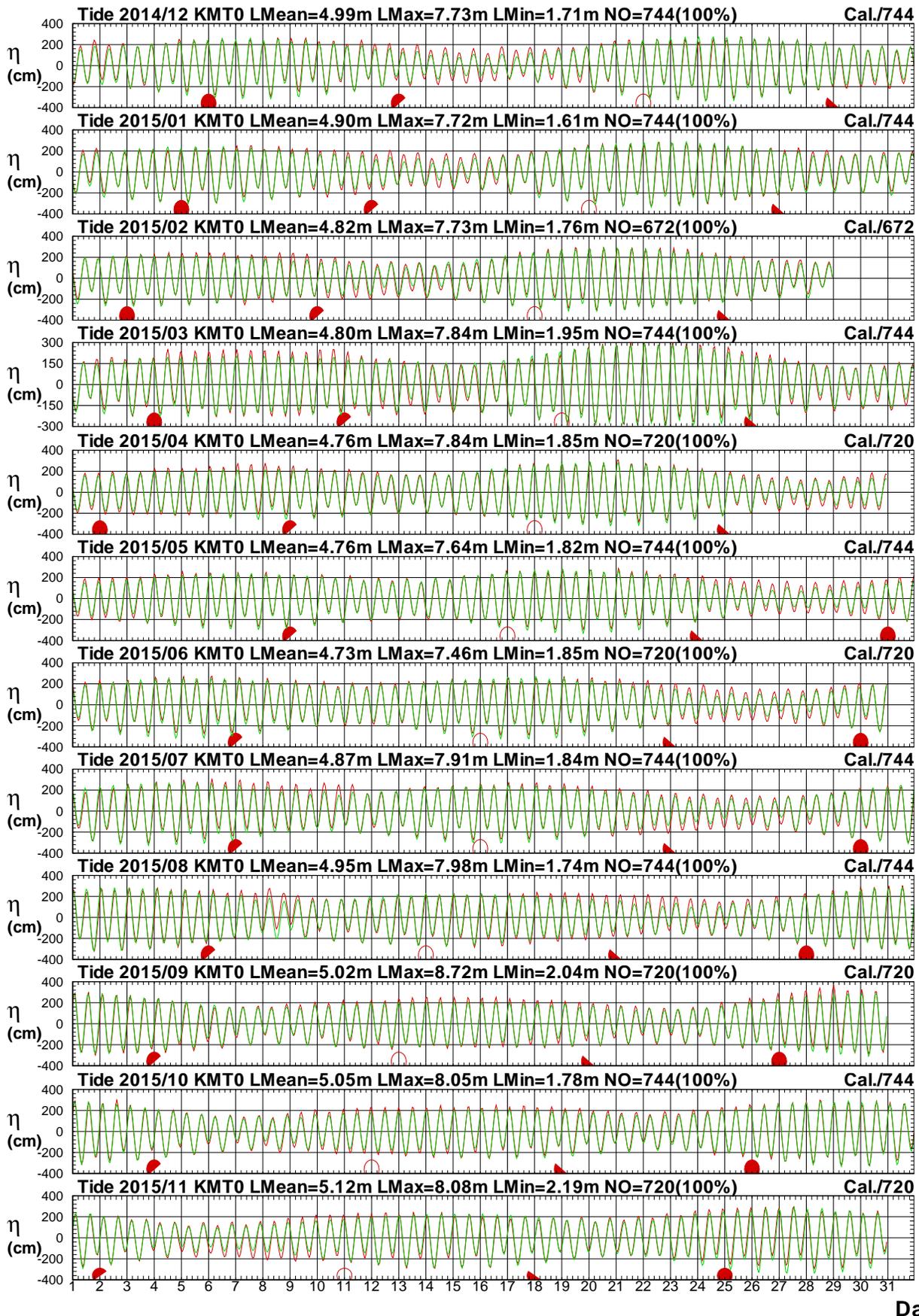


圖 3.1.2 2015年每月金門海域 T 站潮位歷線圖 (綠線: 天文潮)

T14CKMT0.1HA T14CKMT0.1HC T151KMT0.1HA T151KMT0.1HC T152KMT0.1HA T152KMT0.1HC  
 T153KMT0.1HA T153KMT0.1HC T154KMT0.1HA T154KMT0.1HC T155KMT0.1HA T155KMT0.1HC

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# Tidal Level in Kin-Men seas of KMT0 at 2015

1 ○ 8 ● 15 ● 22 ●

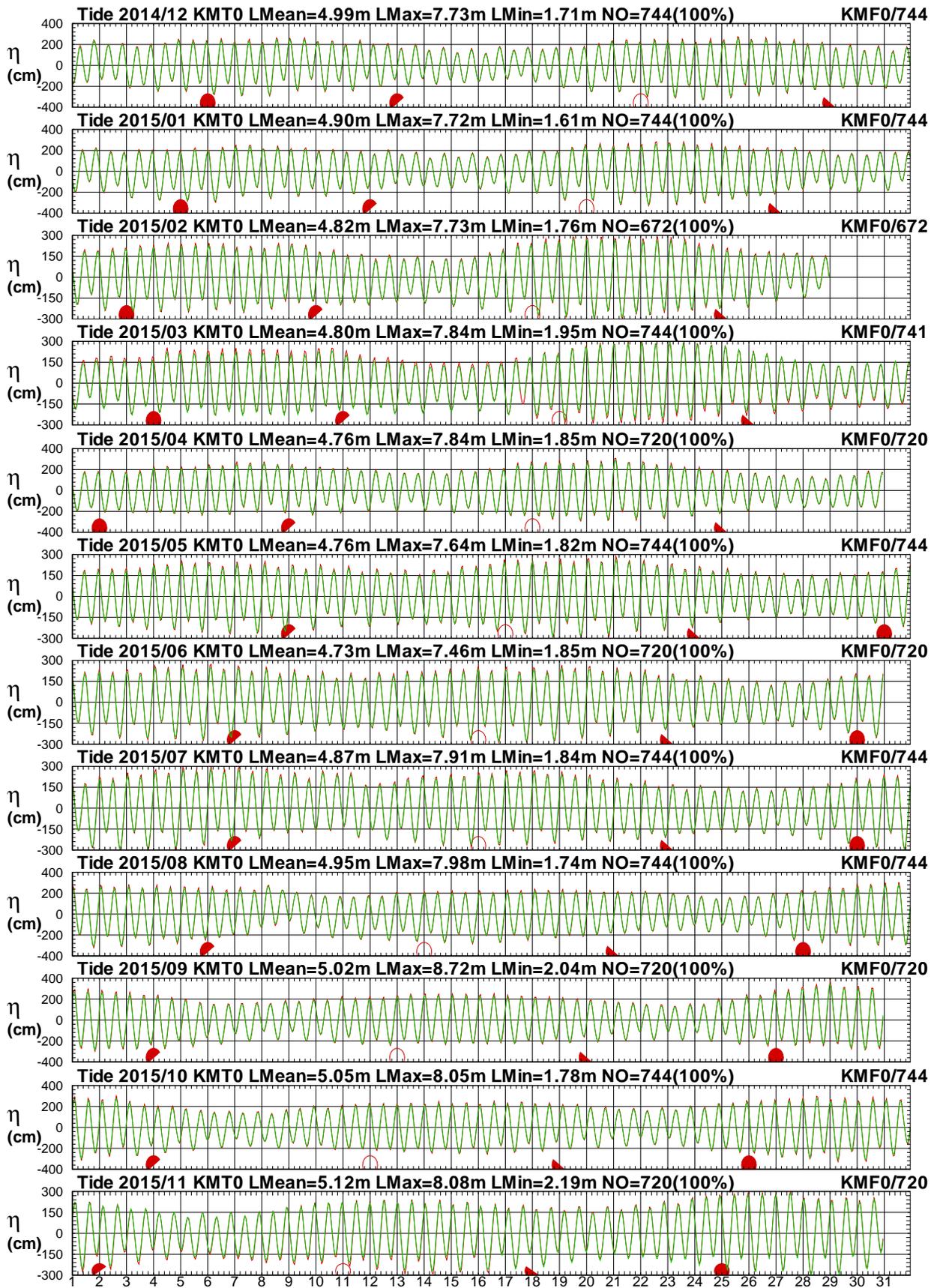


圖 3.1.3 2015年每月金門海域 T 站與 F 站潮位比較圖

T14CKMT0.1HA T14CKMF0.1HO T151KMT0.1HA T151KMF0.1HO T152KMT0.1HA T152KMF0.1HO  
 T153KMT0.1HA T153KMF0.1HO T154KMT0.1HA T154KMF0.1HO T155KMT0.1HA T155KMF0.1HO

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# Tidal Level in Kin-Men seas of KMT0 at 2015

1 ○ 8 ● 15 ● 22 ●

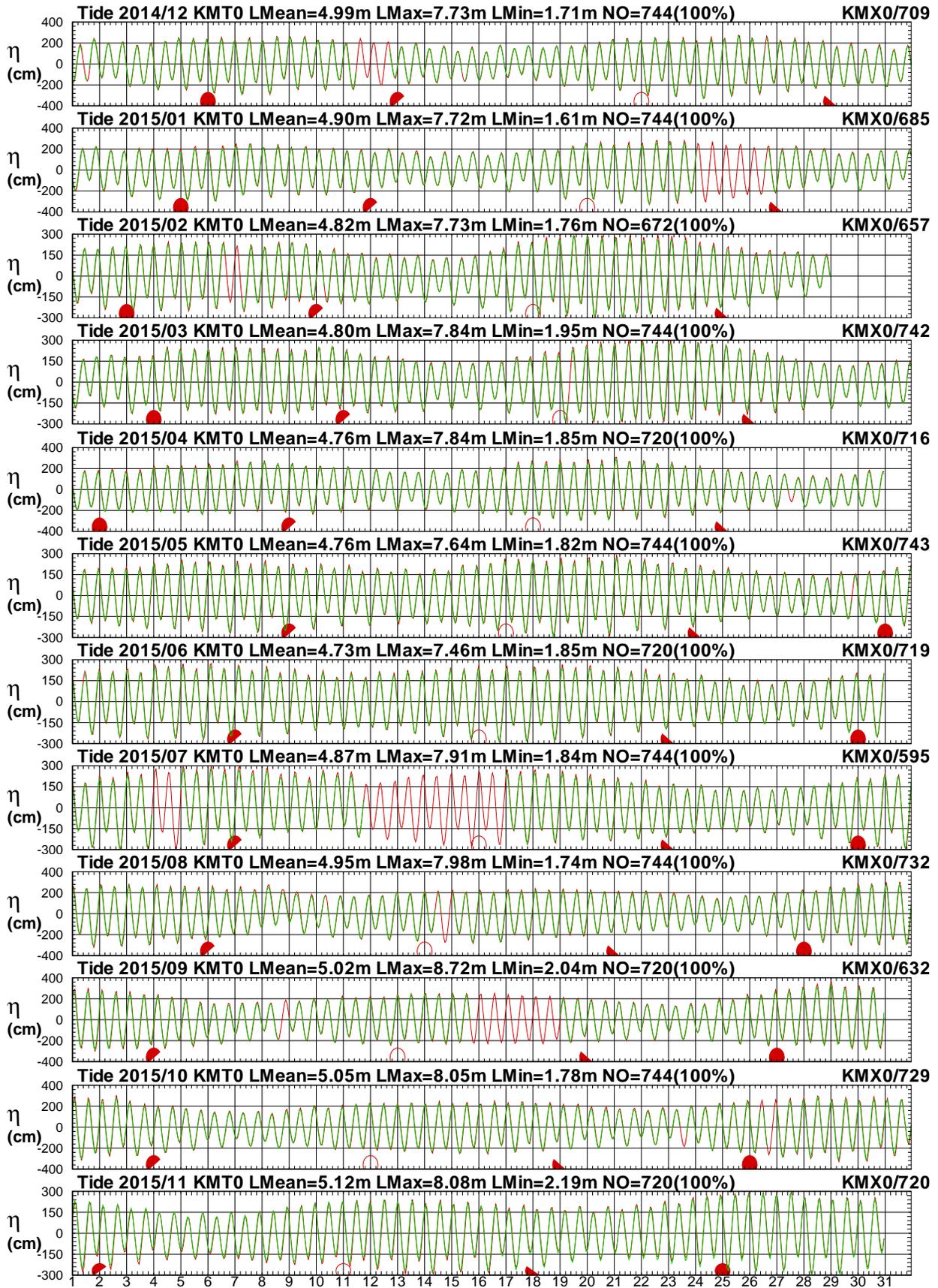


圖 3.1.4 2015年每月金門海域 T 站與 X 站潮位比較圖

T14CKMT0.1HA T14CKMX0.1HO T151KMT0.1HA T151KMX0.1HO T152KMT0.1HA T152KMX0.1HO  
T153KMT0.1HA T153KMX0.1HO T154KMT0.1HA T154KMX0.1HO T155KMT0.1HA T155KMX0.1HO

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# Tidal Level in Kin-Men seas of KMT0 at 2015

1 ○ 8 ● 15 ● 22 ●

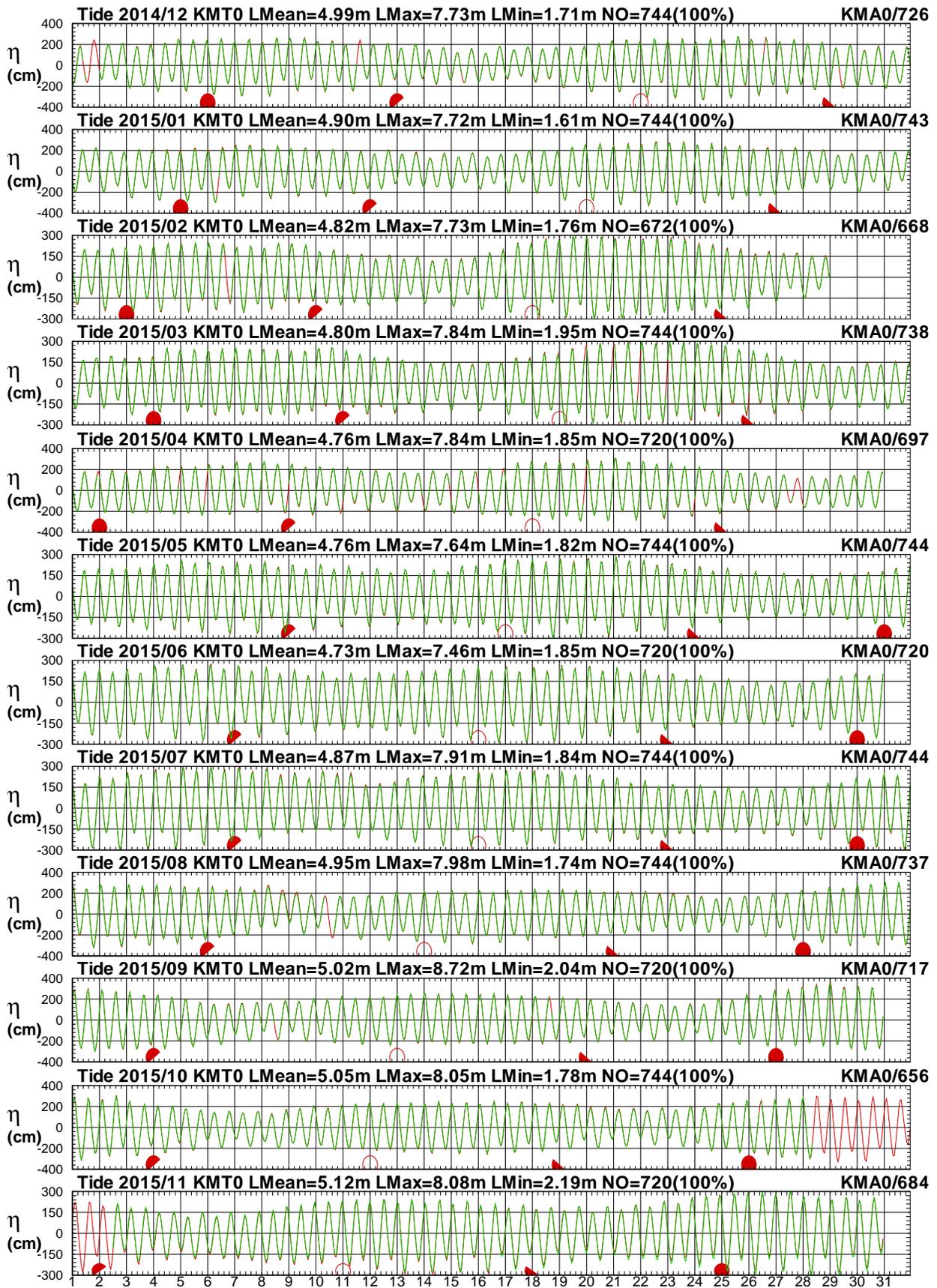


圖 3.1.5 2015年每月金門海域 T 站與 A 站潮位比較圖

T14CKMT0.1HA T14CKMA0.1H0 T151KMT0.1HA T151KMA0.1H0 T152KMT0.1HA T152KMA0.1H0  
 T153KMT0.1HA T153KMA0.1H0 T154KMT0.1HA T154KMA0.1H0 T155KMT0.1HA T155KMA0.1H0

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# Tidal Level in Kin-Men seas of KMT0 at 2015

1 ○ 8 ● 15 ● 22 ●

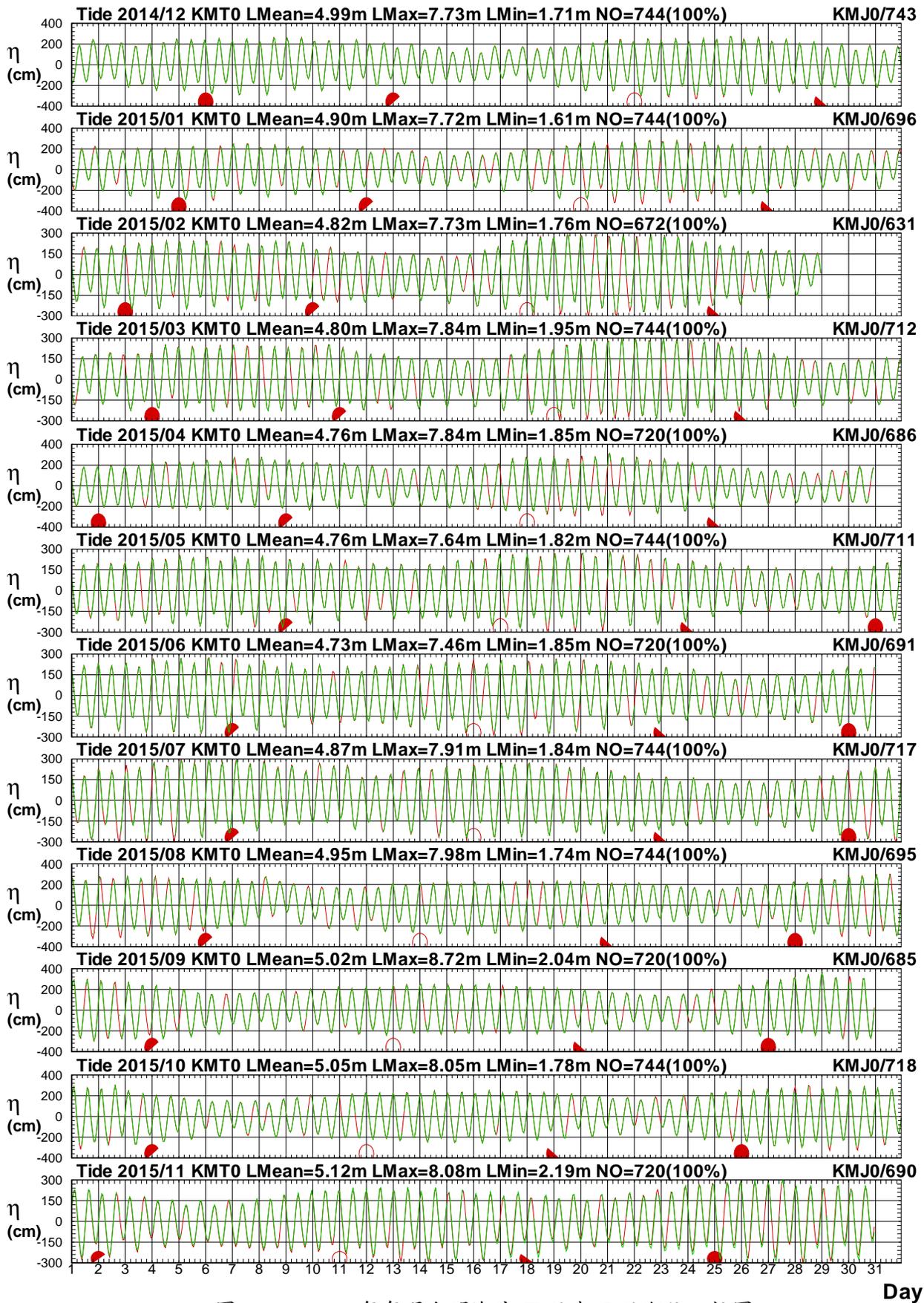


圖 3.1.6 2015年每月金門海域 T 站與 J 站潮位比較圖

T14CKMT0.1HA T14CKMJ0.1H0 T151KMT0.1HA T151KMJ0.1H0 T152KMT0.1HA T152KMJ0.1H0  
 T153KMT0.1HA T153KMJ0.1H0 T154KMT0.1HA T154KMJ0.1H0 T155KMT0.1HA T155KMJ0.1H0

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# Tidal Level in Kin-Men seas of KMT0 at 2015

1 ○ 8 ● 15 ● 22 ●

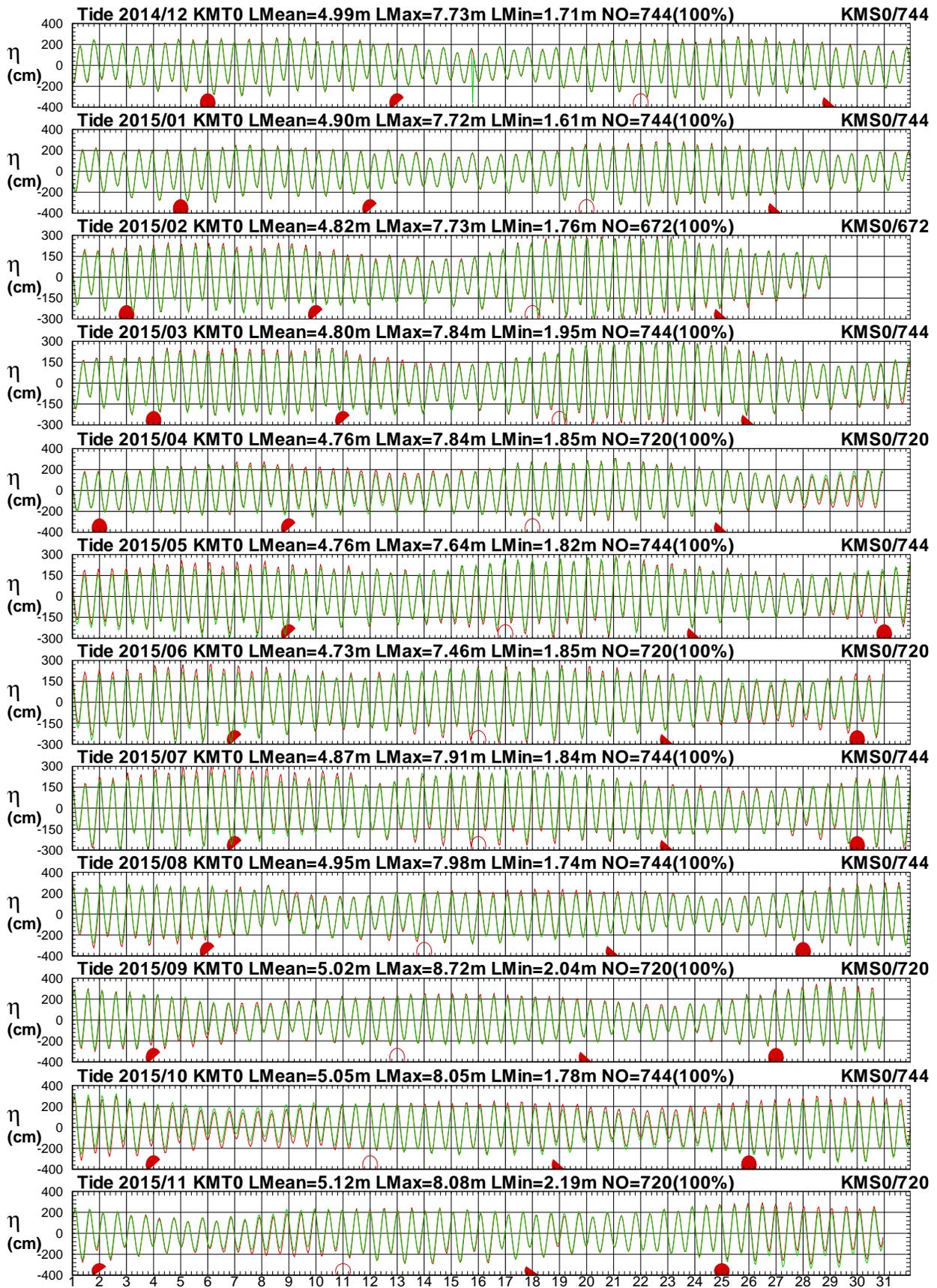


圖 3.1.7 2015年每月金門海域 T 站與 S 站潮位比較圖

T14CKMT0.1HA T14CKMS0.1HO T151KMT0.1HA T151KMS0.1HO T152KMT0.1HA T152KMS0.1HO  
 T153KMT0.1HA T153KMS0.1HO T154KMT0.1HA T154KMS0.1HO T155KMT0.1HA T155KMS0.1HO

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# Tidal Level in Kin-Men seas of KMT0 at 2015

1 ○ 8 ● 15 ● 22 ●

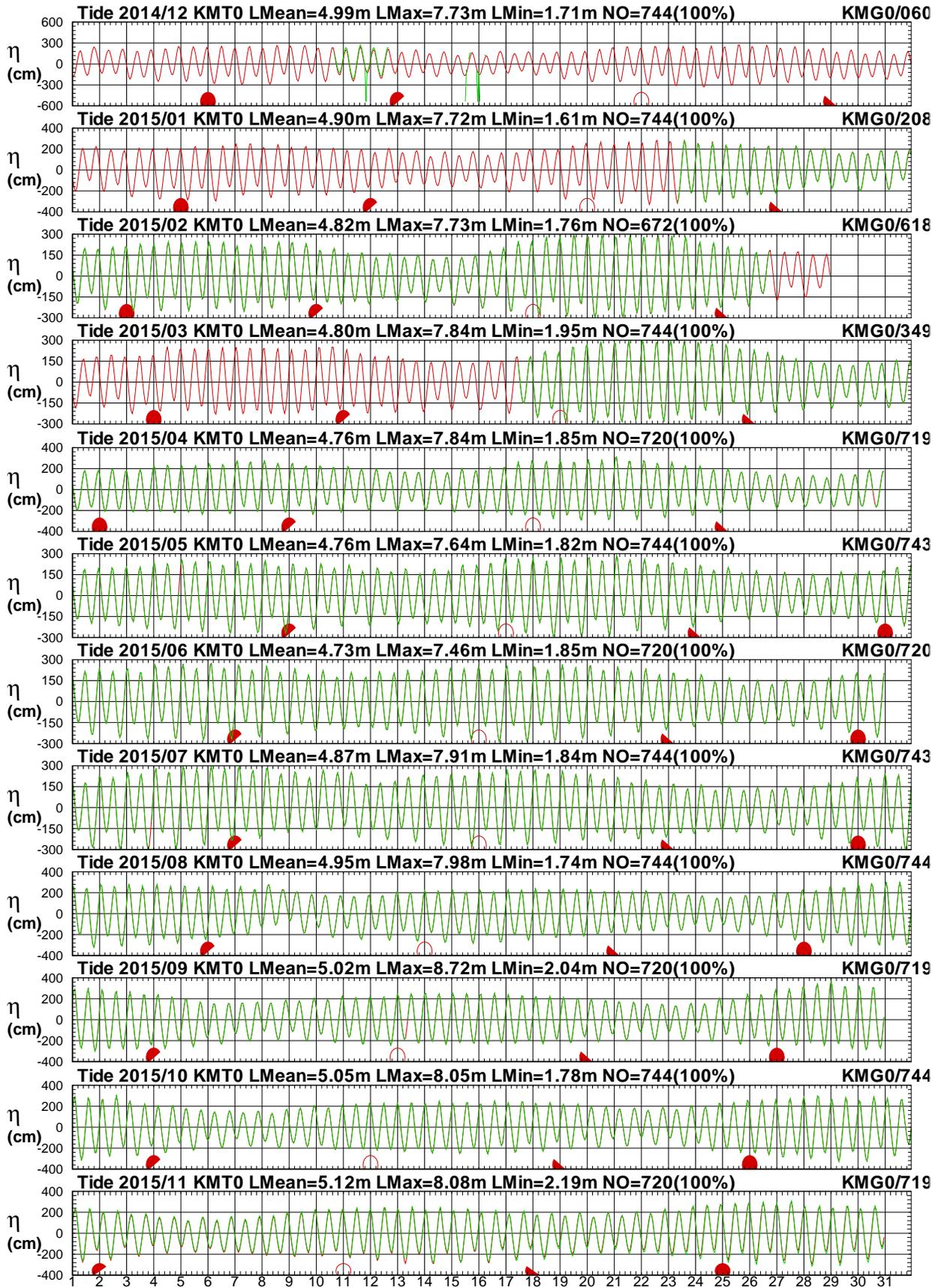


圖 3.1.8 2015年每月金門海域 T 站與 G 站潮位比較圖

T14CKMT0.1HA T14CKMG0.1H0 T151KMT0.1HA T151KMG0.1H0 T152KMT0.1HA T152KMG0.1H0  
 T153KMT0.1HA T153KMG0.1H0 T154KMT0.1HA T154KMG0.1H0 T155KMT0.1HA T155KMG0.1H0

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## 第四章 2015 年金門海域觀測海流資料

金門海域海流之觀測 2014 年 2 月本中心(IHMT)安裝挪威 NORTEK 公司表面波浪監測系統於金門港料羅港區(稱**測站 X**)及水頭港區(稱**測站 A**)，其位置如附圖 4。

**測站 Y** 外海浮標站之海流儀屬水利署(WRA)所有，**測站 Z** 外後江灣小浮標之海流儀屬近海水文中心(COMC)設置。金門海域各測站歷年觀測海流資料蒐集概況如表 4。

剖面海流流速的量測可以依照使用在不同水深即自固定在海床上之儀器位置到水表面來設定量測不同的間距，金門港觀測站水深間距設定為 1~2 公尺；每小時連續量測 600 秒，再將總和平均代表其數樣每一間距層之海流流速、流向等資料，記錄在感應器內，並每隔 1 小時經由海底電纜傳訊回接收站之電腦中儲存。

本海流年報 2015 年各觀測站每月**觀測海流**資料記錄期間統計表，如表 4.1a，2015 年各觀測站每月**計算潮流**資料統計表，如表 4.1b。2015 年**各觀測站觀測海流與計算潮流(殘餘流)**歷線比較圖，**各觀測站觀測海流與其他測站觀測海流**歷線比較圖，如圖 4.1 以後。

表 4 金門海域觀測海流資料蒐集概況表(統計時間至 2015 年 11 月)

測站	緯度	經度	觀測期間	觀測單位	備註
X	24°24'17"N	118°25'19"E	2014/02-2015/11(觀測中)	港研中心	羅港港區外海
A	24°25'8"N	118°16'41"E	2014/02-2015/11(觀測中)	港研中心	水頭港區外海
Y	23°43'37"N	119°33'07"E	2000/07-2015/11(觀測中)	水利署	金門海域資料浮標
Z	24°30'27"N	118°22'24"E	2013/12-2014/07	水文中心	后江灣小浮標



圖 4 金門海域海流觀測站位置示意圖

表 4.1a 2015年每月金門海域各測站觀測海流資料紀錄統計表

年/月 港區	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域
測站	X	Y	A	Z				
2014/12月	709 (95.3%)	721 (96.9%)	725 (97.4%)	*	*	*	*	*
2015/ 1月	685 (92.1%)	459 (61.7%)	743 (99.9%)	*	*	*	*	*
2015/ 2月	657 (97.8%)	510 (75.9%)	668 (99.4%)	*	*	*	*	*
2015/ 3月	742 (99.7%)	477 (64.1%)	738 (99.2%)	*	*	*	*	*
2015/ 4月	716 (99.4%)	495 (68.8%)	697 (96.8%)	*	*	*	*	*
2015/ 5月	743 (99.9%)	520 (69.9%)	744 (100%)	*	*	*	*	*
2015/ 6月	719 (99.9%)	575 (79.9%)	720 (100%)	*	*	*	*	*
2015/ 7月	595 (80.0%)	538 (72.3%)	744 (100%)	*	*	*	*	*
2015/ 8月	732 (98.4%)	534 (71.8%)	737 (99.1%)	*	*	*	*	*
2015/ 9月	632 (87.8%)	463 (64.3%)	716 (99.4%)	*	*	*	*	*
2015/10月	729 (98.0%)	429 (57.7%)	656 (88.2%)	*	*	*	*	*
2015/11月	720 (100%)	378 (52.5%)	683 (94.9%)	*	*	*	*	*
2015/冬季	2051 (95.0%)	1690 (78.2%)	2137 (98.9%)	*	*	*	*	*
2015/春季	2201 (99.7%)	1492 (67.6%)	2179 (98.7%)	*	*	*	*	*
2015/夏季	2046 (92.7%)	1647 (74.6%)	2201 (99.7%)	*	*	*	*	*
2015/秋季	2081 (95.3%)	1270 (58.2%)	2057 (94.2%)	*	*	*	*	*
2015/整年	8379 (95.7%)	6099 (69.6%)	8574 (97.9%)	*	*	*	*	*
起始年月	2014/12	2014/12	2014/12	*	*	*	*	*
結束年月	2015/11	2015/11	2015/11	*	*	*	*	*

ST-X: 港灣技術研究中心觀測 X 站流速資料

表 4.1b 2015年每月金門海域計算潮流各測站資料統計表

年/月 港區	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域	金門海域
測站	X	Y	A	Z				
2014/12月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 1月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 2月	672 (100%)	672 (100%)	672 (100%)	*	*	*	*	*
2015/ 3月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 4月	720 (100%)	720 (100%)	720 (100%)	*	*	*	*	*
2015/ 5月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 6月	720 (100%)	720 (100%)	720 (100%)	*	*	*	*	*
2015/ 7月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 8月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/ 9月	720 (100%)	720 (100%)	720 (100%)	*	*	*	*	*
2015/10月	744 (100%)	744 (100%)	744 (100%)	*	*	*	*	*
2015/11月	720 (100%)	720 (100%)	720 (100%)	*	*	*	*	*
2015/冬季	*	*	*	*	*	*	*	*
2015/春季	*	*	*	*	*	*	*	*
2015/夏季	*	*	*	*	*	*	*	*
2015/秋季	*	*	*	*	*	*	*	*
2015/整年	*	*	*	*	*	*	*	*
起始年月	*	*	*	*	*	*	*	*
結束年月	*	*	*	*	*	*	*	*

Cal.X: 港灣技術研究中心潮流 X 站計算資料

# Current Speed in Kin-Men seas of KMY0 at 2015

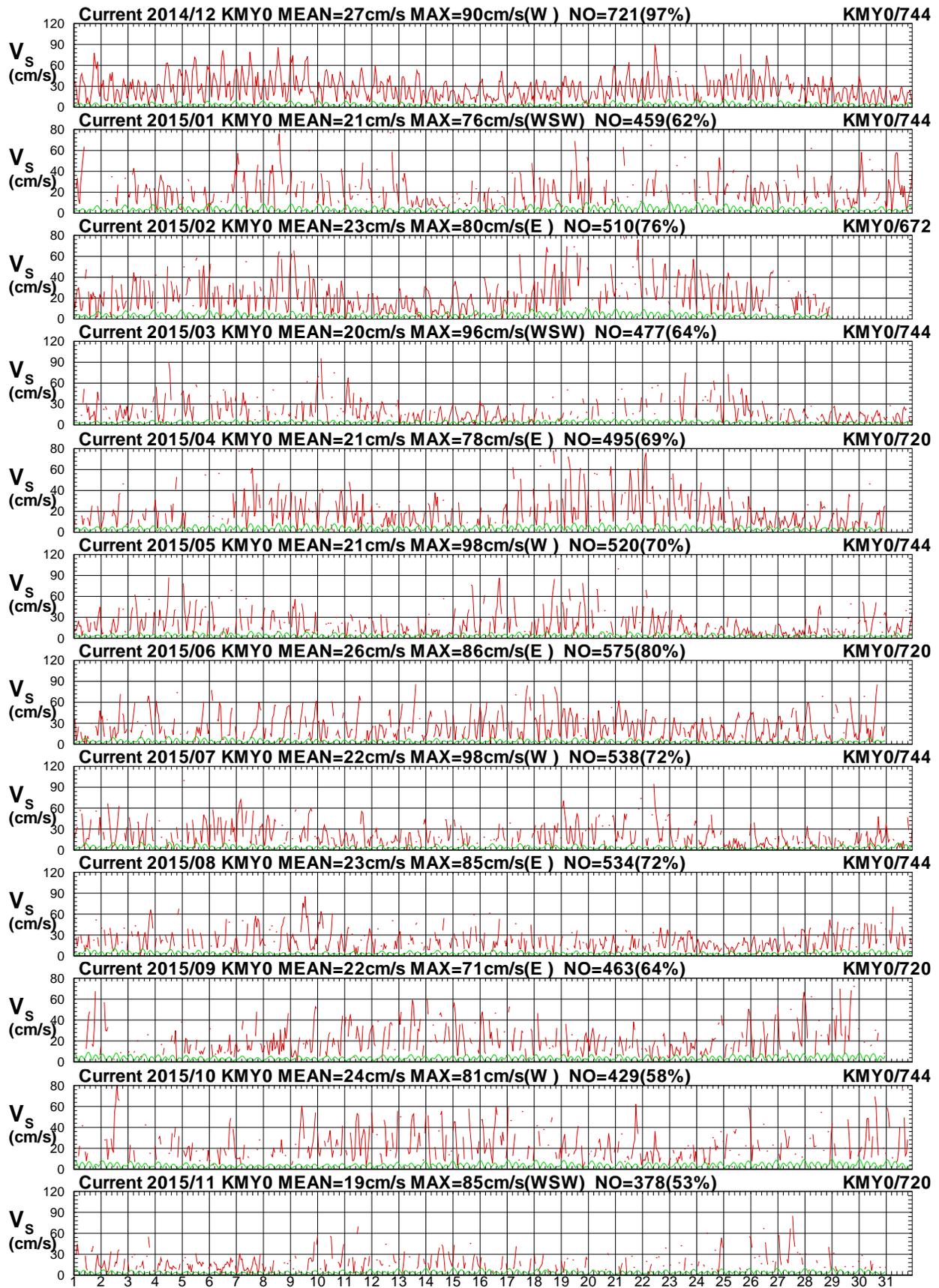


圖 4.1a 2015年每月金門海域 Y 站觀測與潮流流速比較圖

C14CKMY0.1H0 C14CKMY0.1HD C151KMY0.1H0 C151KMY0.1HD C152KMY0.1H0 C152KMY0.1HD  
 C153KMY0.1H0 C153KMY0.1HD C154KMY0.1H0 C154KMY0.1HD C155KMY0.1H0 C155KMY0.1HD

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# Current Direction in Kin-Men seas of KMY0 at 2015

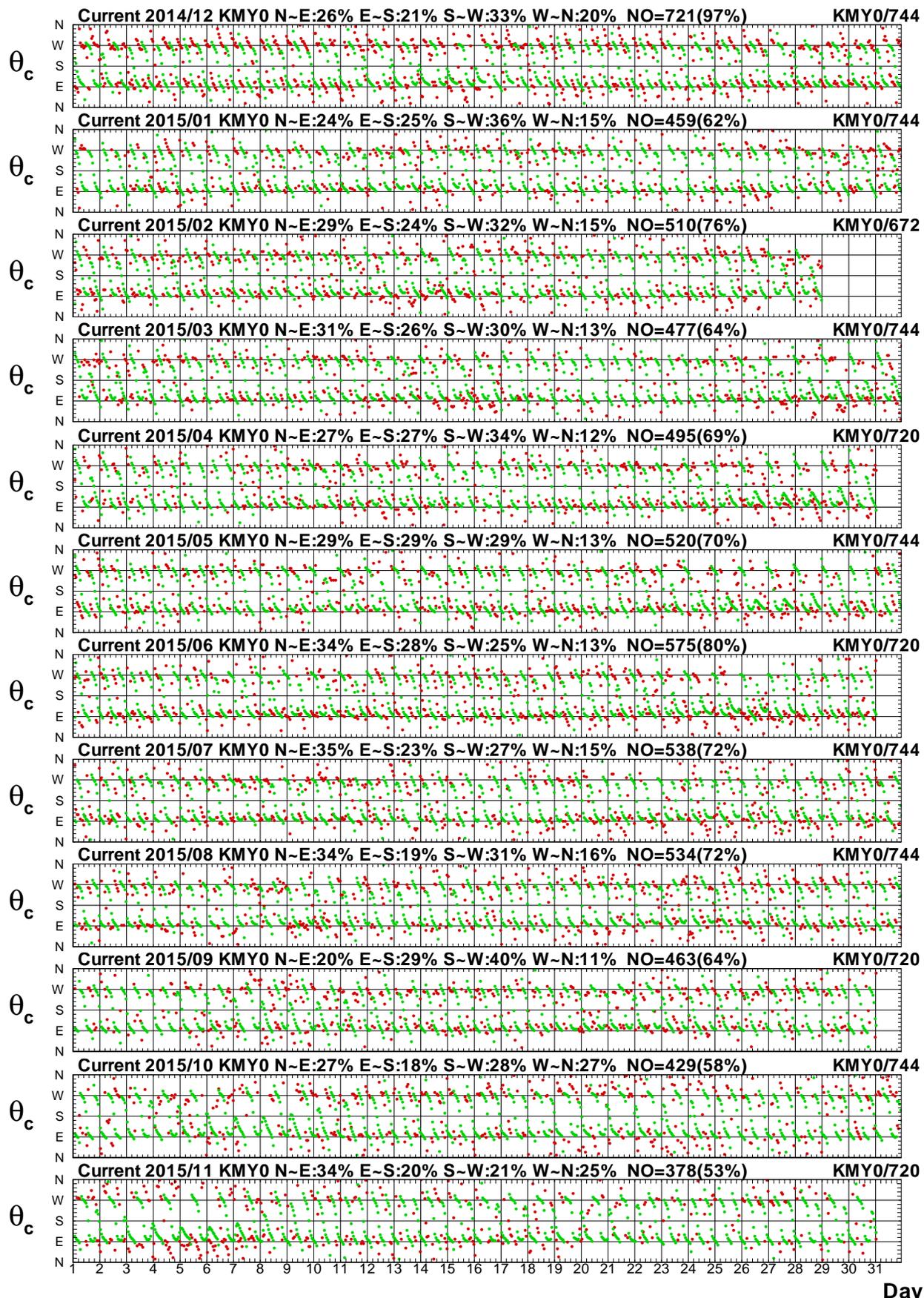


圖 4.1b 2015 年每月金門海域 Y 站觀測與潮流流向比較圖

C14CKMY0.1H0 C14CKMY0.1HD C151KMY0.1H0 C151KMY0.1HD C152KMY0.1H0 C152KMY0.1HD  
 C153KMY0.1H0 C153KMY0.1HD C154KMY0.1H0 C154KMY0.1HD C155KMY0.1H0 C155KMY0.1HD

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# Current Speed in Kin-Men seas of KMY0 at 2015

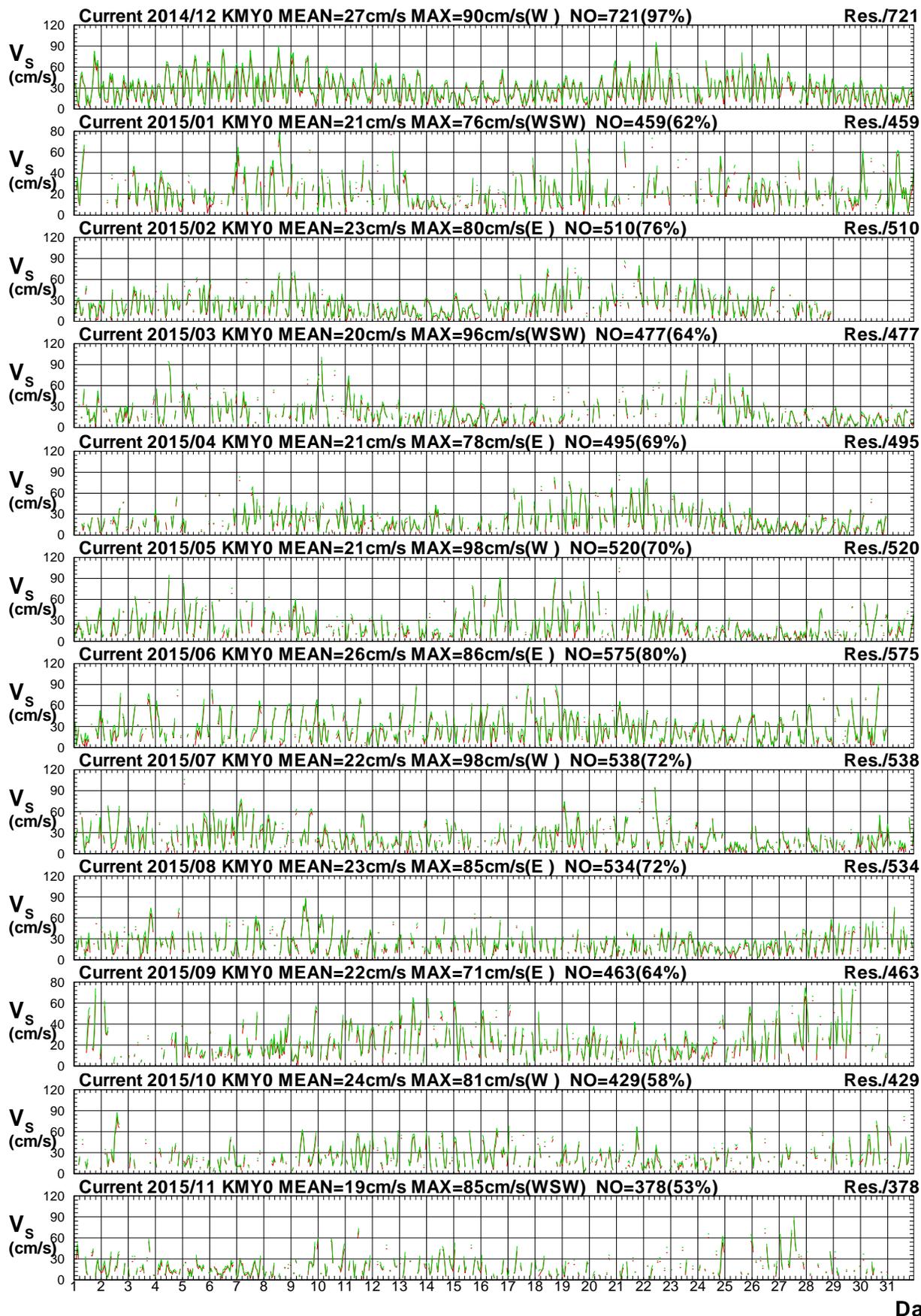


圖 4.2a 2015 年每月金門海域 Y 站觀測與非潮流速比較圖

C14CKMY0.1H0 C14CKMY0.1HR C151KMY0.1H0 C151KMY0.1HR C152KMY0.1H0 C152KMY0.1HR  
 C153KMY0.1H0 C153KMY0.1HR C154KMY0.1H0 C154KMY0.1HR C155KMY0.1H0 C155KMY0.1HR

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# Current Direction in Kin-Men seas of KMY0 at 2015

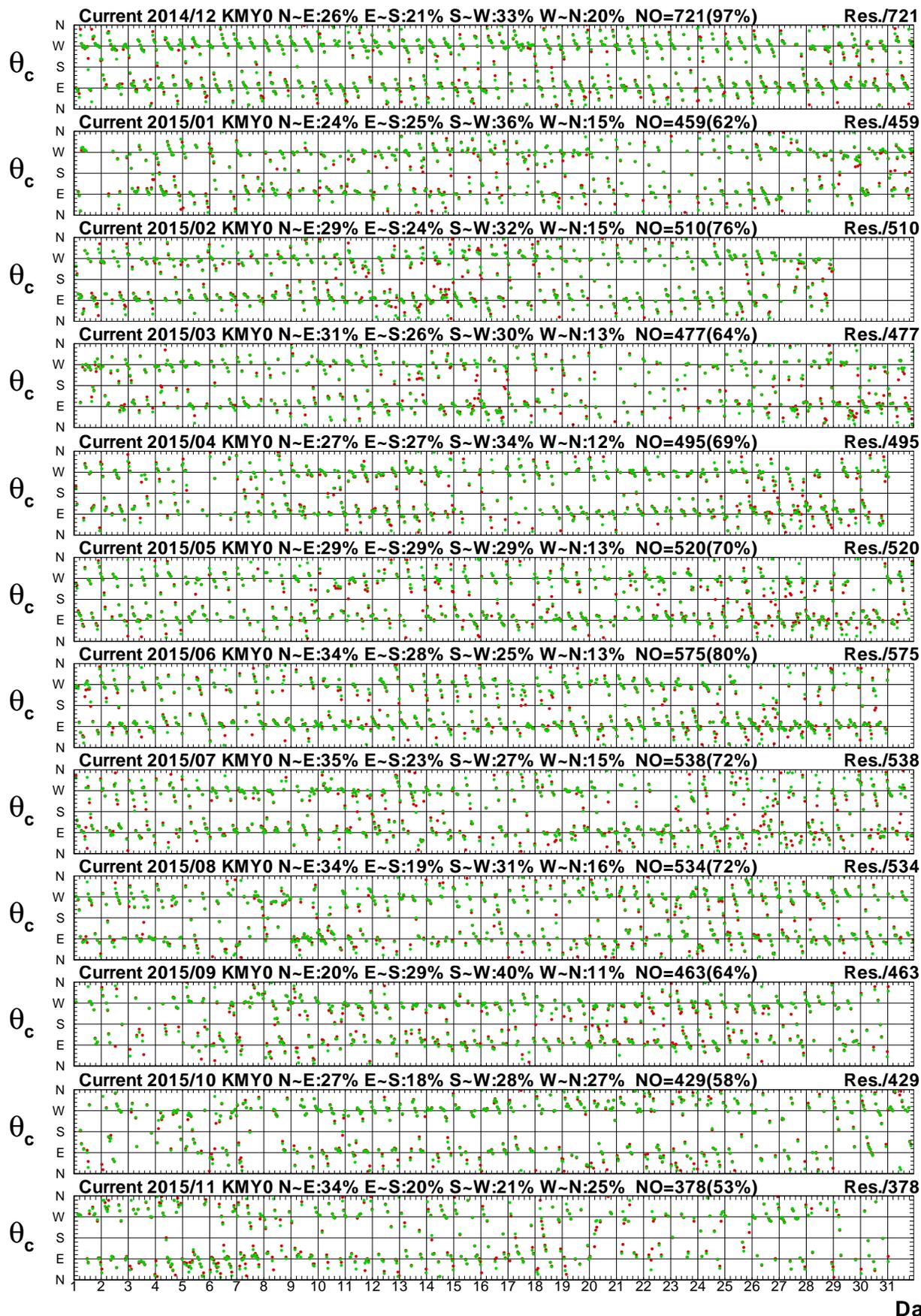


圖 4.2b 2015 年每月金門海域 Y 站觀測與非潮流向比較圖

C14CKMY0.1H0 C14CKMY0.1HR C151KMY0.1H0 C151KMY0.1HR C152KMY0.1H0 C152KMY0.1HR  
 C153KMY0.1H0 C153KMY0.1HR C154KMY0.1H0 C154KMY0.1HR C155KMY0.1H0 C155KMY0.1HR

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# Current Speed in Kin-Men seas of KMX0 at 2015

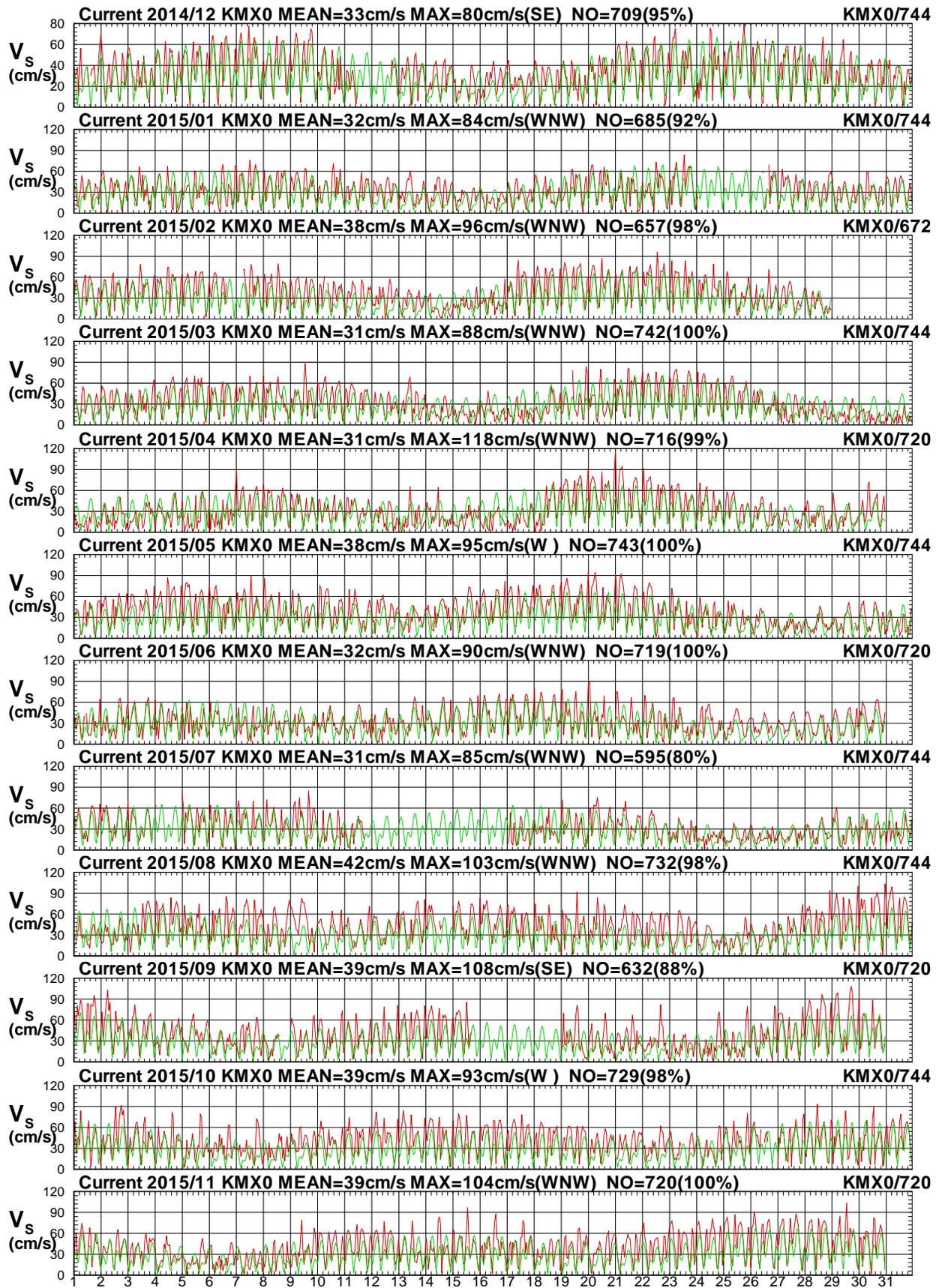


圖 4.3a 2015年每月金門海域 X 站觀測與潮流流速比較圖

C14CKMX0.1H0 C14CKMX0.1HD C151KMX0.1H0 C151KMX0.1HD C152KMX0.1H0 C152KMX0.1HD  
 C153KMX0.1H0 C153KMX0.1HD C154KMX0.1H0 C154KMX0.1HD C155KMX0.1H0 C155KMX0.1HD

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# Current Direction in Kin-Men seas of KMX0 at 2015

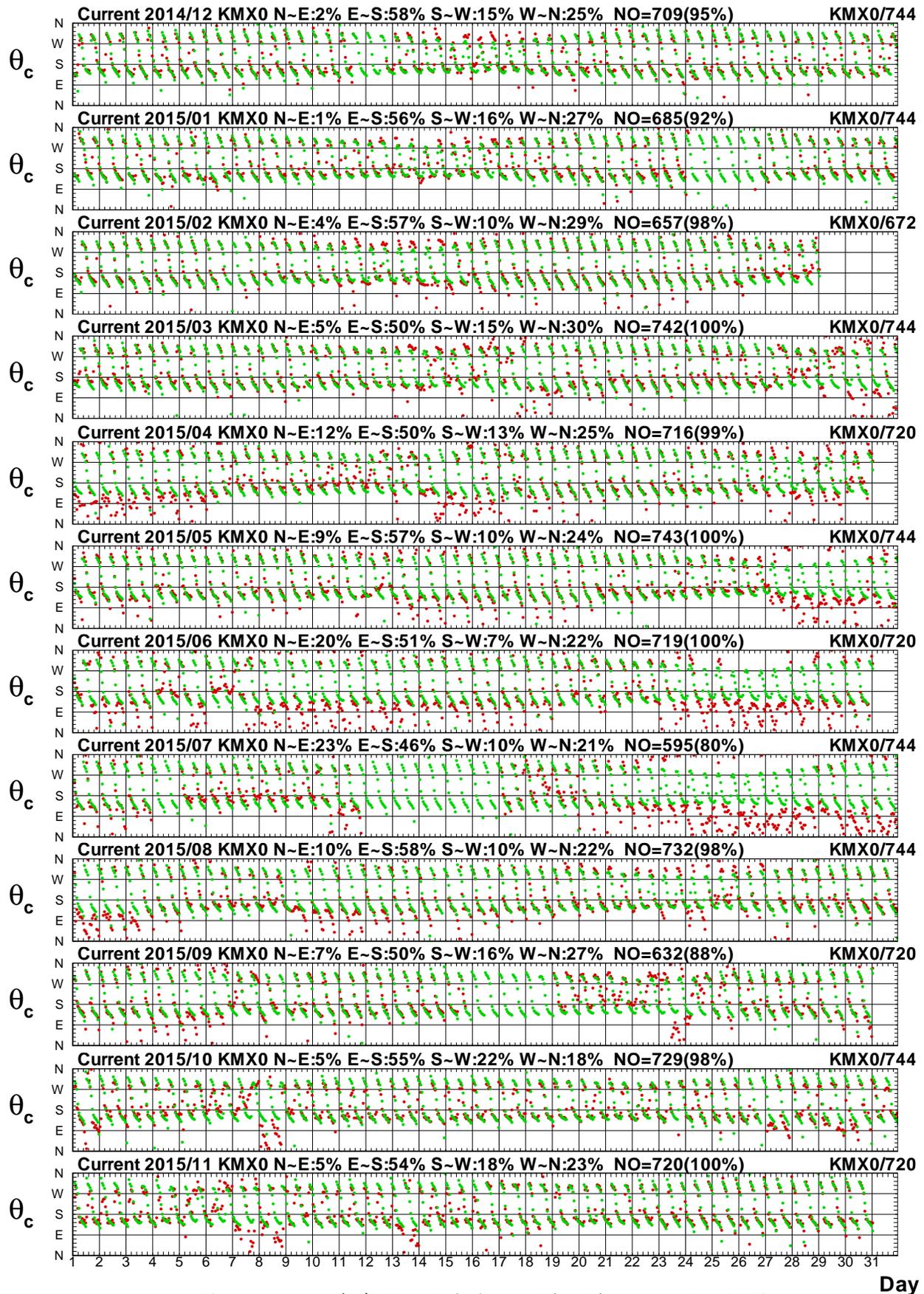


圖 4.3b 2015年每月金門海域 X 站觀測與潮流流向比較圖

C14CKMX0.1H0 C14CKMX0.1HD C151KMX0.1H0 C151KMX0.1HD C152KMX0.1H0 C152KMX0.1HD  
 C153KMX0.1H0 C153KMX0.1HD C154KMX0.1H0 C154KMX0.1HD C155KMX0.1H0 C155KMX0.1HD

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# Current Speed in Kin-Men seas of KMX0 at 2015

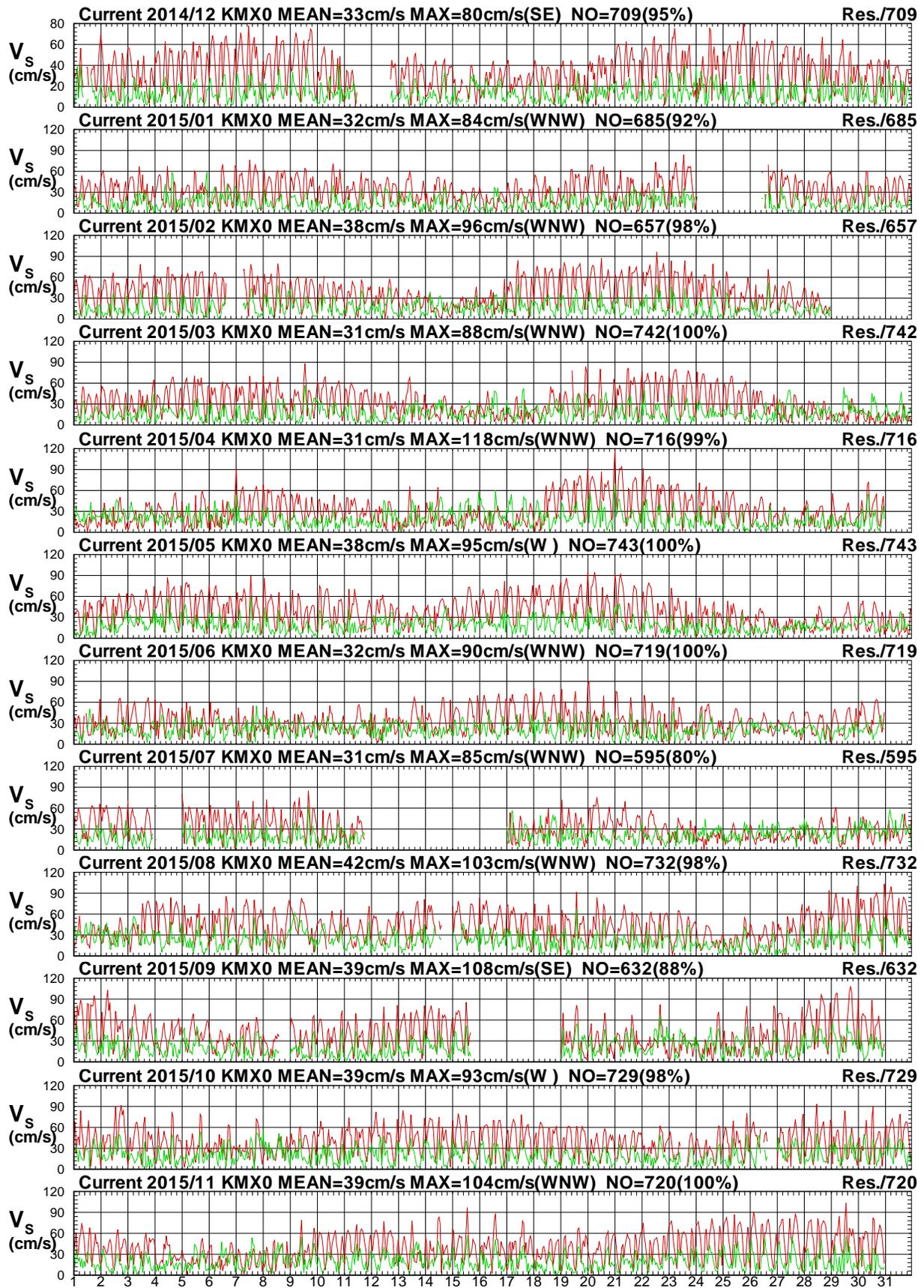


圖 4.4a 2015年每月金門海域 X 站觀測與非潮流速比較圖

C14CKMX0.1H0 C14CKMX0.1HR C151KMX0.1H0 C151KMX0.1HR C152KMX0.1H0 C152KMX0.1HR  
 C153KMX0.1H0 C153KMX0.1HR C154KMX0.1H0 C154KMX0.1HR C155KMX0.1H0 C155KMX0.1HR

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# Current Direction in Kin-Men seas of KMX0 at 2015

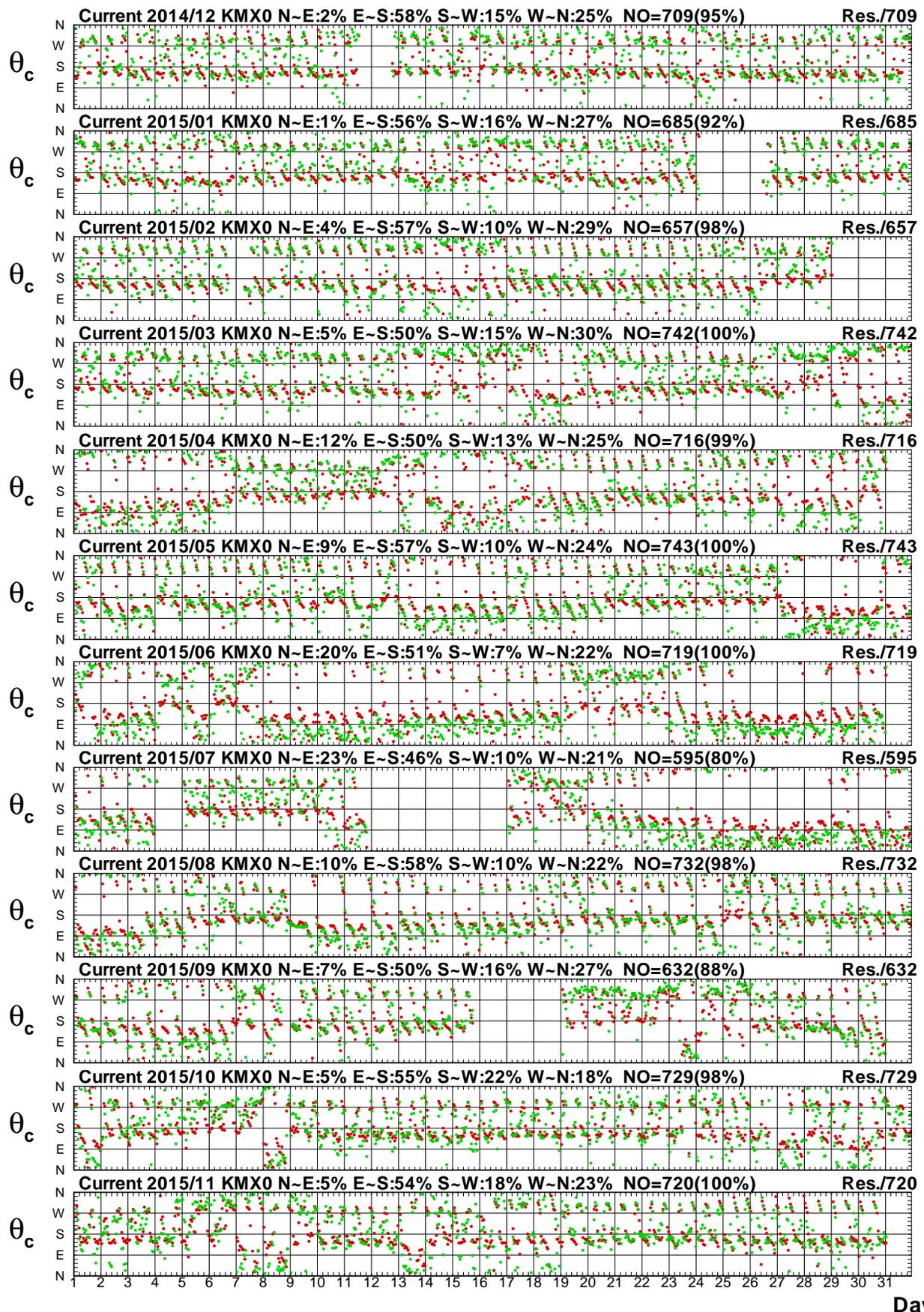


圖 4.4b 2015 年每月金門海域 X 站觀測與非潮流向比較圖

C14CKMX0.1H0 C14CKMX0.1HR C151KMX0.1H0 C151KMX0.1HR C152KMX0.1H0 C152KMX0.1HR  
 C153KMX0.1H0 C153KMX0.1HR C154KMX0.1H0 C154KMX0.1HR C155KMX0.1H0 C155KMX0.1HR

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# Current Speed in Kin-Men seas of KMA0 at 2015

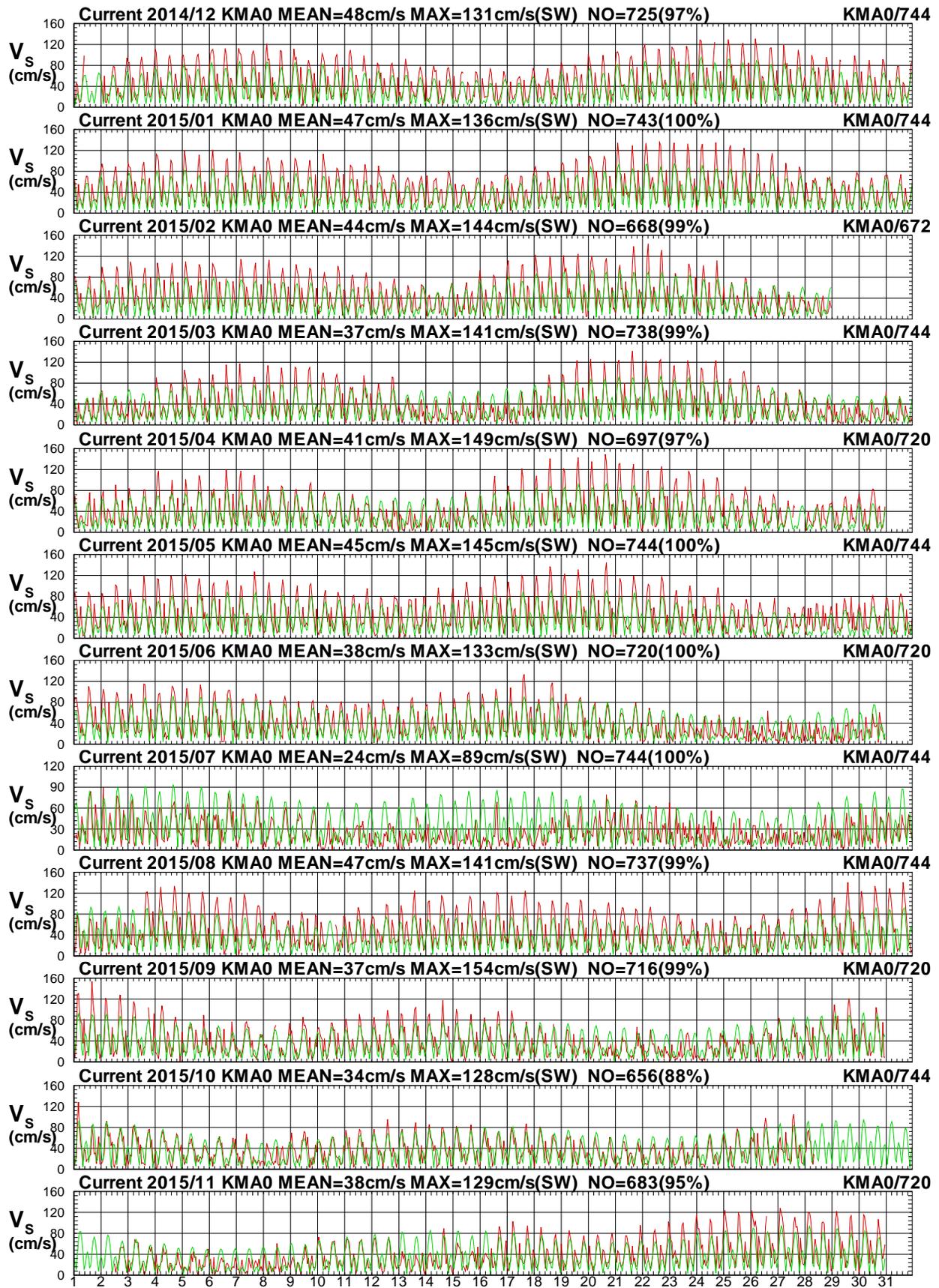


圖 4.5a 2015年每月金門海域 A 站觀測與潮流流速比較圖

C14CKMA0.1H0 C14CKMA0.1HD C151KMA0.1H0 C151KMA0.1HD C152KMA0.1H0 C152KMA0.1HD  
 C153KMA0.1H0 C153KMA0.1HD C154KMA0.1H0 C154KMA0.1HD C155KMA0.1H0 C155KMA0.1HD

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# Current Direction in Kin-Men seas of KMA0 at 2015

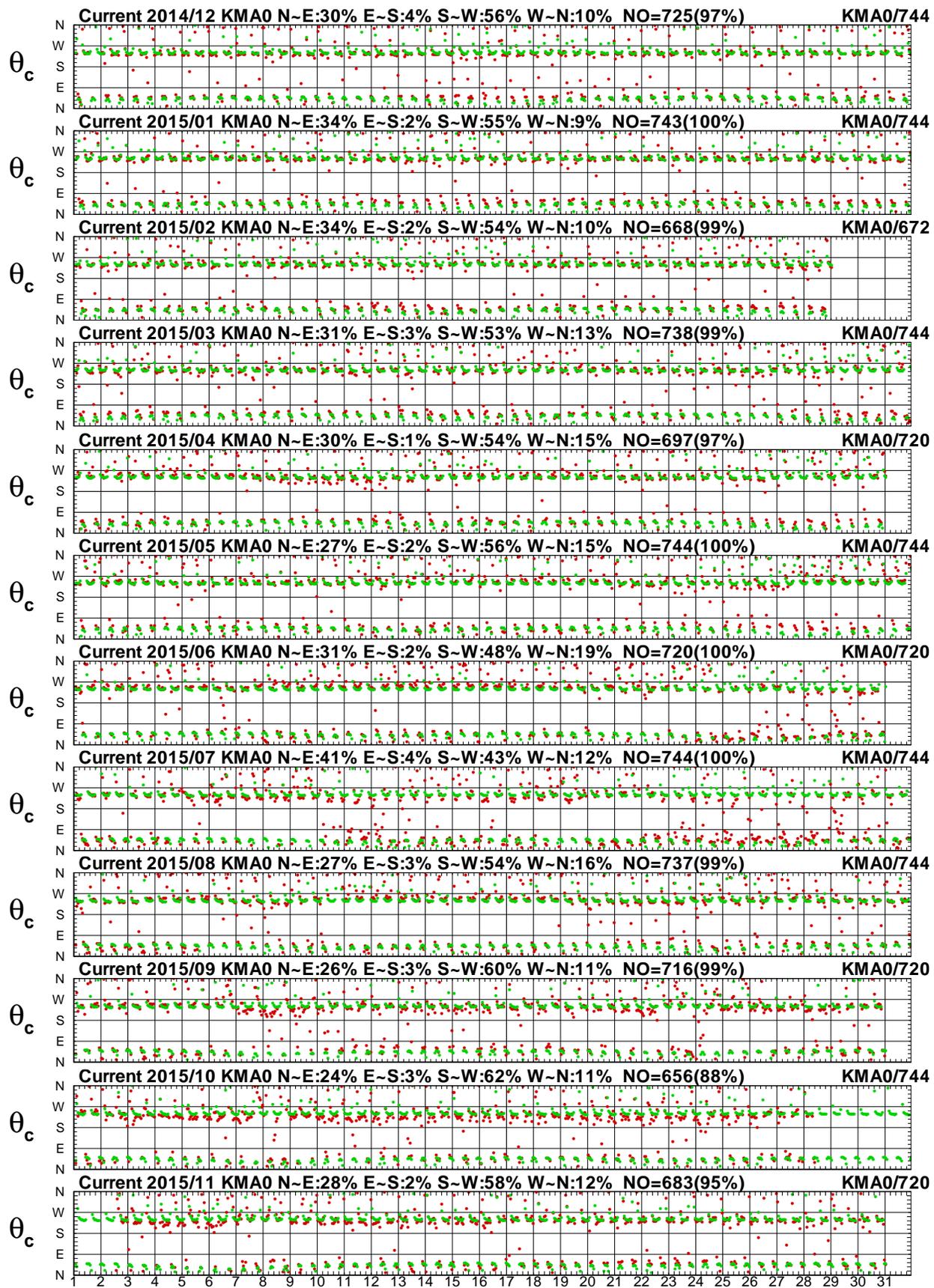


圖 4.5b 2015年每月金門海域 A 站觀測與潮流流向比較圖

C14CKMA0.1H0 C14CKMA0.1HD C151KMA0.1H0 C151KMA0.1HD C152KMA0.1H0 C152KMA0.1HD  
 C153KMA0.1H0 C153KMA0.1HD C154KMA0.1H0 C154KMA0.1HD C155KMA0.1H0 C155KMA0.1HD

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# Current Speed in Kin-Men seas of KMA0 at 2015

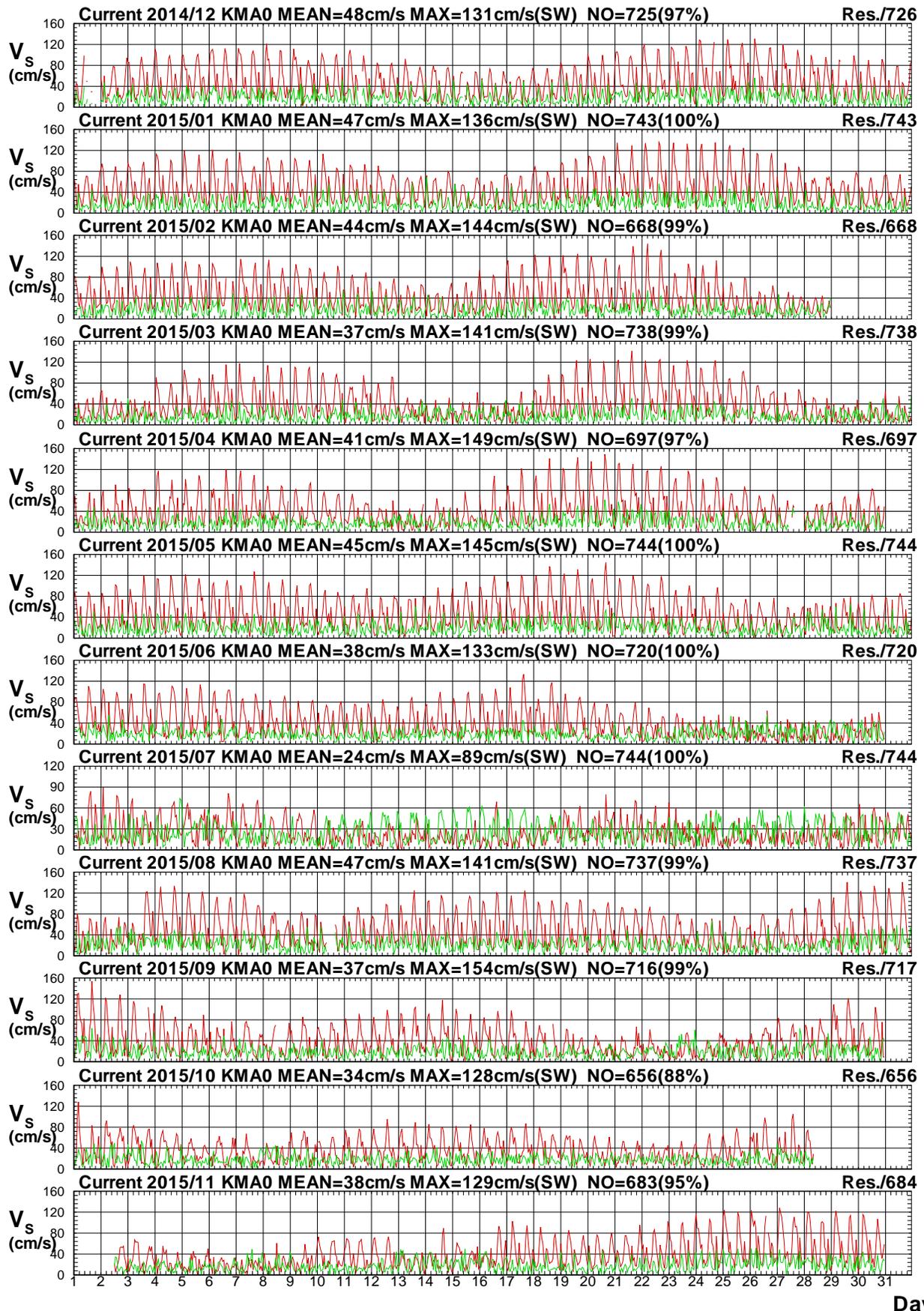


圖 4.6a 2015年每月金門海域 A 站觀測與非潮流速比較圖

C14CKMA0.1H0 C14CKMA0.1HR C151KMA0.1H0 C151KMA0.1HR C152KMA0.1H0 C152KMA0.1HR  
 C153KMA0.1H0 C153KMA0.1HR C154KMA0.1H0 C154KMA0.1HR C155KMA0.1H0 C155KMA0.1HR

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# Current Direction in Kin-Men seas of KMA0 at 2015

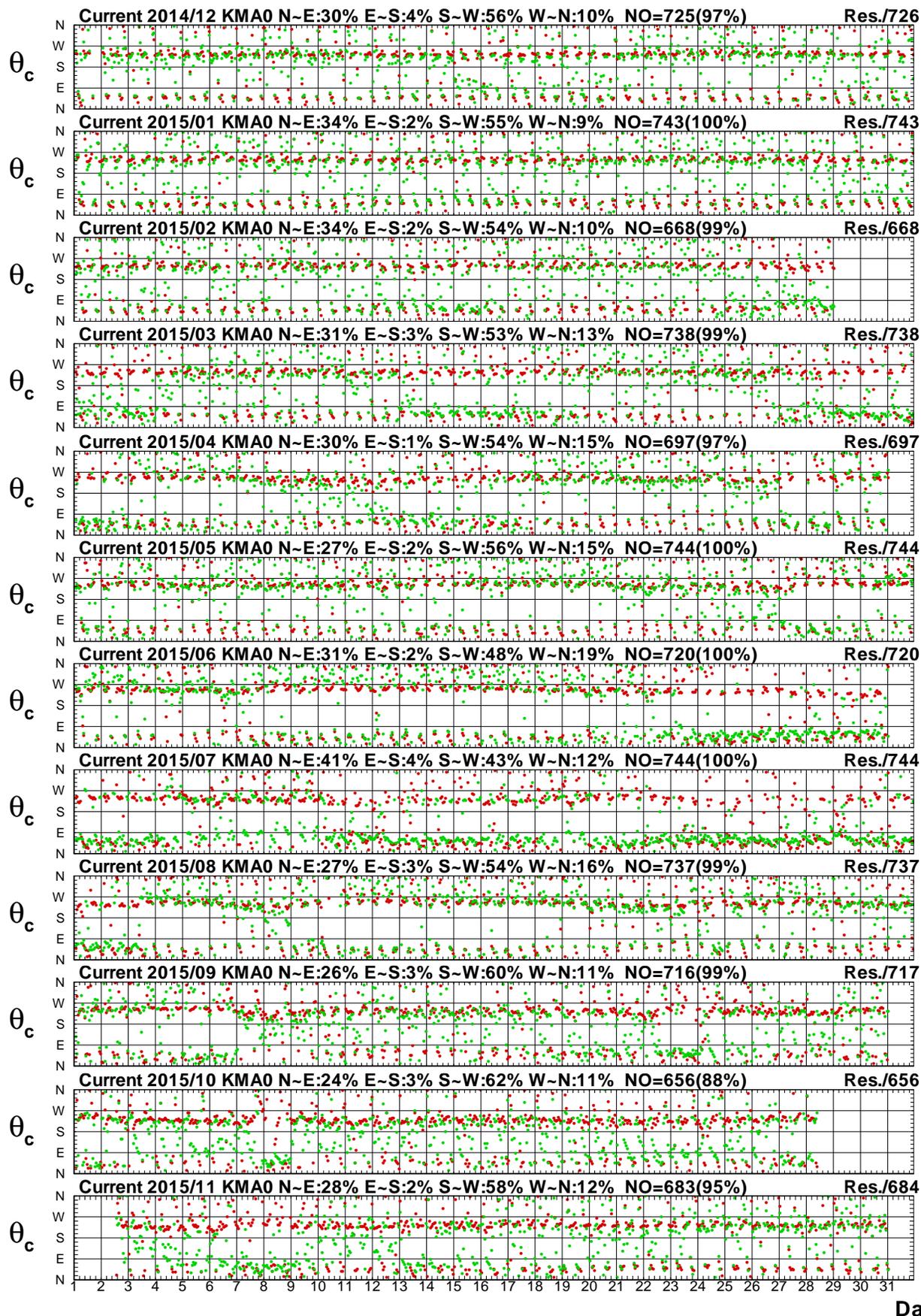


圖 4.6b 2015年每月金門海域 A 站觀測與非潮流向比較圖

C14CKMA0.1H0 C14CKMA0.1HR C151KMA0.1H0 C151KMA0.1HR C152KMA0.1H0 C152KMA0.1HR  
 C153KMA0.1H0 C153KMA0.1HR C154KMA0.1H0 C154KMA0.1HR C155KMA0.1H0 C155KMA0.1HR

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# Current Speed in Kin-Men seas of KMY0 at 2015

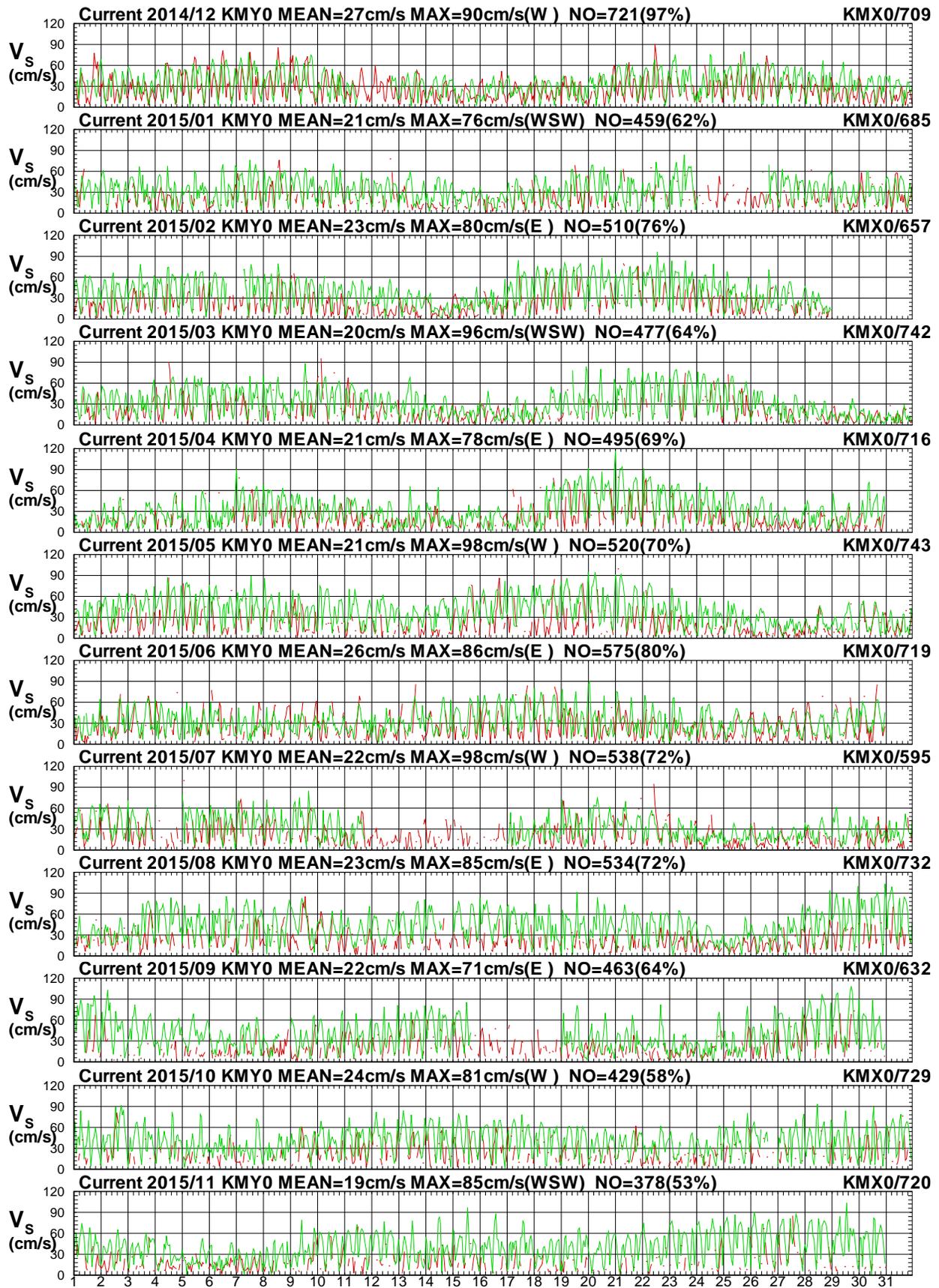


圖 4.7a 2015年每月金門海域 Y 站與 X 站流速比較圖

C14CKMY0.1H0 C14CKMX0.1H0 C151KMY0.1H0 C151KMX0.1H0 C152KMY0.1H0 C152KMX0.1H0  
 C153KMY0.1H0 C153KMX0.1H0 C154KMY0.1H0 C154KMX0.1H0 C155KMY0.1H0 C155KMX0.1H0

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# Current Direction in Kin-Men seas of KMY0 at 2015

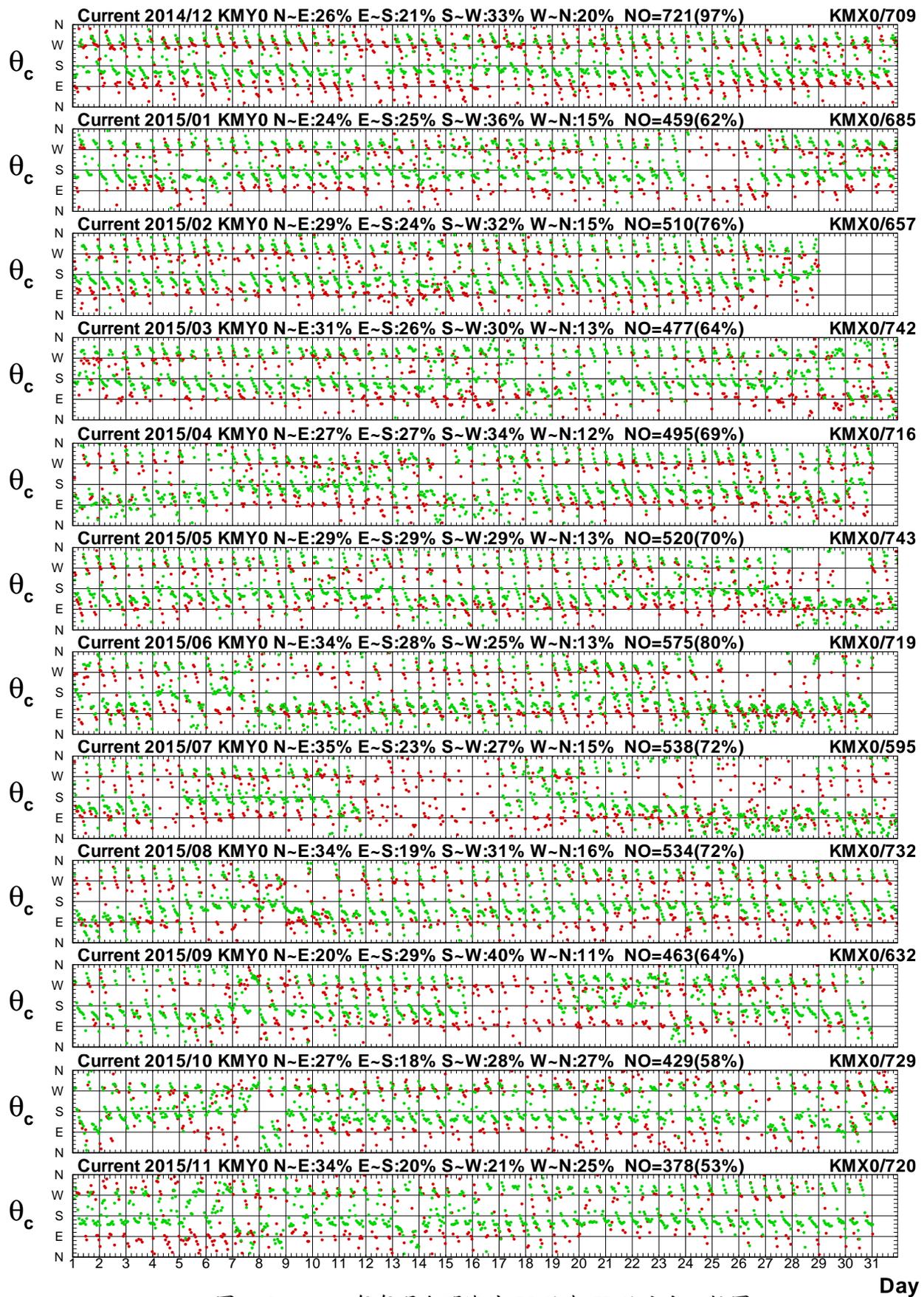


圖 4.7b 2015年每月金門海域 Y 站與 X 站流向比較圖

C14CKMY0.1H0 C14CKMX0.1H0 C151KMY0.1H0 C151KMX0.1H0 C152KMY0.1H0 C152KMX0.1H0  
 C153KMY0.1H0 C153KMX0.1H0 C154KMY0.1H0 C154KMX0.1H0 C155KMY0.1H0 C155KMX0.1H0

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# Current Speed in Kin-Men seas of KMY0 at 2015

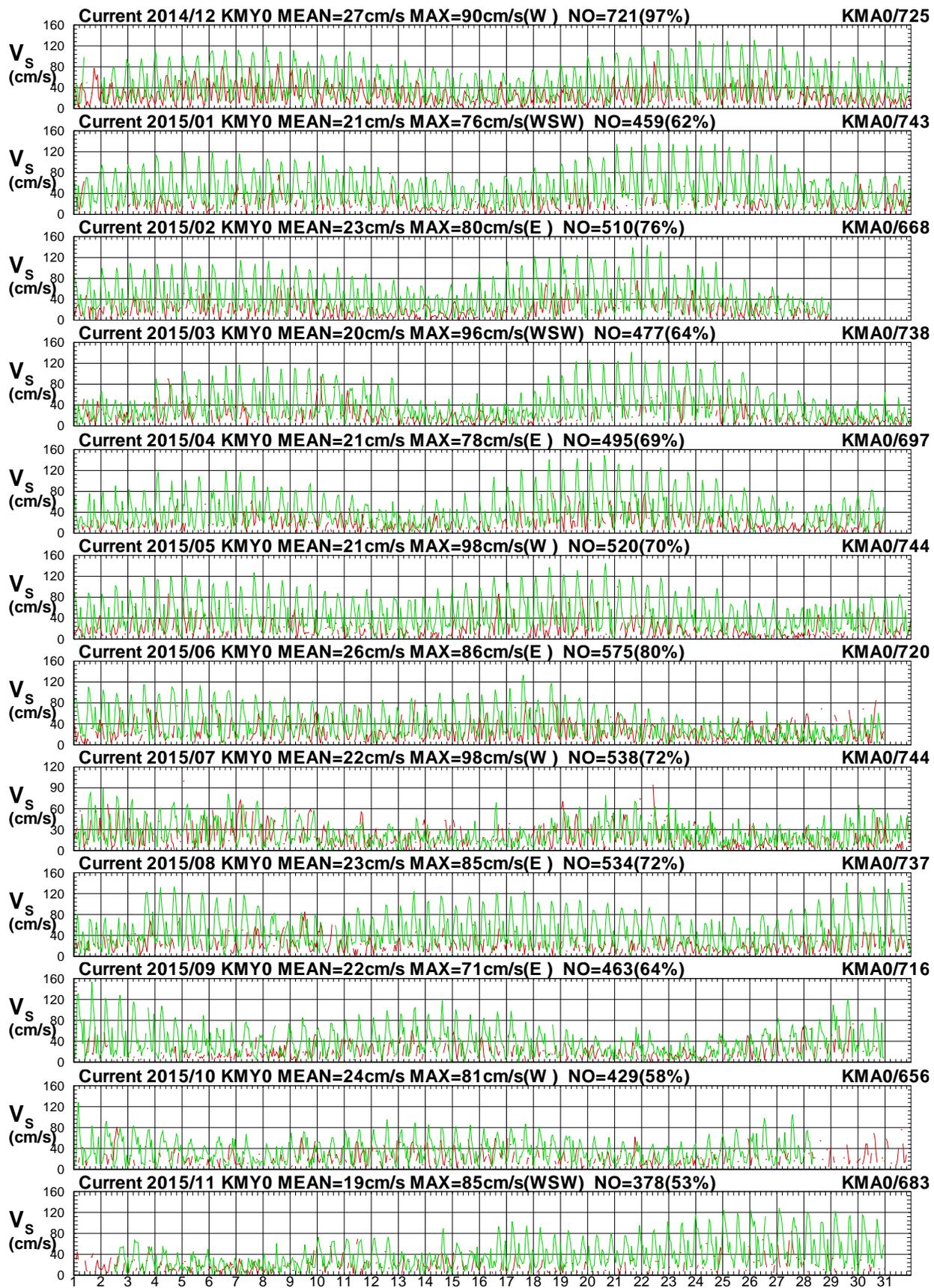


圖 4.8a 2015年每月金門海域 Y 站與 A 站流速比較圖

C14CKMY0.1H0 C14CKMA0.1H0 C151KMY0.1H0 C151KMA0.1H0 C152KMY0.1H0 C152KMA0.1H0  
 C153KMY0.1H0 C153KMA0.1H0 C154KMY0.1H0 C154KMA0.1H0 C155KMY0.1H0 C155KMA0.1H0

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# Current Direction in Kin-Men seas of KMY0 at 2015

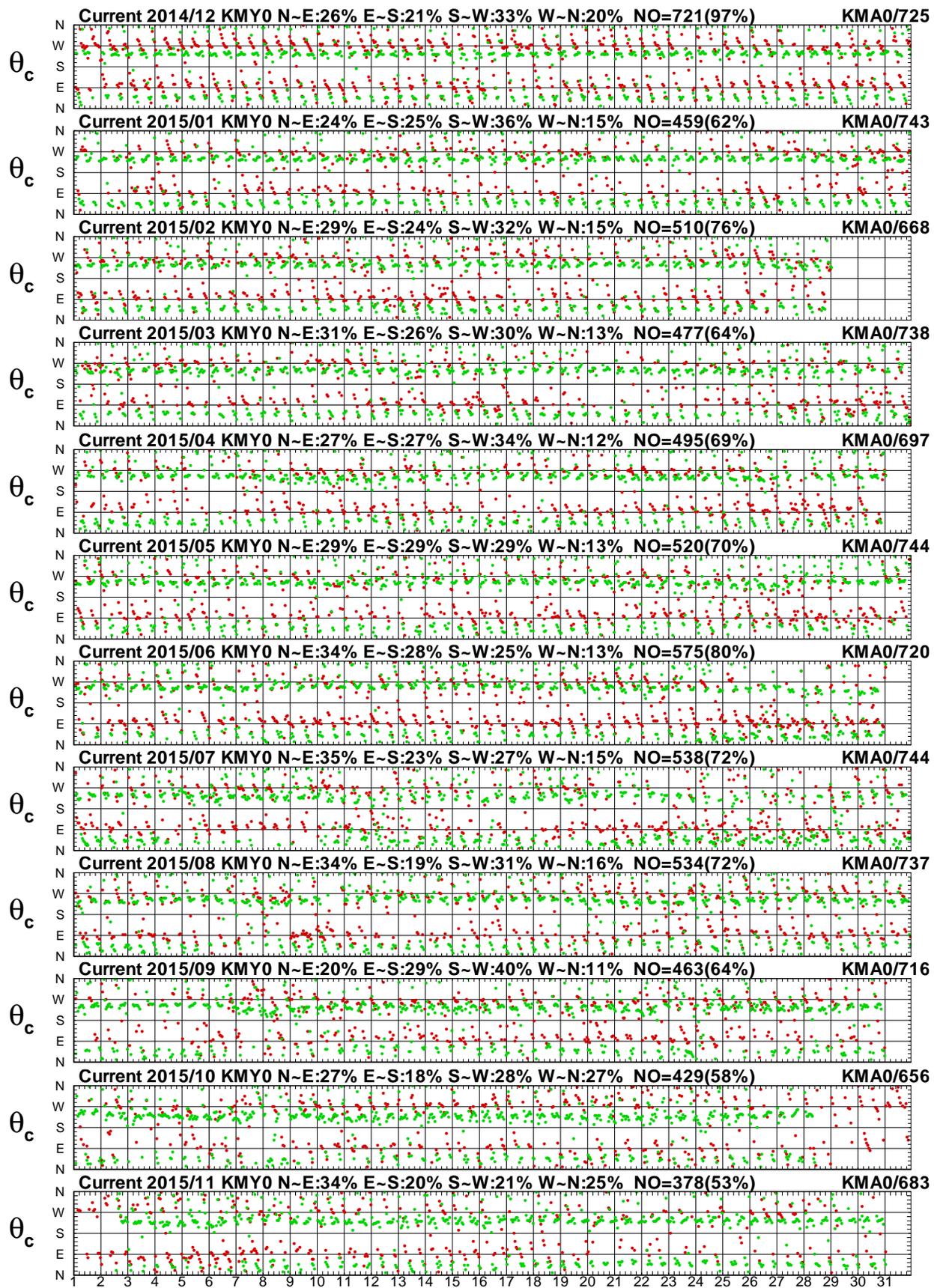


圖 4.8b 2015年每月金門海域 Y 站與 A 站流向比較圖

C14CKMY0.1H0 C14CKMA0.1H0 C151KMY0.1H0 C151KMA0.1H0 C152KMY0.1H0 C152KMA0.1H0  
 C153KMY0.1H0 C153KMA0.1H0 C154KMY0.1H0 C154KMA0.1H0 C155KMY0.1H0 C155KMA0.1H0

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