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2017 年港灣環境資訊網

海氣象觀測資料年報

(宜蘭海域風浪潮流觀測資料)



交通部運輸研究所

中華民國 108 年 2 月

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著者：蘇青和、李俊穎、傅怡釗、陳鈞彥
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摘要： 本港灣環境資訊網觀測海氣象資料年報，包括宜蘭海域2017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。			
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2017 年港灣環境資訊網海氣象觀測資料年報

(宜蘭海域風浪潮流觀測資料)

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誌 謝

2017 年港灣環境資訊網觀測風力資料，蒐集之宜蘭海域風力資料，除本中心自行觀測之外，在蘇澳氣象站(測站 E 及 F)、宜蘭氣象站(測站 H)等，係交通部中央氣象局(CWB)提供;蘇澳海上浮標(測站 Y)觀測風力資料，係經濟部水利署(WRA)提供;福隆海上浮標(測站 R)觀測風力資料，係國立成功大學水文中心(COMC)裝設;龜山島外海浮標站(測站 Z)之風速儀屬觀光局東北角管理處(TBRC)所設置，謹致謝忱。

2017 年港灣環境資訊網觀測波浪資料，蒐集之宜蘭海域波浪資料，除本中心自行觀測之外，在蘇澳海上浮標(測站 Y)觀測波浪資料，係經濟部水利署(WRA)提供;福隆海上浮標(測站 R)觀測波浪儀，係國立成功大學水文中心(COMC)裝設;龜山島外海浮標站(測站 Z)之波浪儀屬觀光局東北角管理處(TBRC)所設置，謹致謝忱。

2017 年港灣海氣象觀測潮汐資料，蒐集之宜蘭海域潮汐觀測資料，除本中心自行觀測之外，在蘇澳港(測站 F 及測站 P)、烏石(測站 J)、福隆(測站 K)等觀測潮汐資料，係交通部中央氣象局提供，謹致謝忱。

2017 年港灣環境資訊網觀測海流資料，蒐集之宜蘭海域海流資料，除本中心自行觀測之外，在蘇澳海上浮標(測站 Y)觀測海流資料，係經濟部水利署(WRA)提供，謹致謝忱。

第 0 章 宜蘭海域觀測風浪潮流資料蒐集

本年報將彙整包括本所港研中心(IHMT)、氣象局(CWB)、水利署(WRA)、成功大學水文中心(COMC)、立臺灣海洋大學(NTOC)、海科中心(TORI)、觀光局東北角管理處(TBRC)、台灣中油(CPC)等單位，於臺灣北苗海域、北端海域、宜蘭海域、花蓮海域、臺東海域、屏東海域、高雄海域、嘉南海域、中雲海域、澎湖海域、金門海域及馬祖海域等 12 個海域，海域區分如附圖 A1。

宜蘭海域觀測風力資料測站統計表如表 WS1，觀測波浪資料測站統計表如表 VS1，觀測潮汐資料測站統計表如表 TS1，觀測海流資料測站統計表如表 CS1。

表 WS1 宜蘭海域觀測風力資料測站統計表

海域名稱	測站總數	IHMT 測站	CWB 測站	WRA 測站	其他 測站	備註
宜蘭海域	7	1	3	1	2	

表 VS1 宜蘭海域觀測波浪資料測站統計表

海域名稱	測站總數	IHMT 測站	CWB 測站	WRA 測站	其他 測站	備註
宜蘭海域	4	1	0	1	2	

表 TS1 宜蘭海域觀測潮汐資料測站統計表

海域名稱	測站總數	IHMT 測站	CWB 測站	WRA 測站	其他 測站	備註
宜蘭海域	6	2	4	0	0	

表 CS1 宜蘭海域觀測海流資料測站統計表

海域名稱	測站總數	IHMT 測站	CWB 測站	WRA 測站	其他 測站	備註
宜蘭海域	2	1	0	1	0	

註:資料更新時間為 2017 年。

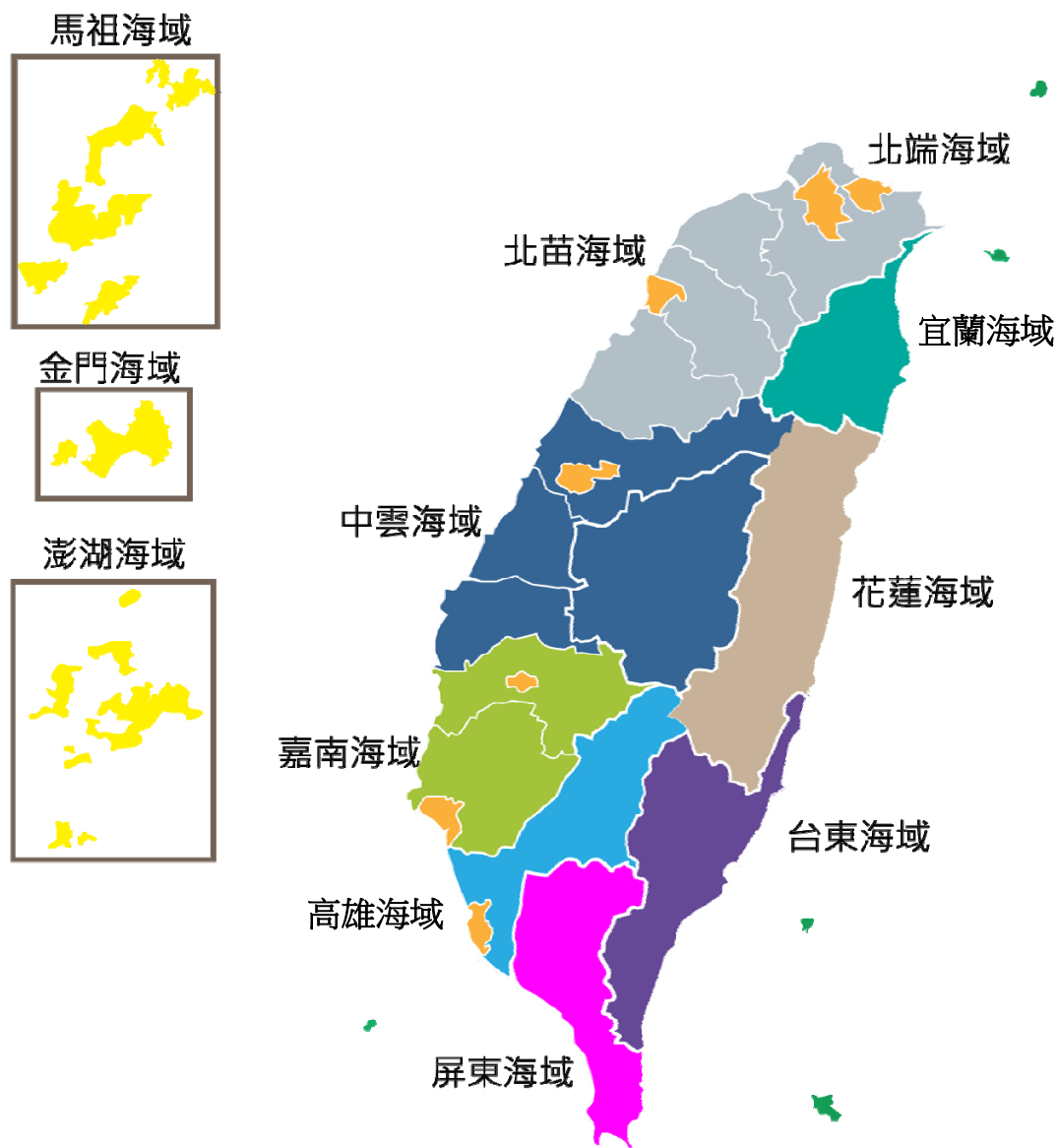


圖 A1 臺灣 12 海域區分示意圖

2017 年宜蘭海域觀測風力資料

宜蘭海域風之觀測係 2003 年 6 月本所港研中心(IHMT)於蘇澳港安裝一具風速風向即時傳送監測系統(稱測站 W)，其位置如附圖 WS1，2012 年 10 月更新為 Gill 二維超音波式風速計。測站 E、測站 F 及測站 H 之風速儀屬中央氣象局所有，測站 Y(蘇澳外海浮標站)之風速儀屬水利署(WRA)所有，測站 Z(龜山島外海浮標站)之風速儀屬觀光局東北角管理處(TBRC)所設置。福隆海上浮標(測站 R)觀測風力，係國立成功大學水文中心(COMC)所裝設。

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。本中心之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)。各測站歷年觀測風資料蒐集概況如表 WS1。

表 WS1 宜蘭海域觀測風力資料蒐集概況表(統計時間至 2017 年 11 月)

測站	緯度	經度	觀測期間	觀測單位	備註
W	24°35'33"N	121°51'01"E	2003/06-2017/11(觀測中)	港研中心	蘇澳港區
E	24°35'48"N	121°51'26"E	1999/01-2017/11(觀測中)	中央氣象局	蘇澳
Y	24°37'38"N	121°52'36"E	1999/09-2017/11(觀測中)	水利署	蘇澳浮標站
Z	24°50'52"N	121°55'39"E	2002/05-2017/11(觀測中)	觀光局	龜山島浮標站
H	24°45'56"N	121°44'53"E	2013/11-2017/11(觀測中)	中央氣象局	宜蘭
R	22°18'50"N	120°21'50"E	2006/04-2008/02	水文中心	福隆浮標站
F	24°35'33"N	121°51'56"E	2015/04-2017/11(觀測中)	中央氣象局	蘇澳

宜蘭海域



WRA 浮標風速站



IHMT 風速站



COMC 福隆浮標風速站



CWB 風速站



TBRC 龜山島浮標風速站



圖 WS1 宜蘭海域風力觀測站位置示意圖

2017 年宜蘭海域觀測波浪資料

宜蘭海域波浪之觀測本中心(IHMT)於 2002 年 7 月 19 日於蘇澳港外約 700m 附近(稱測站 X)，水深約 25 公尺處設置挪威 NORTEK 公司之剖面海流與表面波浪(波高、週期及波向)即時傳送監測系統(簡稱 AWCP)波浪觀測站，其位置如附圖 VS1。

測站 Y(蘇澳外海浮標站)之波浪儀屬水利署(WRA)所有，測站 Z(龜山島外海浮標站)之波浪儀屬觀光局東北角管理處(TBRC)所設置。福隆海上浮標(測站 R)觀測風力，係國立成功大學水文中心(COMC)所裝設。蘇澳海域各測站歷年觀測波浪資料蒐集概況如表 VS1。

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。

表 VS1 宜蘭海域觀測波浪資料蒐集概況表(統計時間至 2017 年 11 月)

測站	緯度	經度	觀測期間	觀測單位	備註
X	24°35'23"N	121°53'07"E	2002/08-2017/11(觀測中)	港研中心	AWCP 蘇澳港
Y	24°37'38"N	121°52'36"E	1999/09-2017/11(觀測中)	水利署	蘇澳浮標站
Z	24°50'52"N	121°55'39"E	2002/05-2017/11(觀測中)	觀光局	龜山島浮標站
R	22°18'50"N	120°21'50"E	2006/04-2008/08	水文中心	福隆浮標站

宜蘭海域



IHMT 波潮流站



WRA 浮標波浪站



COMC 福隆浮標波浪站



TBRC 龜山島浮標波浪站



圖 VS1 宜蘭海域波浪觀測站位置示意圖

2017 年宜蘭海域觀測潮汐資料

宜蘭海域潮汐之觀測係本中心於 2003 年 6 月本中心在蘇澳港(稱**測站 T**)安裝一具壓力式潮位儀監測系統，如附圖 TS1。另於 2002 年 7 月，在蘇澳港港口外 700 公尺水深約 25 公尺處(**測站 X**) 安置 AWCP 即時傳送監測系統，也具量測水位功能。蘇澳港潮位站(**測站 F** 及 **測站 P**)、烏石潮位站(**測站 J**)及福隆潮位站(**測站 K**)由中央氣象局設置。各測站歷年觀測潮汐資料蒐集概況如表 TS1。

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。其他潮位資料由中央氣象局提供。

表 TS1 宜蘭海域觀測潮汐資料蒐集概況表(統計時間至 2017 年 11 月)

測站	緯度	經度	觀測期間	觀測單位	備註
T	24°35'33"N	121°51'56"E	2003/06-2017/11(觀測中)	港研中心	蘇澳港潮位計
X	24°35'23"N	121°53'07"E	2002/08-2017/11(觀測中)	港研中心	AWCP
F	24°35'33"N	121°51'56"E	1981/01-2017/11(觀測中)	中央氣象局	蘇澳港潮位站
J	24°52'07"N	121°50'17"E	2013/12-2017/11(觀測中)	中央氣象局	烏石潮位站
K	24°01'18"N	121°57'00"E	2013/12-2017/11(觀測中)	中央氣象局	福隆潮位站
P	24°35'24"N	121°52'12"E	2017/07-2017/11(觀測中)	中央氣象局	蘇澳潮位站

宜蘭海域



圖 TS1 宜蘭海域潮汐觀測站位置示意圖

2017 年宜蘭海域觀測海流資料

宜蘭海域海流之觀測本中心於 2002 年 7 月 19 日於蘇澳港外約 700m 附近(稱**測站 X**)，水深約 25 公尺處設置挪威 NORTEK 公司之剖面海流與表面波浪(波高、週期及波向)即時傳送監測系統(簡稱 AWCP)海流觀測站，其位置如附圖 CS1。

測站 Y(蘇澳外海浮標站)之海流儀屬水利署所有，各測站歷年觀測海流資料蒐集概況如表 CS1。

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，蘇澳港觀測站水深間距設定為 1 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。

表 CS1 宜蘭海域觀測海流資料蒐集概況表(統計時間至 2017 年 11 月)

測站	緯度	經度	觀測期間	觀測單位	備註
X	24°35'23"N	121°53'07"E	2002/08-2017/11(觀測中)	港研中心	AWCP 蘇澳港
Y	24°37'38"N	121°52'36"E	1999/09-2017/11(觀測中)	水利署	蘇澳浮標站

宜蘭海域



圖 CS1 宜蘭海域海流觀測站位置示意圖

第一章 2017 年宜蘭海域觀測風力資料

宜蘭海域風之觀測包括測站 **W**、測站 **Y**、測站 **E**、測站 **F**、測站 **Z**、測站 **R** 及測站 **H** 等 7 個測站(測站位置如第 O 章圖 WS1)。本年報取經檢核及補遺之 **Y 站** 及 **W 站** 資料作為主要測站。

本**風力**年報資料處理之圖表包括：

1. 2017 年**各觀測站**每月**觀測風力**資料**修補前**記錄表。
2. 2017 年**主要測站**每月**觀測風力**資料**修補後**記錄表。
3. 2017 年**主要測站修補前後**每月(季)及整年風速及風向重要統計量統計表。
4. 2017 年**主要測站修補前後**每月風力歷線比較圖。
5. 2017 年**主要測站之觀測風力與次要觀測站(或其他觀測站)**每月風力歷線比較圖。

表 1.1a 2017 年每月宜蘭海域修補前各測站觀測風力資料紀錄表

海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域
年月/測站	W	Y	Z	R	E	H	F					
2016/12 月	497(66.8%)	734(98.7%)	742(99.7%)	*	744(100%)	744(100%)	732(98.4%)	*	*	*	*	*
2017/ 1 月	595(80.0%)	696(93.5%)	738(99.2%)	*	744(100%)	744(100%)	608(81.7%)	*	*	*	*	*
2017/ 2 月	476(70.8%)	671(99.9%)	671(99.9%)	*	672(100%)	672(100%)	670(99.7%)	*	*	*	*	*
2017/ 3 月	574(77.2%)	743(99.9%)	740(99.5%)	*	744(100%)	744(100%)	685(92.1%)	*	*	*	*	*
2017/ 4 月	706(98.1%)	709(98.5%)	705(97.9%)	*	720(100%)	720(100%)	568(78.9%)	*	*	*	*	*
2017/ 5 月	744(100%)	734(98.7%)	724(97.3%)	*	744(100%)	744(100%)	699(94.0%)	*	*	*	*	*
2017/ 6 月	720(100%)	708(98.3%)	707(98.2%)	*	720(100%)	720(100%)	351(48.8%)	*	*	*	*	*
2017/ 7 月	744(100%)	727(97.7%)	737(99.1%)	*	744(100%)	744(100%)	561(75.4%)	*	*	*	*	*
2017/ 8 月	721(96.9%)	578(77.7%)	575(77.3%)	*	744(100%)	744(100%)	411(55.2%)	*	*	*	*	*
2017/ 9 月	720(100%)	711(98.8%)	147(20.4%)	*	720(100%)	720(100%)	444(61.7%)	*	*	*	*	*
2017/10 月	744(100%)	742(99.7%)	*	*	*	*	556(74.7%)	*	*	*	*	*
2017/11 月	720(100%)	354(49.2%)	703(97.6%)	*	*	*	601(83.5%)	*	*	*	*	*
2017/冬季	1568(72.6%)	2101(97.3%)	2151(99.6%)	*	2160(100%)	2160(100%)	2010(93.1%)	*	*	*	*	*
2017/春季	2024(91.7%)	2186(99.0%)	2169(98.2%)	*	2208(100%)	2208(100%)	1952(88.4%)	*	*	*	*	*
2017/夏季	2185(99.0%)	2013(91.2%)	2019(91.4%)	*	2208(100%)	2208(100%)	1323(59.9%)	*	*	*	*	*
2017/秋季	2184(100%)	1807(82.7%)	850(38.9%)	*	720(33.0%)	720(33.0%)	1601(73.3%)	*	*	*	*	*
2017/整年	7961(90.9%)	8107(92.5%)	7189(82.1%)	*	7296(83.3%)	7296(83.3%)	6886(78.6%)	*	*	*	*	*
起始年月	2016/12	2016/12	2016/12	*	2016/12	2016/12	2016/12	*	*	*	*	*
結束年月	2017/11	2017/11	2017/11	*	2017/09	2017/09	2017/11	*	*	*	*	*

表 1.1b 2017年每月宜蘭海域修補後各測站風力資料紀錄表

海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域
年月/測站	W	Y										
2016/12 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 1 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 2 月	672(100%)	672(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 3 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 4 月	720(100%)	720(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 5 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 6 月	720(100%)	720(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 7 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 8 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 9 月	720(100%)	720(100%)	*	*	*	*	*	*	*	*	*	*
2017/10 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/11 月	720(100%)	720(100%)	*	*	*	*	*	*	*	*	*	*
2017/冬季	2160(100%)	2160(100%)	*	*	*	*	*	*	*	*	*	*
2017/春季	2208(100%)	2208(100%)	*	*	*	*	*	*	*	*	*	*
2017/夏季	2208(100%)	2208(100%)	*	*	*	*	*	*	*	*	*	*
2017/秋季	2184(100%)	2184(100%)	*	*	*	*	*	*	*	*	*	*
2017/整年	8760(100%)	8760(100%)	*	*	*	*	*	*	*	*	*	*
起始年月	2016/12	2016/12	*	*	*	*	*	*	*	*	*	*
結束年月	2017/11	2017/11	*	*	*	*	*	*	*	*	*	*

表1.2a 2017年宜蘭海域主要測站1修補前風速及風向重要統計量統計表

序 號	日期 (年/月)	觀測 點數	風速 平均值 (m/s)	平均風 風速/風向 (m/s)/(來向)	最大風 風速/風向 (m/s)/(來向)	輕風 <3.3 (%)	和風 ~7.9 (%)	強風 ~13.8 (%)	疾風 >13.8 (%)	風向 N~E (%)	風向 E~S (%)	風向 S~W (%)	風向 W~N (%)	主要風向 方向/百分比
1	2016/12	497(67%)	4.0	1.8/NW	10.1/NNE	44.9	50.9	4.2	.0	14.5	15.3	8.7	61.6	WNW/27.2%
2	2017/01	595(80%)	3.8	2.0/NW	9.3/N	47.7	47.4	4.9	.0	19.3	10.1	4.7	65.9	WNW/37.8%
3	2017/02	476(71%)	4.2	2.2/NW	10.4/N	44.5	49.4	6.1	.0	18.1	10.1	9.5	62.4	WNW/28.8%
4	2017/03	574(77%)	4.1	1.5/NW	12.3/NNE	46.2	46.3	7.5	.0	18.8	13.2	8.5	59.4	WNW/26.1%
5	2017/04	706(98%)	3.7	.6/W	10.1/S	55.2	39.1	5.7	.0	14.0	24.8	9.8	51.4	WNW/26.3%
6	2017/05	744(100%)	2.9	.6/NW	8.6/SSE	69.1	30.0	.9	.0	17.5	21.9	6.9	53.8	WNW/25.9%
7	2017/06	720(100%)	2.5	.2/W	8.9/S	81.3	16.1	2.6	.0	16.9	26.4	6.7	50.0	WNW/26.1%
8	2017/07	744(100%)	4.9	3.5/S	27.5/SSE	45.4	36.2	15.6	2.8	5.0	46.5	19.2	29.3	S /36.0%
9	2017/08	721(97%)	3.4	1.3/S	11.8/S	61.0	35.8	3.2	.0	10.3	45.2	7.1	37.4	WNW/22.6%
10	2017/09	720(100%)	4.2	.8/SSW	12.3/S	47.9	44.6	7.5	.0	14.0	36.0	9.2	40.8	SSE/18.9%
11	2017/10	744(100%)	5.9	2.4/N	13.4/NE	17.6	61.3	21.1	.0	31.3	18.4	6.5	43.8	NW /15.6%
12	2017/11	720(100%)	4.7	2.6/NW	11.7/NNE	24.2	69.3	6.5	.0	12.4	11.4	10.3	66.0	WNW/26.1%
13	2017/冬	1568(73%)	4.0	2.0/NW	10.4/N	45.9	49.1	5.0	.0	17.4	11.7	7.4	63.5	WNW/31.7%
14	2017/春	2024(92%)	3.5	.8/NW	12.3/NNE	57.8	37.8	4.4	.0	16.7	20.5	8.3	54.5	WNW/26.1%
15	2017/夏	2185(99%)	3.6	1.6/S	27.5/SSE	62.4	29.4	7.2	1.0	10.7	39.5	11.1	38.8	WNW/22.4%
16	2017/秋	2184(100%)	4.9	1.4/NW	13.4/NE	29.8	58.4	11.8	.0	19.4	21.9	8.6	50.1	WNW/18.1%
17	2017/年	7961(91%)	4.0	.7/WNW	27.5/SSE	49.0	43.4	7.3	.3	15.9	24.3	9.0	50.8	WNW/24.0%

表1.2b 2017年宜蘭海域主要測站1修補後風速及風向重要統計量統計表

序 號	日期 (年/月)	觀測 點數	風速 平均值 (m/s)	平均風 風速/風向 (m/s)/(來向)	最大風 風速/風向 (m/s)/(來向)	輕風 <3.3 (%)	和風 ~7.9 (%)	強風 ~13.8 (%)	疾風 >13.8 (%)	風向 N~E (%)	風向 E~S (%)	風向 S~W (%)	風向 W~N (%)	主要風向 方向/百分比
1	2016/12	744(100%)	4.0	2.1/WNW	10.1/NNE	38.6	58.5	3.0	.0	11.6	10.5	25.5	52.4	WNW/24.6%
2	2017/01	744(100%)	4.0	2.3/NW	9.3/N	40.6	55.5	3.9	.0	16.3	8.1	10.3	65.3	WNW/36.0%
3	2017/02	672(100%)	4.1	2.2/WNW	10.4/N	43.8	51.9	4.3	.0	14.0	7.4	22.0	56.5	WNW/26.6%
4	2017/03	744(100%)	4.0	1.7/NW	12.3/NNE	46.0	48.0	6.0	.0	15.7	10.3	20.6	53.4	WNW/24.3%
5	2017/04	720(100%)	3.7	.7/W	10.1/S	55.8	38.6	5.6	.0	13.8	24.3	11.5	50.4	WNW/25.7%
6	2017/05	744(100%)	2.9	.6/NW	8.6/SSE	69.1	30.0	.9	.0	17.5	21.9	6.9	53.8	WNW/25.9%
7	2017/06	720(100%)	2.5	.2/W	8.9/S	81.3	16.1	2.6	.0	16.8	26.5	6.7	50.0	WNW/26.1%
8	2017/07	744(100%)	4.9	3.5/S	27.5/SSE	45.4	36.3	15.5	2.8	5.0	46.5	19.2	29.3	S /36.0%
9	2017/08	744(100%)	3.4	1.3/S	11.8/S	60.8	36.2	3.1	.0	10.1	45.0	8.6	36.3	WNW/21.9%
10	2017/09	720(100%)	4.2	.8/SSW	12.3/S	47.9	44.6	7.5	.0	14.0	36.0	9.2	40.8	SSE/18.9%
11	2017/10	744(100%)	5.9	2.4/N	13.4/NE	17.6	61.4	21.0	.0	31.3	18.4	6.5	43.8	NW /15.7%
12	2017/11	720(100%)	4.7	2.6/NW	11.7/NNE	24.2	69.3	6.5	.0	12.4	11.4	10.3	66.0	WNW/26.3%
13	2017/冬	2160(100%)	4.0	2.2/WNW	10.4/N	40.9	55.4	3.7	.0	13.9	8.7	19.2	58.1	WNW/29.2%
14	2017/春	2208(100%)	3.5	.9/WNW	12.3/NNE	57.0	38.9	4.2	.0	15.7	18.8	13.0	52.5	WNW/25.3%
15	2017/夏	2208(100%)	3.6	1.6/S	27.5/SSE	62.3	29.7	7.1	1.0	10.6	39.5	11.5	38.4	WNW/22.2%
16	2017/秋	2184(100%)	4.9	1.4/NW	13.4/NE	29.8	58.5	11.8	.0	19.4	21.9	8.6	50.1	WNW/18.1%
17	2017/年	8760(100%)	4.0	.9/WNW	27.5/SSE	47.6	45.5	6.7	.2	14.9	22.3	13.1	49.8	WNW/23.7%

表1.3a 2017年宜蘭海域主要測站2修補前風速及風向重要統計量統計表

序 號	日期 (年/月)	觀測 點數	風速 平均值 (m/s)	平均風 風速/風向 (m/s)/(來向)	最大風 風速/風向 (m/s)/(來向)	輕風 <3.3 (%)	和風 ~7.9 (%)	強風 ~13.8 (%)	疾風 >13.8 (%)	風向 N~E (%)	風向 E~S (%)	風向 S~W (%)	風向 W~N (%)	主要風向 方向/百分比
1	2016/12	734(99%)	4.5	2.2/N	11.5/SSW	35.6	52.3	12.1	.0	29.7	7.5	9.5	53.3	NW /26.4%
2	2017/01	696(94%)	4.6	2.8/NNW	12.5/NNE	33.6	54.6	11.8	.0	29.0	3.3	8.0	59.6	NW /27.0%
3	2017/02	671(100%)	4.9	2.8/NNW	11.9/NE	29.7	55.4	14.9	.0	26.1	4.6	8.3	61.0	NW /26.1%
4	2017/03	743(100%)	4.5	2.2/NNW	14.0/NE	39.6	45.9	14.4	.1	26.5	5.2	12.7	55.6	NW /25.8%
5	2017/04	709(99%)	3.9	.5/N	14.3/NE	51.3	37.5	11.0	.1	25.4	18.5	13.5	42.6	NW /17.6%
6	2017/05	734(99%)	2.9	.7/N	11.8/NNE	65.1	32.8	2.0	.0	27.5	16.8	10.5	45.2	NW /16.6%
7	2017/06	708(98%)	2.3	.2/NNW	10.0/S	79.4	16.7	4.0	.0	23.4	18.5	15.0	43.1	NW /15.8%
8	2017/07	727(98%)	4.9	3.6/S	28.0/S	45.3	32.5	19.3	3.0	8.7	32.0	34.8	24.5	S /25.6%
9	2017/08	578(78%)	3.2	1.5/SSE	13.2/SSE	63.0	32.7	4.3	.0	18.0	34.3	20.1	27.7	SSE/15.6%
10	2017/09	711(99%)	3.6	.6/S	12.0/NNW	52.9	39.1	8.0	.0	17.3	28.6	20.7	33.5	S /16.7%
11	2017/10	742(100%)	6.2	2.9/NNE	14.7/ENE	17.1	52.4	30.3	.1	39.4	18.7	7.7	34.2	NE /12.4%
12	2017/11	354(49%)	4.2	1.9/NNW	10.9/NNE	38.7	52.8	8.5	.0	23.4	11.6	7.6	57.3	WNW/24.3%
13	2017/冬	2101(97%)	4.7	2.6/NNW	12.5/NNE	33.0	54.1	12.9	.0	28.3	5.2	8.7	57.8	NW /26.5%
14	2017/春	2186(99%)	3.8	1.1/NNW	14.3/NE	52.0	38.8	9.1	.1	26.5	13.4	12.2	47.9	NW /20.1%
15	2017/夏	2013(91%)	3.5	1.7/S	28.0/S	62.3	27.0	9.6	1.1	16.5	27.9	23.6	31.9	S /15.8%
16	2017/秋	1807(83%)	4.8	1.3/NNE	14.7/ENE	35.4	47.3	17.3	.1	27.6	21.2	12.8	38.5	NW /12.7%
17	2017/年	8107(93%)	4.2	.8/NNW	28.0/S	45.9	41.7	12.0	.3	24.7	16.6	14.2	44.4	NW /17.9%

表1.3b 2017年宜蘭海域主要測站2修補後風速及風向重要統計量統計表

序 號	日期 (年/月)	觀測 點數	風速 平均值 (m/s)	平均風 風速/風向 (m/s)/(來向)	最大風 風速/風向 (m/s)/(來向)	輕風 <3.3 (%)	和風 ~7.9 (%)	強風 ~13.8 (%)	疾風 >13.8 (%)	風向 N~E (%)	風向 E~S (%)	風向 S~W (%)	風向 W~N (%)	主要風向 方向/百分比
1	2016/12	744(100%)	4.4	2.2/N	11.5/SSW	36.3	51.7	12.0	.0	29.4	7.5	9.7	53.4	NW /26.3%
2	2017/01	744(100%)	4.5	2.7/NNW	12.5/NNE	37.8	51.2	11.0	.0	28.6	3.6	7.7	60.1	NW /27.2%
3	2017/02	672(100%)	4.9	2.8/NNW	11.9/NE	29.9	55.2	14.9	.0	26.2	4.6	8.3	60.9	NW /26.0%
4	2017/03	744(100%)	4.5	2.2/NNW	14.0/NE	39.8	45.7	14.4	.1	26.5	5.2	12.6	55.6	NW /25.8%
5	2017/04	720(100%)	3.8	.5/N	14.3/NE	52.1	36.9	10.8	.1	25.1	18.2	13.8	42.9	NW /17.5%
6	2017/05	744(100%)	2.9	.7/N	11.8/NNE	65.5	32.5	2.0	.0	27.8	16.7	10.5	45.0	NW /16.5%
7	2017/06	720(100%)	2.3	.2/NNW	10.0/S	79.7	16.4	3.9	.0	23.5	18.6	14.7	43.2	NW /15.6%
8	2017/07	744(100%)	4.8	3.5/S	28.0/S	46.5	31.7	18.8	3.0	8.6	31.3	34.7	25.4	S /24.9%
9	2017/08	744(100%)	3.0	1.4/SSE	13.2/SSE	66.4	30.2	3.4	.0	14.9	38.7	18.5	27.8	SSE/16.3%
10	2017/09	720(100%)	3.6	.6/S	12.0/NNW	53.5	38.6	7.9	.0	17.6	28.3	20.4	33.6	S /16.5%
11	2017/10	744(100%)	6.2	2.9/NNE	14.7/ENE	17.3	52.3	30.2	.1	39.2	18.7	7.7	34.4	NE /12.4%
12	2017/11	720(100%)	4.8	2.6/NW	14.6/NNE	30.0	57.4	12.2	.4	16.9	10.7	12.4	60.0	WNW/23.2%
13	2017/冬	2160(100%)	4.6	2.5/NNW	12.5/NNE	34.8	52.6	12.5	.0	28.1	5.3	8.6	58.0	NW /26.5%
14	2017/春	2208(100%)	3.7	1.1/NNW	14.3/NE	52.4	38.4	9.1	.1	26.5	13.3	12.3	47.9	NW /20.0%
15	2017/夏	2208(100%)	3.3	1.6/S	28.0/S	64.0	26.2	8.7	1.0	15.6	29.7	22.7	32.0	S /14.6%
16	2017/秋	2184(100%)	4.9	1.4/N	14.7/ENE	33.4	49.5	16.9	.2	24.8	19.2	13.4	42.6	NW /13.0%
17	2017/年	8760(100%)	4.1	.9/NNW	28.0/S	46.3	41.6	11.8	.3	23.7	16.9	14.3	45.1	NW /17.6%

Wind Speed in Yi-Lan Seas of SAW0 at 2017

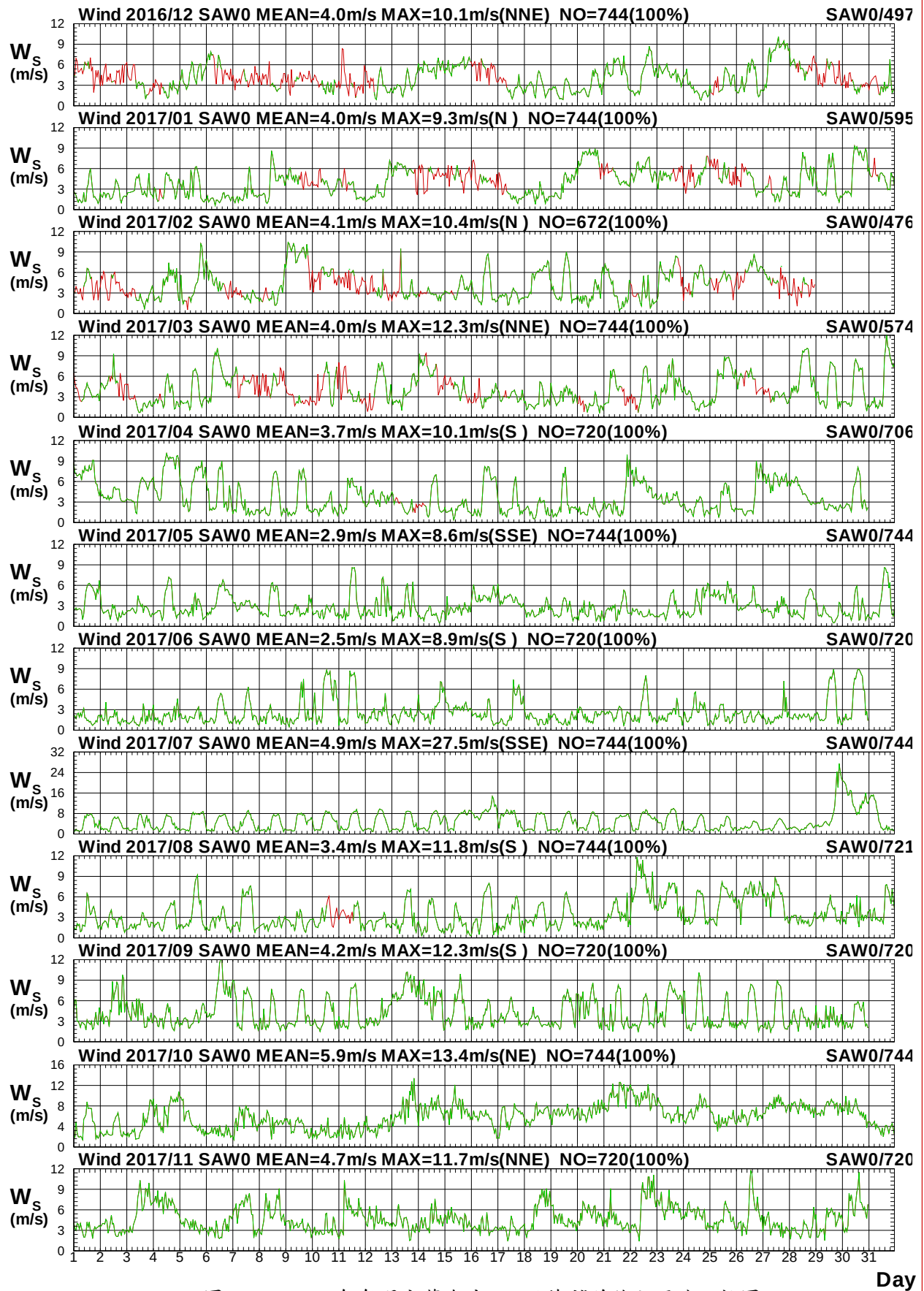


圖1.1a 2017年每月宜蘭海域 W 站修補前後之風速比較圖

W16CSAW0.1HA W16CSAW0.1H0 W171SAW0.1HA W171SAW0.1H0 W172SAW0.1HA W172SAW0.1H0

W173SAW0.1HA W173SAW0.1H0 W174SAW0.1HA W174SAW0.1H0 W175SAW0.1HA W175SAW0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

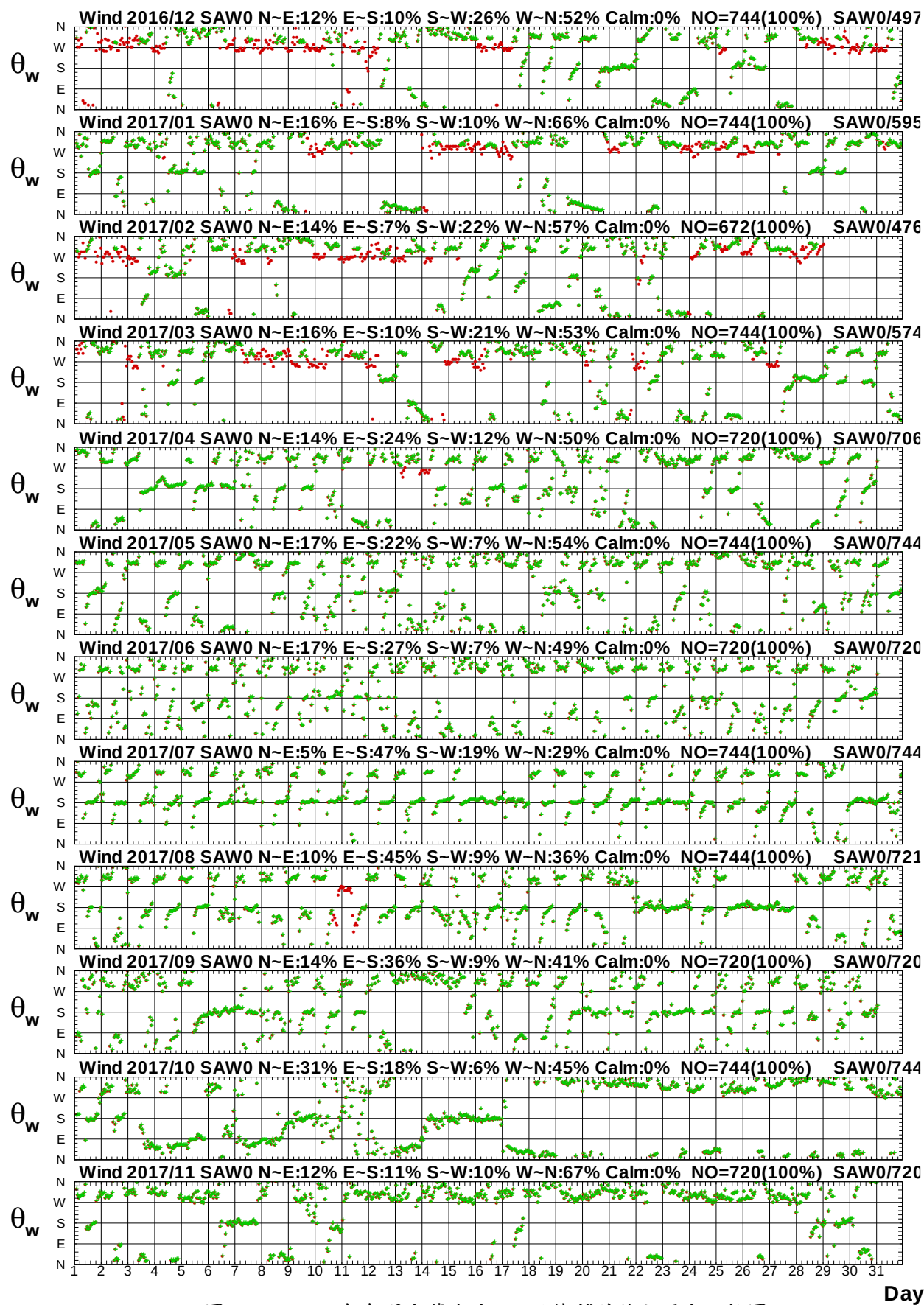


圖1.1b 2017年每月宜蘭海域 W 站修補前後之風向比較圖

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W173SAW0.1HA W173SAW0.1H0 W174SAW0.1HA W174SAW0.1H0 W175SAW0.1HA W175SAW0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

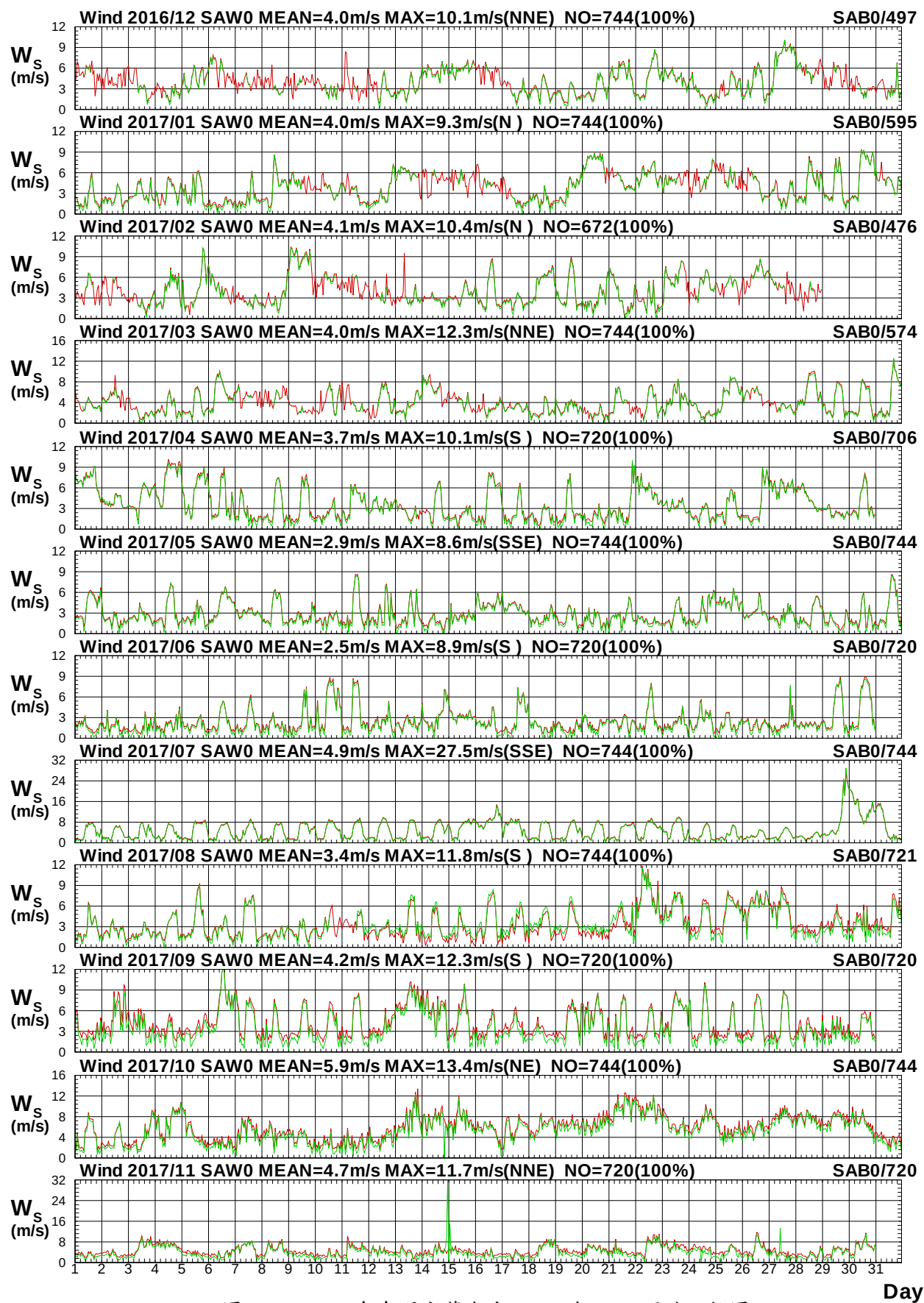


圖1.2a 2017年每月宜蘭海域 W 站與 B 站風速比較圖

W16CSAW0.1HA W16CSAB0.1H0 W171SAW0.1HA W171SAB0.1H0 W172SAW0.1HA W172SAB0.1H0
W173SAW0.1HA W173SAB0.1H0 W174SAW0.1HA W174SAB0.1H0 W175SAW0.1HA W175SAB0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

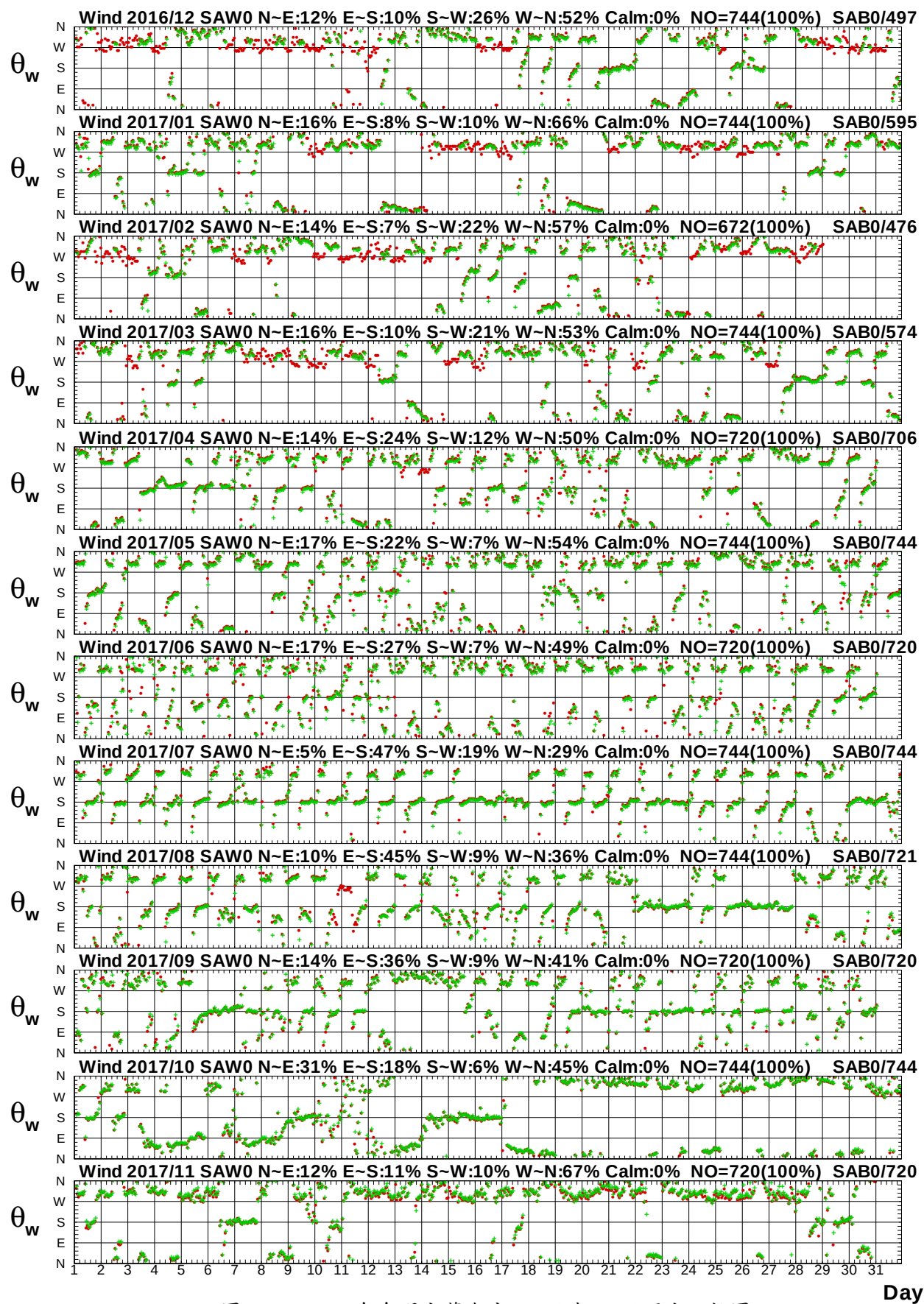


圖1.2b 2017年每月宜蘭海域 W 站與 B 站風向比較圖

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W173SAW0.1HA W173SAB0.1H0 W174SAW0.1HA W174SAB0.1H0 W175SAW0.1HA W175SAB0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

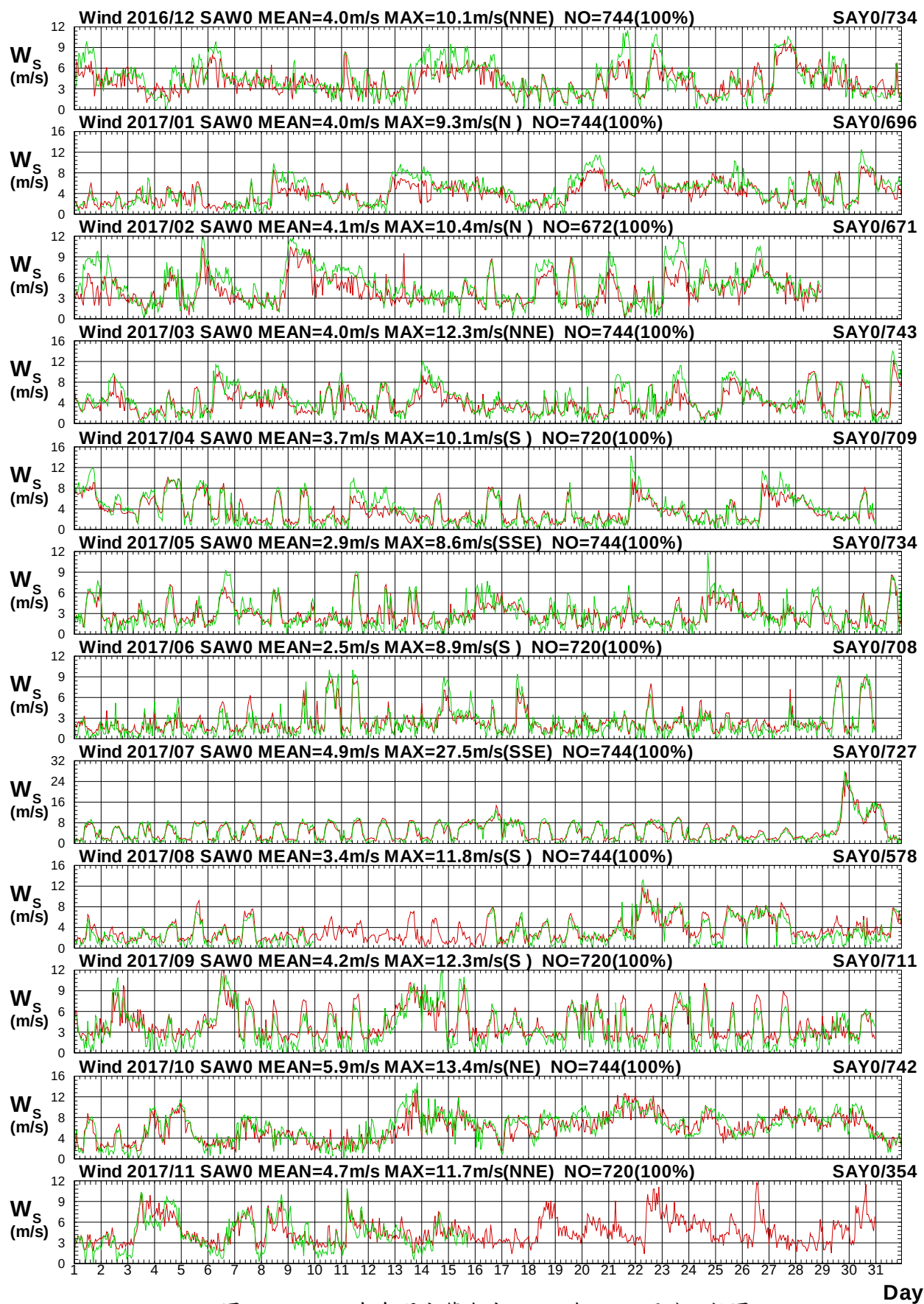


圖1.3a 2017年每月宜蘭海域 W 站與 Y 站風速比較圖

W16CSAW0.1HA W16CSAY0.1H0 W171SAW0.1HA W171SAY0.1H0 W172SAW0.1HA W172SAY0.1H0
W173SAW0.1HA W173SAY0.1H0 W174SAW0.1HA W174SAY0.1H0 W175SAW0.1HA W175SAY0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

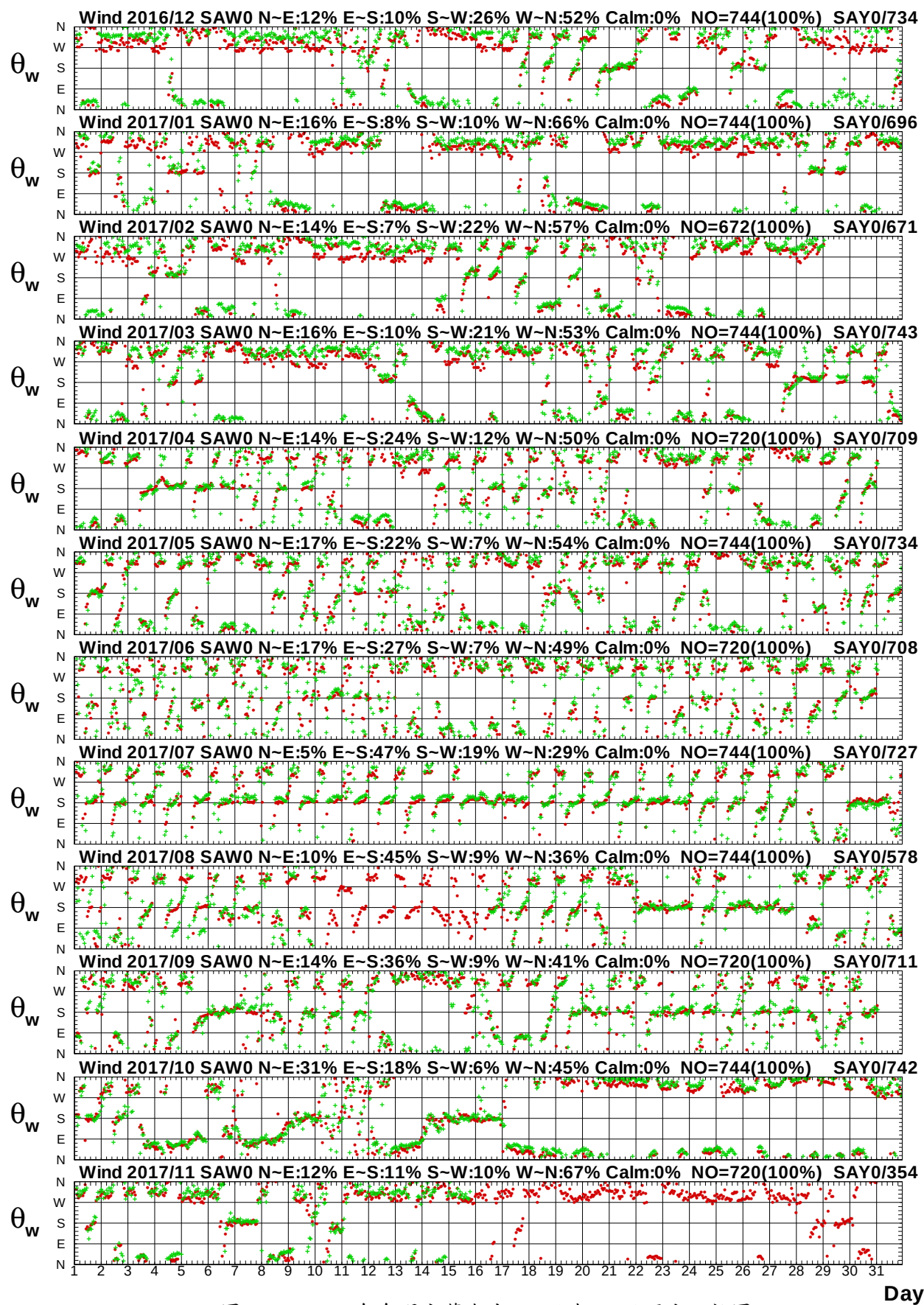


圖1.3b 2017年每月宜蘭海域 W 站與 Y 站風向比較圖

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W173SAW0.1HA W173SAY0.1H0 W174SAW0.1HA W174SAY0.1H0 W175SAW0.1HA W175SAY0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

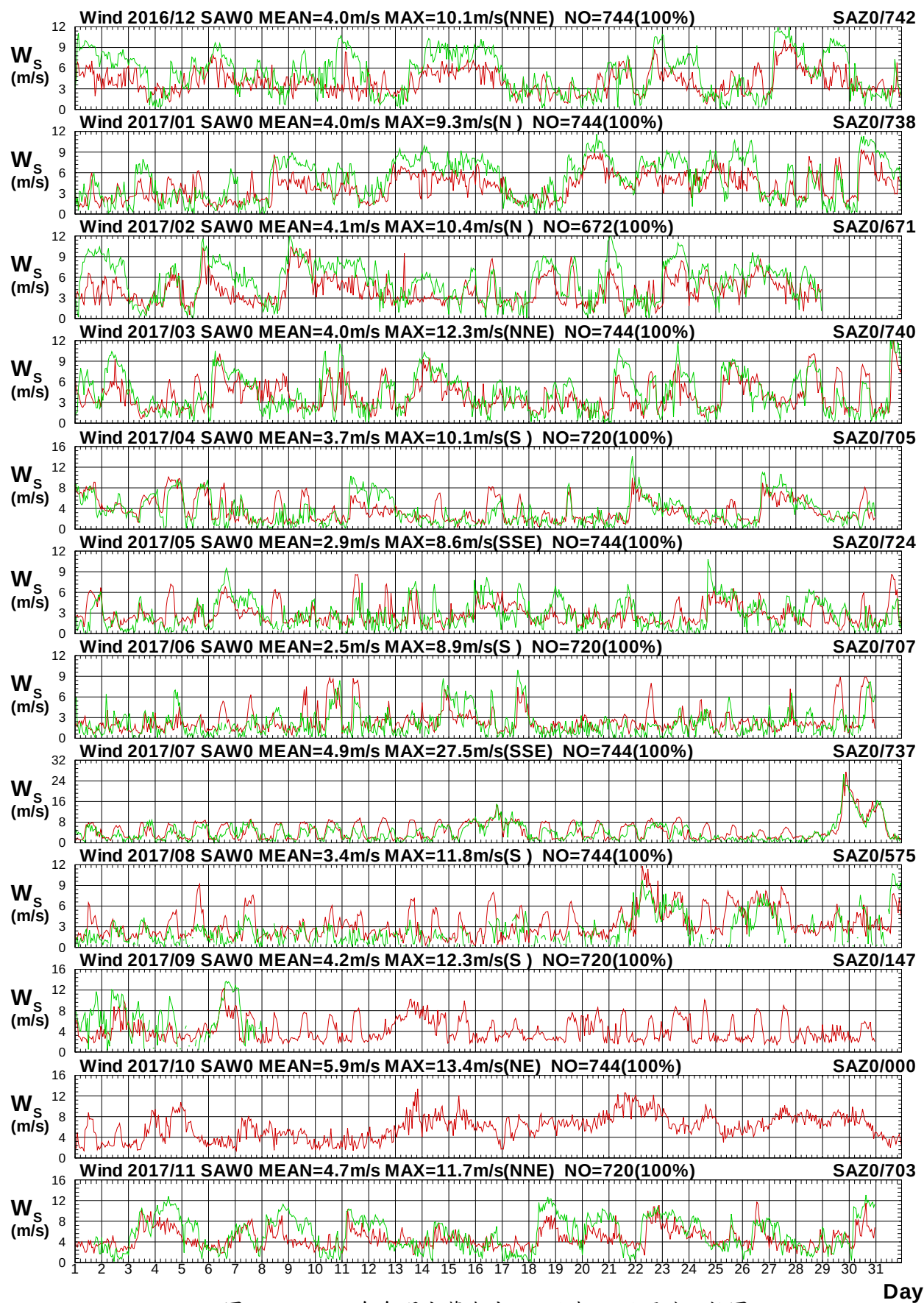


圖1.4a 2017年每月宜蘭海域 W 站與 Z 站風速比較圖

W16CSAW0.1HA W16CSAZ0.1H0 W171SAW0.1HA W171SAZ0.1H0 W172SAW0.1HA W172SAZ0.1H0
W173SAW0.1HA W173SAZ0.1H0 W174SAW0.1HA W174SAZ0.1H0 W175SAW0.1HA W175SAZ0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

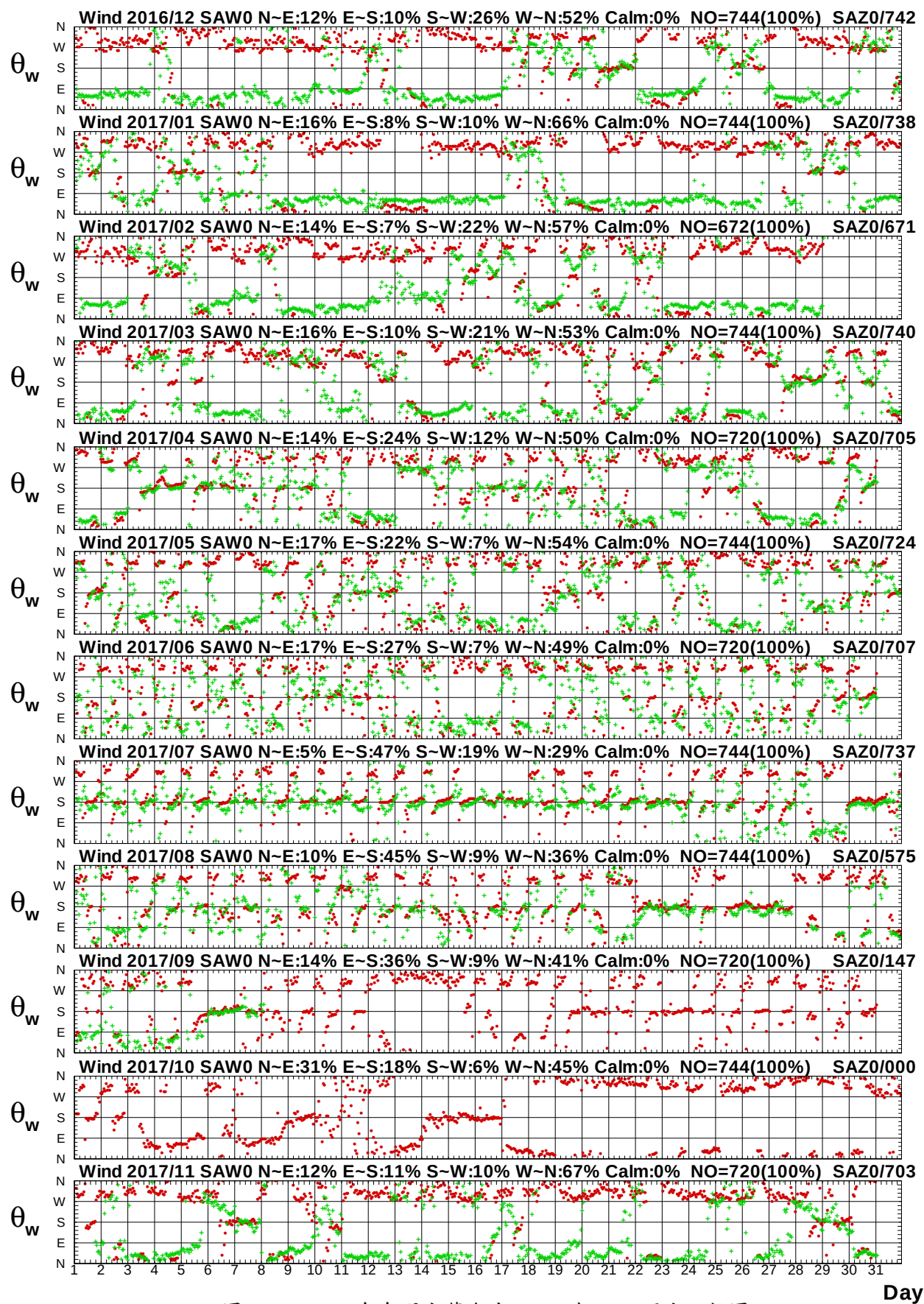


圖1.4b 2017年每月宜蘭海域 W 站與 Z 站風向比較圖

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W173SAW0.1HA W173SAZ0.1H0 W174SAW0.1HA W174SAZ0.1H0 W175SAW0.1HA W175SAZ0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

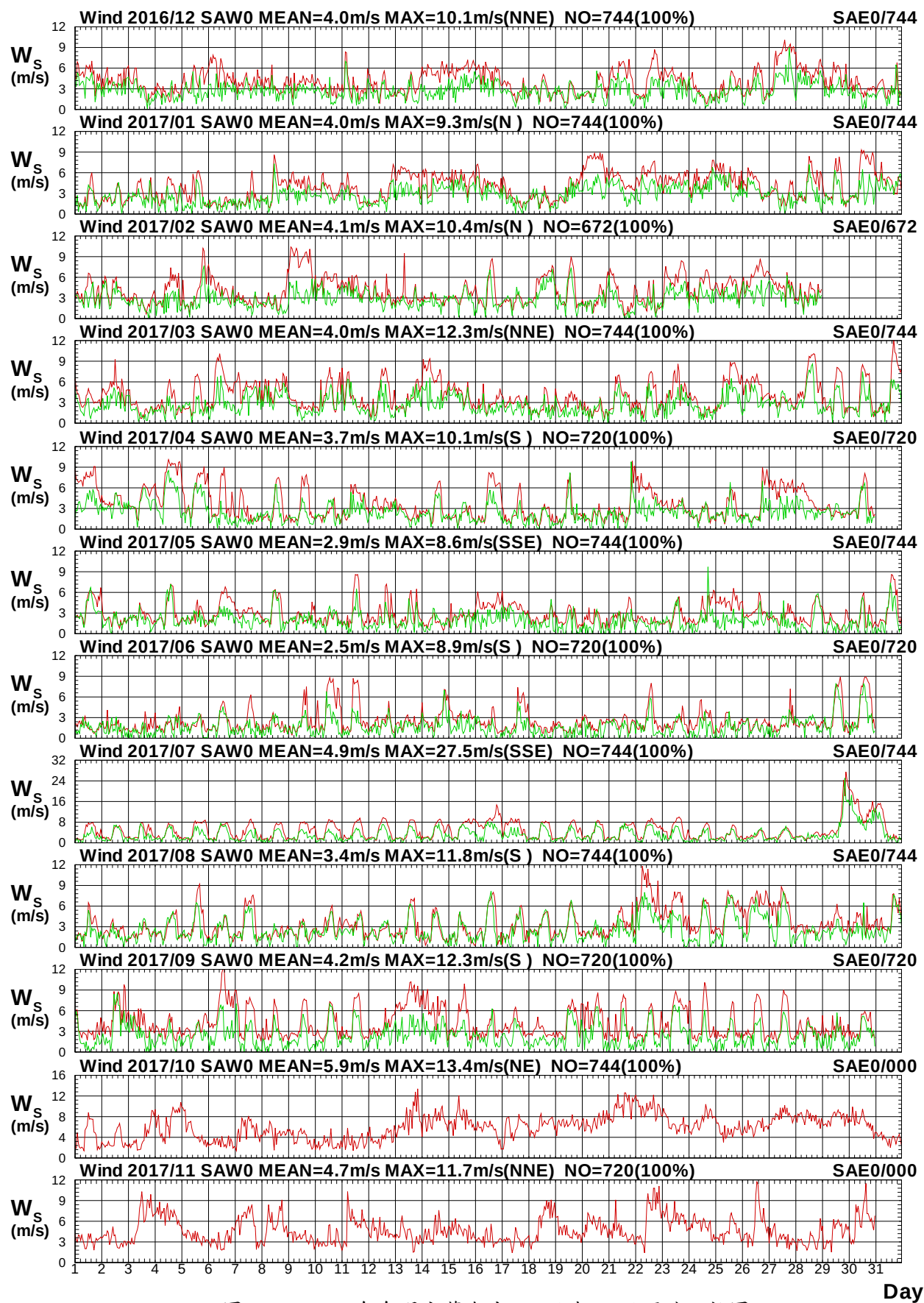


圖1.5a 2017年每月宜蘭海域 W 站與 E 站風速比較圖

W16CSAW0.1HA W16CSAE0.1H0 W171SAW0.1HA W171SAE0.1H0 W172SAW0.1HA W172SAE0.1H0
W173SAW0.1HA W173SAE0.1H0 W174SAW0.1HA W174SAE0.1H0 W175SAW0.1HA W175SAE0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

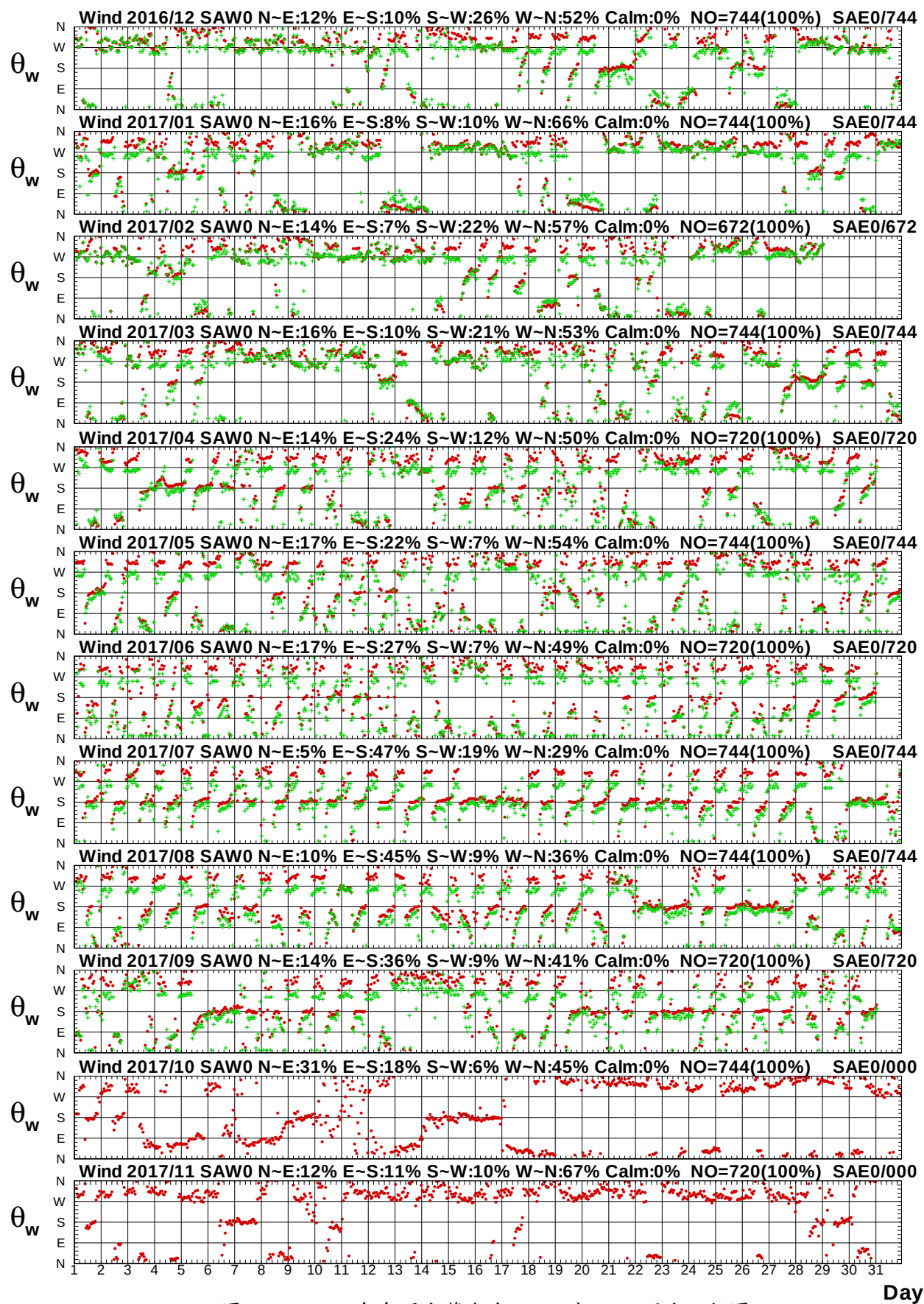


圖1.5b 2017年每月宜蘭海域 W 站與 E 站風向比較圖

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W173SAW0.1HA W173SAE0.1H0 W174SAW0.1HA W174SAE0.1H0 W175SAW0.1HA W175SAE0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

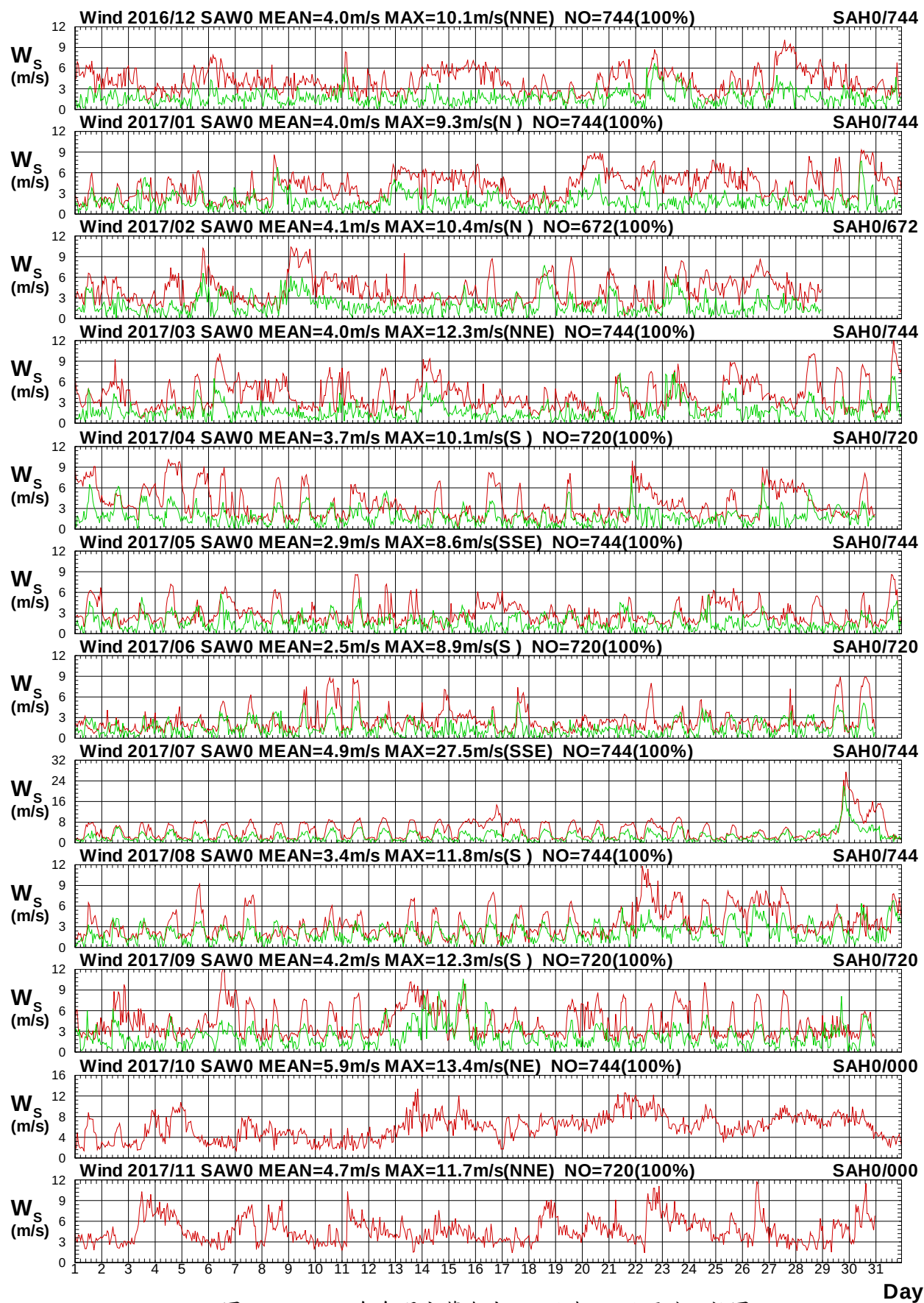


圖1.6a 2017年每月宜蘭海域 W 站與 H 站風速比較圖

W16CSAW0.1HA W16CSAH0.1H0 W171SAW0.1HA W171SAH0.1H0 W172SAW0.1HA W172SAH0.1H0
W173SAW0.1HA W173SAH0.1H0 W174SAW0.1HA W174SAH0.1H0 W175SAW0.1HA W175SAH0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

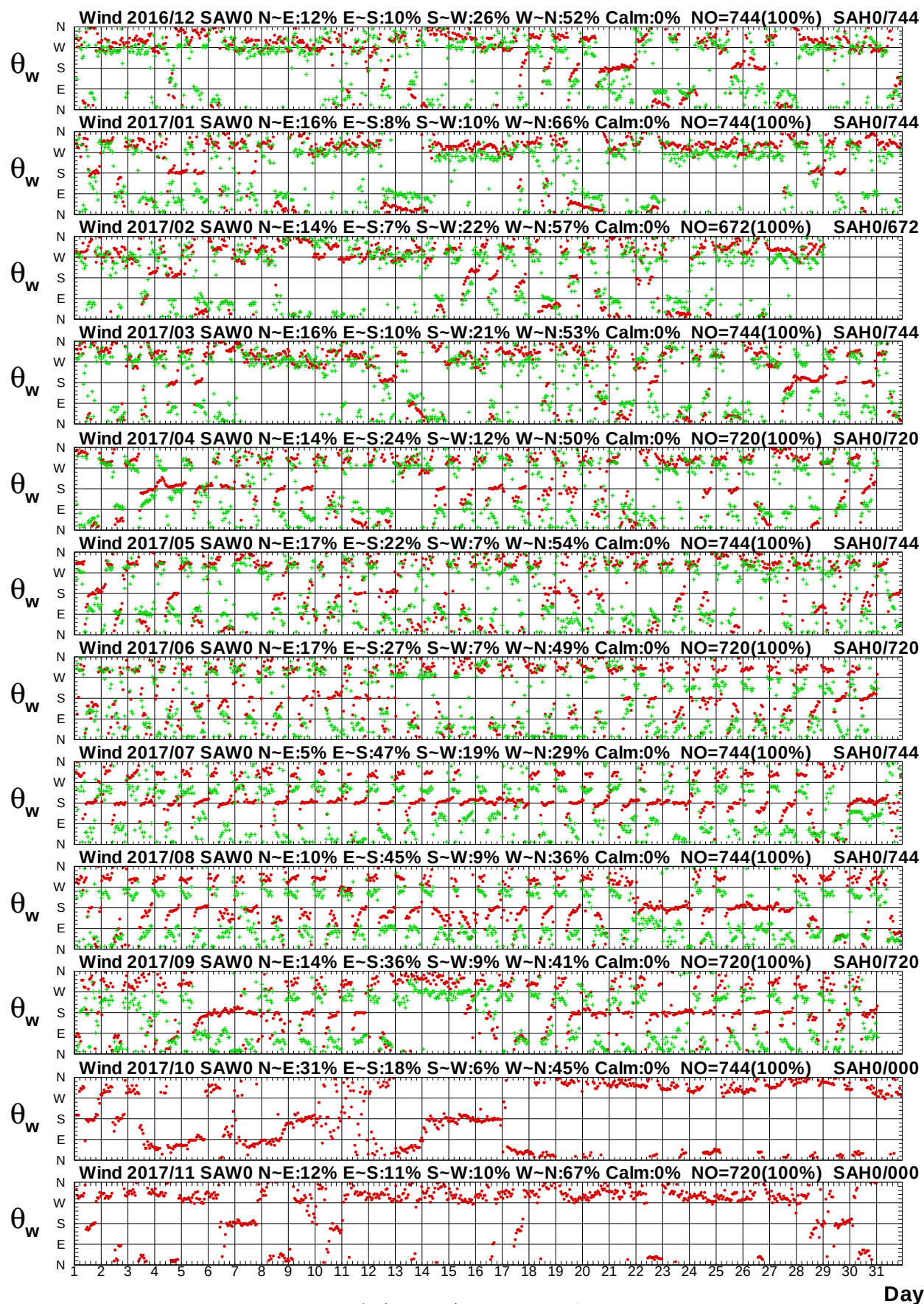


圖1.6b 2017年每月宜蘭海域 W 站與 H 站風向比較圖

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W173SAW0.1HA W173SAH0.1H0 W174SAW0.1HA W174SAH0.1H0 W175SAW0.1HA W175SAH0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

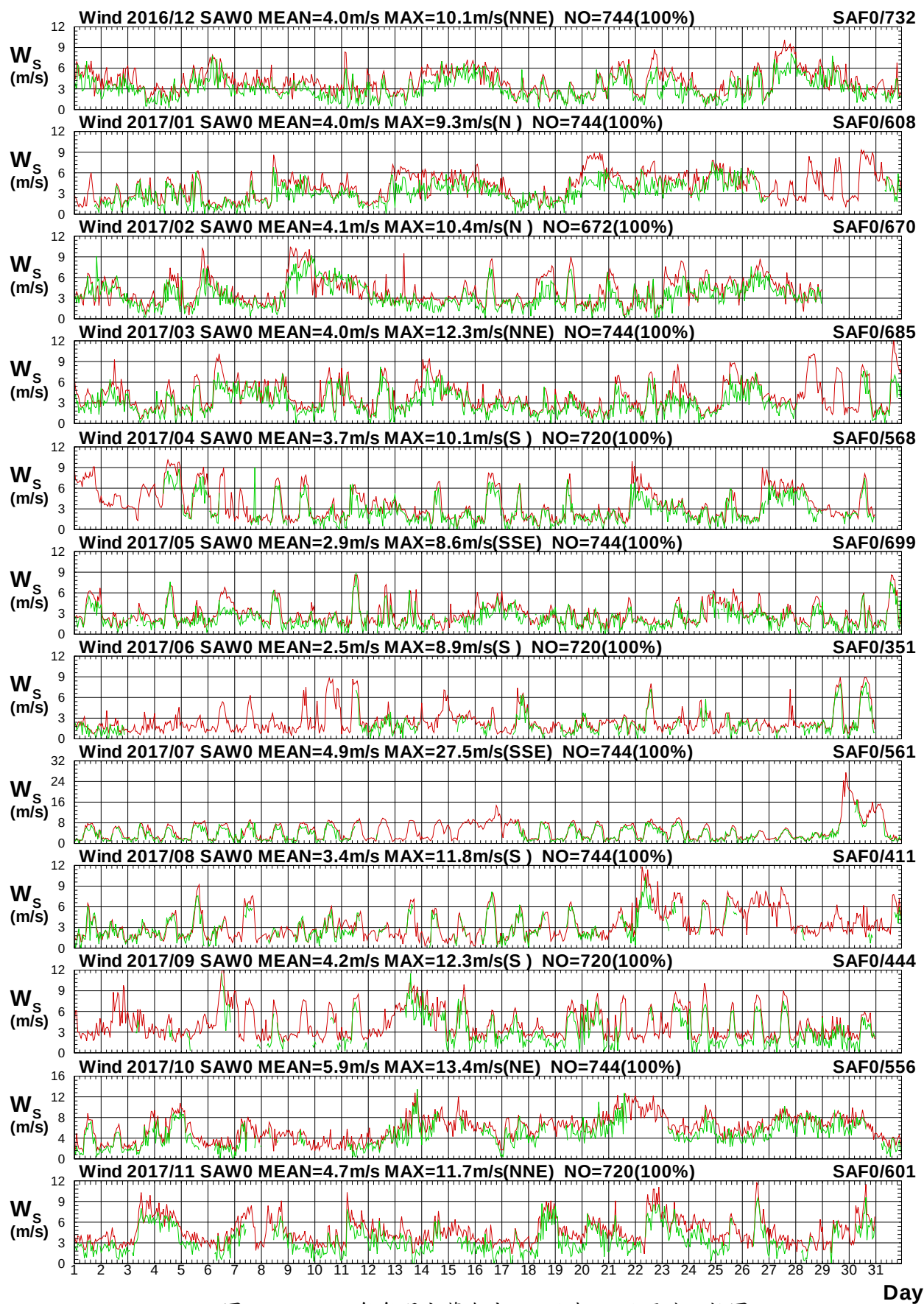


圖1.7a 2017年每月宜蘭海域 W 站與 F 站風速比較圖

W16CSAW0.1HA W16CSAF0.1H0 W171SAW0.1HA W171SAF0.1H0 W172SAW0.1HA W172SAF0.1H0
W173SAW0.1HA W173SAF0.1H0 W174SAW0.1HA W174SAF0.1H0 W175SAW0.1HA W175SAF0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

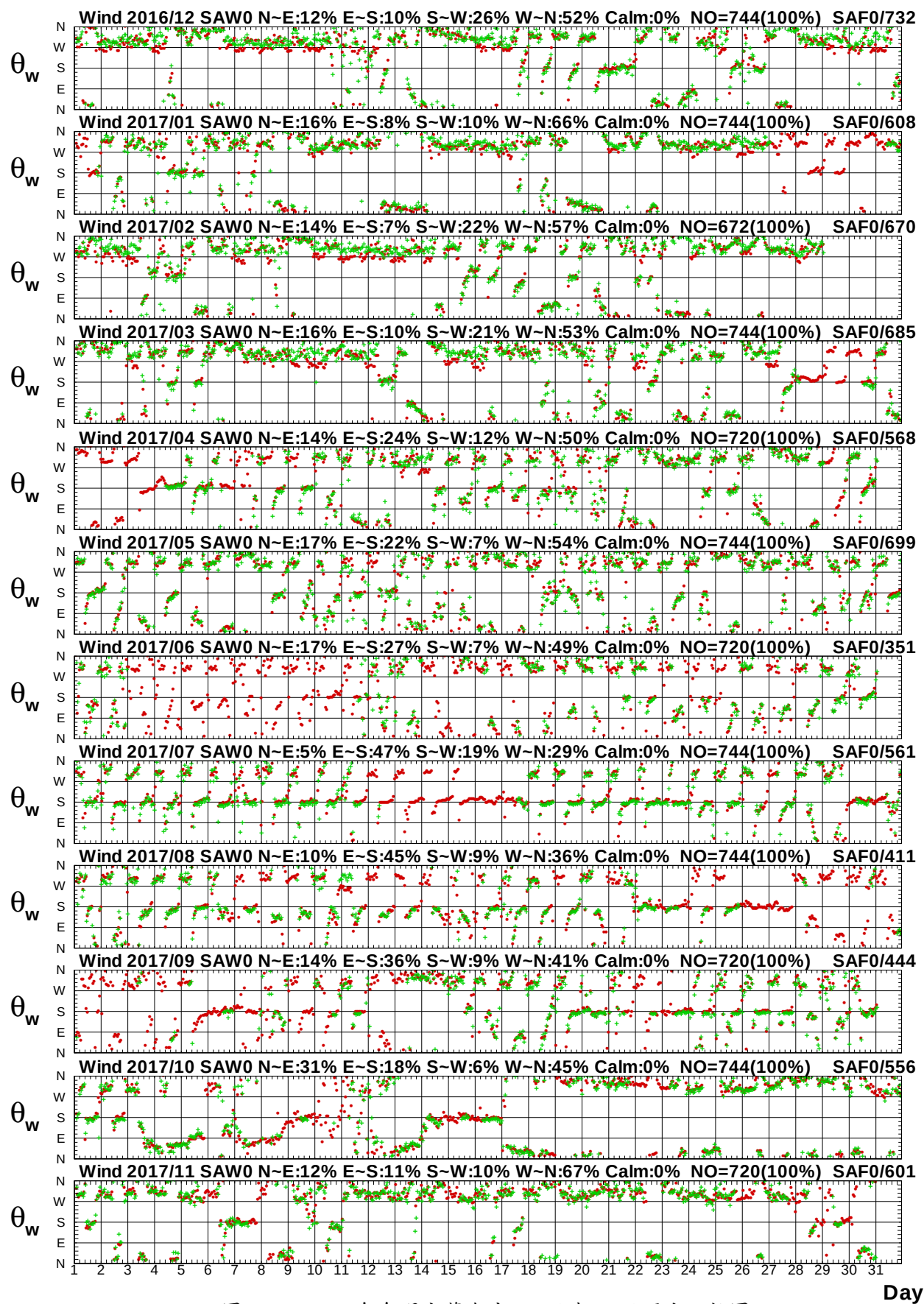


圖1.7b 2017年每月宜蘭海域 W 站與 F 站風向比較圖

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W173SAW0.1HA W173SAF0.1H0 W174SAW0.1HA W174SAF0.1H0 W175SAW0.1HA W175SAF0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

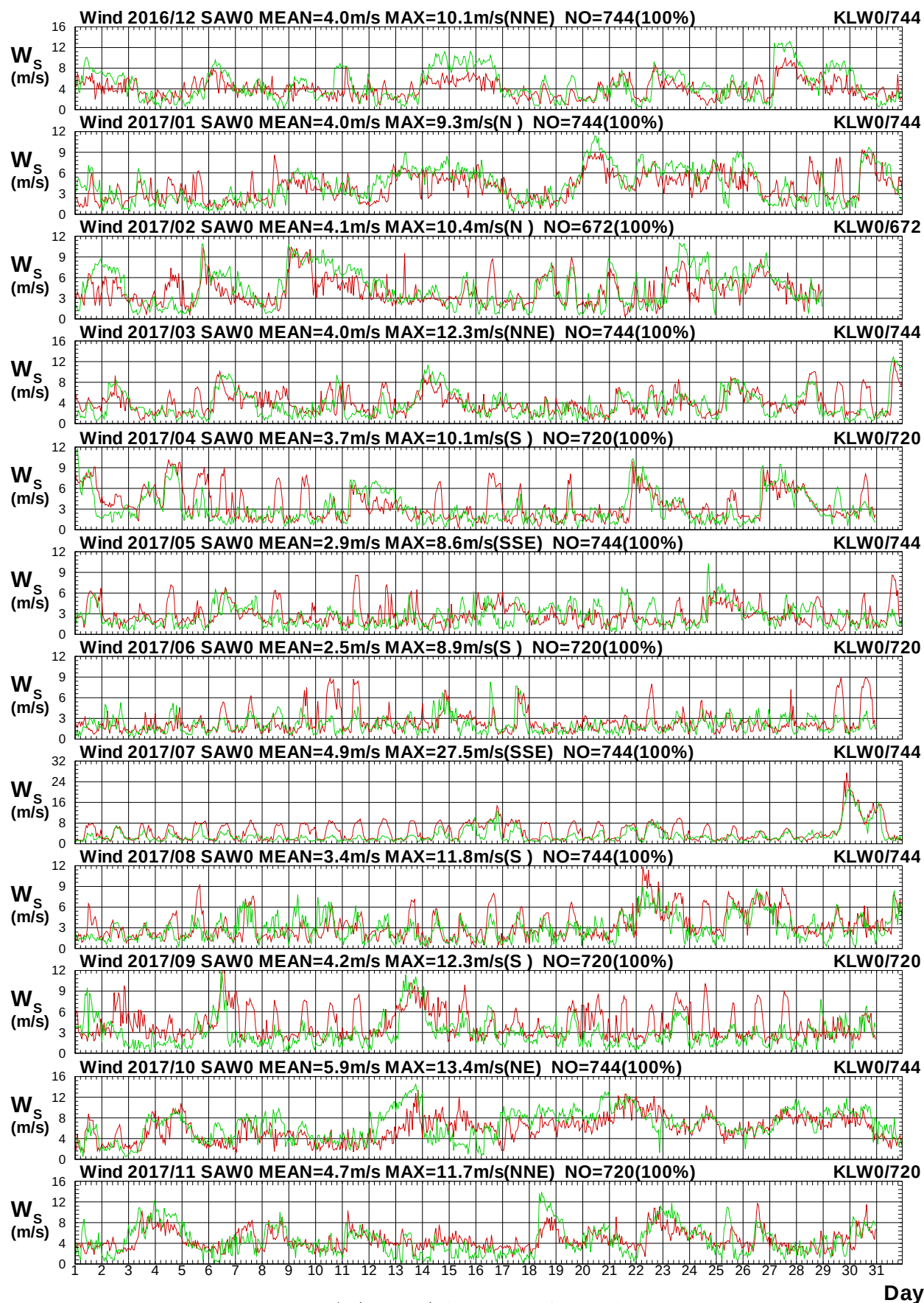


圖1.8a 2017年每月宜蘭海域 W 站與北端海域 W 站風速圖

W16CSAW0.1HA W16CKLRW0.1H0 W171SAW0.1HA W171KLRW0.1H0 W172SAW0.1HA W172KLRW0.1H0
W173SAW0.1HA W173KLRW0.1H0 W174SAW0.1HA W174KLRW0.1H0 W175SAW0.1HA W175KLRW0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

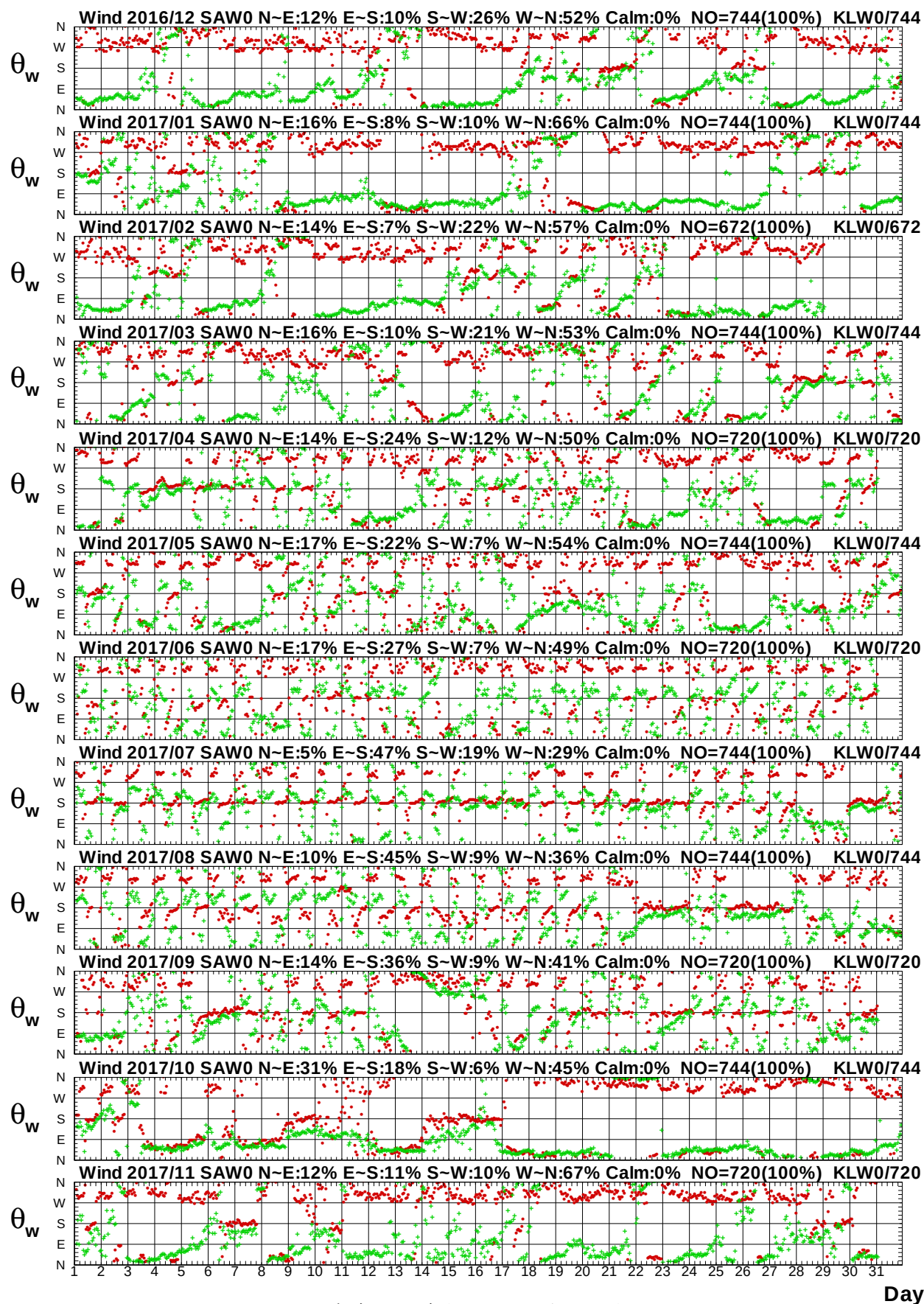


圖1.8b 2017年每月宜蘭海域 W 站與北端海域 W 站風向圖

W16CSAW0.1HA W16CKLW0.1H0 W171SAW0.1HA W171KLW0.1H0 W172SAW0.1HA W172KLW0.1H0

W173SAW0.1HA W173KLW0.1H0 W174SAW0.1HA W174KLW0.1H0 W175SAW0.1HA W175KLW0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

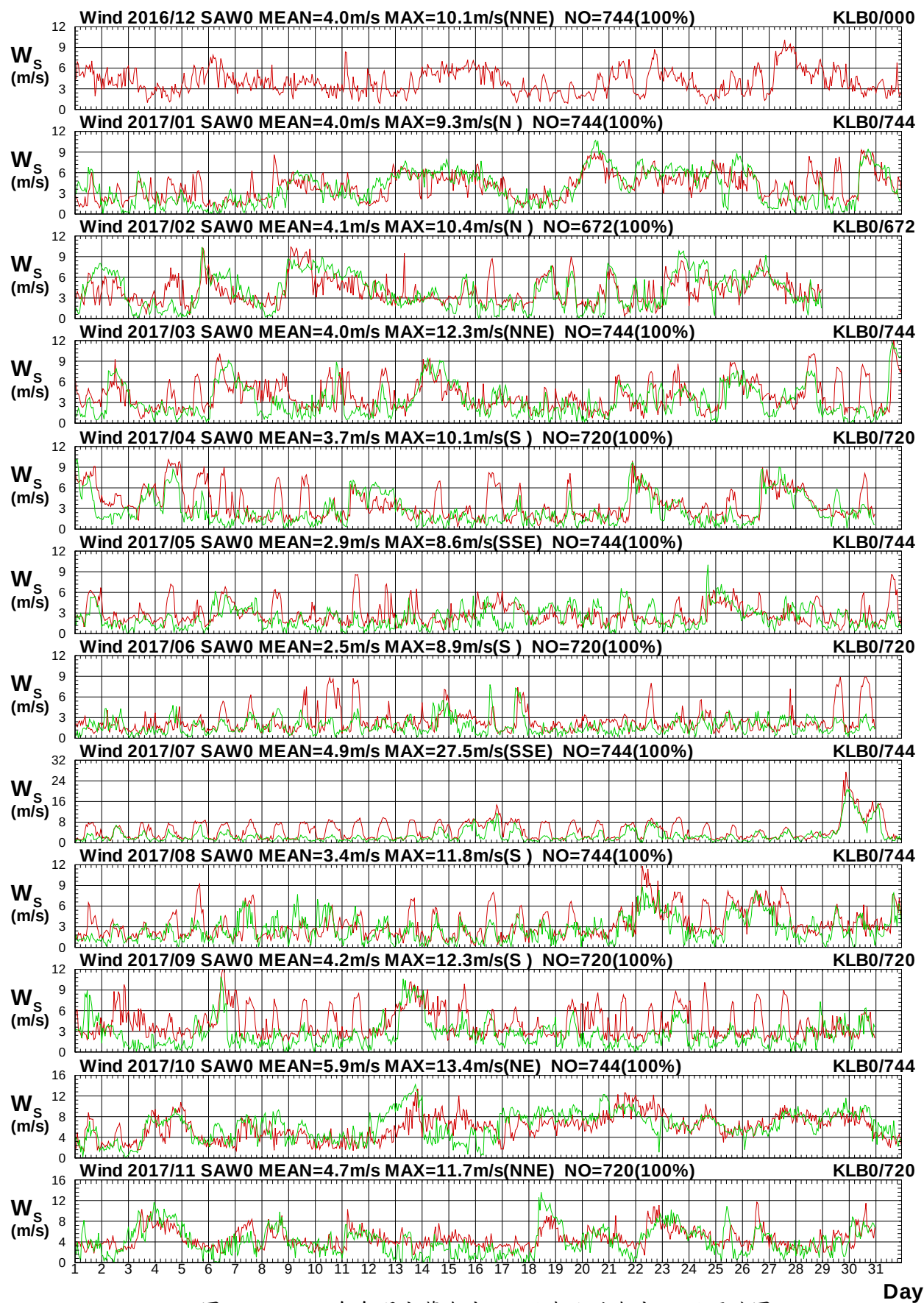


圖1.9a 2017年每月宜蘭海域 W 站與北端海域 B 站風速圖

W16CSAW0.1HA W16CKLB0.1H0 W171SAW0.1HA W171KLB0.1H0 W172SAW0.1HA W172KLB0.1H0
W173SAW0.1HA W173KLB0.1H0 W174SAW0.1HA W174KLB0.1H0 W175SAW0.1HA W175KLB0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

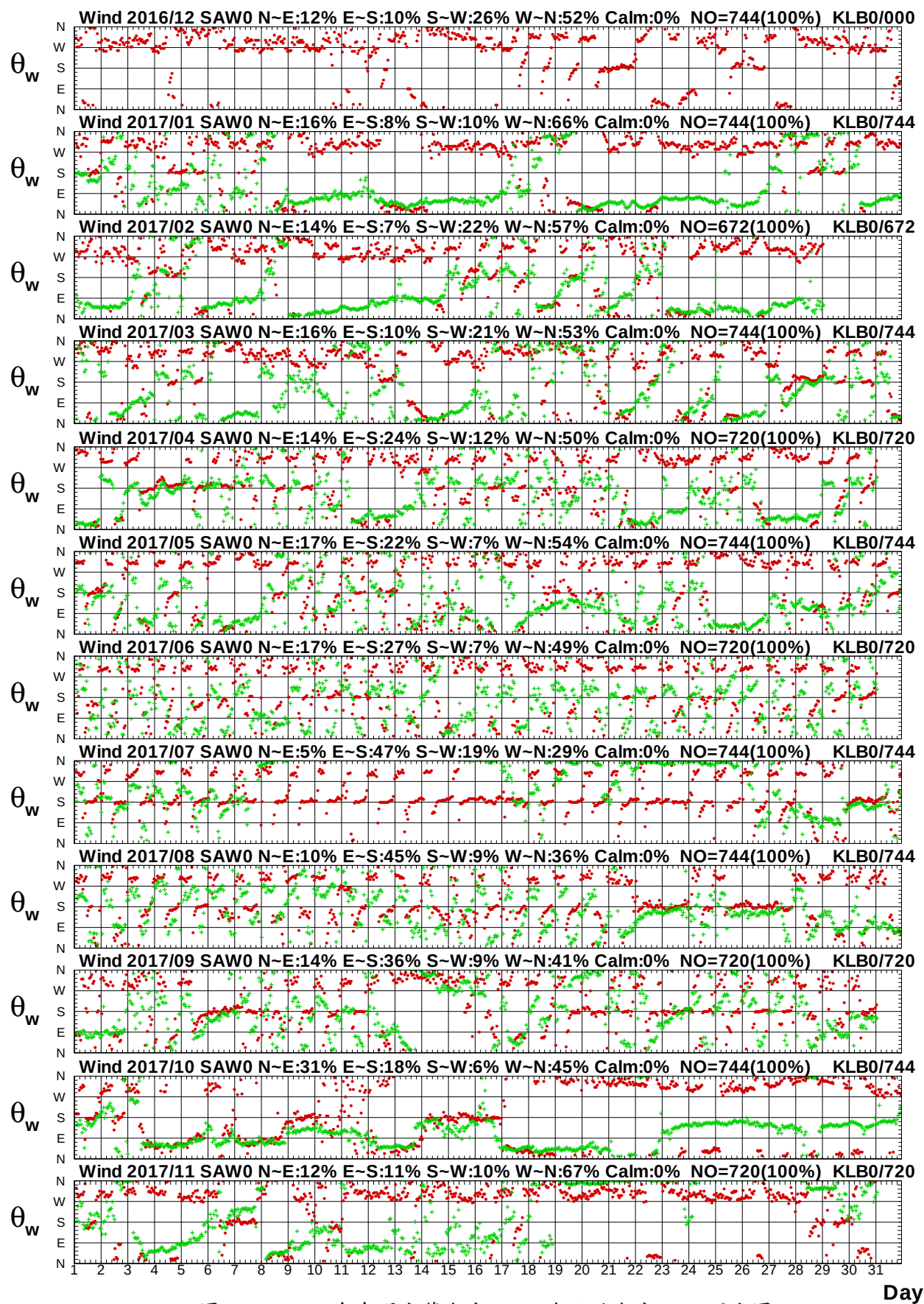


圖1.9b 2017年每月宜蘭海域 W 站與北端海域 B 站風向圖

W16CSAW0.1HA W16CKLB0.1H0 W171SAW0.1HA W171KLB0.1H0 W172SAW0.1HA W172KLB0.1H0

W173SAW0.1HA W173KLB0.1H0 W174SAW0.1HA W174KLB0.1H0 W175SAW0.1HA W175KLB0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

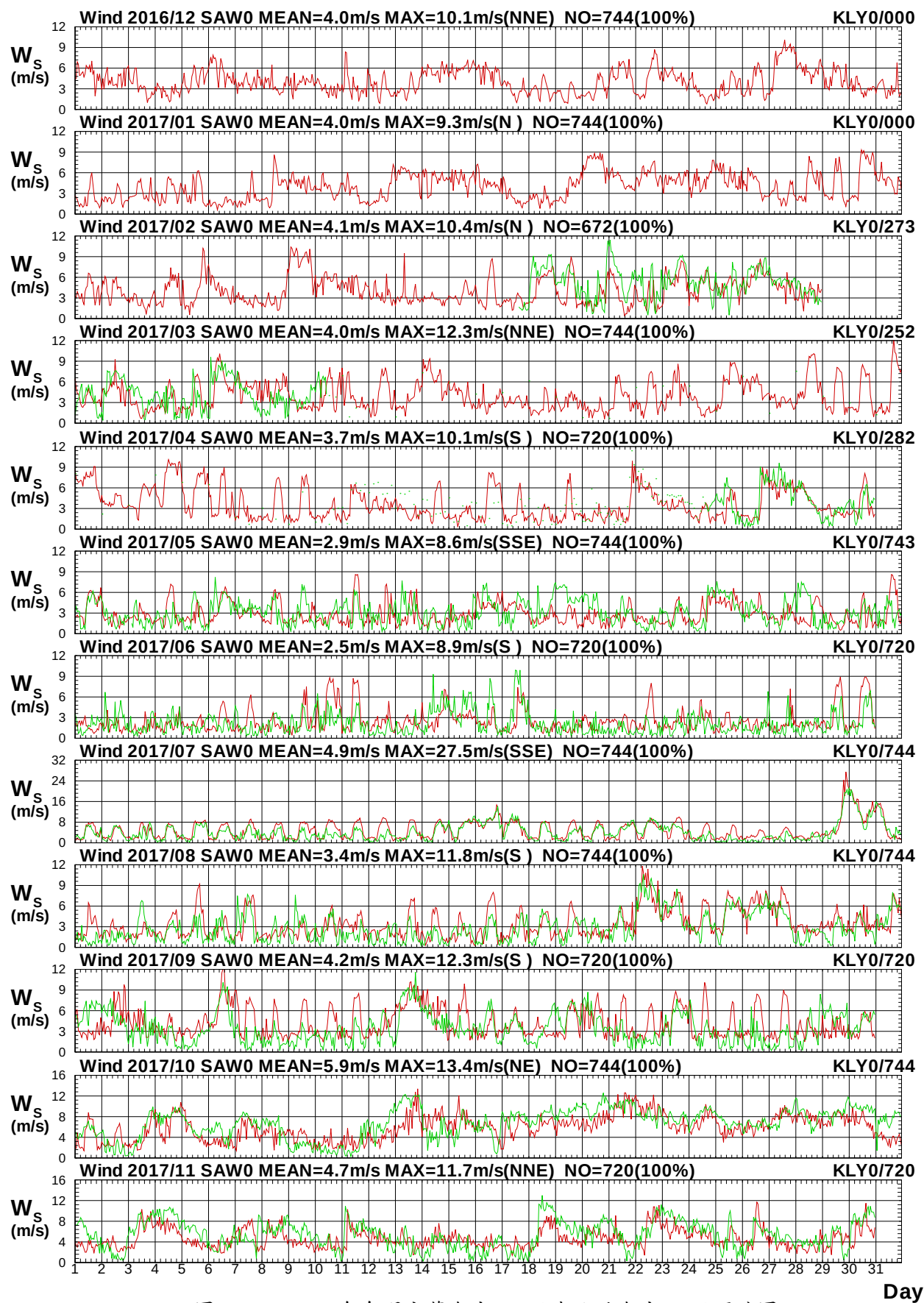


圖1.10a 2017年每月宜蘭海域 W 站與北端海域 Y 站風速圖

W16CSAW0.1HA W16CKLY0.1H0 W171SAW0.1HA W171KLY0.1H0 W172SAW0.1HA W172KLY0.1H0
W173SAW0.1HA W173KLY0.1H0 W174SAW0.1HA W174KLY0.1H0 W175SAW0.1HA W175KLY0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

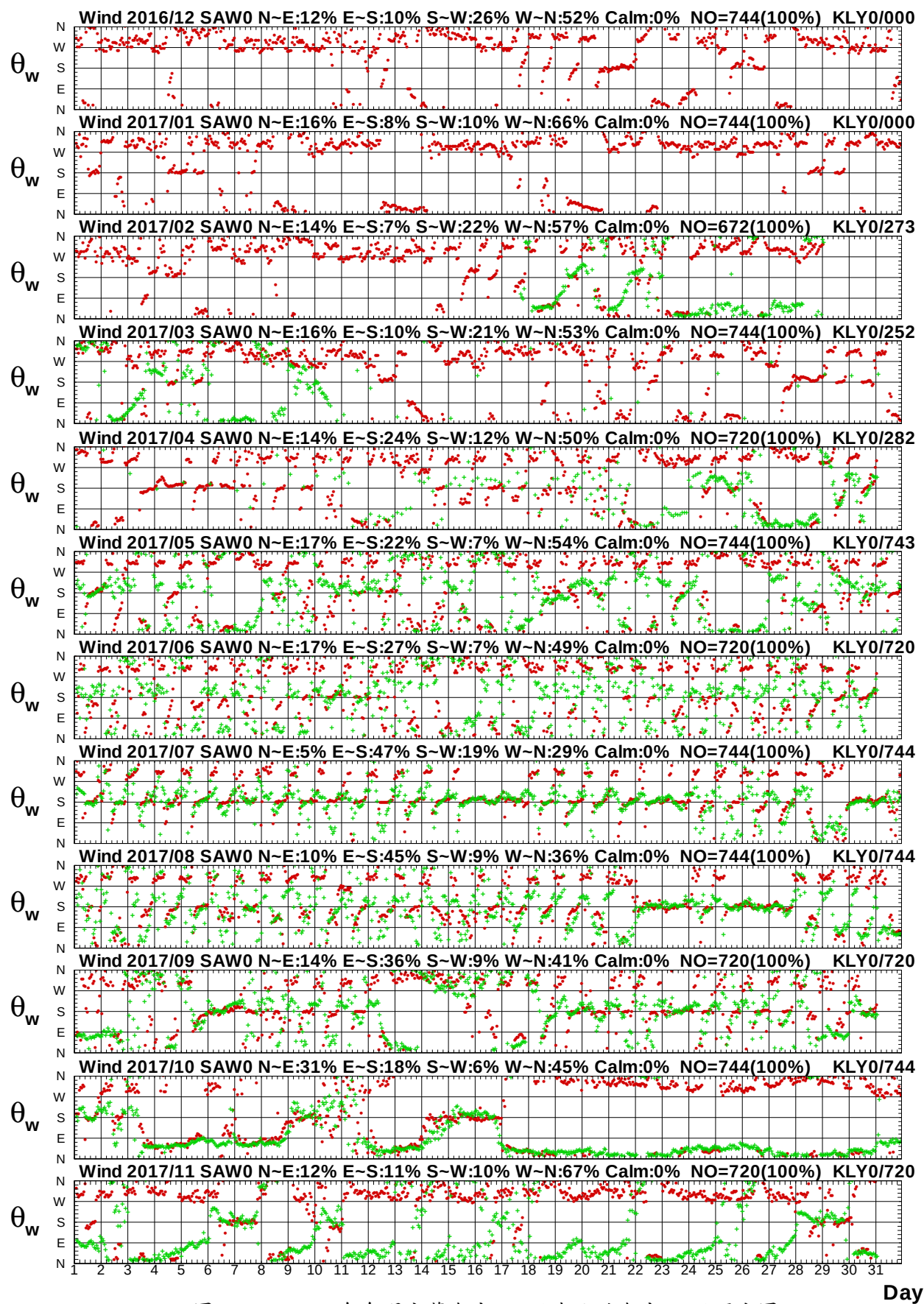


圖1.10b 2017年每月宜蘭海域 W 站與北端海域 Y 站風向圖

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W173SAW0.1HA W173KLY0.1H0 W174SAW0.1HA W174KLY0.1H0 W175SAW0.1HA W175KLY0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

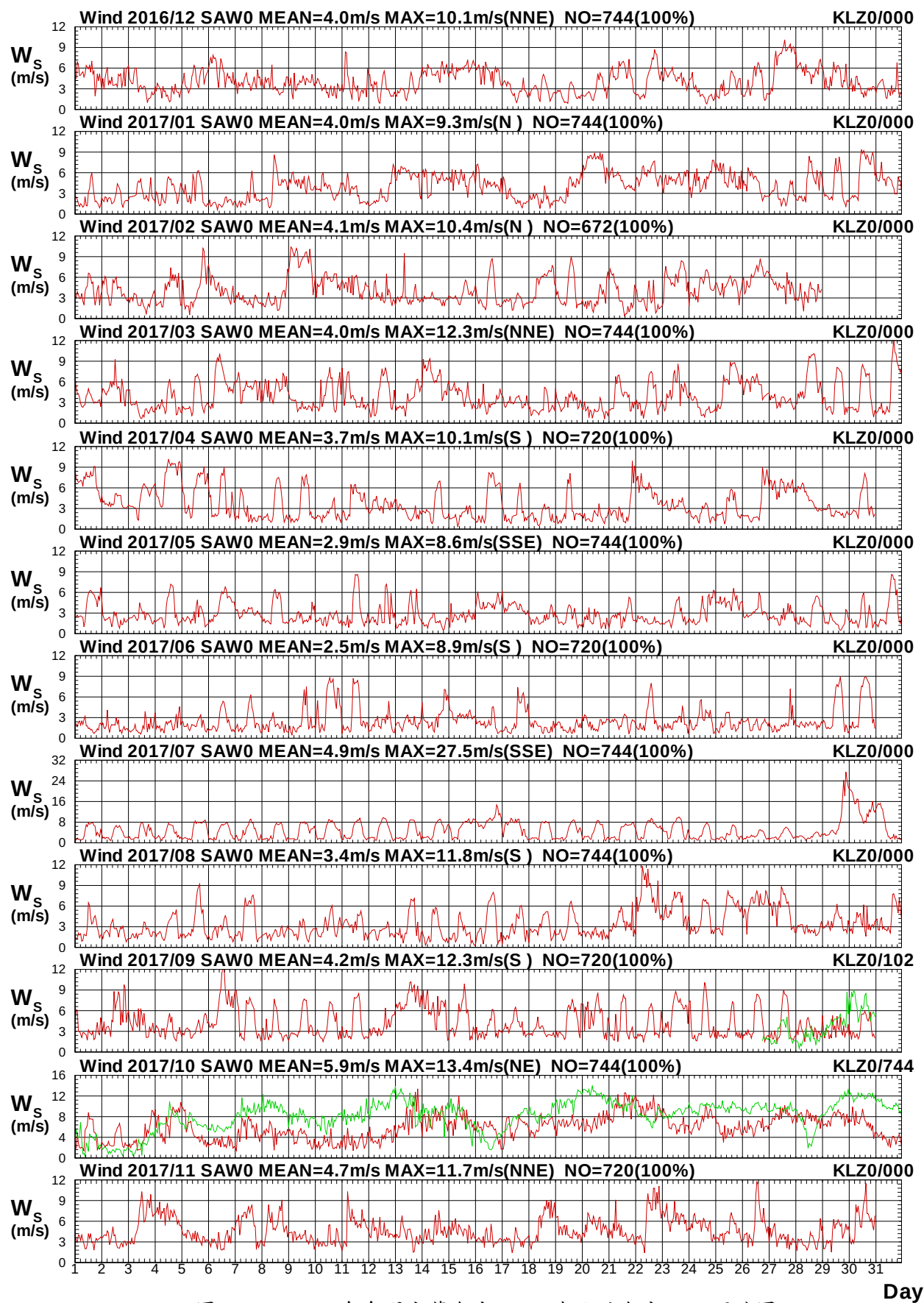


圖1.11a 2017年每月宜蘭海域 W 站與北端海域 Z 站風速圖

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W173SAW0.1HA W173KLZ0.1H0 W174SAW0.1HA W174KLZ0.1H0 W175SAW0.1HA W175KLZ0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

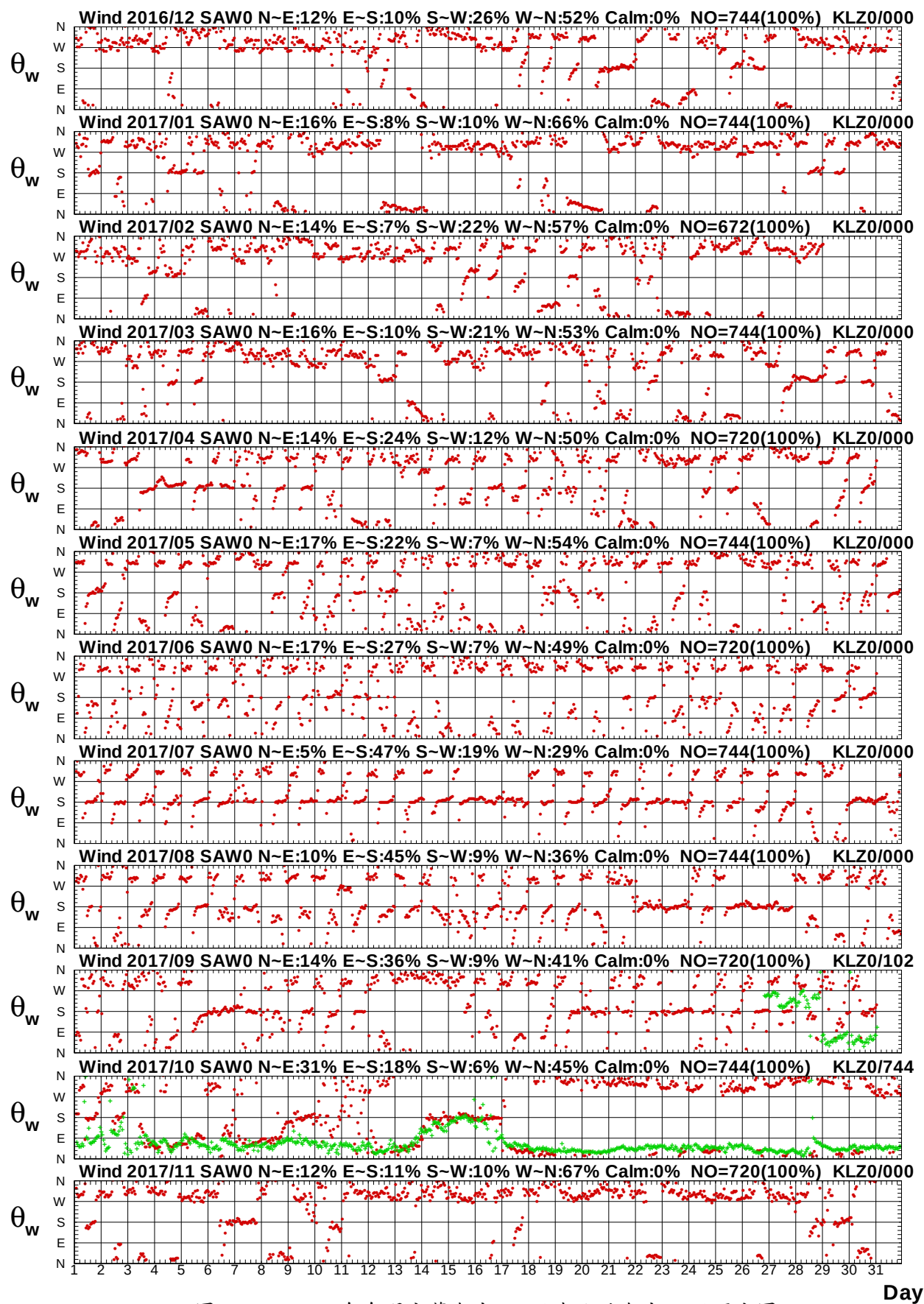


圖1.11b 2017年每月宜蘭海域 W 站與北端海域 Z 站風向圖

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W173SAW0.1HA W173KLZ0.1H0 W174SAW0.1HA W174KLZ0.1H0 W175SAW0.1HA W175KLZ0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

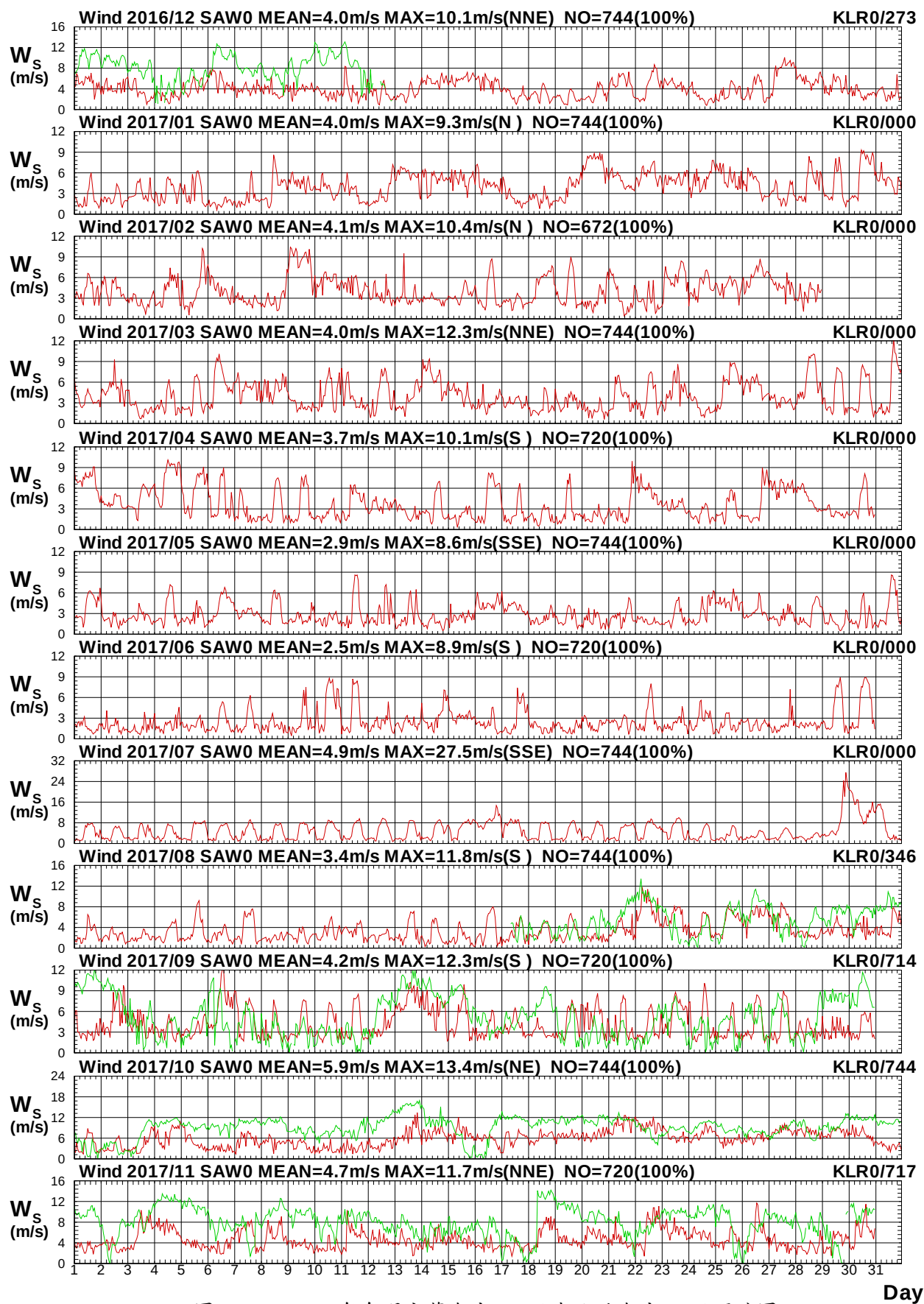


圖1.12a 2017年每月宜蘭海域 W 站與北端海域 R 站風速圖

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W173SAW0.1HA W173KLR0.1H0 W174SAW0.1HA W174KLR0.1H0 W175SAW0.1HA W175KLR0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

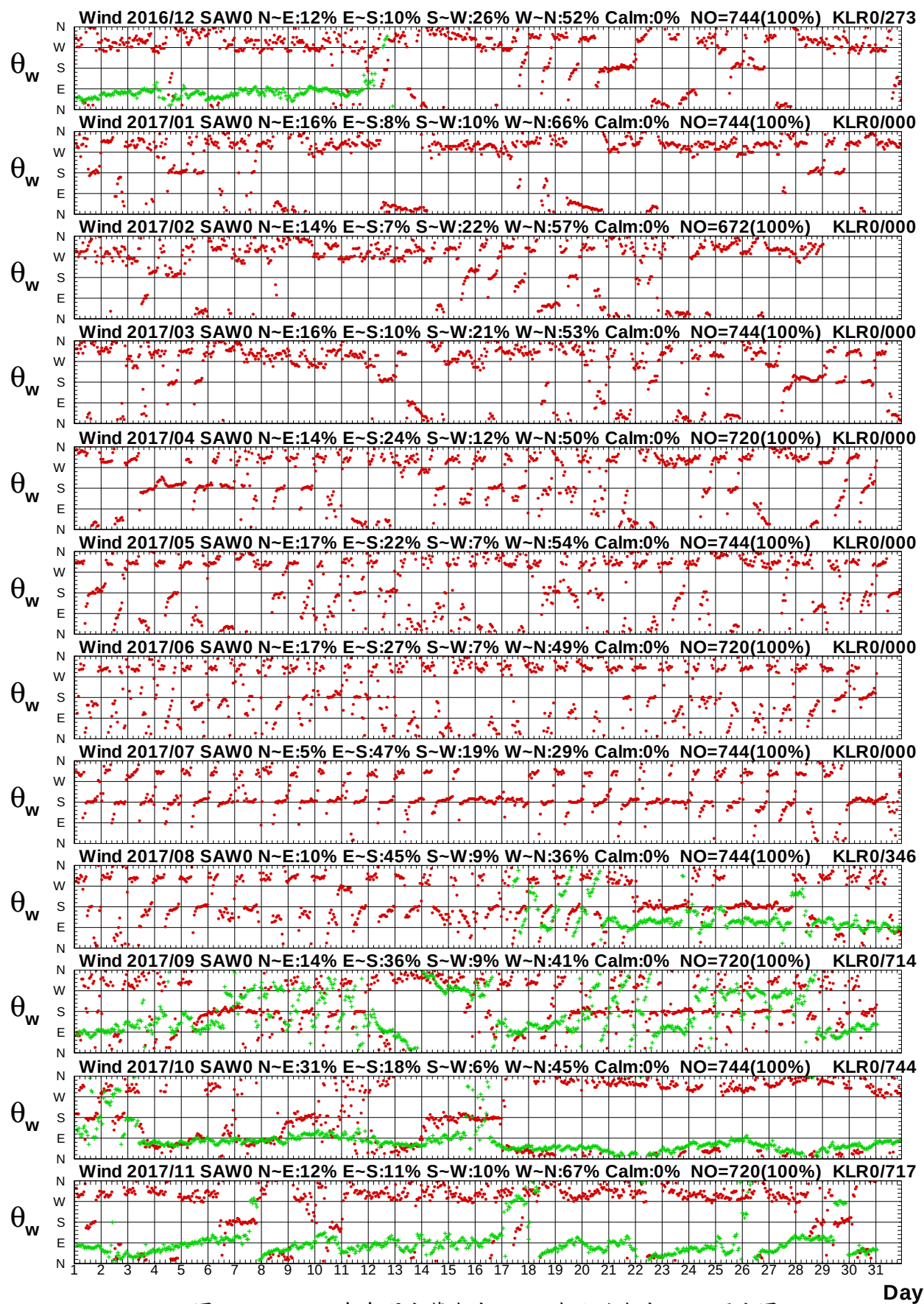


圖1.12b 2017年每月宜蘭海域 W 站與北端海域 R 站風向圖

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W173SAW0.1HA W173KLR0.1H0 W174SAW0.1HA W174KLR0.1H0 W175SAW0.1HA W175KLR0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

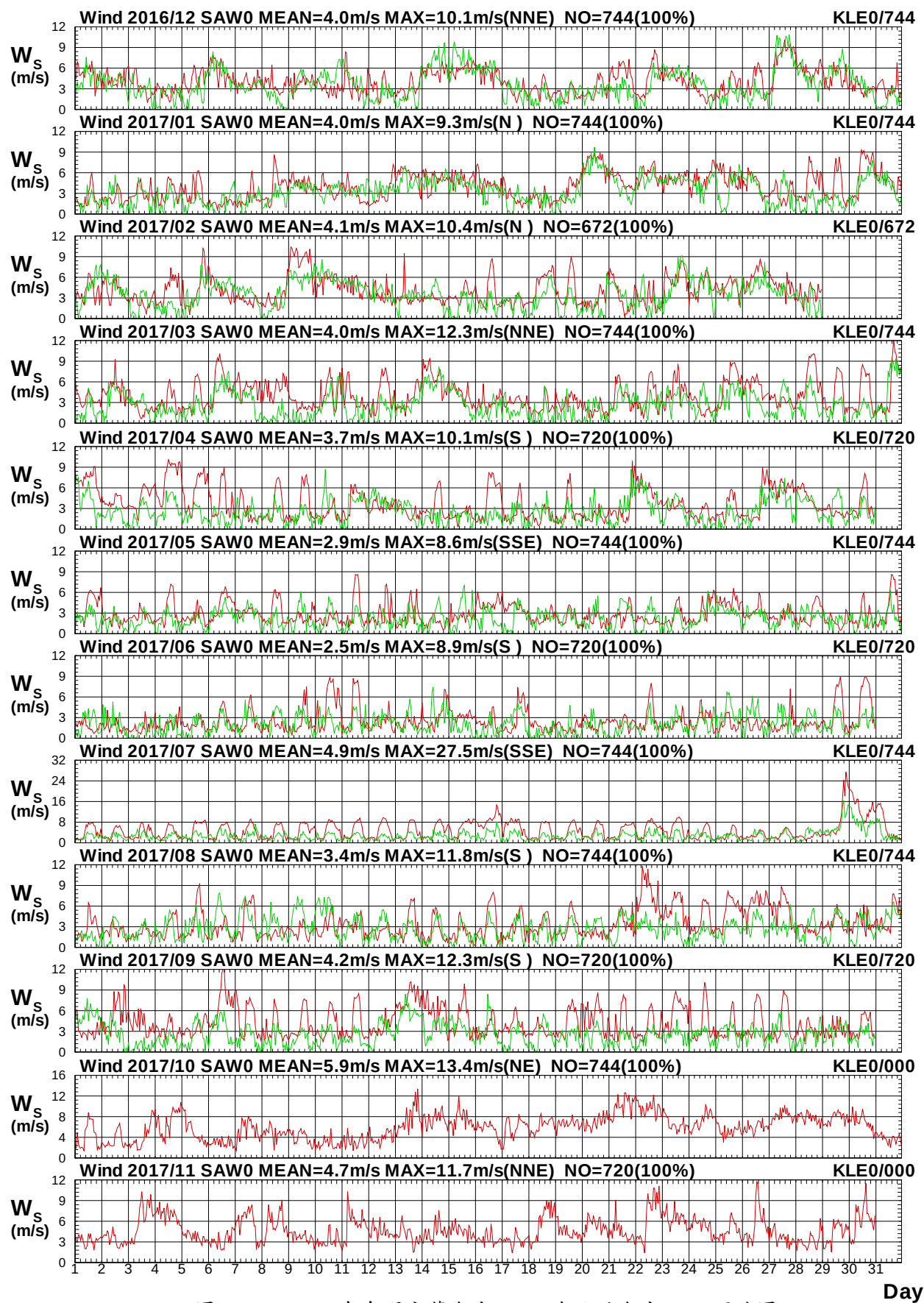


圖1.13a 2017年每月宜蘭海域 W 站與北端海域 E 站風速圖

W16CSAW0.1HA W16CKLE0.1H0 W171SAW0.1HA W171KLE0.1H0 W172SAW0.1HA W172KLE0.1H0
W173SAW0.1HA W173KLE0.1H0 W174SAW0.1HA W174KLE0.1H0 W175SAW0.1HA W175KLE0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

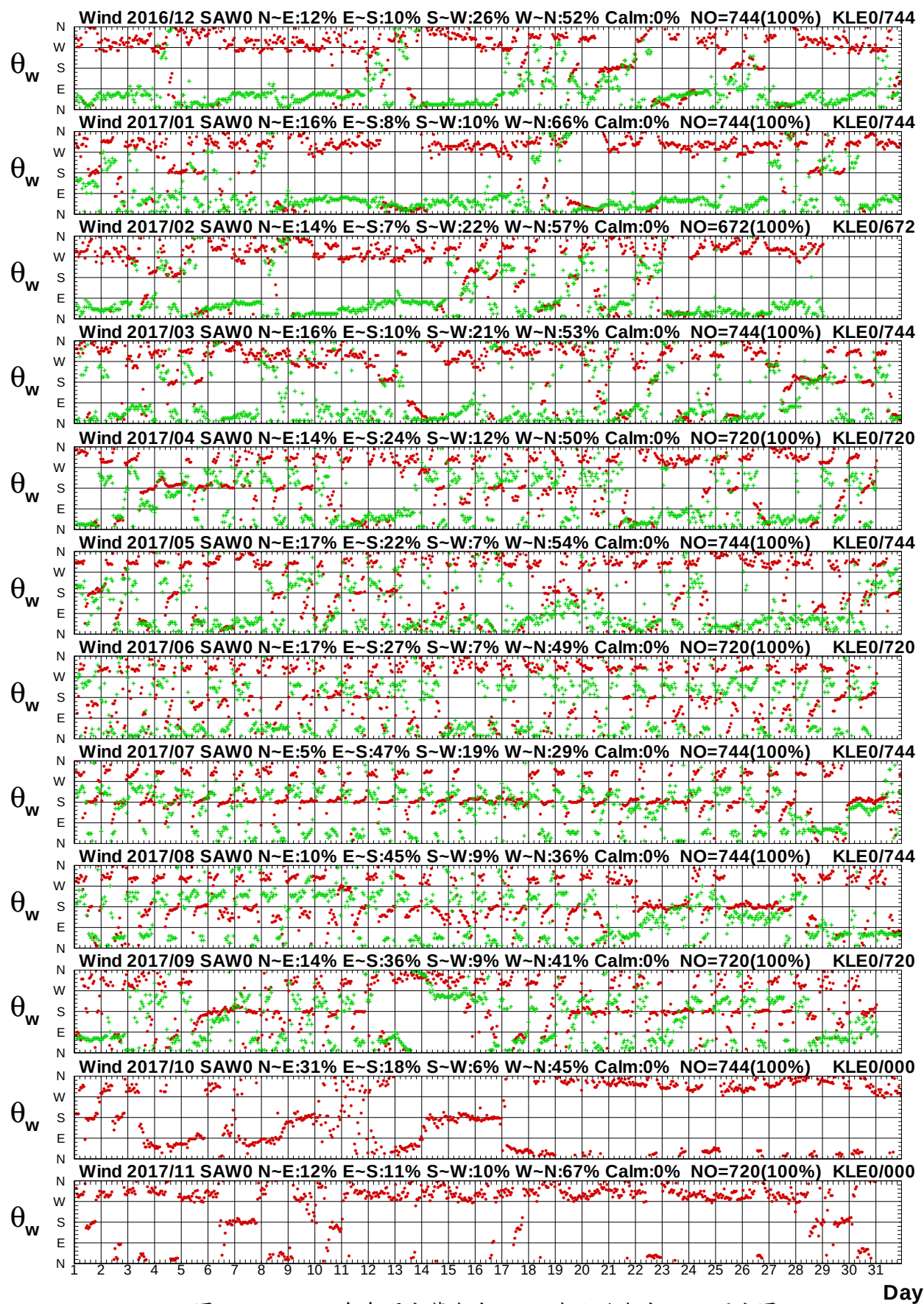


圖1.13b 2017年每月宜蘭海域 W 站與北端海域 E 站風向圖

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W173SAW0.1HA W173KLE0.1H0 W174SAW0.1HA W174KLE0.1H0 W175SAW0.1HA W175KLE0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

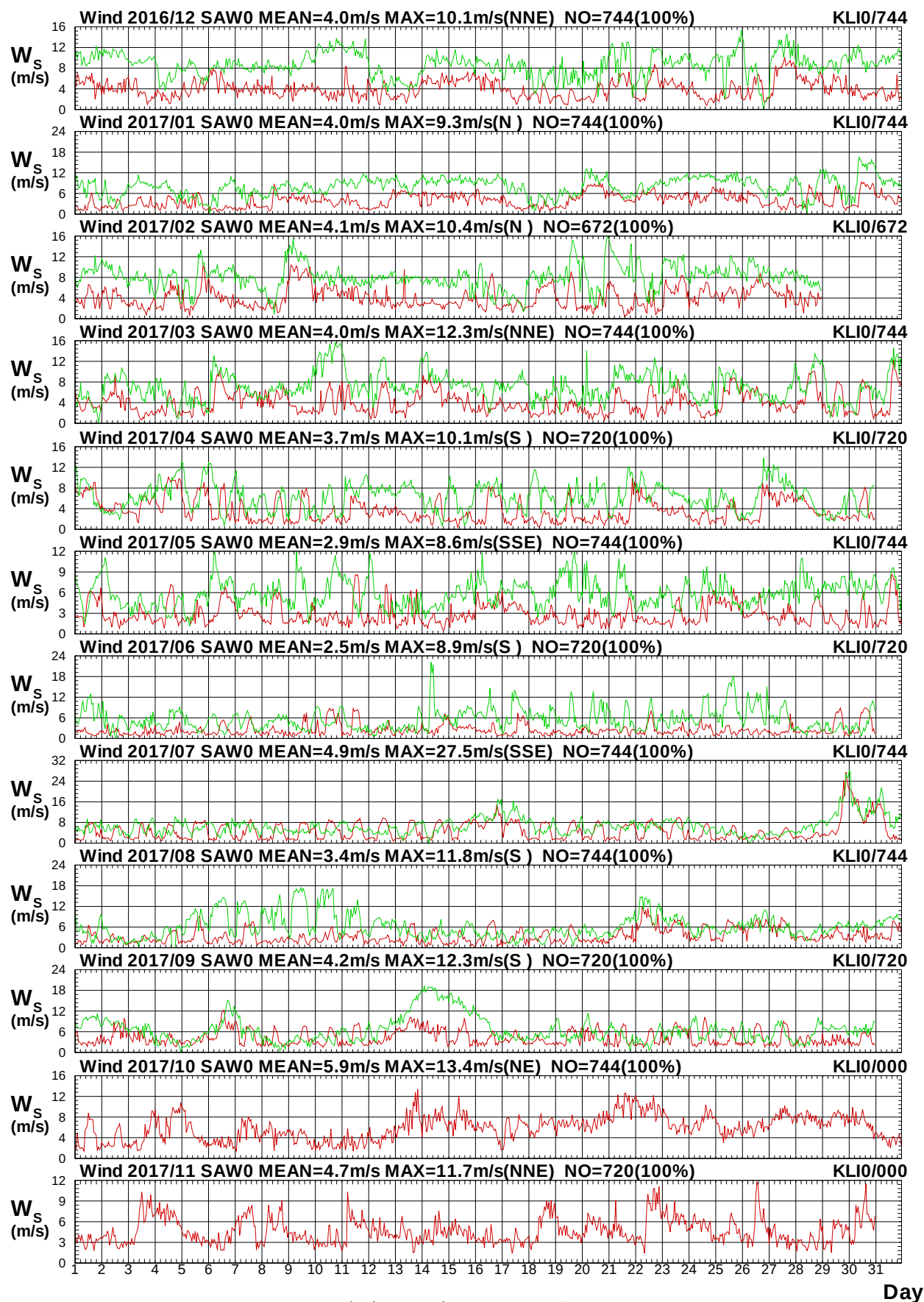


圖1.14a 2017年每月宜蘭海域 W 站與北端海域 I 站風速圖

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W173SAW0.1HA W173KLI0.1H0 W174SAW0.1HA W174KLI0.1H0 W175SAW0.1HA W175KLI0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

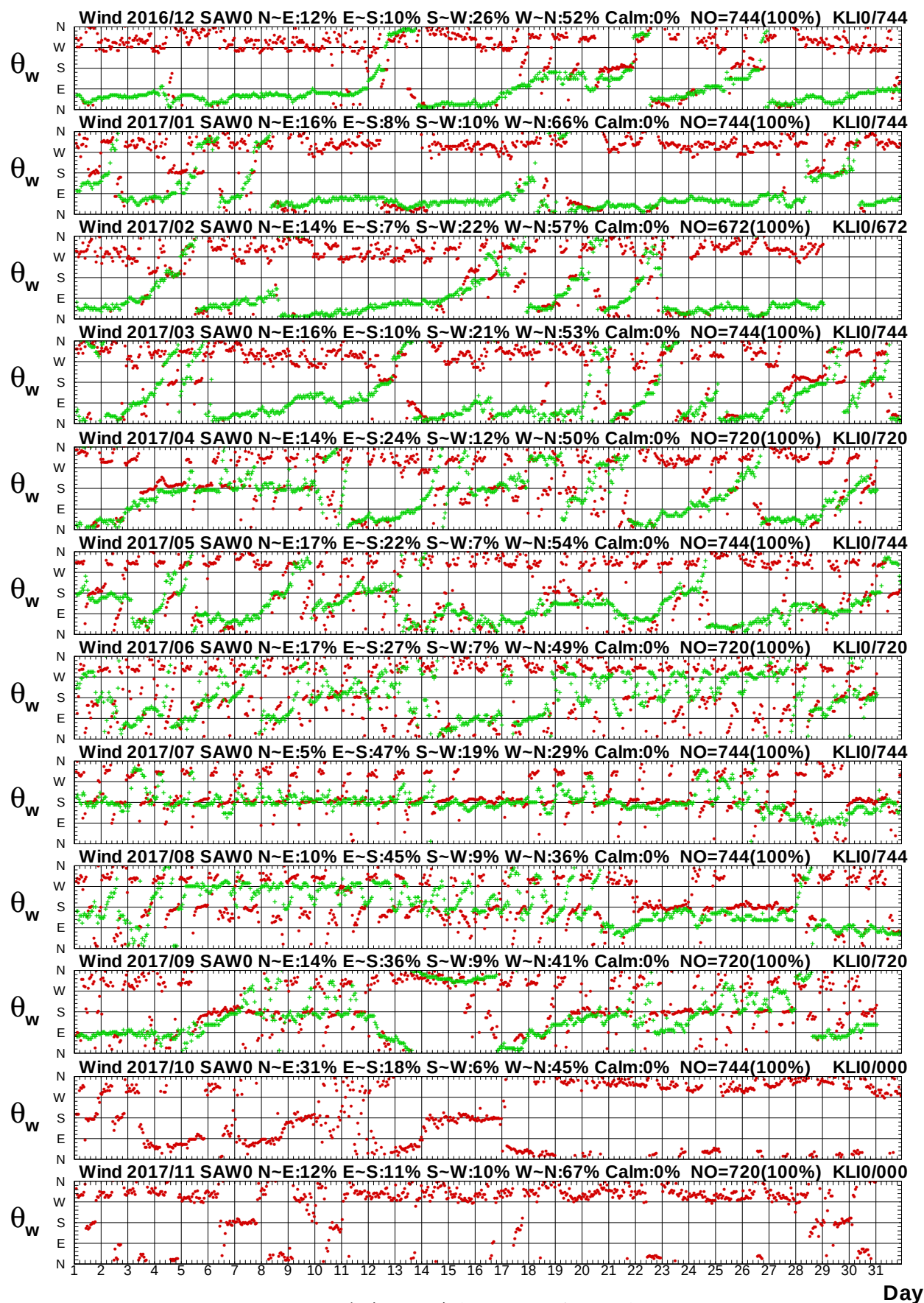


圖1.14b 2017年每月宜蘭海域 W 站與北端海域 I 站風向圖

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W173SAW0.1HA W173KLI0.1H0 W174SAW0.1HA W174KLI0.1H0 W175SAW0.1HA W175KLI0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

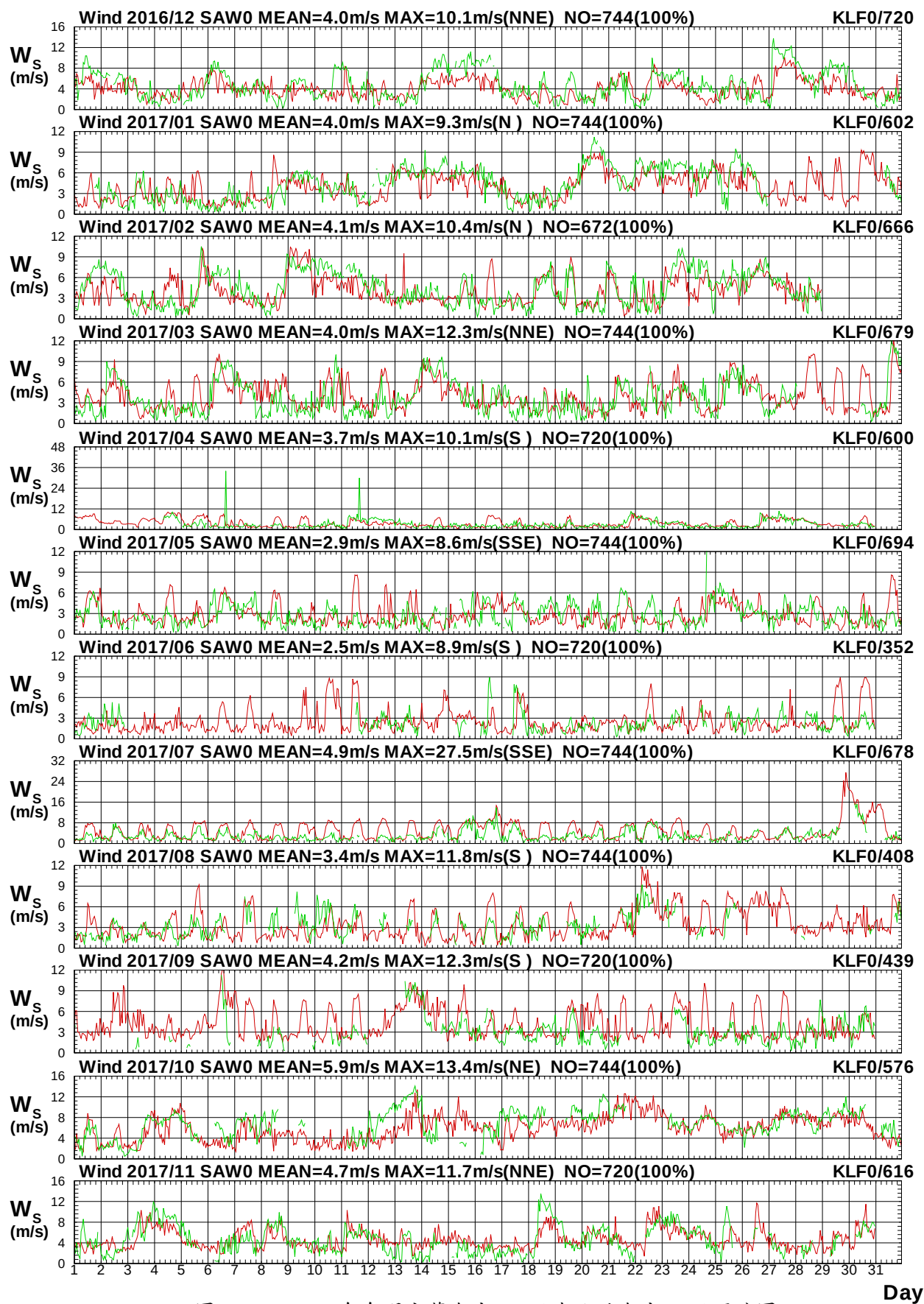


圖1.15a 2017年每月宜蘭海域 W 站與北端海域 F 站風速圖

W16CSAW0.1HA W16CKLF0.1HO W171SAW0.1HA W171KLF0.1HO W172SAW0.1HA W172KLF0.1HO
W173SAW0.1HA W173KLF0.1HO W174SAW0.1HA W174KLF0.1HO W175SAW0.1HA W175KLF0.1HO

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

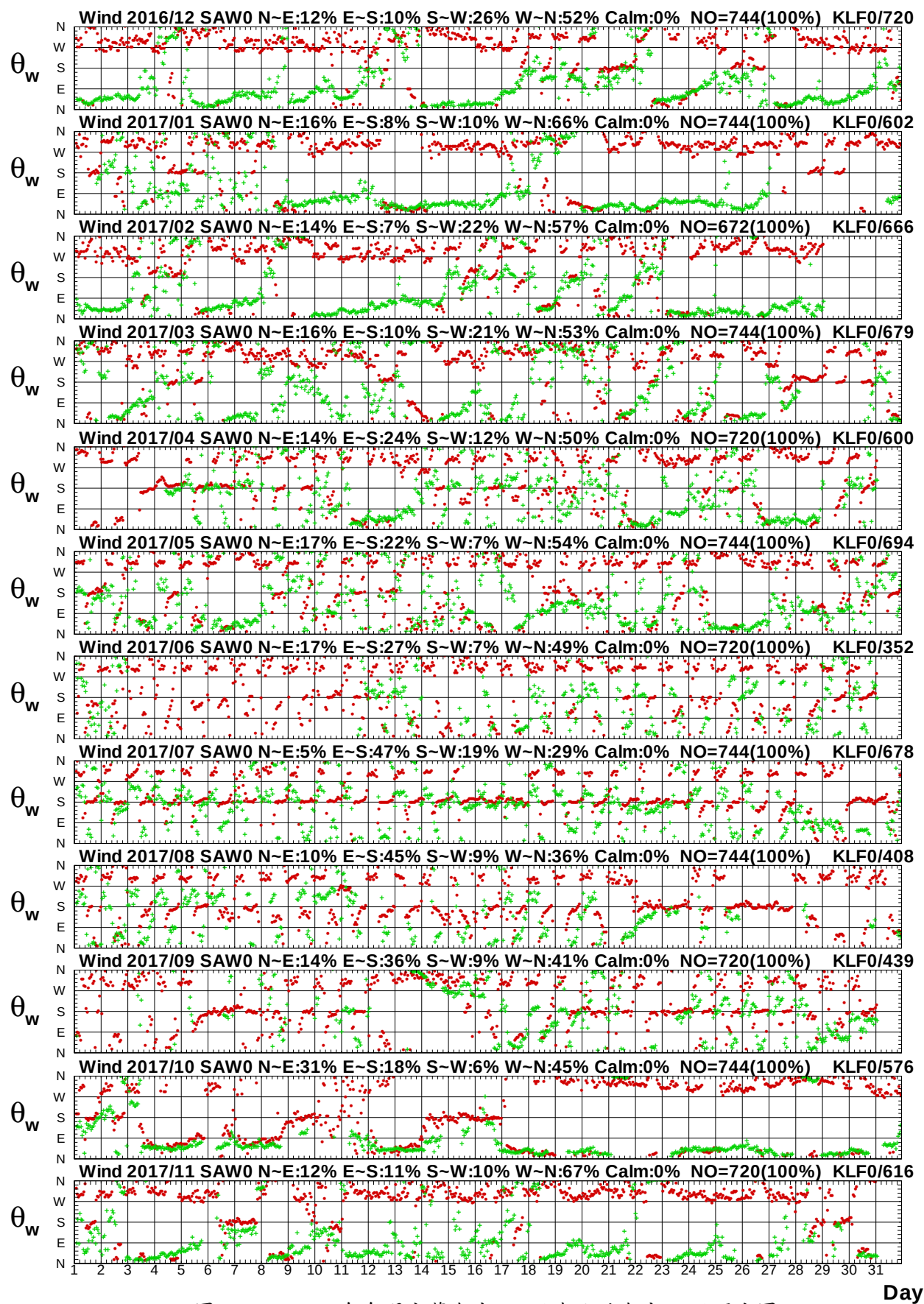


圖1.15b 2017年每月宜蘭海域 W 站與北端海域 F 站風向圖

W16CSAW0.1HA W16CKLF0.1H0 W171SAW0.1HA W171KLF0.1H0 W172SAW0.1HA W172KLF0.1H0
W173SAW0.1HA W173KLF0.1H0 W174SAW0.1HA W174KLF0.1H0 W175SAW0.1HA W175KLF0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

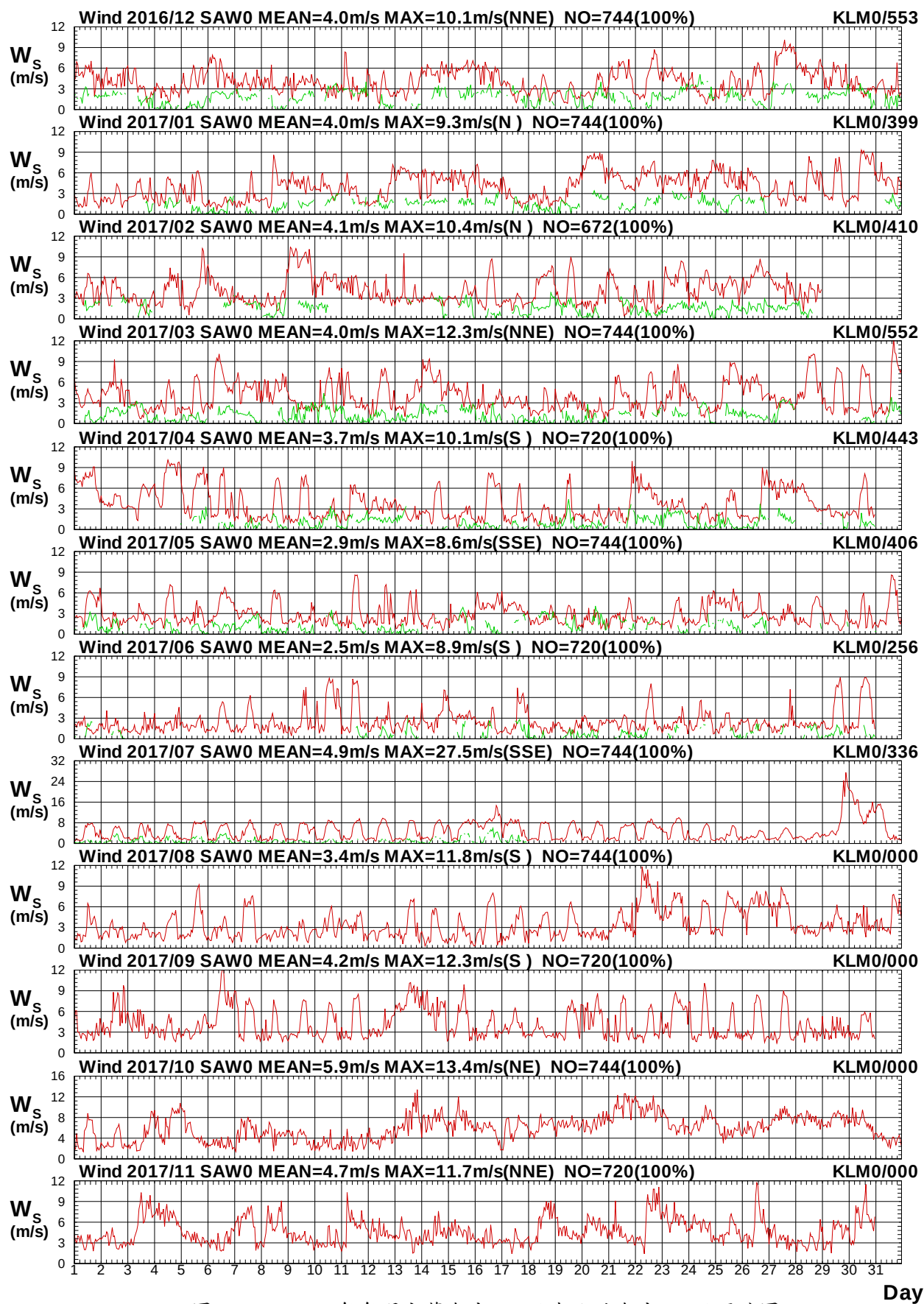


圖1.16a 2017年每月宜蘭海域 W 站與北端海域 M 站風速圖

W16CSAW0.1HA W16CKLM0.1H0 W171SAW0.1HA W171KLM0.1H0 W172SAW0.1HA W172KLM0.1H0
W173SAW0.1HA W173KLM0.1H0 W174SAW0.1HA W174KLM0.1H0 W175SAW0.1HA W175KLM0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

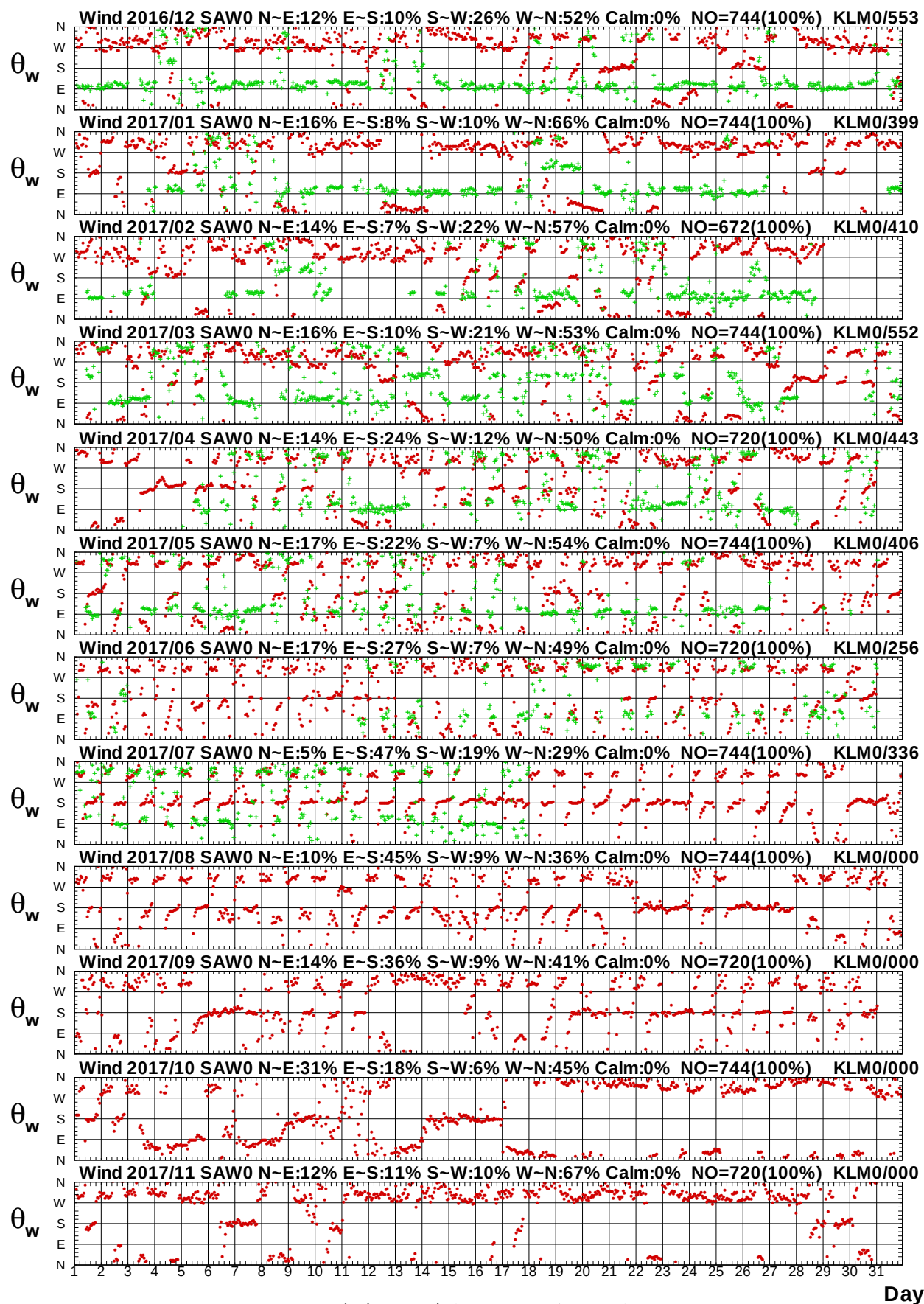


圖1.16b 2017年每月宜蘭海域 W 站與北端海域 M 站風向圖

W16CSAW0.1HA W16CKLM0.1H0 W171SAW0.1HA W171KLM0.1H0 W172SAW0.1HA W172KLM0.1H0
W173SAW0.1HA W173KLM0.1H0 W174SAW0.1HA W174KLM0.1H0 W175SAW0.1HA W175KLM0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

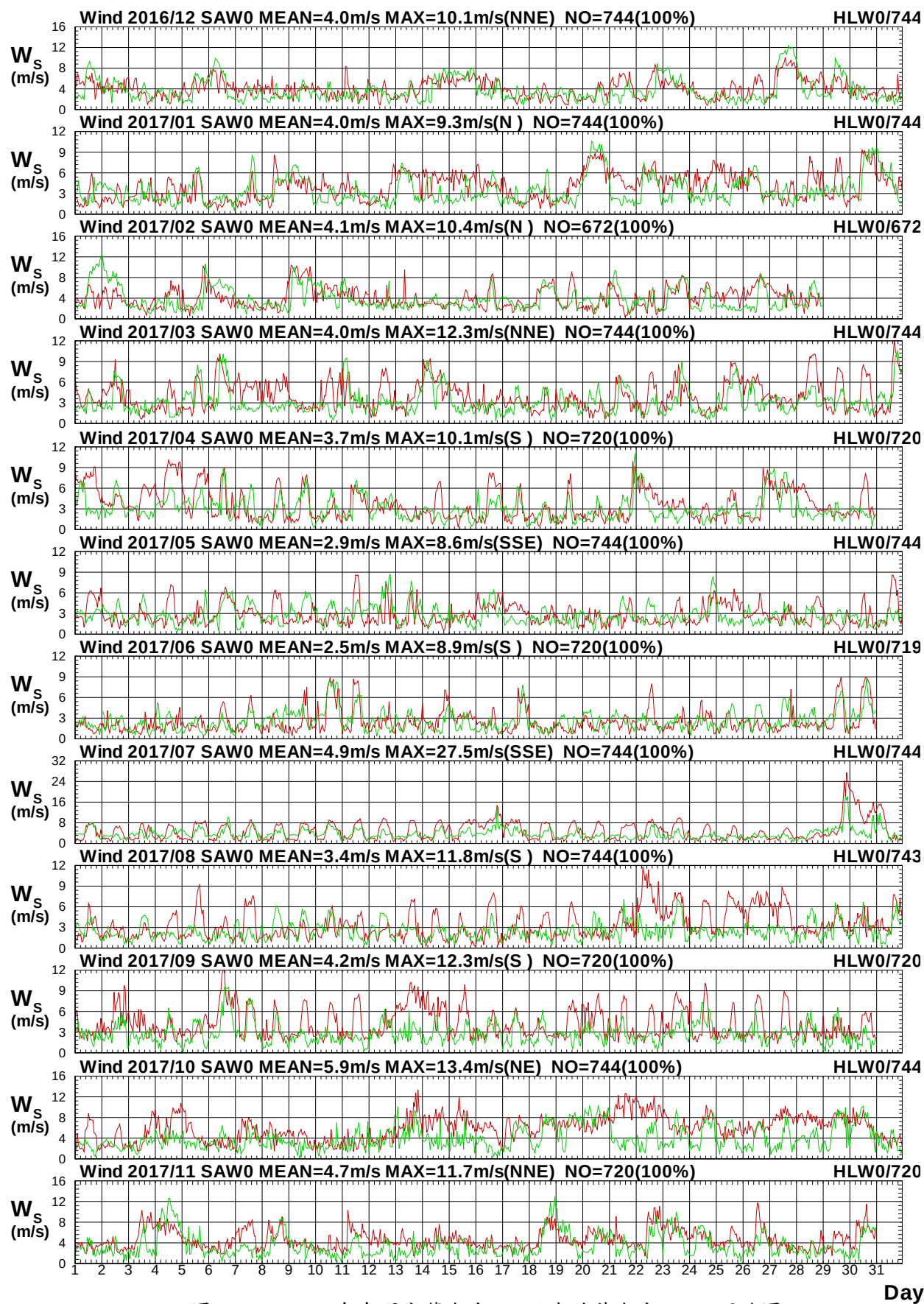


圖1.17a 2017年每月宜蘭海域 W 站與花蓮海域 W 站風速圖

W16CSAW0.1HA W16CHLW0.1H0 W171SAW0.1HA W171HLW0.1H0 W172SAW0.1HA W172HLW0.1H0
W173SAW0.1HA W173HLW0.1H0 W174SAW0.1HA W174HLW0.1H0 W175SAW0.1HA W175HLW0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

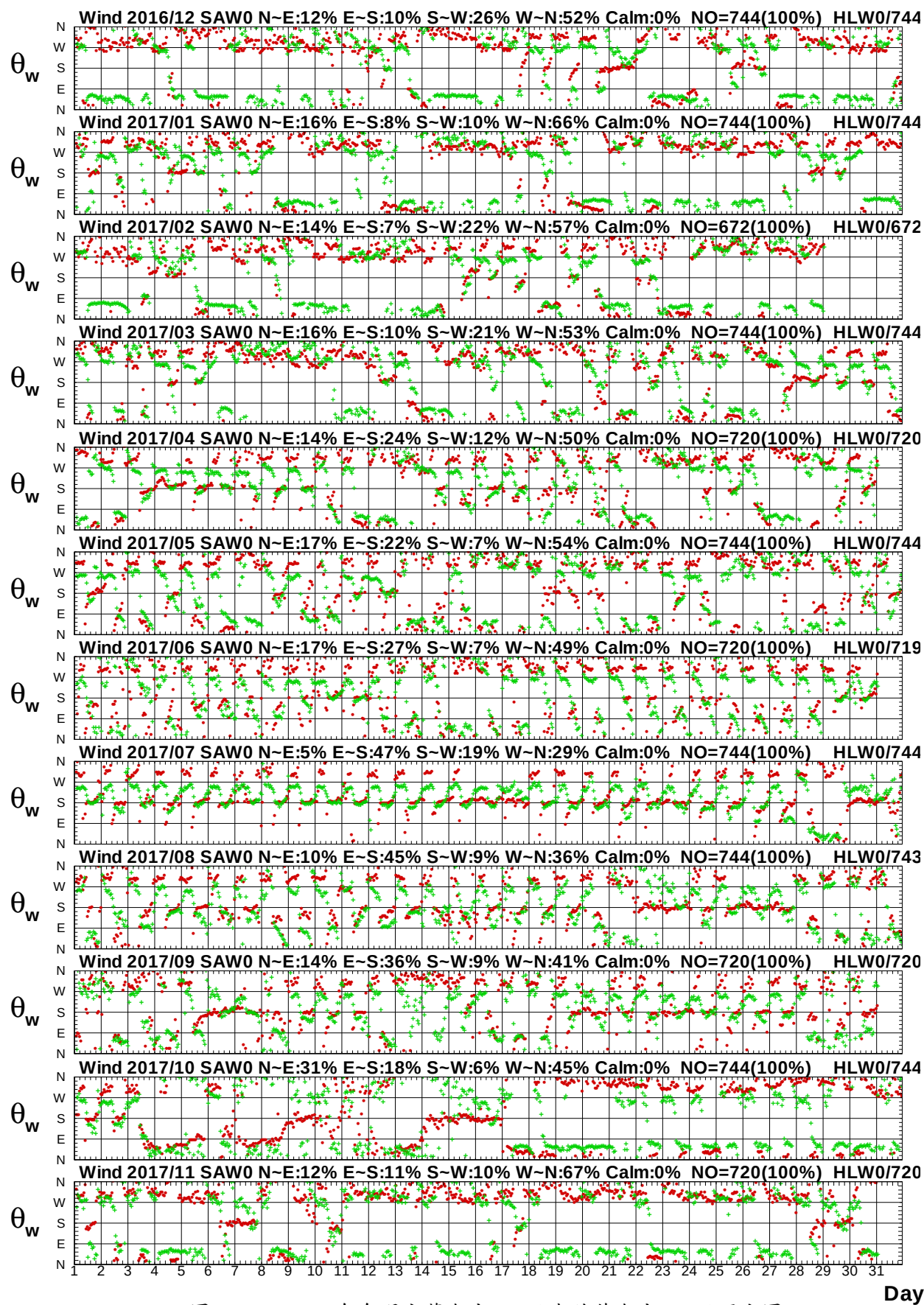


圖1.17b 2017年每月宜蘭海域 W 站與花蓮海域 W 站風向圖

W16CSAW0.1HA W16CHLW0.1H0 W171SAW0.1HA W171HLW0.1H0 W172SAW0.1HA W172HLW0.1H0
W173SAW0.1HA W173HLW0.1H0 W174SAW0.1HA W174HLW0.1H0 W175SAW0.1HA W175HLW0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

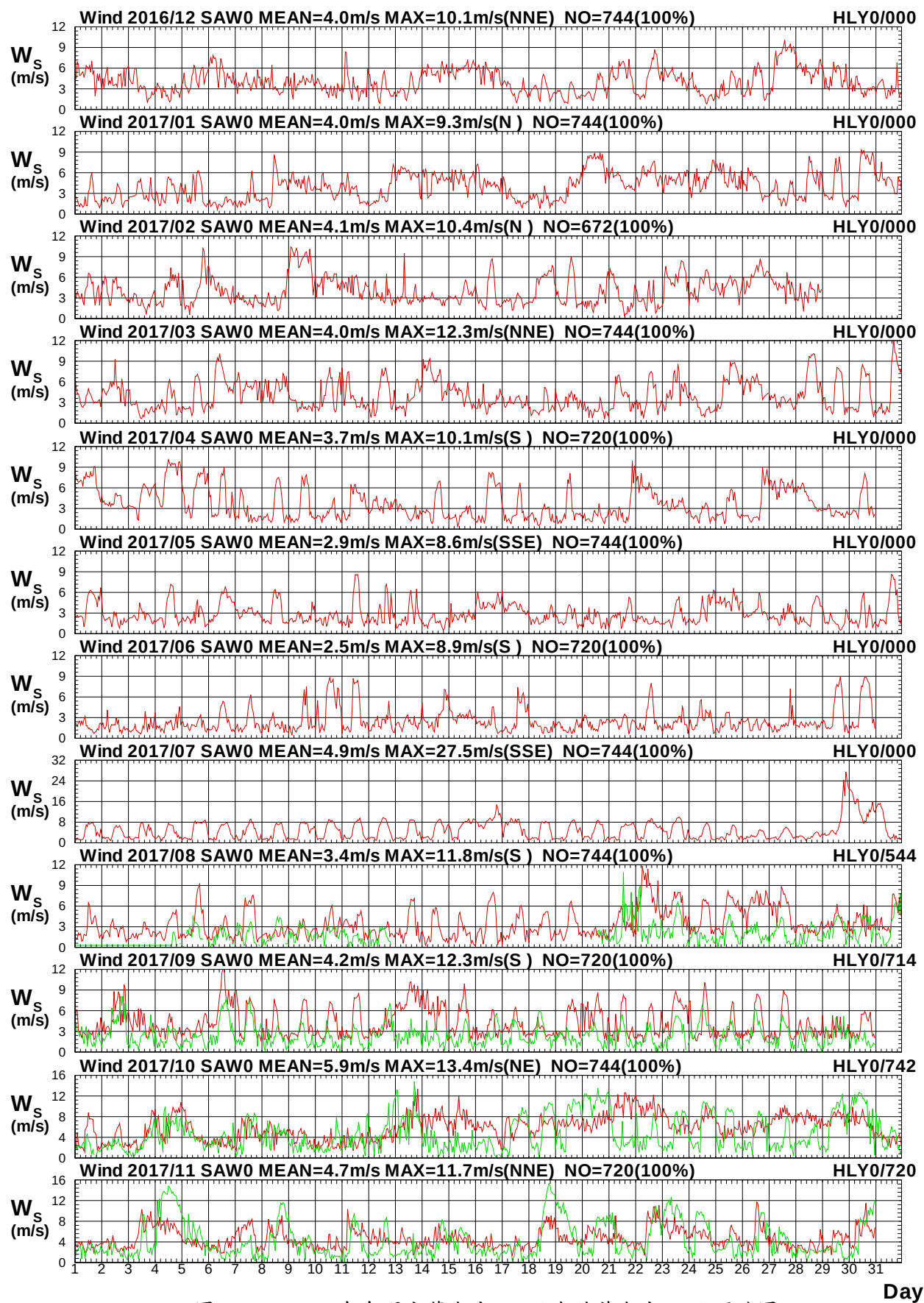


圖1.18a 2017年每月宜蘭海域 W 站與花蓮海域 Y 站風速圖

W16CSAW0.1HA W16CHLY0.1H0 W171SAW0.1HA W171HLY0.1H0 W172SAW0.1HA W172HLY0.1H0
W173SAW0.1HA W173HLY0.1H0 W174SAW0.1HA W174HLY0.1H0 W175SAW0.1HA W175HLY0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

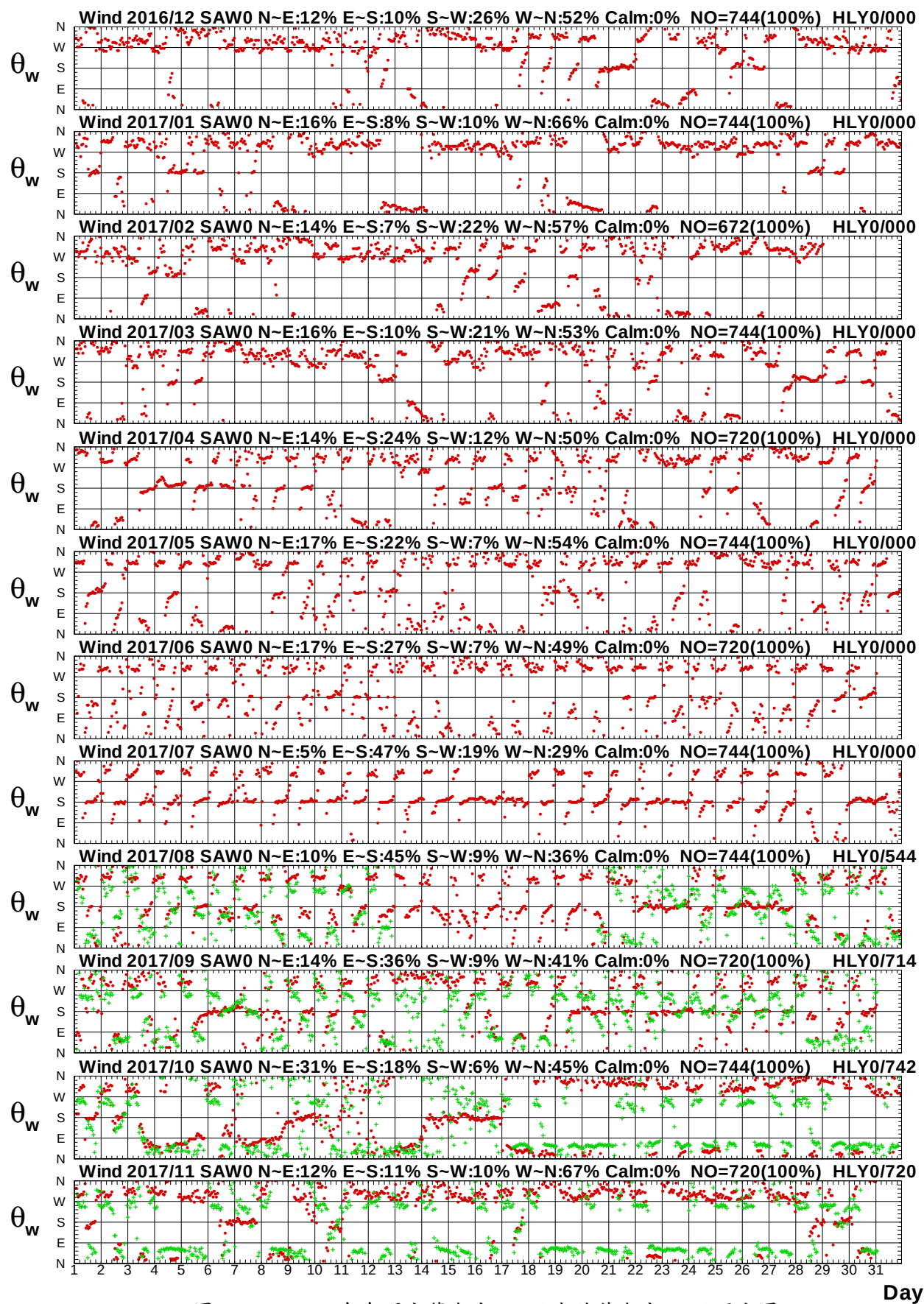


圖1.18b 2017年每月宜蘭海域 W 站與花蓮海域 Y 站風向圖

W16CSAW0.1HA W16CHLY0.1H0 W171SAW0.1HA W171HLY0.1H0 W172SAW0.1HA W172HLY0.1H0
W173SAW0.1HA W173HLY0.1H0 W174SAW0.1HA W174HLY0.1H0 W175SAW0.1HA W175HLY0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

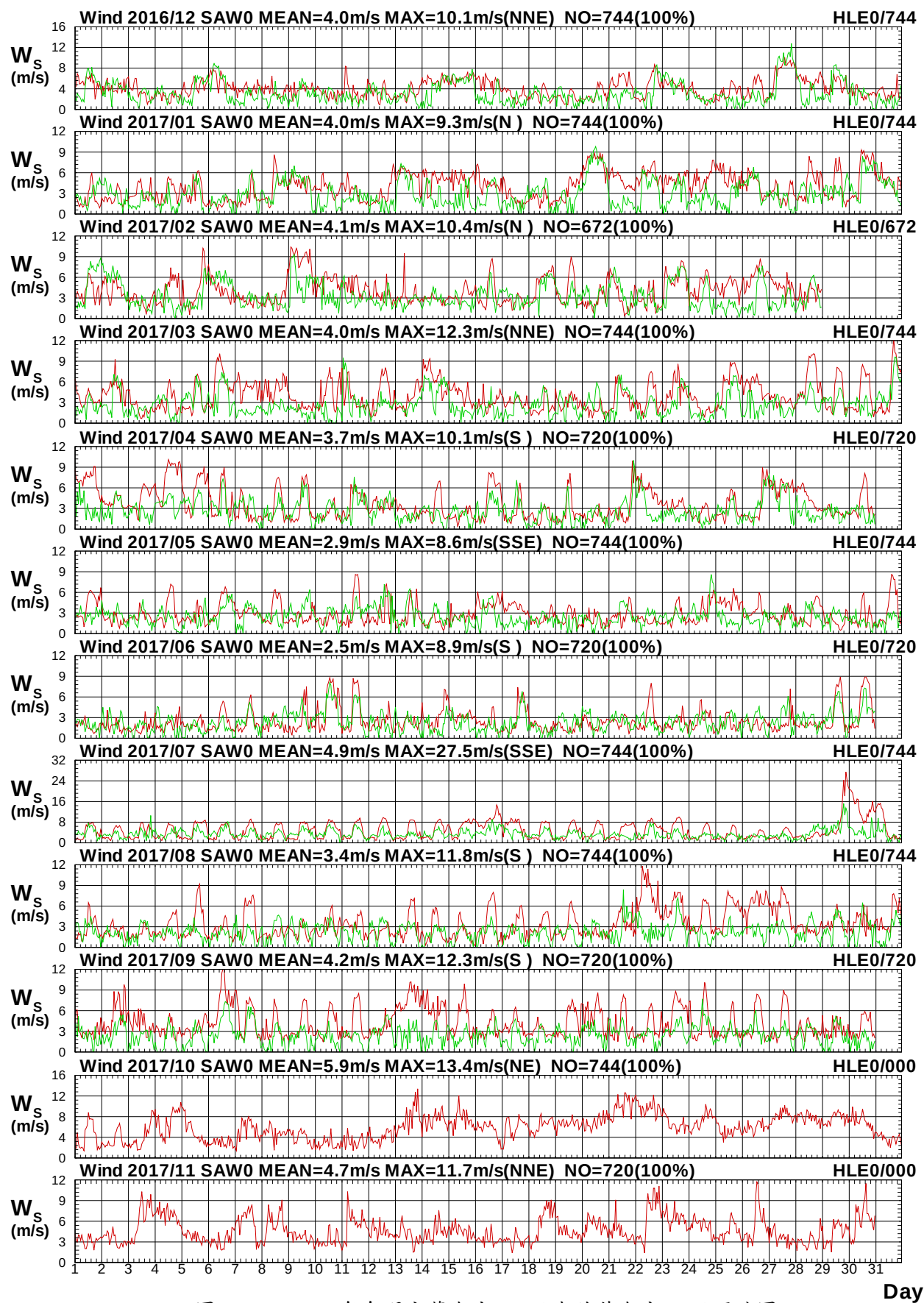


圖1.19a 2017年每月宜蘭海域 W 站與花蓮海域 E 站風速圖

W16CSAW0.1HA W16CHLE0.1H0 W171SAW0.1HA W171HLE0.1H0 W172SAW0.1HA W172HLE0.1H0
W173SAW0.1HA W173HLE0.1H0 W174SAW0.1HA W174HLE0.1H0 W175SAW0.1HA W175HLE0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

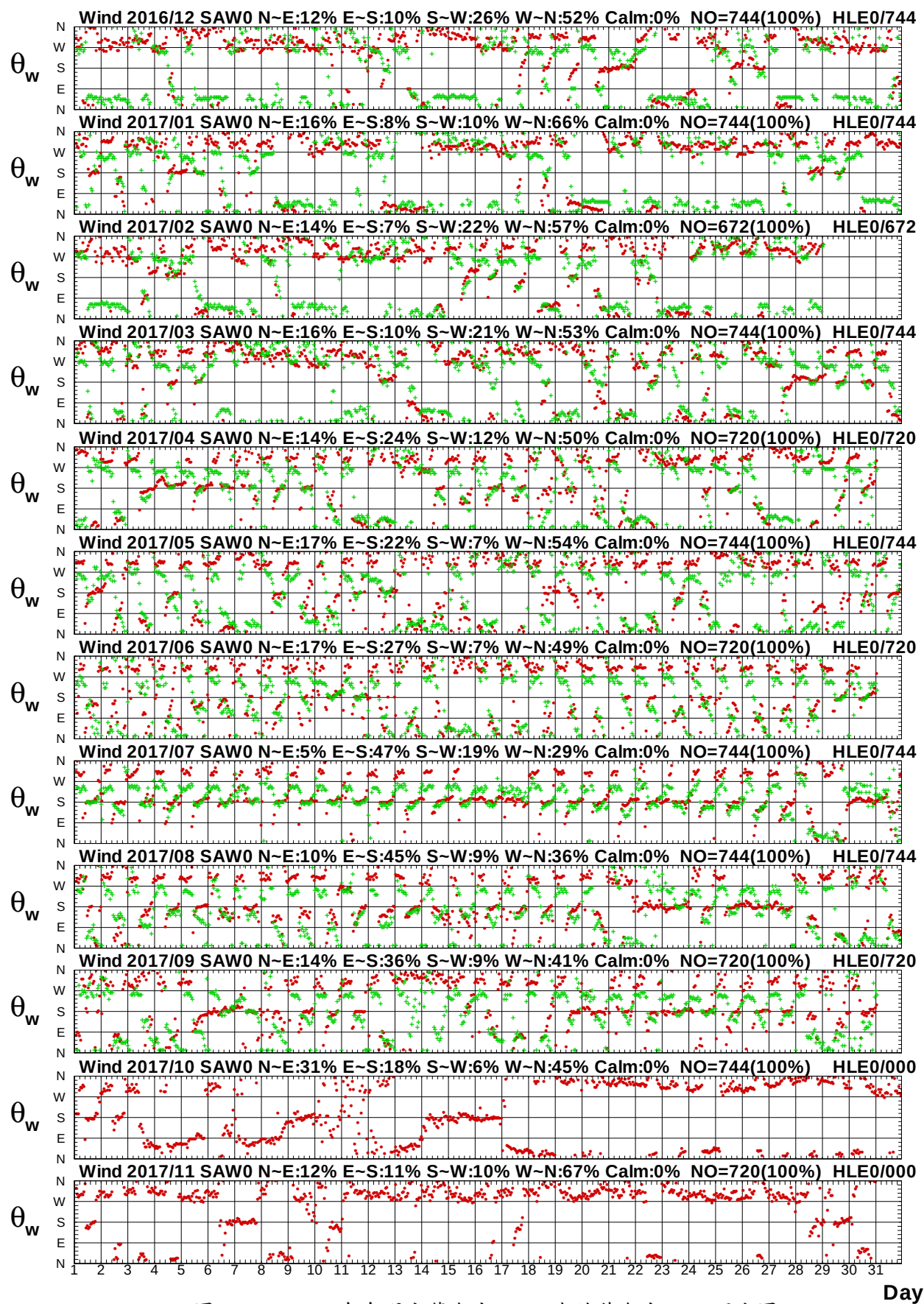


圖1.19b 2017年每月宜蘭海域 W 站與花蓮海域 E 站風向圖

W16CSAW0.1HA W16CHLE0.1H0 W171SAW0.1HA W171HLE0.1H0 W172SAW0.1HA W172HLE0.1H0
W173SAW0.1HA W173HLE0.1H0 W174SAW0.1HA W174HLE0.1H0 W175SAW0.1HA W175HLE0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

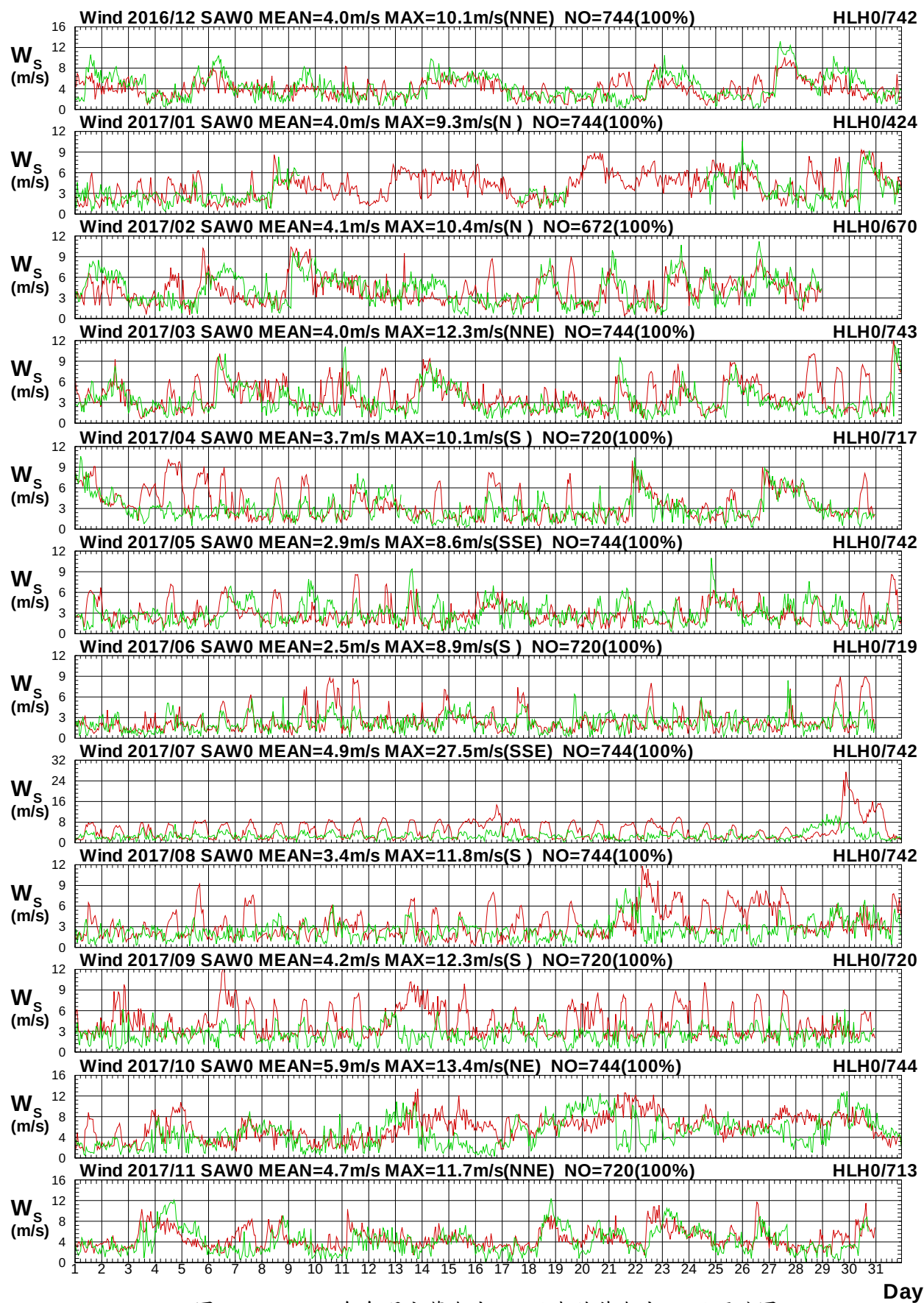


圖1.20a 2017年每月宜蘭海域 W 站與花蓮海域 H 站風速圖

W16CSAW0.1HA W16CHLH0.1H0 W171SAW0.1HA W171HLH0.1H0 W172SAW0.1HA W172HLH0.1H0
W173SAW0.1HA W173HLH0.1H0 W174SAW0.1HA W174HLH0.1H0 W175SAW0.1HA W175HLH0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

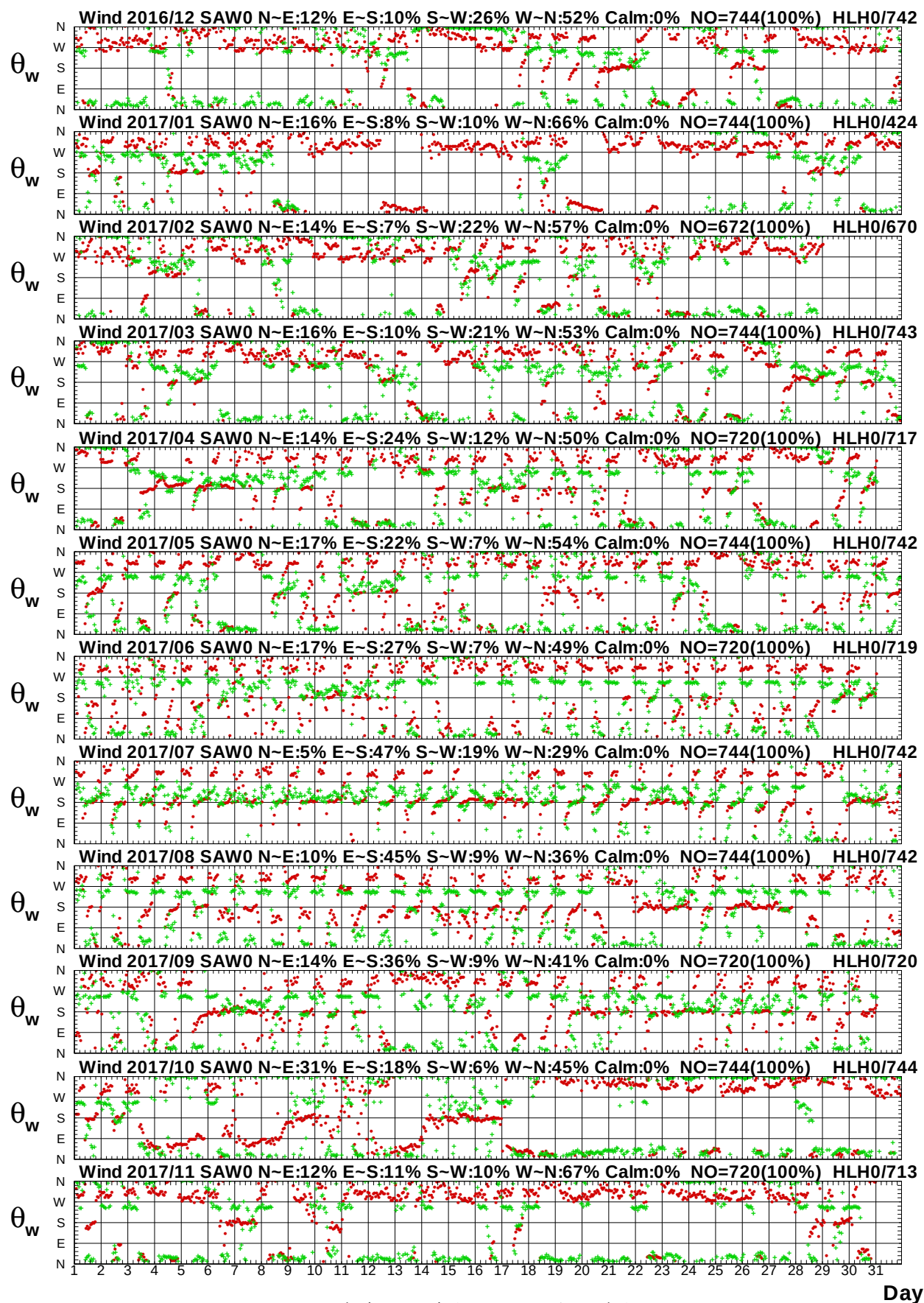


圖1.20b 2017年每月宜蘭海域 W 站與花蓮海域 H 站風向圖

W16CSAW0.1HA W16CHLH0.1H0 W171SAW0.1HA W171HLH0.1H0 W172SAW0.1HA W172HLH0.1H0
W173SAW0.1HA W173HLH0.1H0 W174SAW0.1HA W174HLH0.1H0 W175SAW0.1HA W175HLH0.1H0

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Wind Speed in Yi-Lan Seas of SAW0 at 2017

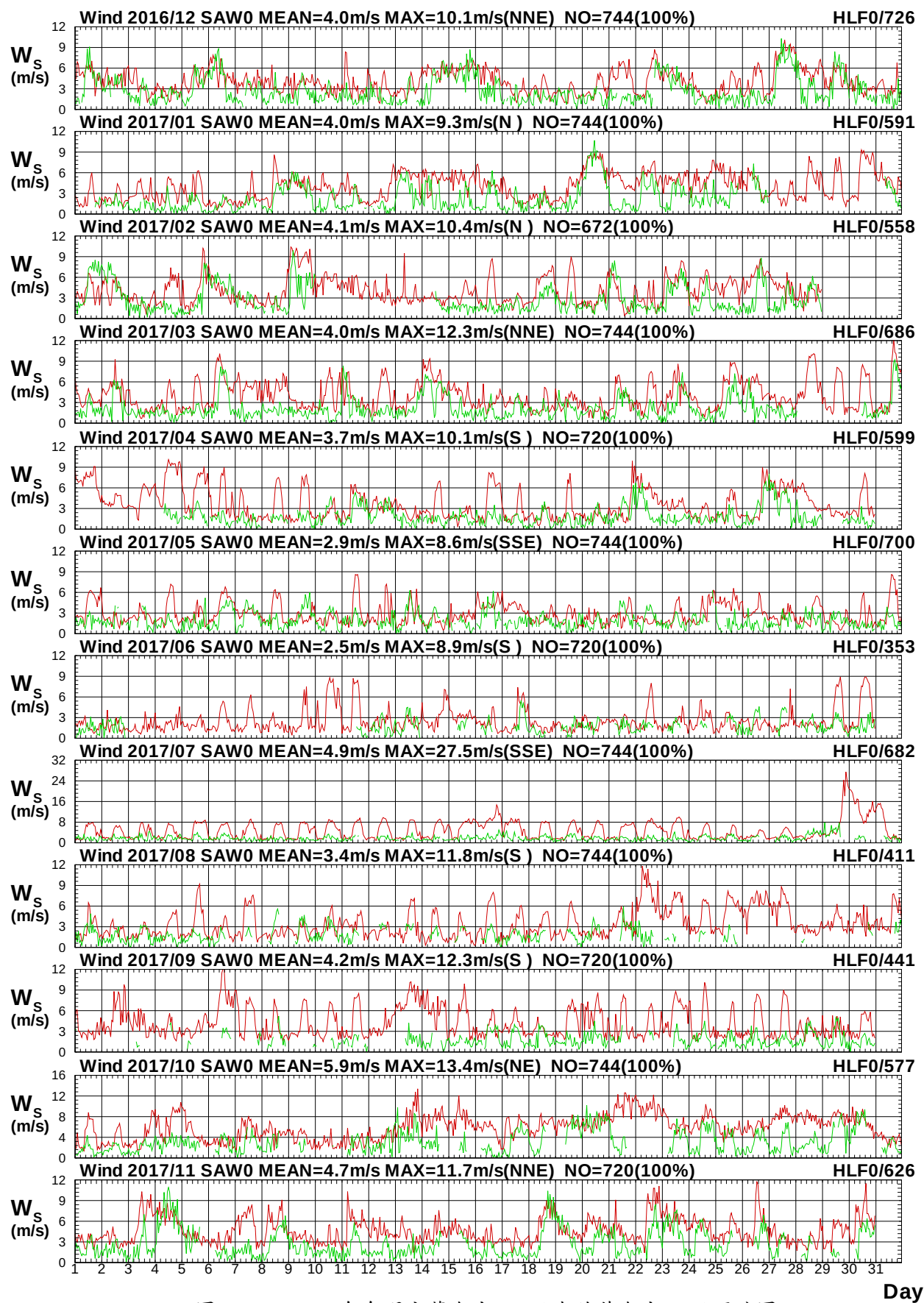


圖1.21a 2017年每月宜蘭海域 W 站與花蓮海域 F 站風速圖

W16CSAW0.1HA W16CHLF0.1H0 W171SAW0.1HA W171HLF0.1H0 W172SAW0.1HA W172HLF0.1H0
W173SAW0.1HA W173HLF0.1H0 W174SAW0.1HA W174HLF0.1H0 W175SAW0.1HA W175HLF0.1H0

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Wind Direction in Yi-Lan Seas of SAW0 at 2017

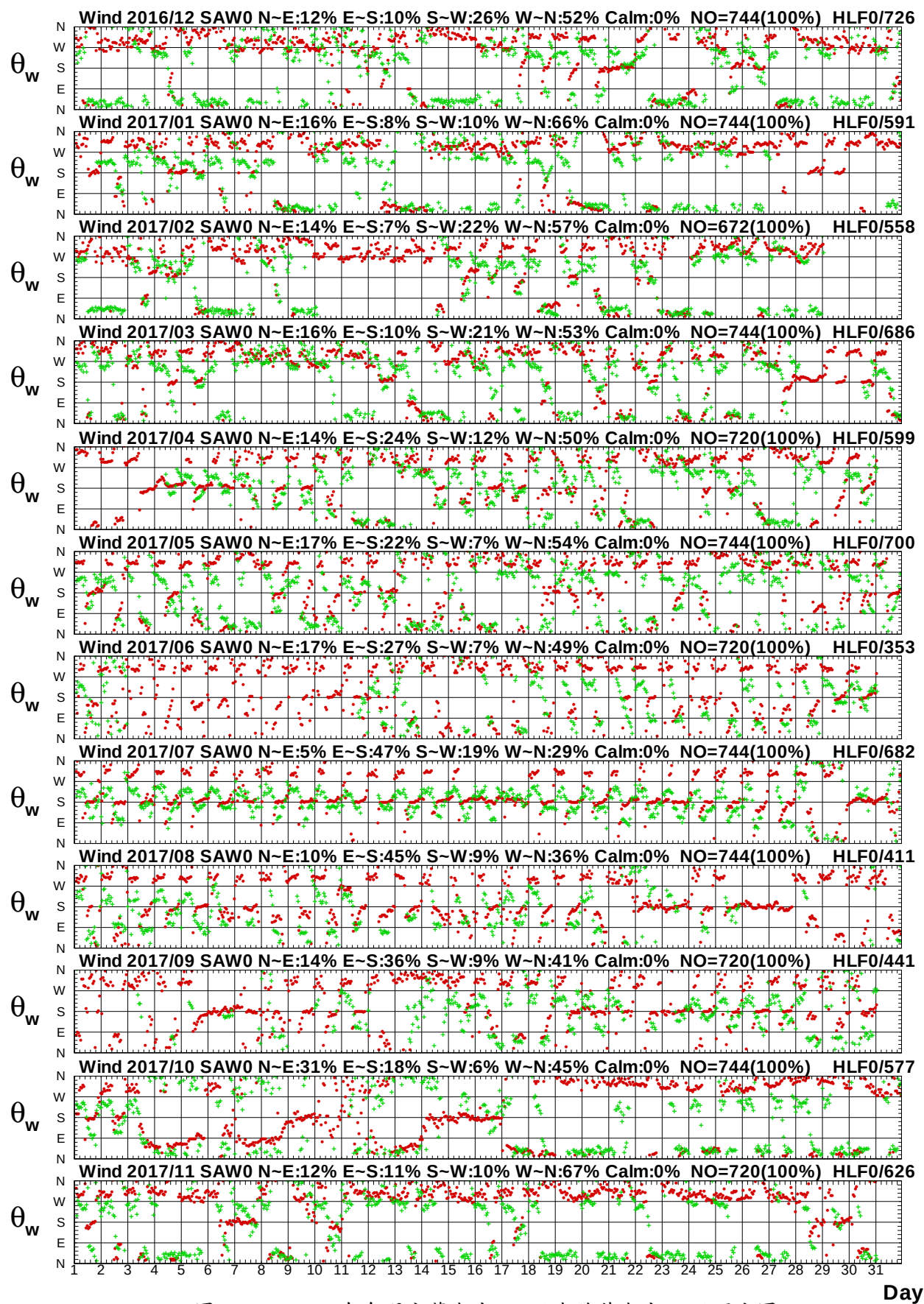


圖1.21b 2017年每月宜蘭海域 W 站與花蓮海域 F 站風向圖

W16CSAW0.1HA W16CHLF0.1H0 W171SAW0.1HA W171HLF0.1H0 W172SAW0.1HA W172HLF0.1H0
W173SAW0.1HA W173HLF0.1H0 W174SAW0.1HA W174HLF0.1H0 W175SAW0.1HA W175HLF0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

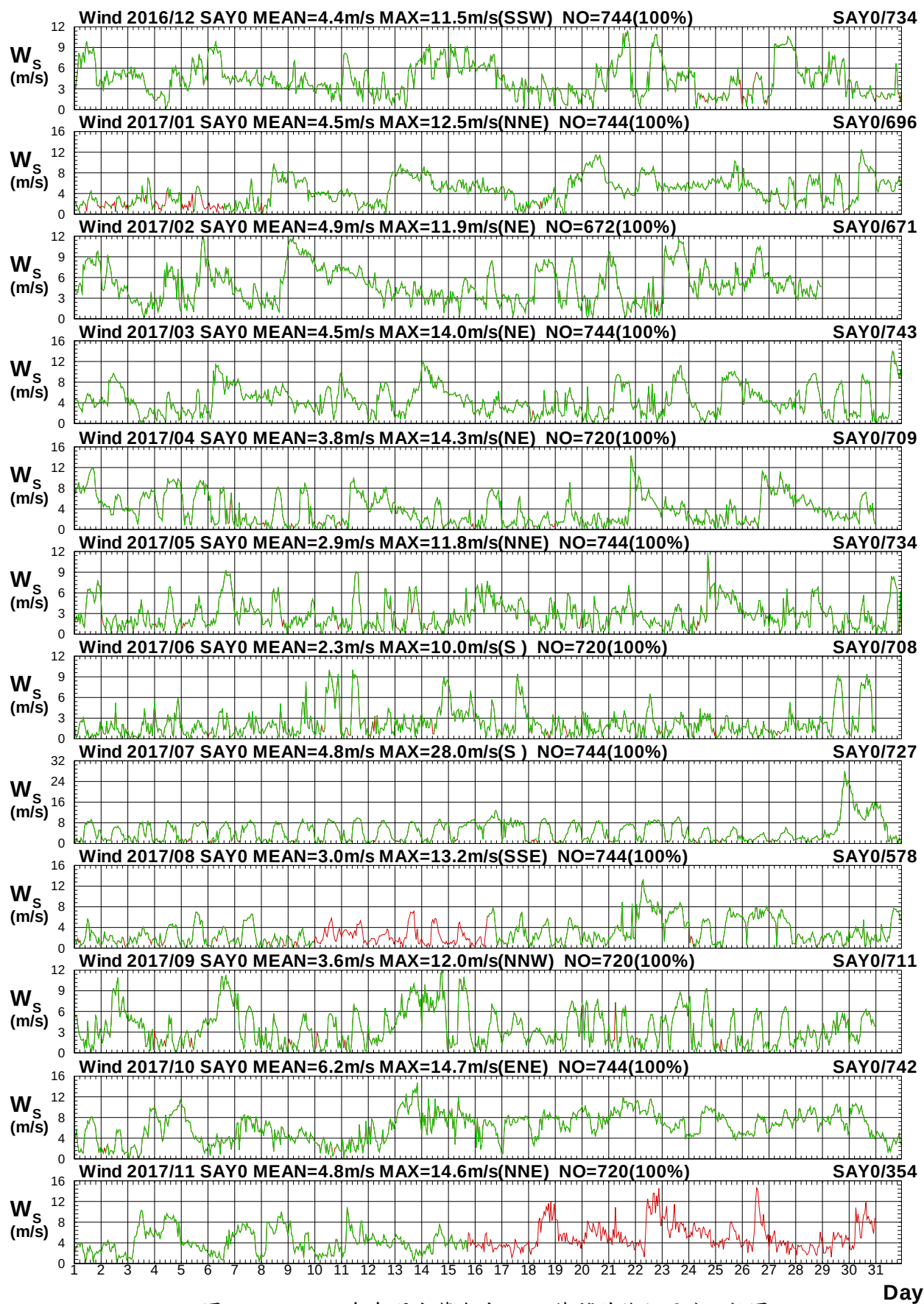


圖1.22a 2017年每月宜蘭海域 Y 站修補前後之風速比較圖

W16CSAY0.1HA W16CSAY0.1H0 W171SAY0.1HA W171SAY0.1H0 W172SAY0.1HA W172SAY0.1H0
W173SAY0.1HA W173SAY0.1H0 W174SAY0.1HA W174SAY0.1H0 W175SAY0.1HA W175SAY0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

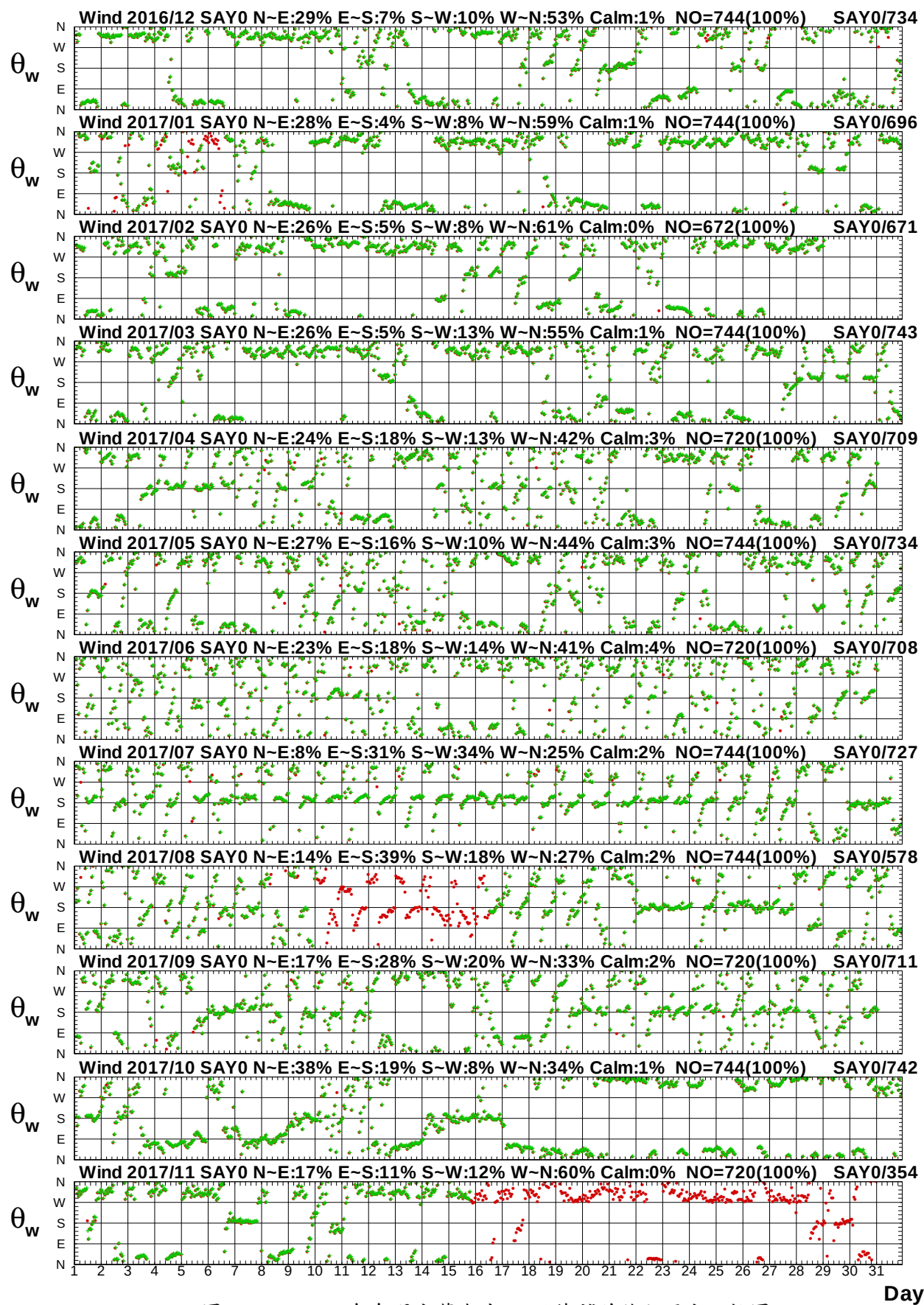


圖1.22b 2017年每月宜蘭海域 Y 站修補前後之風向比較圖

W16CSAY0.1HA W16CSAY0.1H0 W171SAY0.1HA W171SAY0.1H0 W172SAY0.1HA W172SAY0.1H0
W173SAY0.1HA W173SAY0.1H0 W174SAY0.1HA W174SAY0.1H0 W175SAY0.1HA W175SAY0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

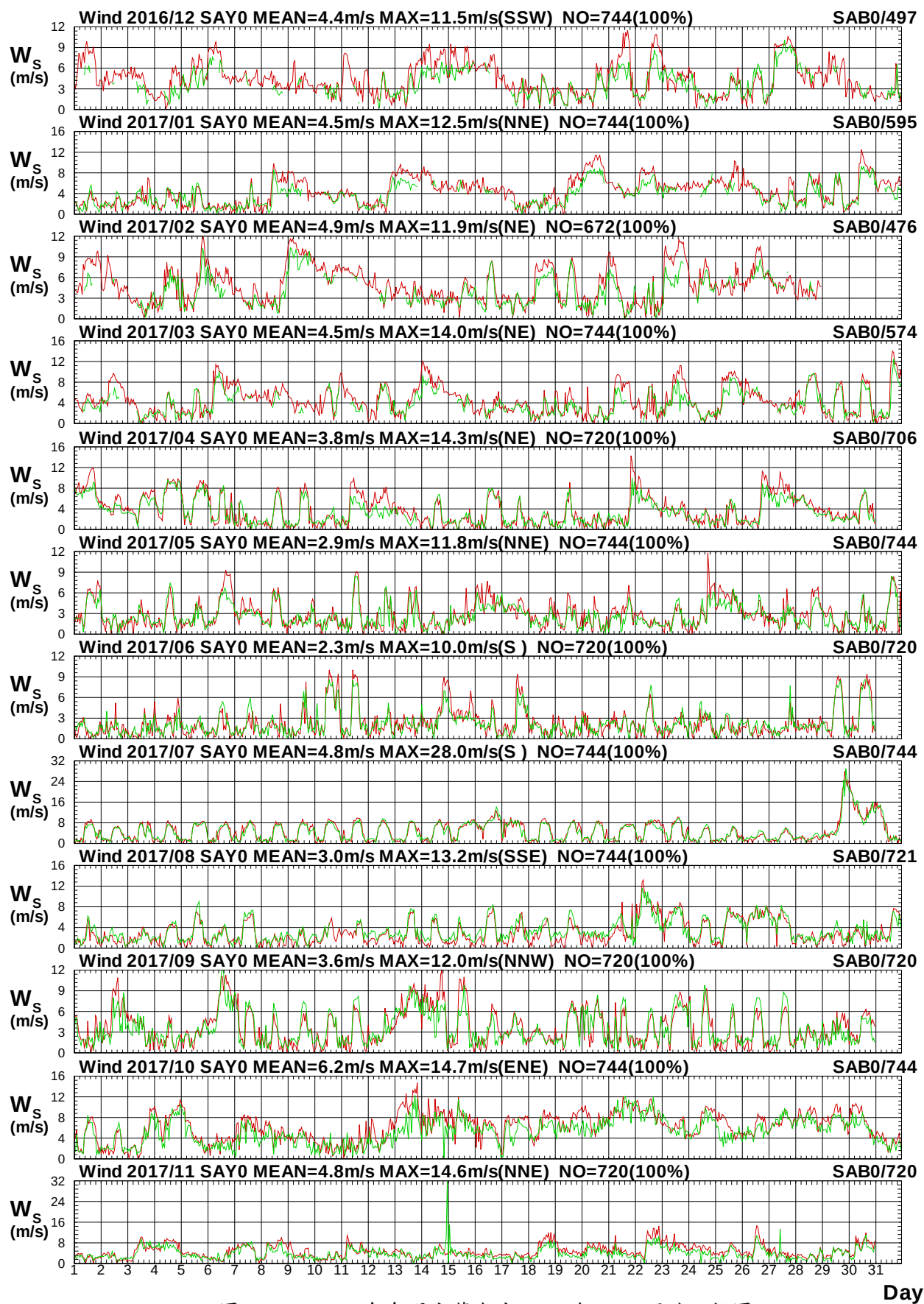


圖1.23a 2017年每月宜蘭海域 Y 站與 B 站風速比較圖

W16CSAY0.1HA W16CSAB0.1H0 W171SAY0.1HA W171SAB0.1H0 W172SAY0.1HA W172SAB0.1H0
W173SAY0.1HA W173SAB0.1H0 W174SAY0.1HA W174SAB0.1H0 W175SAY0.1HA W175SAB0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

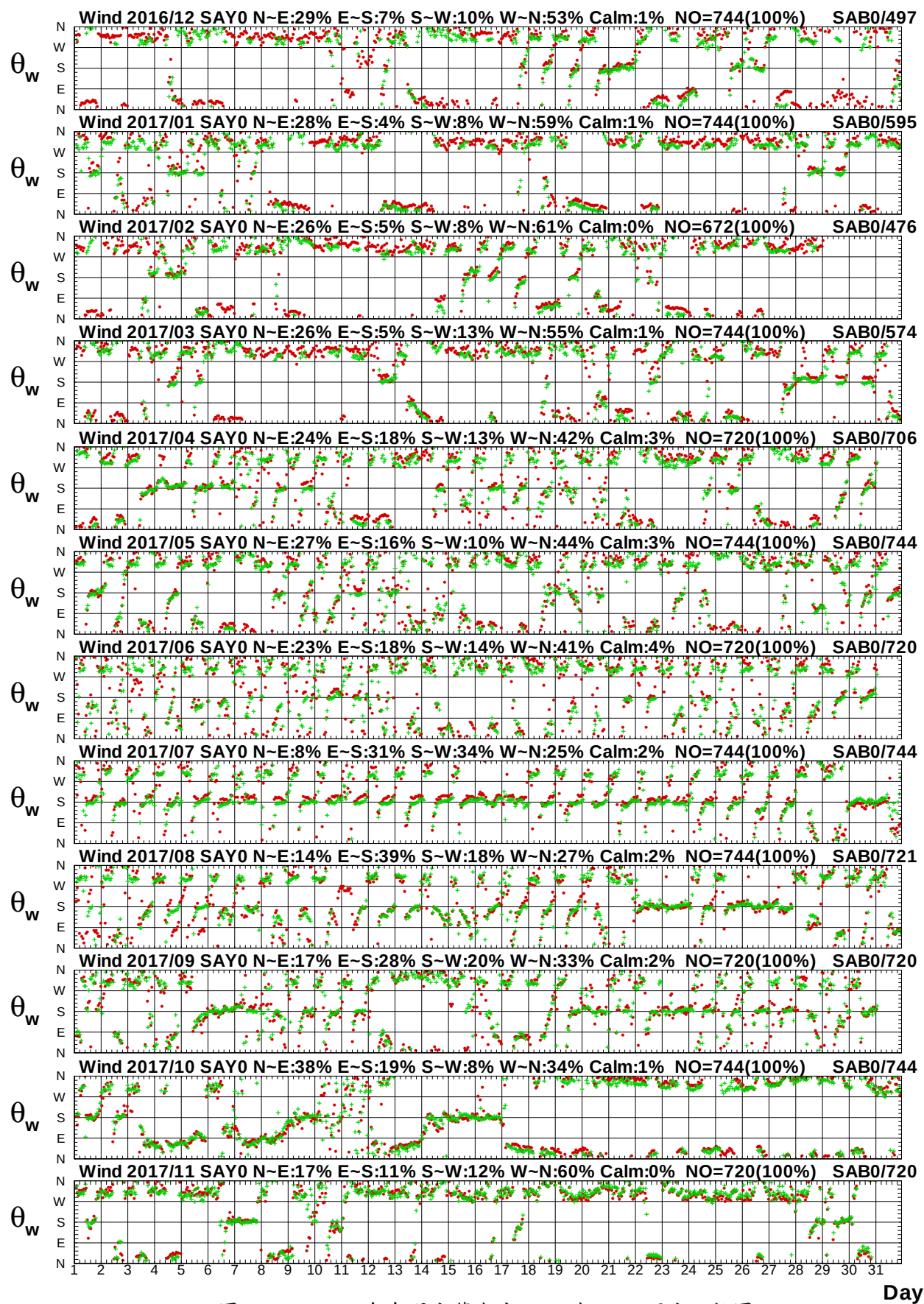


圖1.23b 2017年每月宜蘭海域 Y 站與 B 站風向比較圖

W16CSAY0.1HA W16CSAB0.1H0 W171SAY0.1HA W171SAB0.1H0 W172SAY0.1HA W172SAB0.1H0
W173SAY0.1HA W173SAB0.1H0 W174SAY0.1HA W174SAB0.1H0 W175SAY0.1HA W175SAB0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

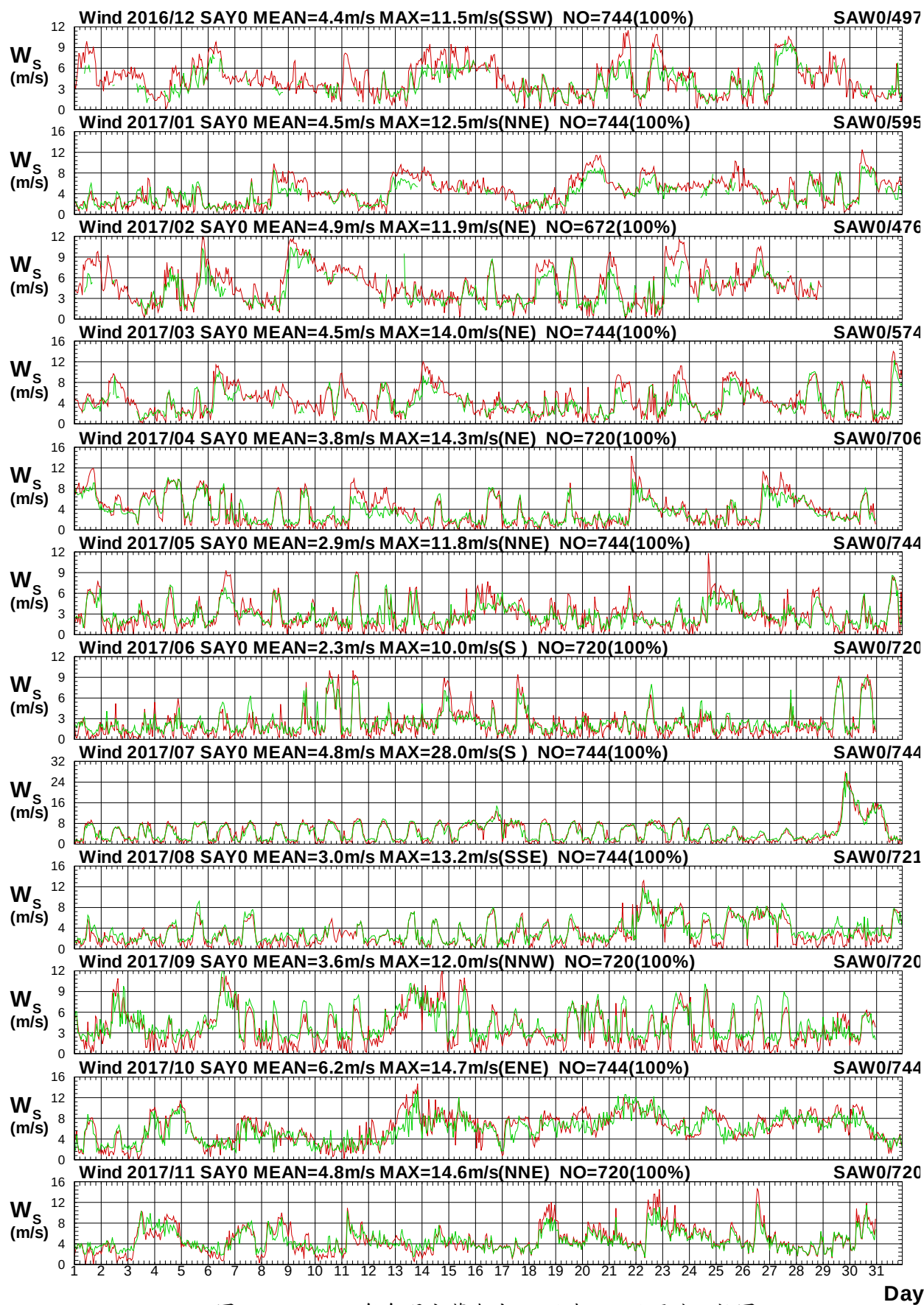


圖1.24a 2017年每月宜蘭海域 Y 站與 W 站風速比較圖

W16CSAY0.1HA W16CSAW0.1H0 W171SAY0.1HA W171SAW0.1H0 W172SAY0.1HA W172SAW0.1H0
W173SAY0.1HA W173SAW0.1H0 W174SAY0.1HA W174SAW0.1H0 W175SAY0.1HA W175SAW0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

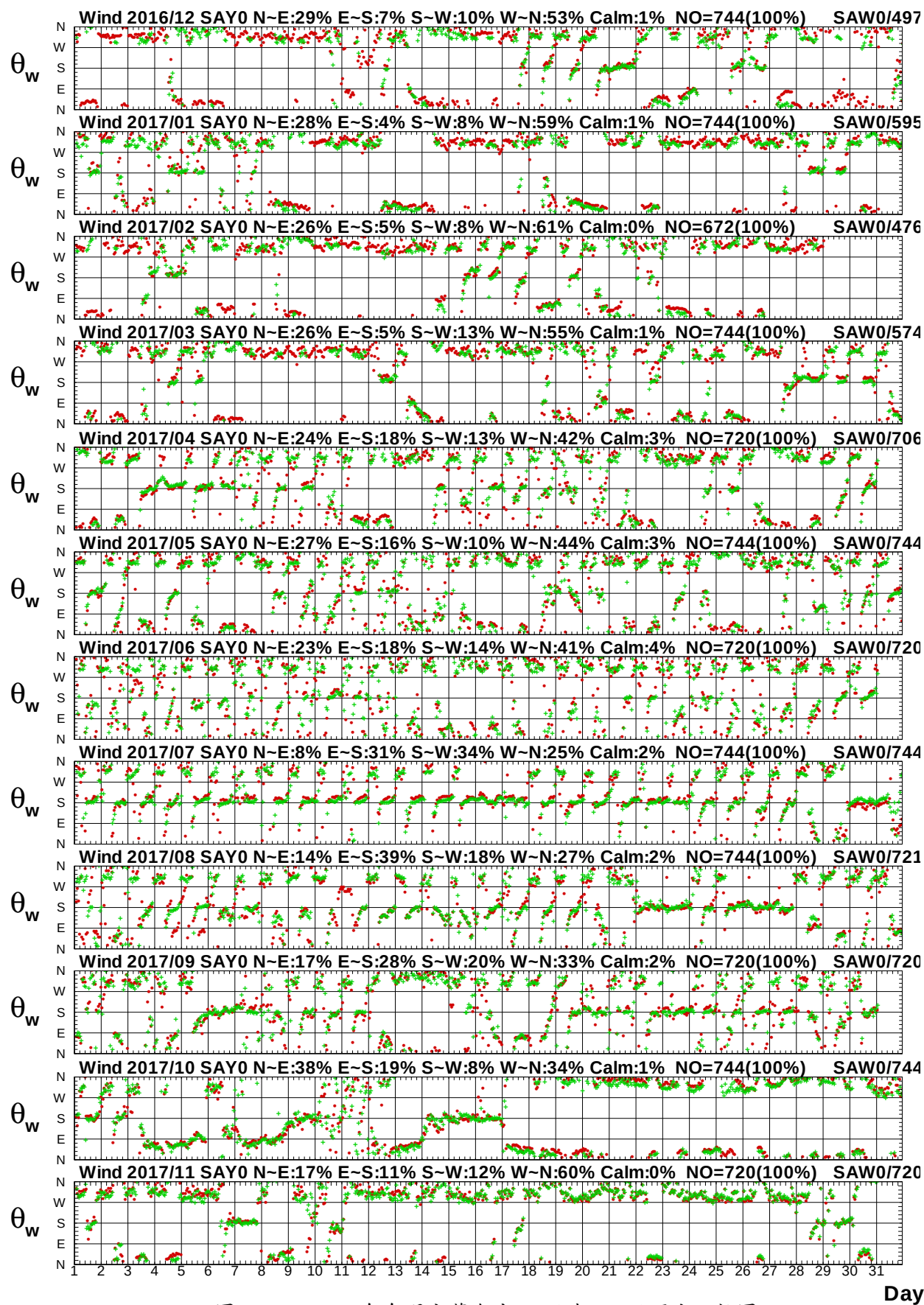


圖1.24b 2017年每月宜蘭海域 Y 站與 W 站風向比較圖

W16CSAY0.1HA W16CSAW0.1H0 W171SAY0.1HA W171SAW0.1H0 W172SAY0.1HA W172SAW0.1H0
W173SAY0.1HA W173SAW0.1H0 W174SAY0.1HA W174SAW0.1H0 W175SAY0.1HA W175SAW0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

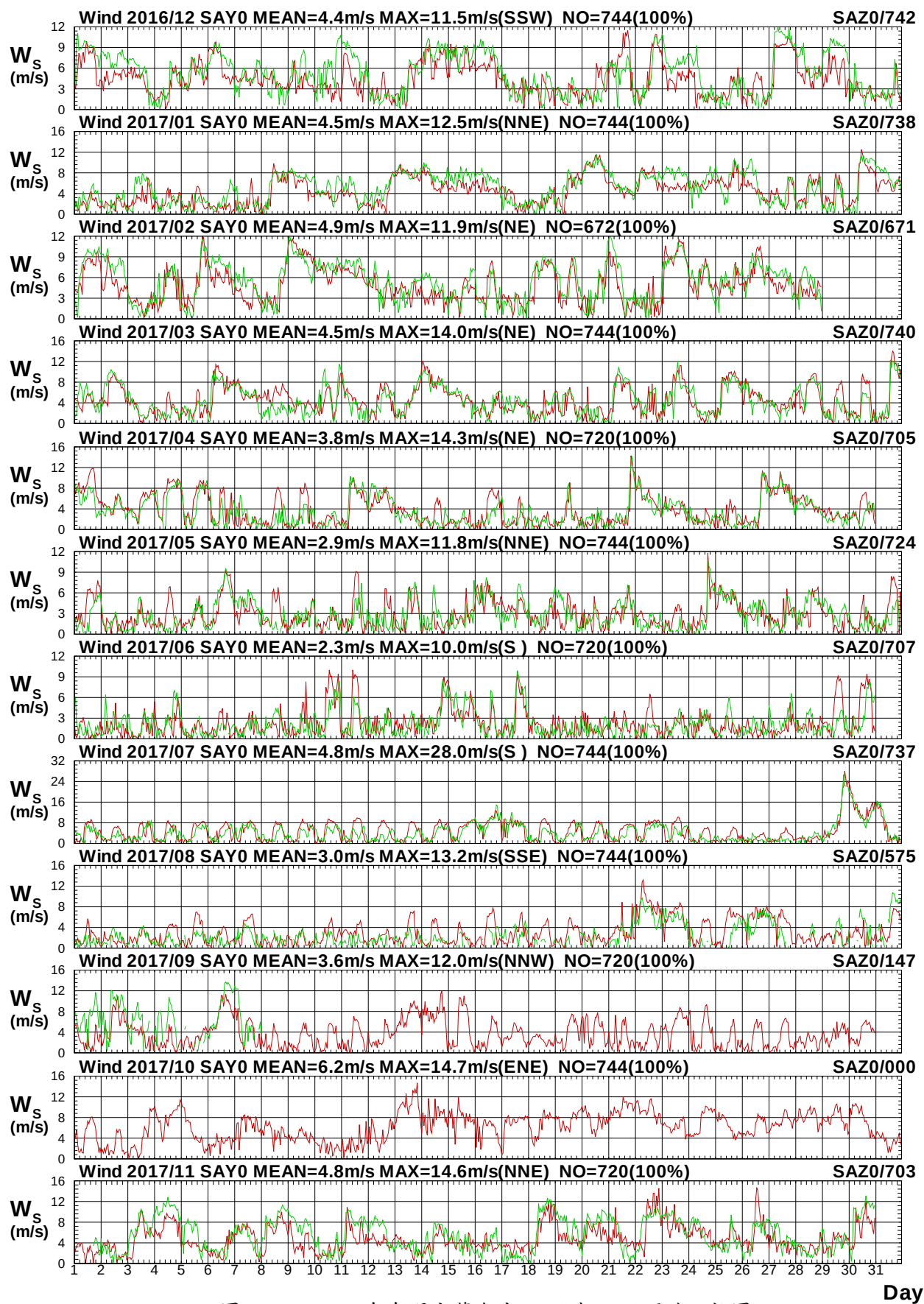


圖1.25a 2017年每月宜蘭海域 Y 站與 Z 站風速比較圖

W16CSAY0.1HA W16CSAZ0.1H0 W171SAY0.1HA W171SAZ0.1H0 W172SAY0.1HA W172SAZ0.1H0
W173SAY0.1HA W173SAZ0.1H0 W174SAY0.1HA W174SAZ0.1H0 W175SAY0.1HA W175SAZ0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

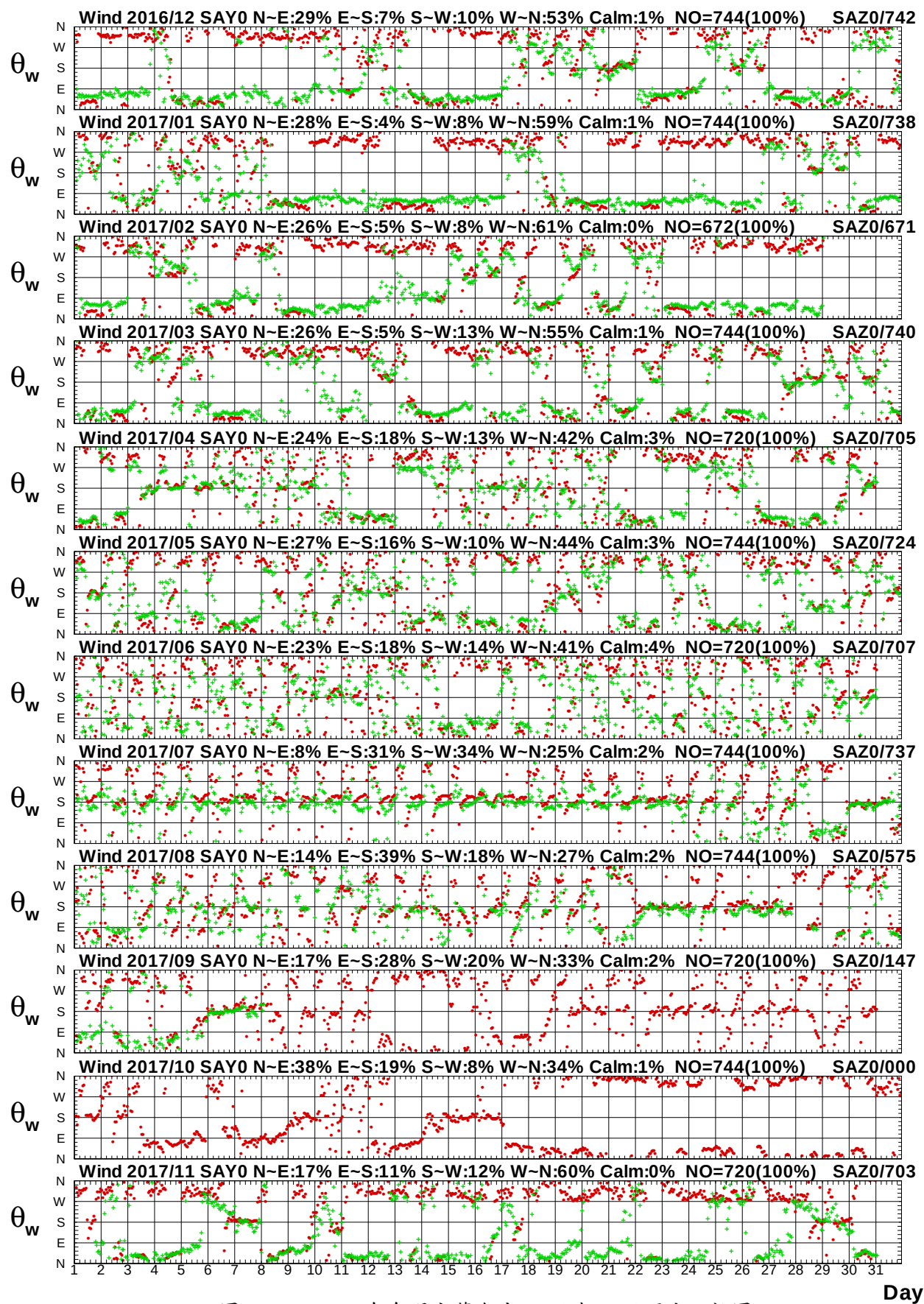


圖1.25b 2017年每月宜蘭海域 Y 站與 Z 站風向比較圖

W16CSAY0.1HA W16CSAZ0.1H0 W171SAY0.1HA W171SAZ0.1H0 W172SAY0.1HA W172SAZ0.1H0
W173SAY0.1HA W173SAZ0.1H0 W174SAY0.1HA W174SAZ0.1H0 W175SAY0.1HA W175SAZ0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

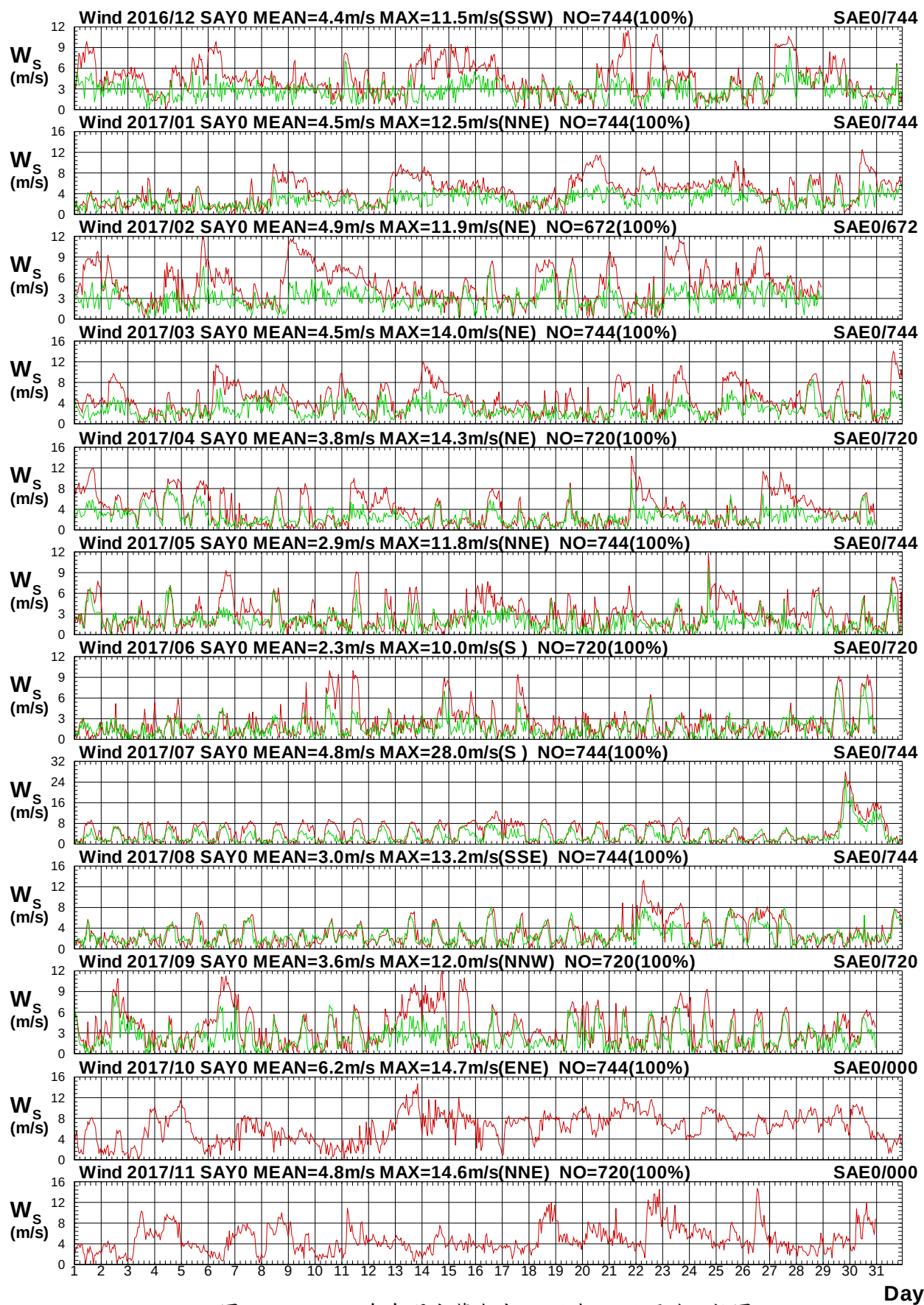


圖1.26a 2017年每月宜蘭海域 Y 站與 E 站風速比較圖

W16CSAY0.1HA W16CSAE0.1H0 W171SAY0.1HA W171SAE0.1H0 W172SAY0.1HA W172SAE0.1H0
W173SAY0.1HA W173SAE0.1H0 W174SAY0.1HA W174SAE0.1H0 W175SAY0.1HA W175SAE0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

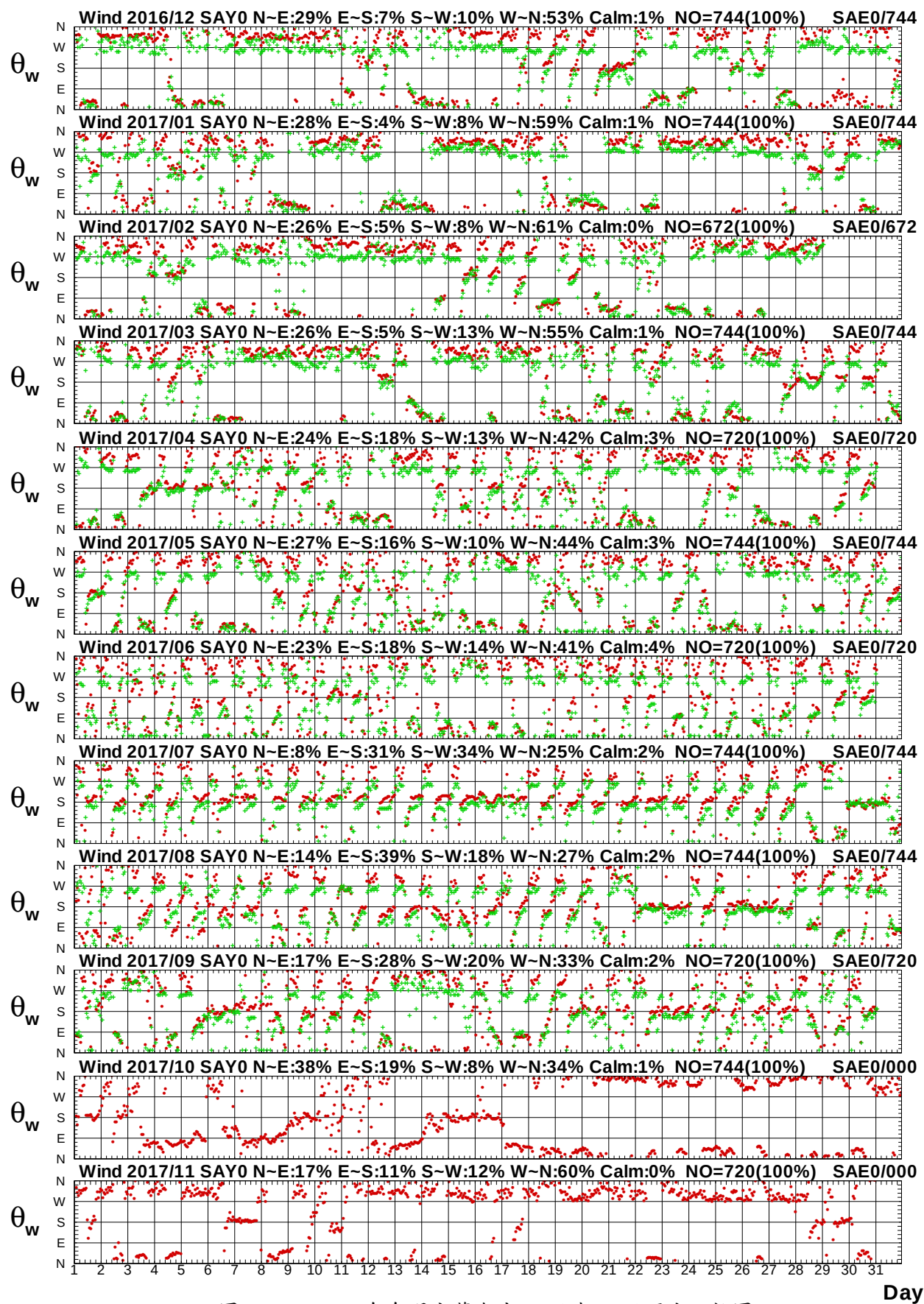


圖1.26b 2017年每月宜蘭海域 Y 站與 E 站風向比較圖

W16CSAY0.1HA W16CSAE0.1H0 W171SAY0.1HA W171SAE0.1H0 W172SAY0.1HA W172SAE0.1H0
W173SAY0.1HA W173SAE0.1H0 W174SAY0.1HA W174SAE0.1H0 W175SAY0.1HA W175SAE0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

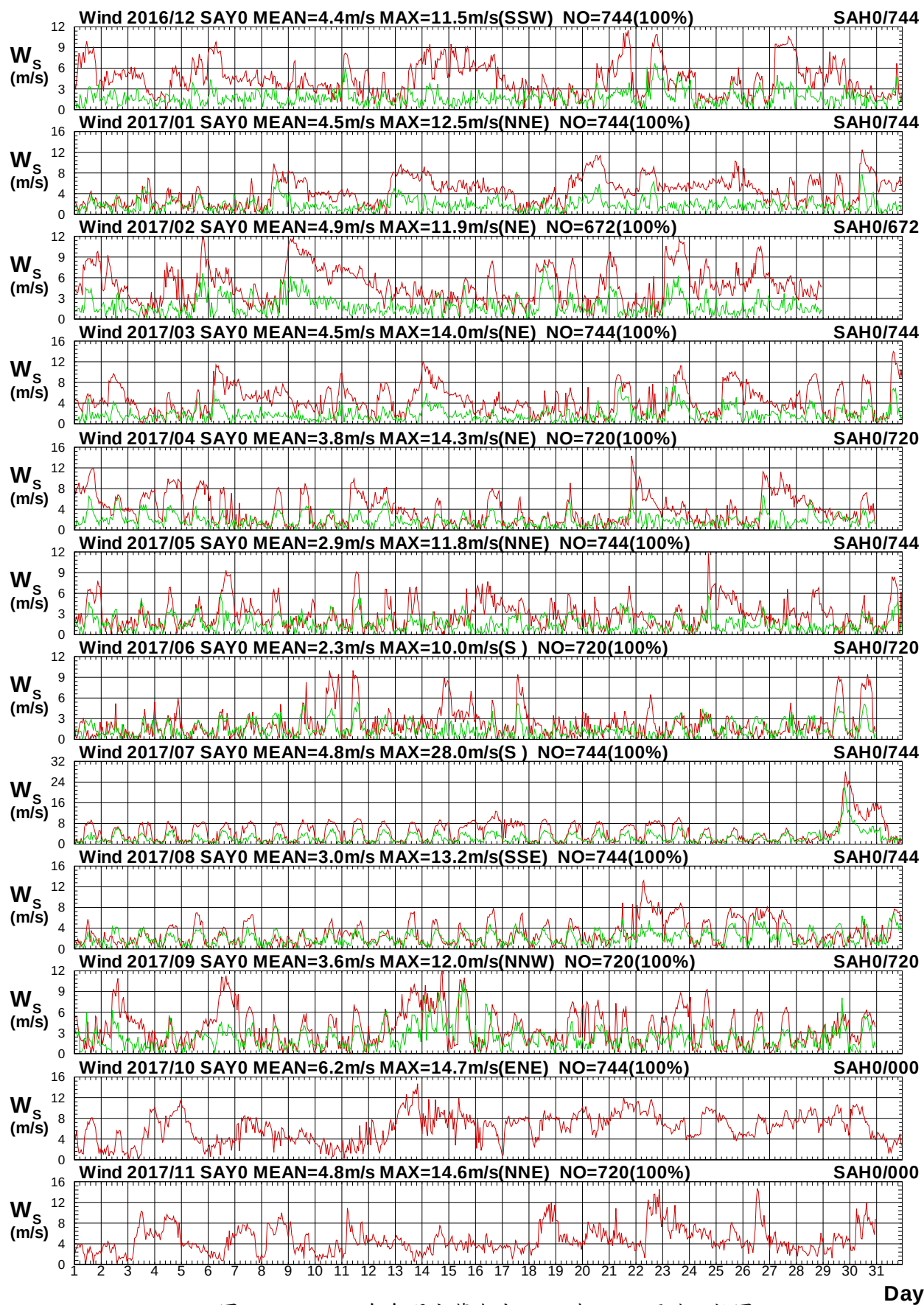


圖1.27a 2017年每月宜蘭海域 Y 站與 H 站風速比較圖

W16CSAY0.1HA W16CSAH0.1H0 W171SAY0.1HA W171SAH0.1H0 W172SAY0.1HA W172SAH0.1H0
W173SAY0.1HA W173SAH0.1H0 W174SAY0.1HA W174SAH0.1H0 W175SAY0.1HA W175SAH0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

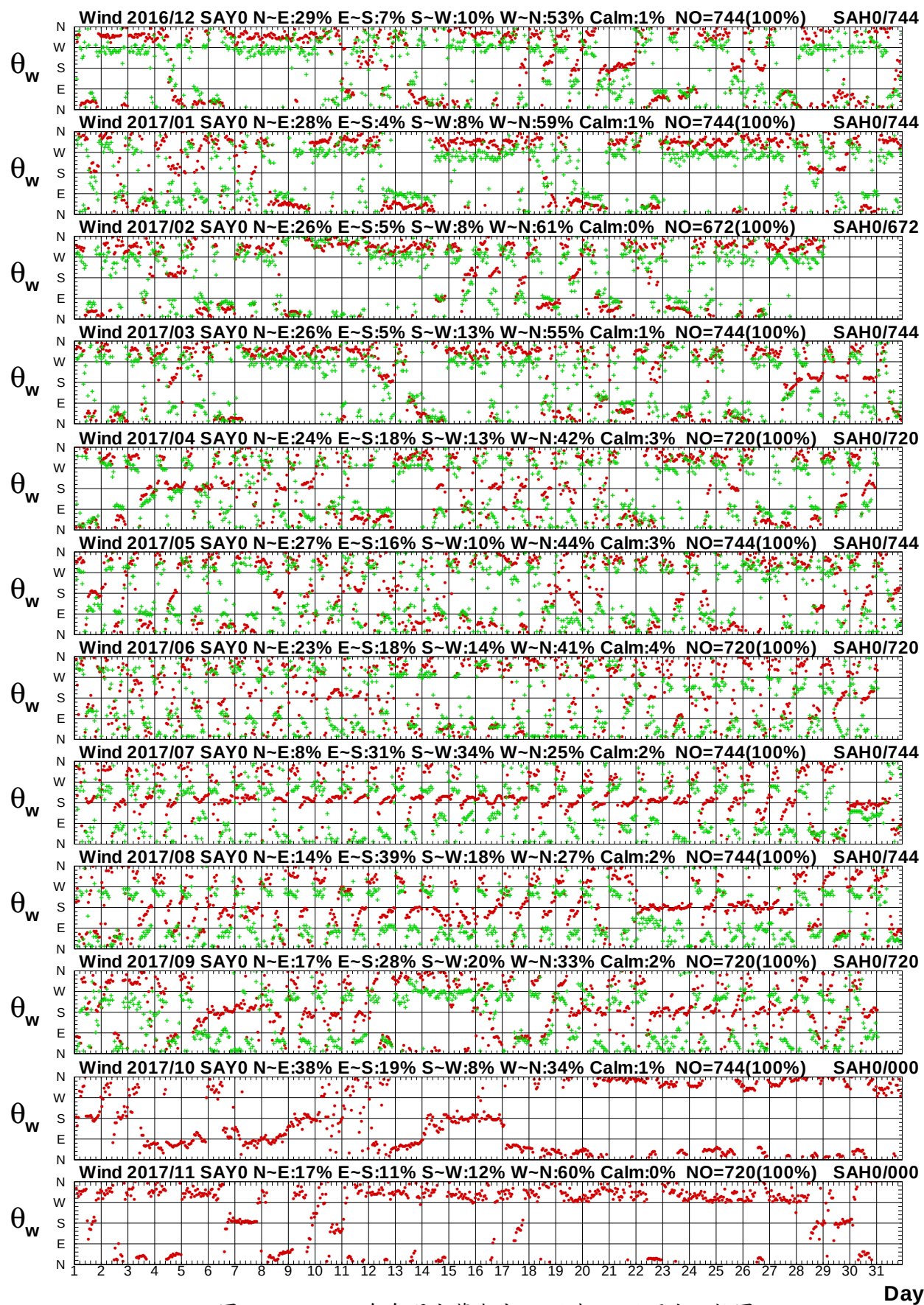


圖1.27b 2017年每月宜蘭海域 Y 站與 H 站風向比較圖

W16CSAY0.1HA W16CSAH0.1H0 W171SAY0.1HA W171SAH0.1H0 W172SAY0.1HA W172SAH0.1H0
W173SAY0.1HA W173SAH0.1H0 W174SAY0.1HA W174SAH0.1H0 W175SAY0.1HA W175SAH0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

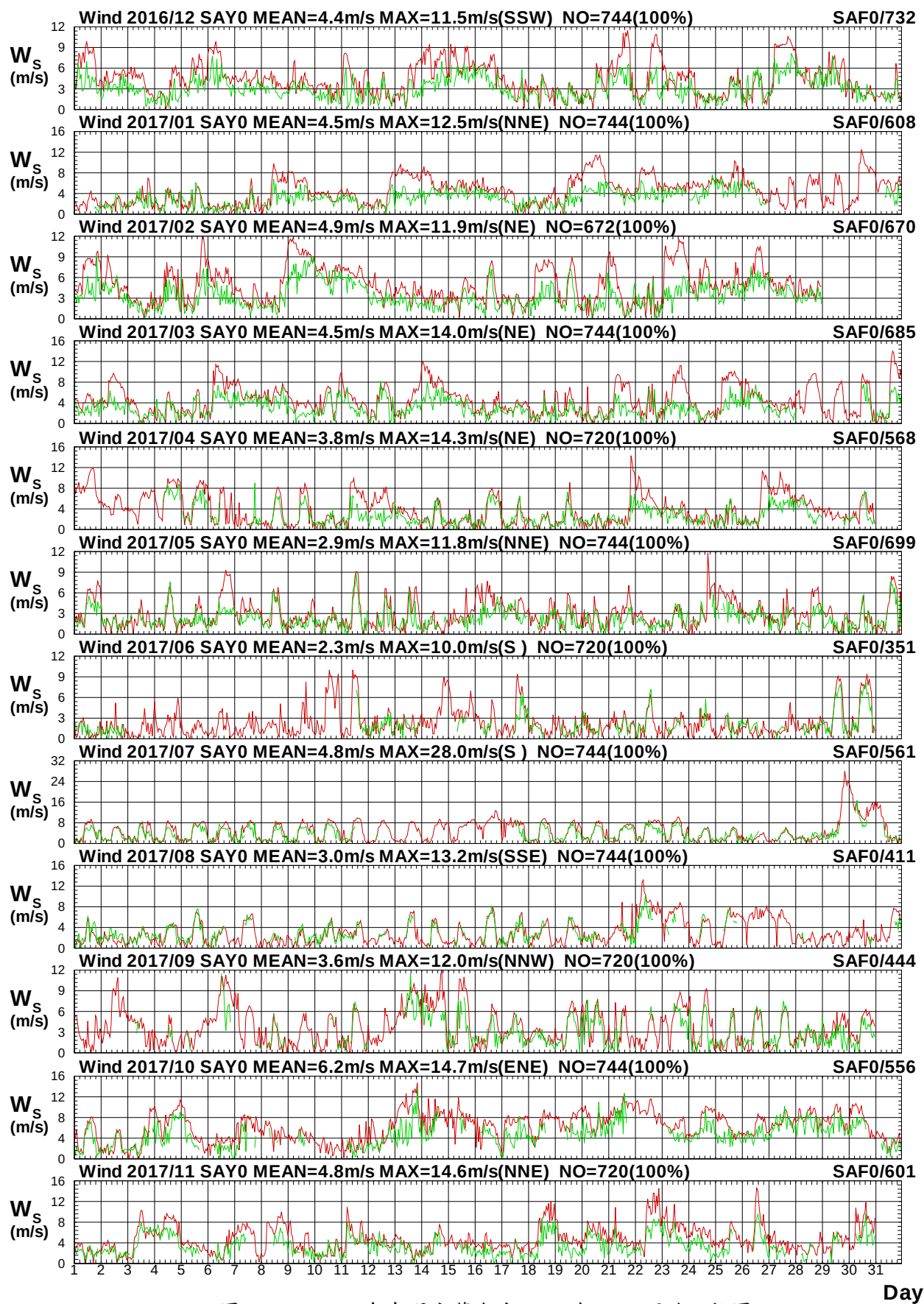


圖1.28a 2017年每月宜蘭海域 Y 站與 F 站風速比較圖

W16CSAY0.1HA W16CSAF0.1H0 W171SAY0.1HA W171SAF0.1H0 W172SAY0.1HA W172SAF0.1H0
W173SAY0.1HA W173SAF0.1H0 W174SAY0.1HA W174SAF0.1H0 W175SAY0.1HA W175SAF0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

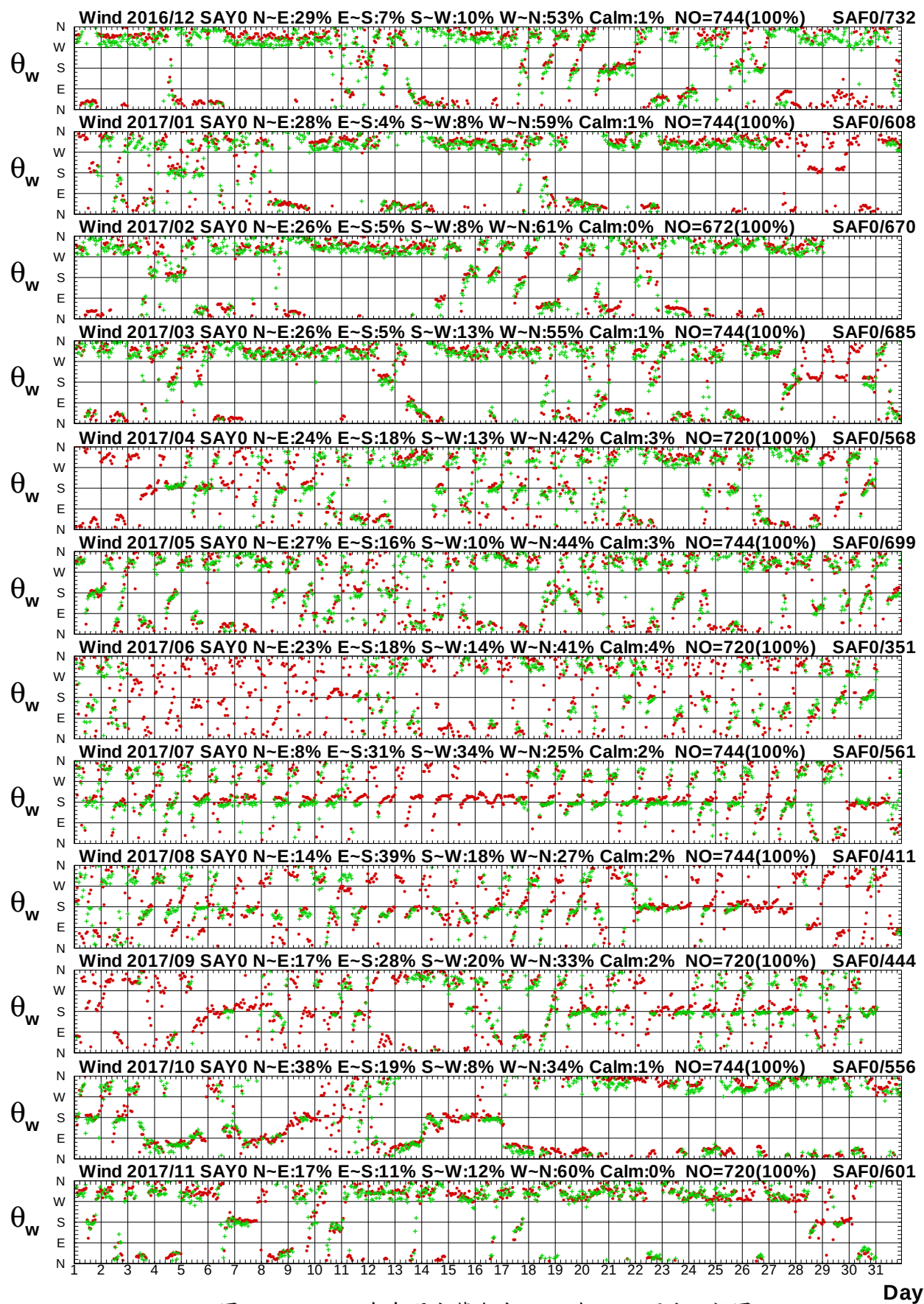


圖1.28b 2017年每月宜蘭海域 Y 站與 F 站風向比較圖

W16CSAY0.1HA W16CSAF0.1H0 W171SAY0.1HA W171SAF0.1H0 W172SAY0.1HA W172SAF0.1H0
W173SAY0.1HA W173SAF0.1H0 W174SAY0.1HA W174SAF0.1H0 W175SAY0.1HA W175SAF0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

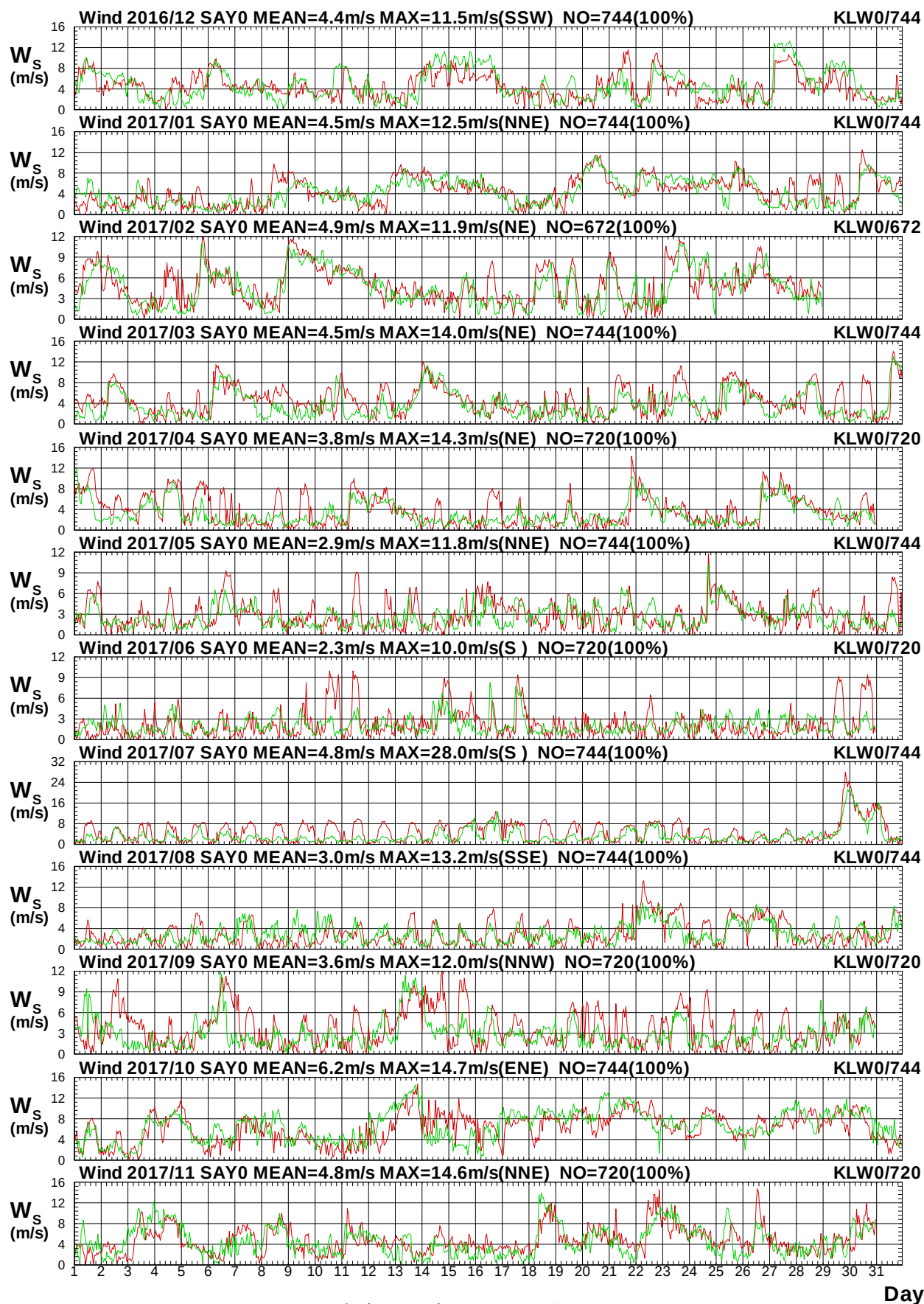


圖1.29a 2017年每月宜蘭海域 Y 站與北端海域 W 站風速圖

W16CSAY0.1HA W16CKLW0.1H0 W171SAY0.1HA W171KLW0.1H0 W172SAY0.1HA W172KLW0.1H0
W173SAY0.1HA W173KLW0.1H0 W174SAY0.1HA W174KLW0.1H0 W175SAY0.1HA W175KLW0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

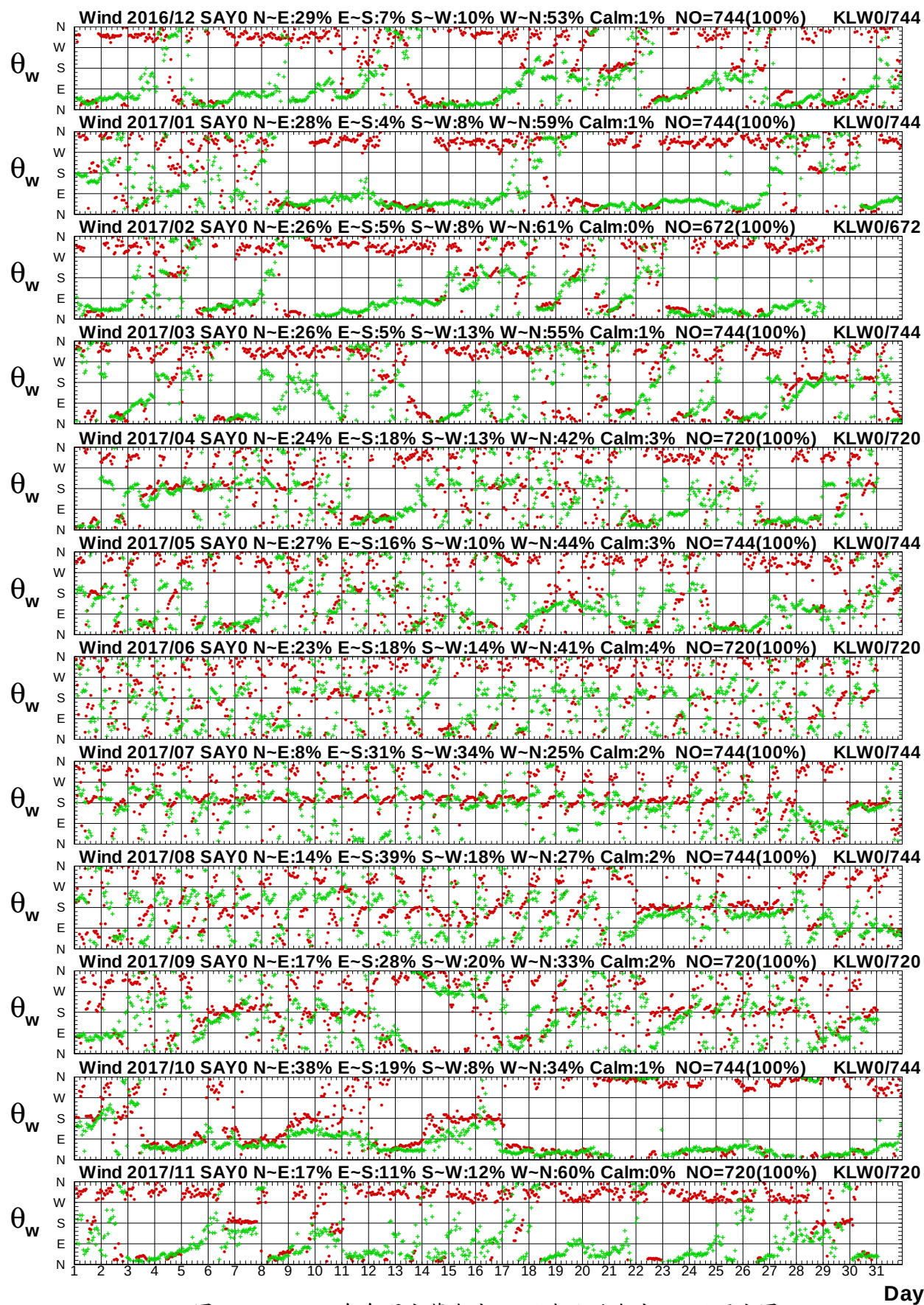


圖1.29b 2017年每月宜蘭海域 Y 站與北端海域 W 站風向圖

W16CSAY0.1HA W16CKLW0.1H0 W171SAY0.1HA W171KLW0.1H0 W172SAY0.1HA W172KLW0.1H0

W173SAY0.1HA W173KLW0.1H0 W174SAY0.1HA W174KLW0.1H0 W175SAY0.1HA W175KLW0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

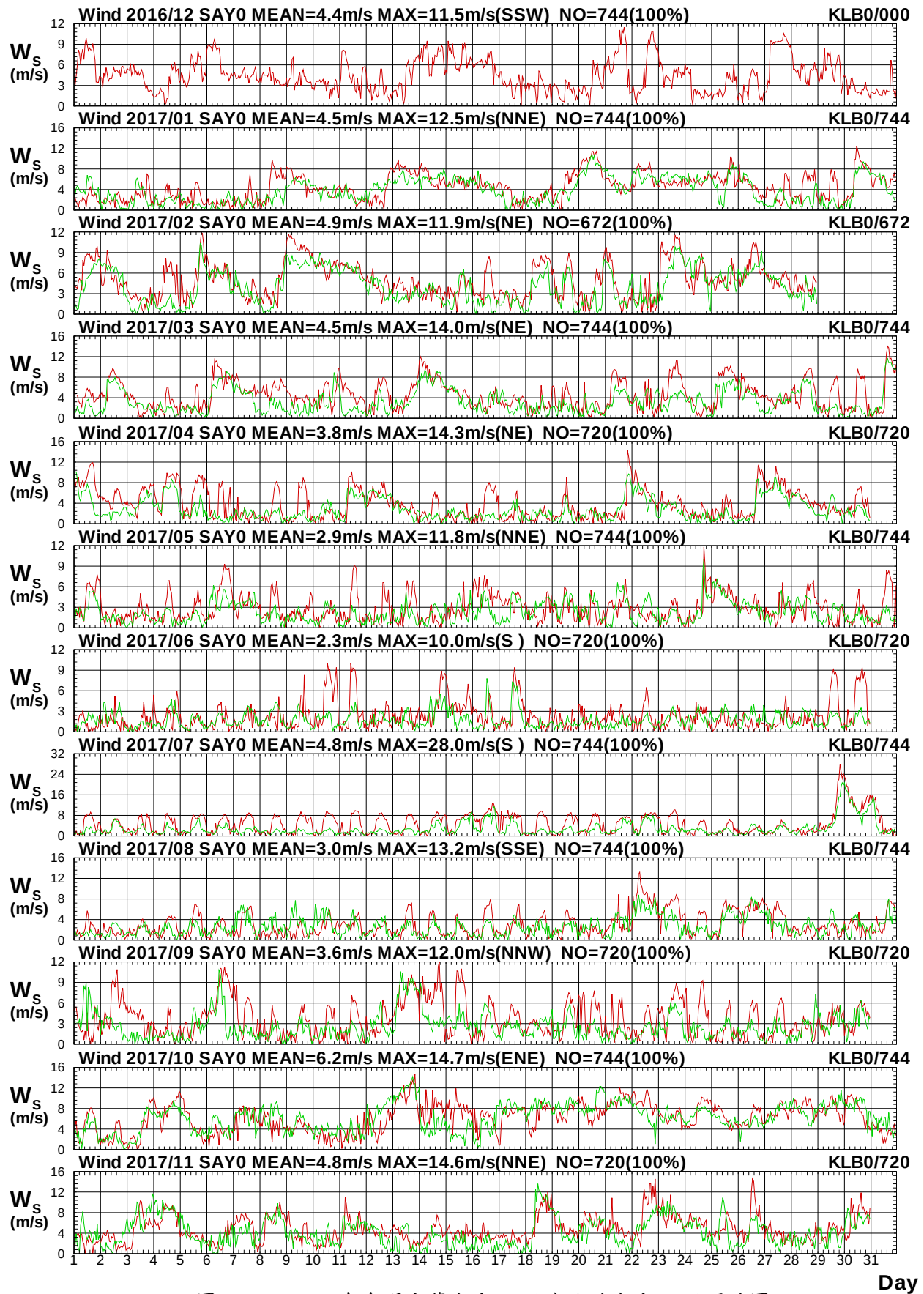


圖1.30a 2017年每月宜蘭海域 Y 站與北端海域 B 站風速圖

W16CSAY0.1HA W16CKLB0.1H0 W171SAY0.1HA W171KLB0.1H0 W172SAY0.1HA W172KLB0.1H0
W173SAY0.1HA W173KLB0.1H0 W174SAY0.1HA W174KLB0.1H0 W175SAY0.1HA W175KLB0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

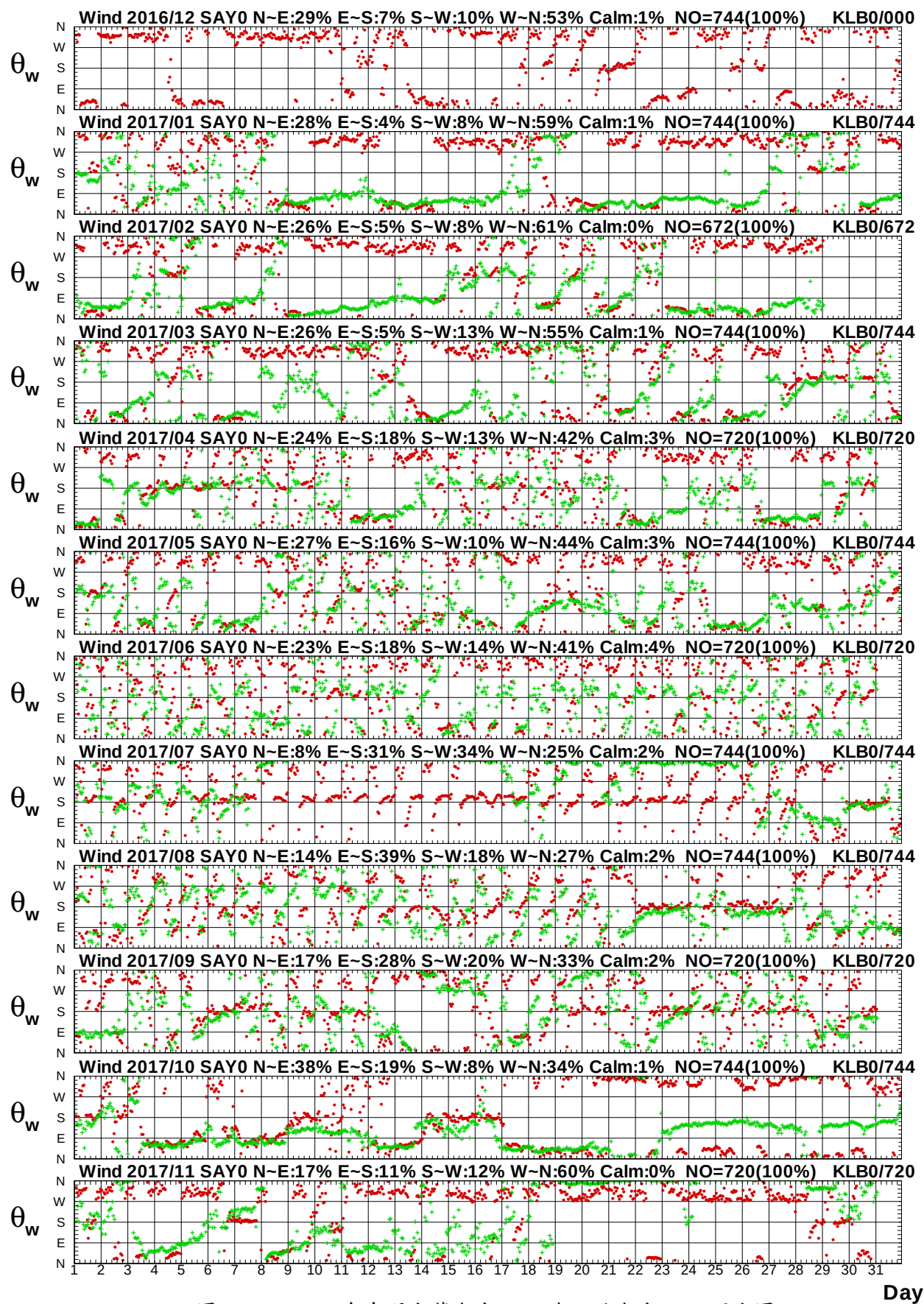


圖1.30b 2017年每月宜蘭海域 Y 站與北端海域 B 站風向圖

W16CSAY0.1HA W16CKLB0.1H0 W171SAY0.1HA W171KLB0.1H0 W172SAY0.1HA W172KLB0.1H0
W173SAY0.1HA W173KLB0.1H0 W174SAY0.1HA W174KLB0.1H0 W175SAY0.1HA W175KLB0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

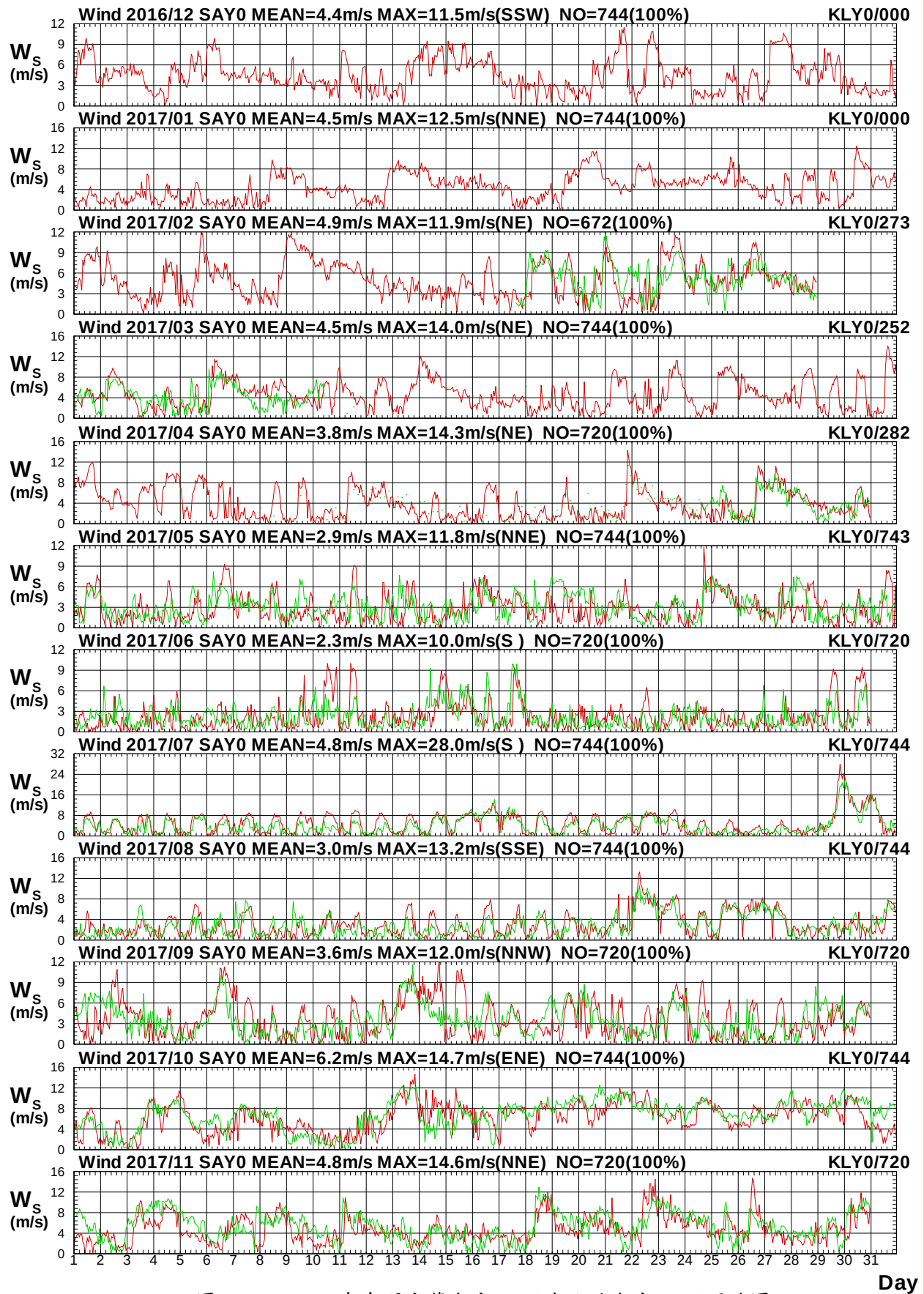


圖1.31a 2017年每月宜蘭海域 Y 站與北端海域 Y 站風速圖

W16CSAY0.1HA W16CKLY0.1H0 W171SAY0.1HA W171KLY0.1H0 W172SAY0.1HA W172KLY0.1H0
W173SAY0.1HA W173KLY0.1H0 W174SAY0.1HA W174KLY0.1H0 W175SAY0.1HA W175KLY0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

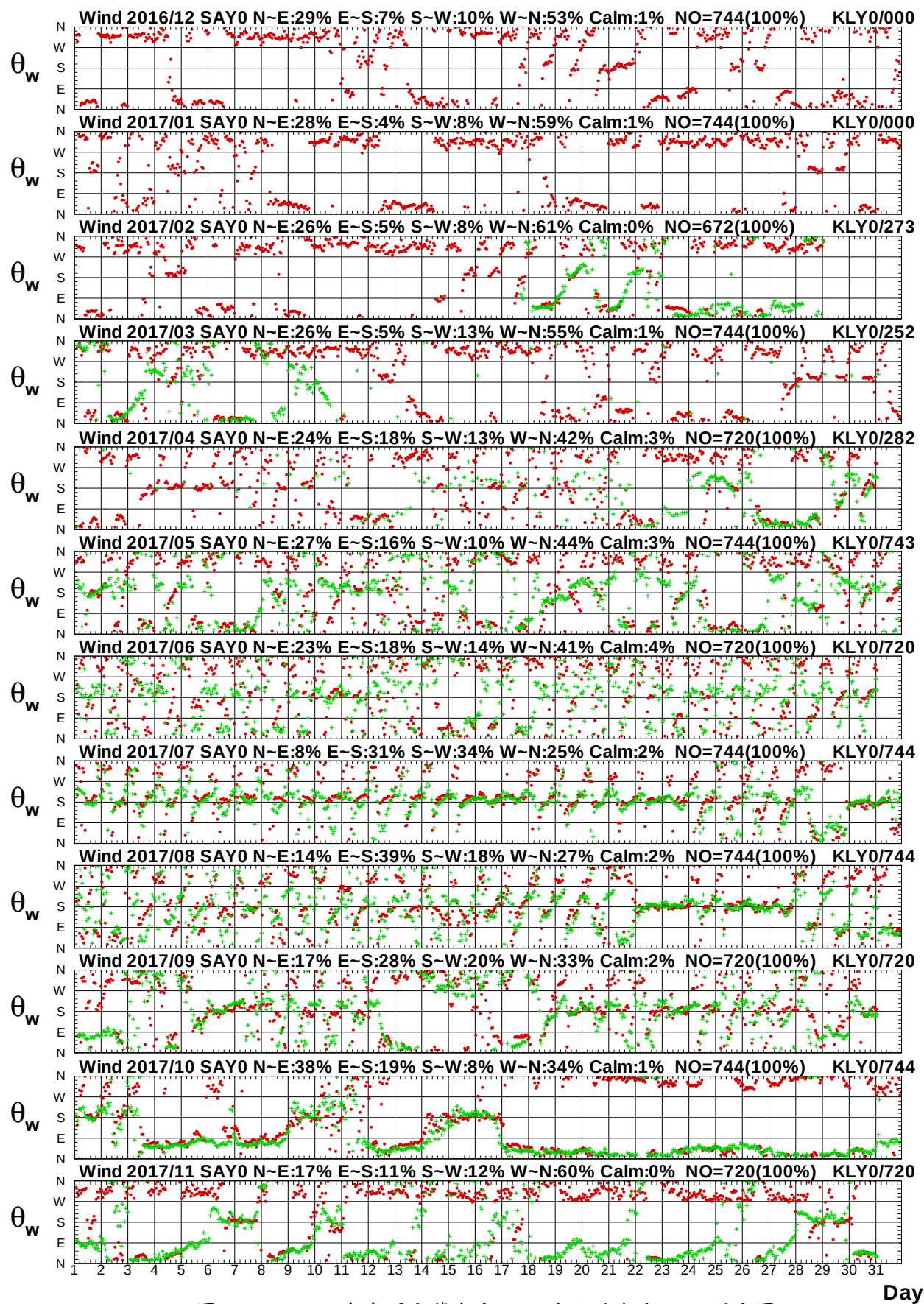


圖1.31b 2017年每月宜蘭海域 Y 站與北端海域 Y 站風向圖

W16CSAY0.1HA W16CKLY0.1H0 W171SAY0.1HA W171KLY0.1H0 W172SAY0.1HA W172KLY0.1H0
W173SAY0.1HA W173KLY0.1H0 W174SAY0.1HA W174KLY0.1H0 W175SAY0.1HA W175KLY0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

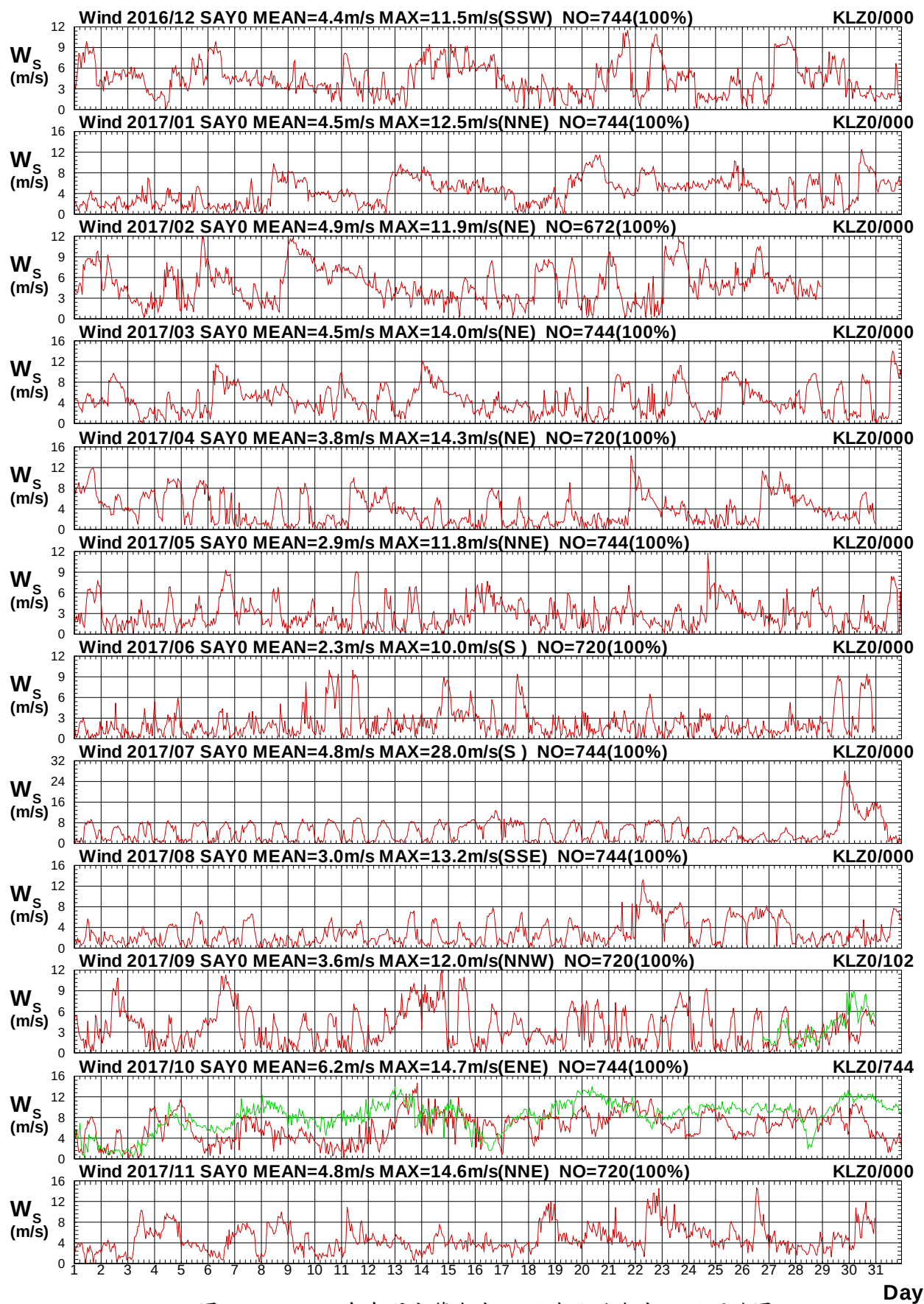


圖1.32a 2017年每月宜蘭海域 Y 站與北端海域 Z 站風速圖

W16CSAY0.1HA W16CKLZ0.1H0 W171SAY0.1HA W171KLZ0.1H0 W172SAY0.1HA W172KLZ0.1H0
W173SAY0.1HA W173KLZ0.1H0 W174SAY0.1HA W174KLZ0.1H0 W175SAY0.1HA W175KLZ0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

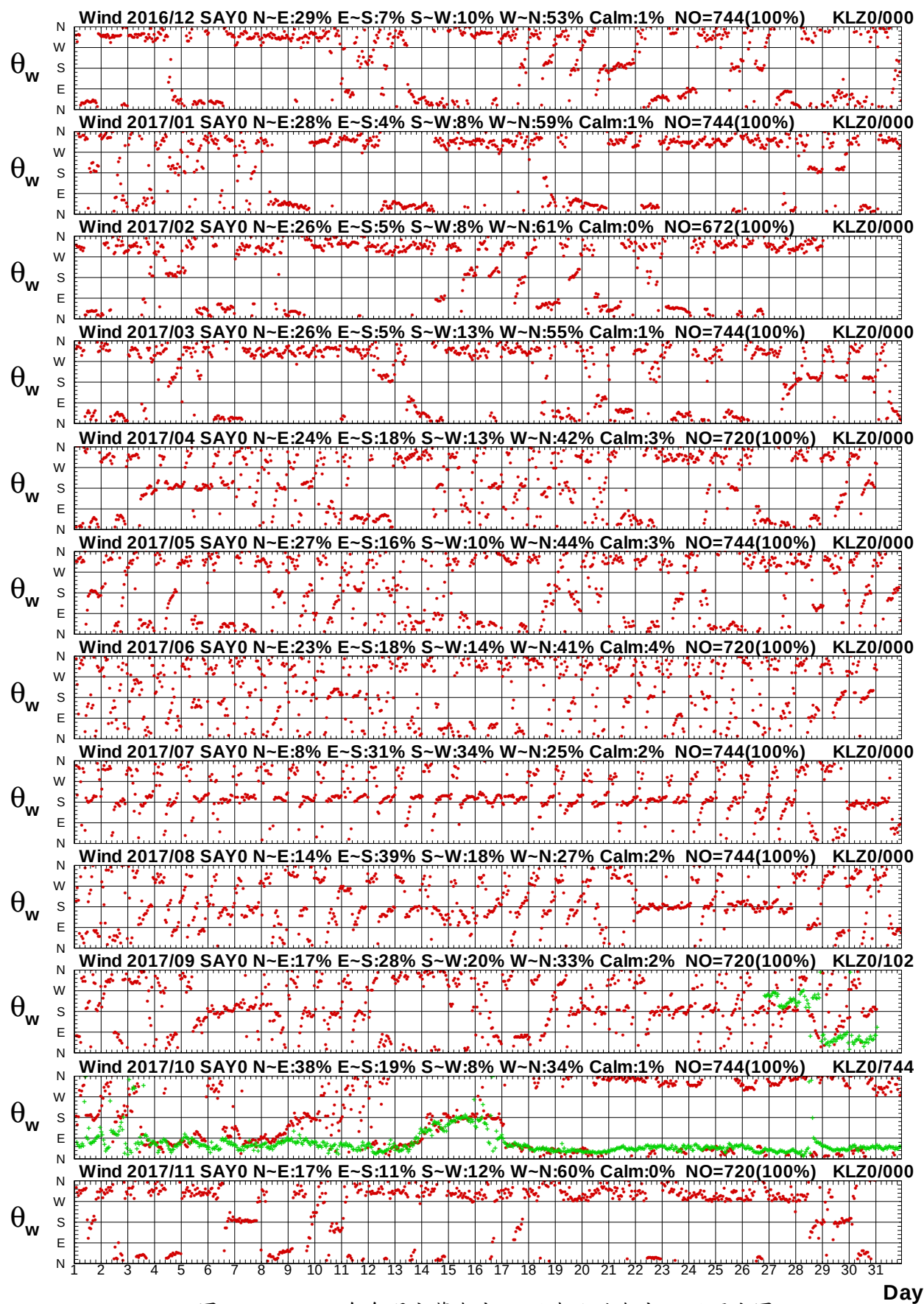


圖1.32b 2017年每月宜蘭海域 Y 站與北端海域 Z 站風向圖

W16CSAY0.1HA W16CKLZ0.1H0 W171SAY0.1HA W171KLZ0.1H0 W172SAY0.1HA W172KLZ0.1H0
W173SAY0.1HA W173KLZ0.1H0 W174SAY0.1HA W174KLZ0.1H0 W175SAY0.1HA W175KLZ0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

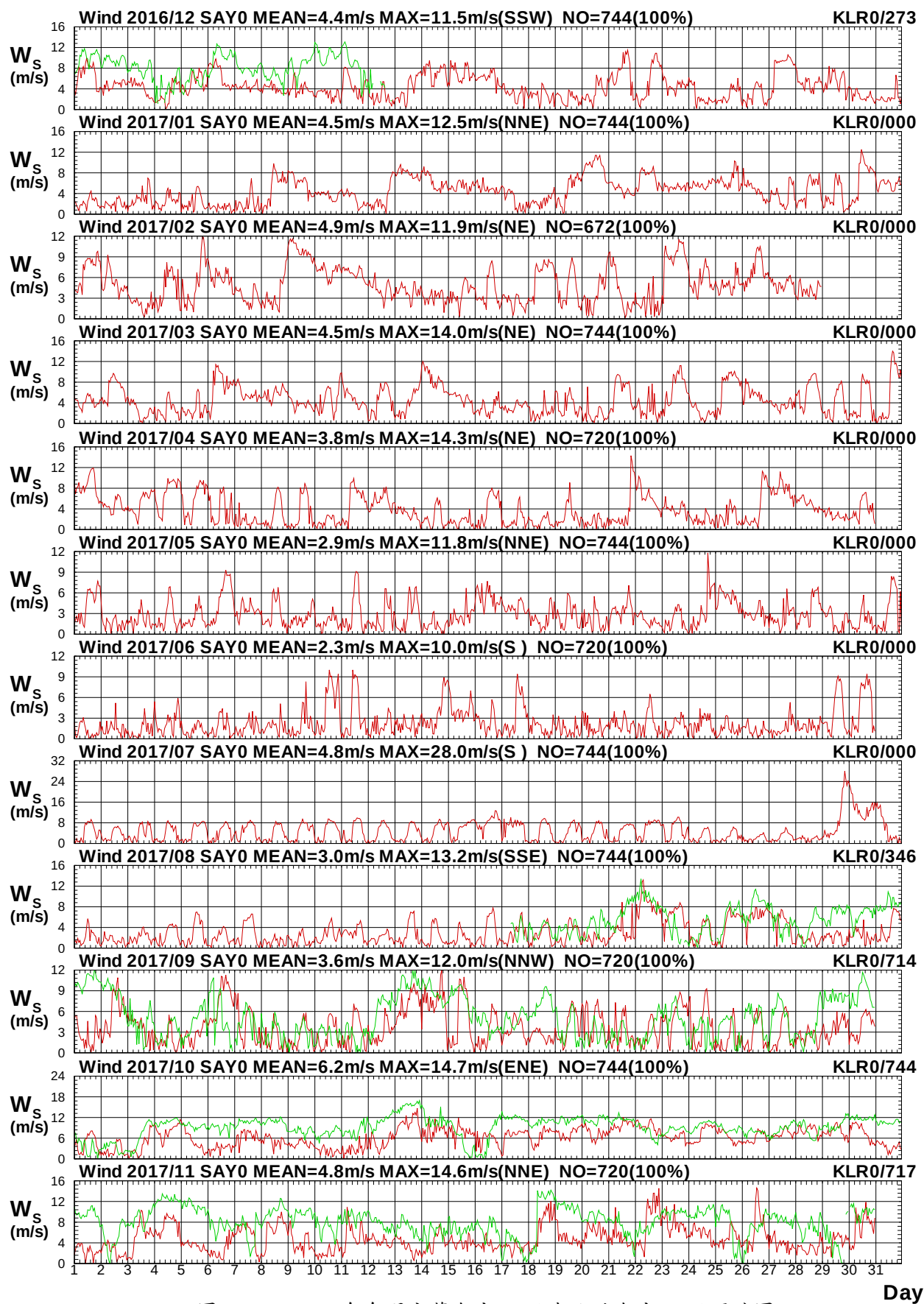


圖1.33a 2017年每月宜蘭海域 Y 站與北端海域 R 站風速圖

W16CSAY0.1HA W16CKLR0.1H0 W171SAY0.1HA W171KLR0.1H0 W172SAY0.1HA W172KLR0.1H0
W173SAY0.1HA W173KLR0.1H0 W174SAY0.1HA W174KLR0.1H0 W175SAY0.1HA W175KLR0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

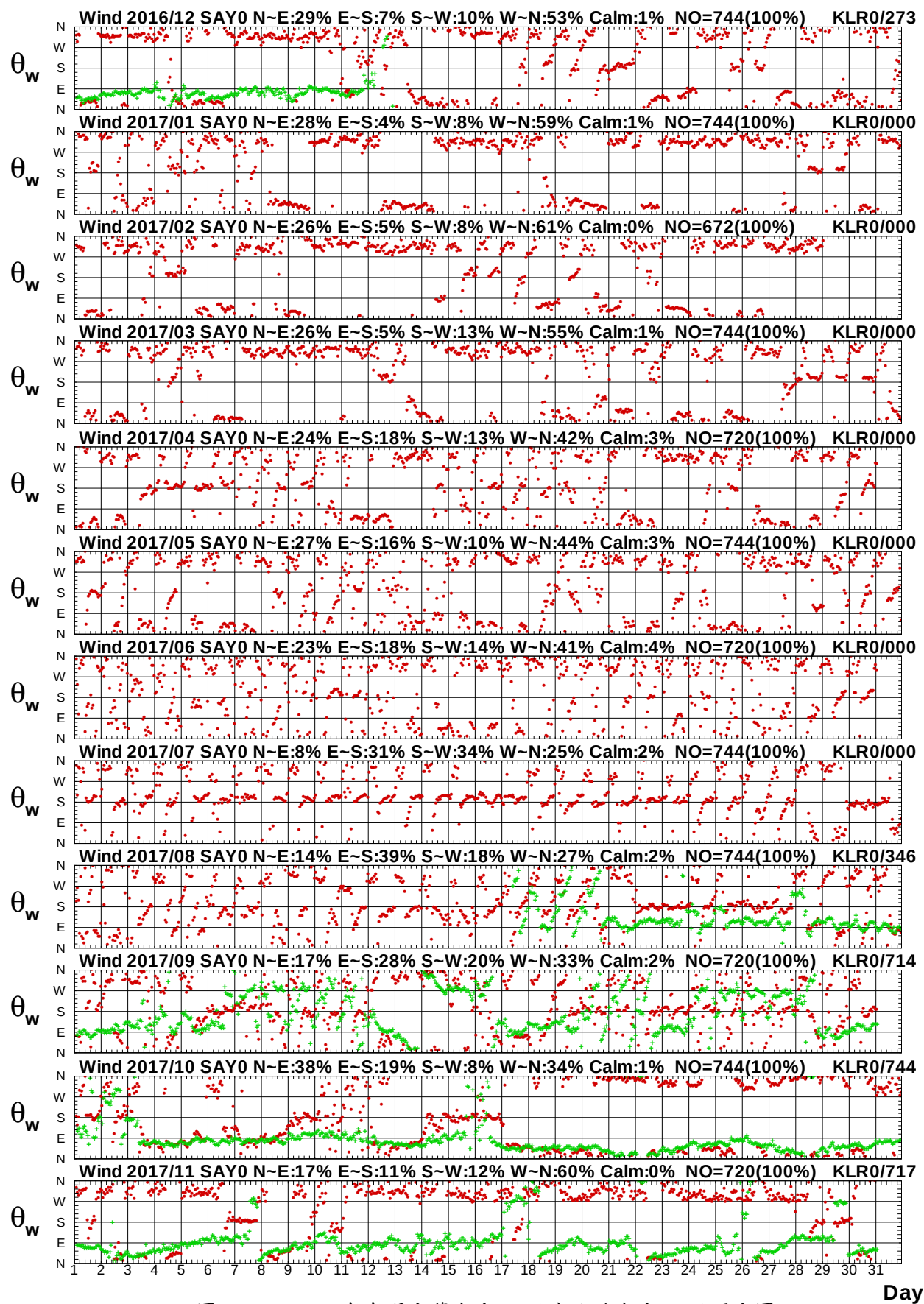


圖1.33b 2017年每月宜蘭海域 Y 站與北端海域 R 站風向圖

W16CSAY0.1HA W16CKLR0.1H0 W171SAY0.1HA W171KLR0.1H0 W172SAY0.1HA W172KLR0.1H0
W173SAY0.1HA W173KLR0.1H0 W174SAY0.1HA W174KLR0.1H0 W175SAY0.1HA W175KLR0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

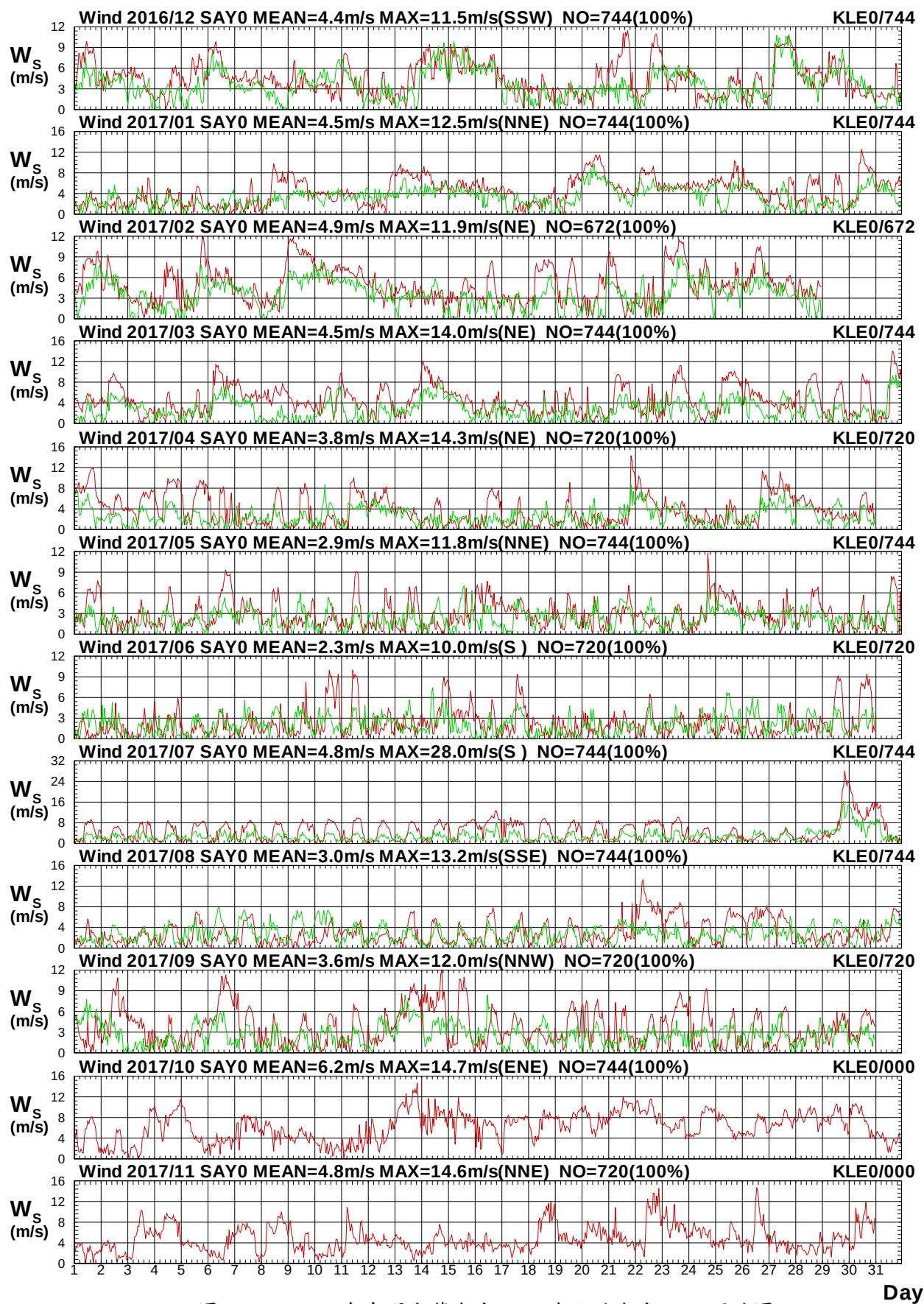


圖1.34a 2017年每月宜蘭海域 Y 站與北端海域 E 站風速圖

W16CSAY0.1HA W16CKLE0.1H0 W171SAY0.1HA W171KLE0.1H0 W172SAY0.1HA W172KLE0.1H0
W173SAY0.1HA W173KLE0.1H0 W174SAY0.1HA W174KLE0.1H0 W175SAY0.1HA W175KLE0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

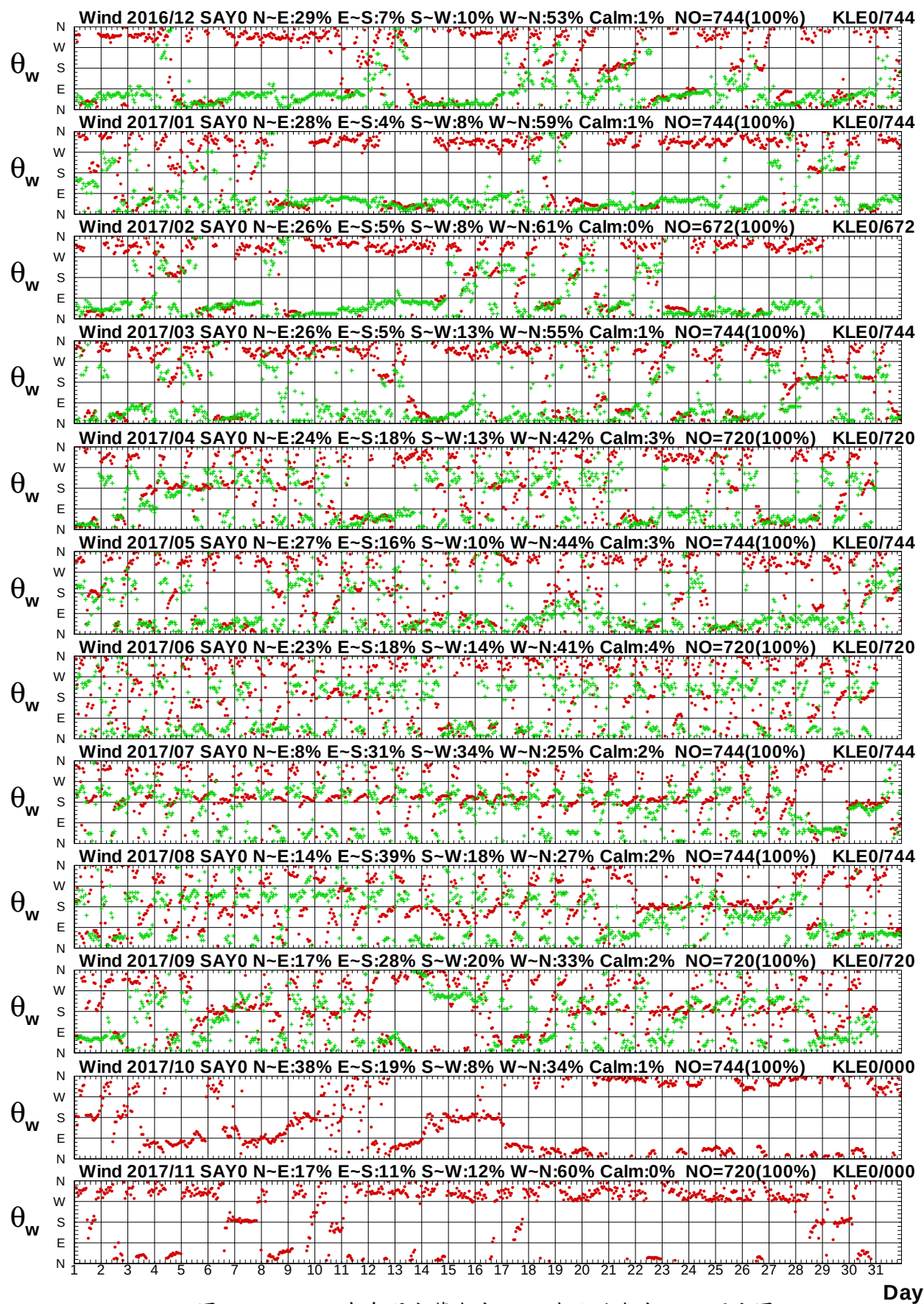


圖1.34b 2017年每月宜蘭海域 Y 站與北端海域 E 站風向圖

W16CSAY0.1HA W16CKLE0.1H0 W171SAY0.1HA W171KLE0.1H0 W172SAY0.1HA W172KLE0.1H0
W173SAY0.1HA W173KLE0.1H0 W174SAY0.1HA W174KLE0.1H0 W175SAY0.1HA W175KLE0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

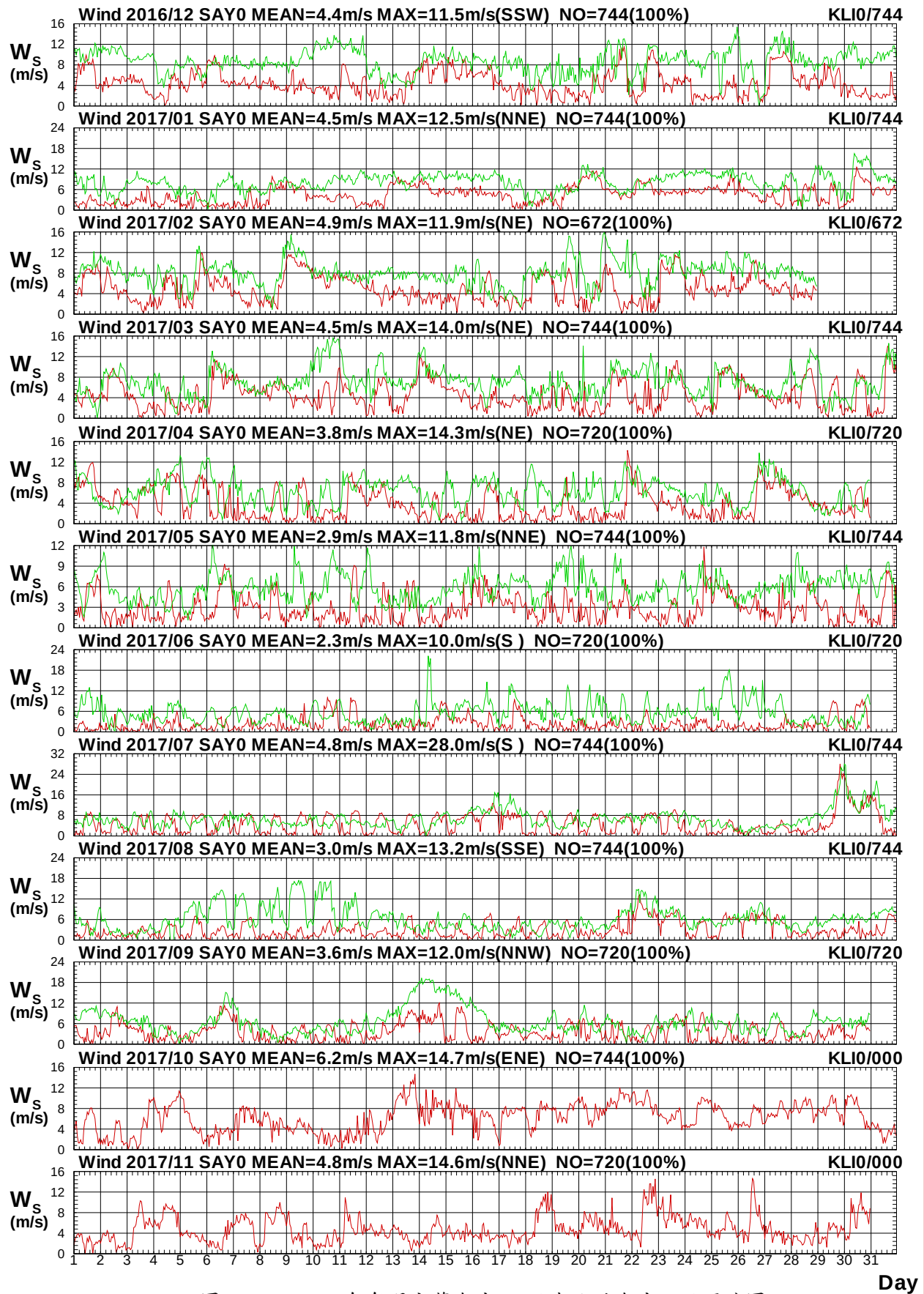


圖1.35a 2017年每月宜蘭海域 Y 站與北端海域 I 站風速圖

W16CSAY0.1HA W16CKLI0.1H0 W171SAY0.1HA W171KLI0.1H0 W172SAY0.1HA W172KLI0.1H0
W173SAY0.1HA W173KLI0.1H0 W174SAY0.1HA W174KLI0.1H0 W175SAY0.1HA W175KLI0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

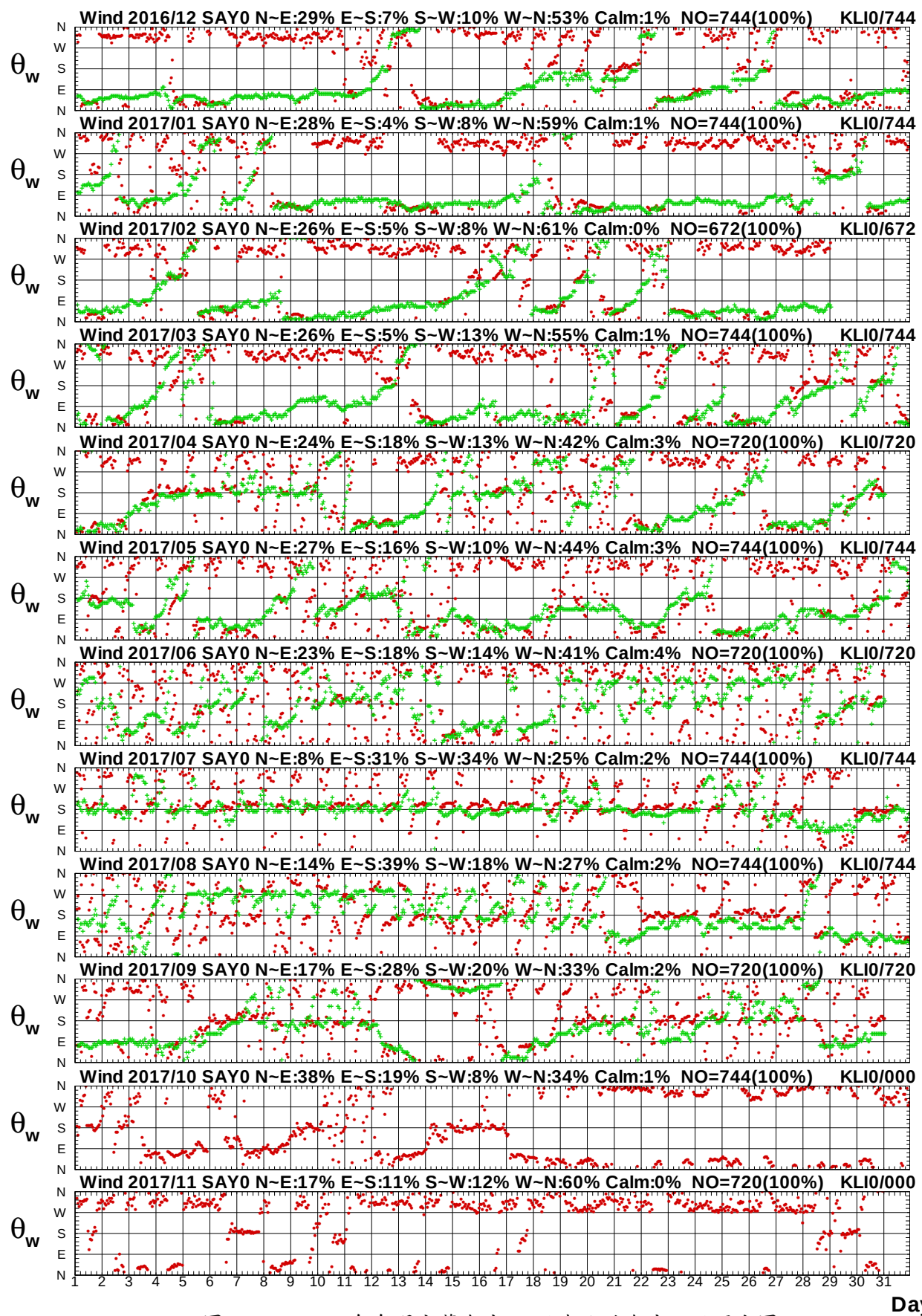


圖1.35b 2017年每月宜蘭海域 Y 站與北端海域 I 站風向圖

W16CSAY0.1HA W16CKLI0.1H0 W171SAY0.1HA W171KLI0.1H0 W172SAY0.1HA W172KLI0.1H0
W173SAY0.1HA W173KLI0.1H0 W174SAY0.1HA W174KLI0.1H0 W175SAY0.1HA W175KLI0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

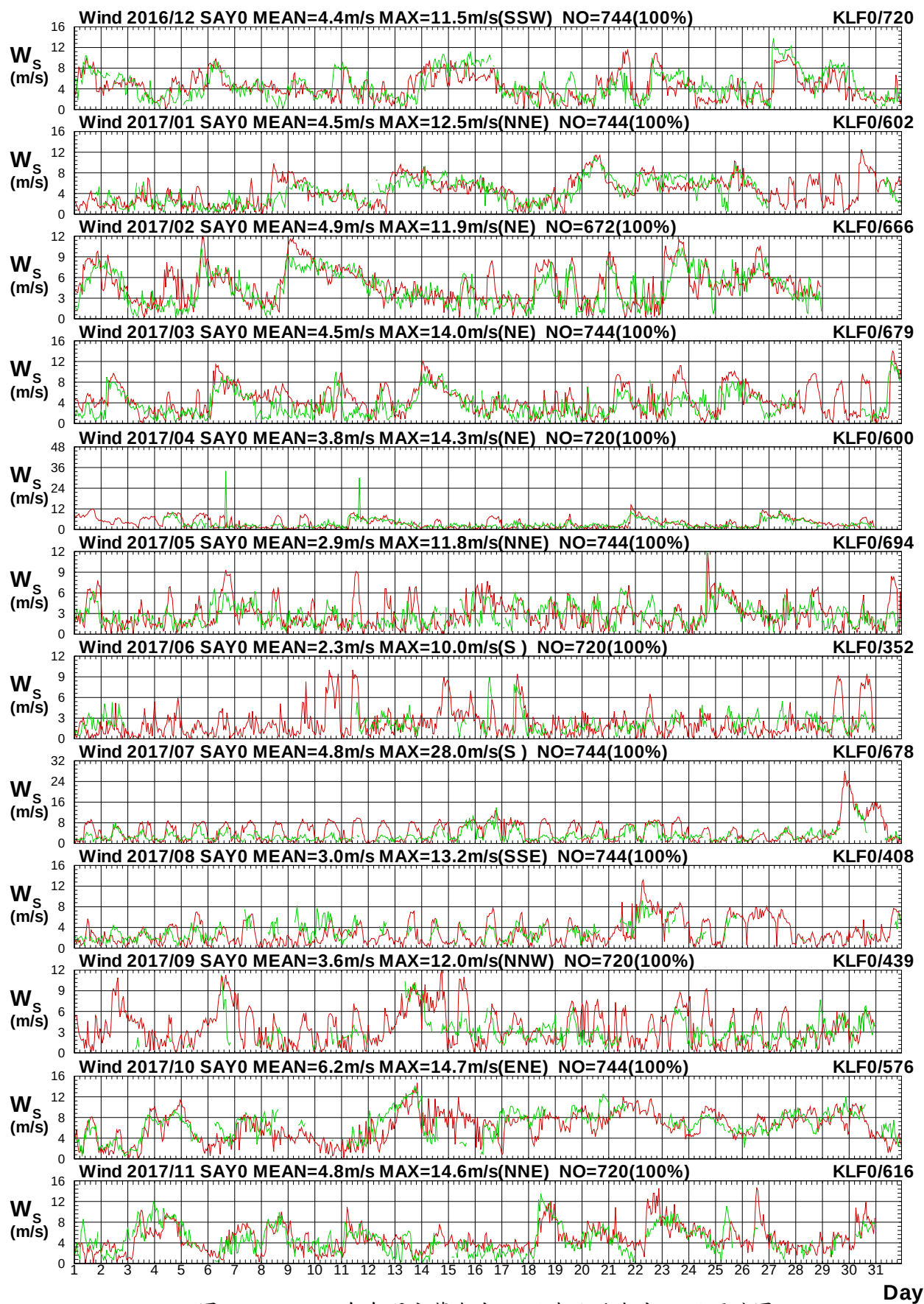


圖1.36a 2017年每月宜蘭海域 Y 站與北端海域 F 站風速圖

W16CSAY0.1HA W16CKLF0.1H0 W171SAY0.1HA W171KLF0.1H0 W172SAY0.1HA W172KLF0.1H0
W173SAY0.1HA W173KLF0.1H0 W174SAY0.1HA W174KLF0.1H0 W175SAY0.1HA W175KLF0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

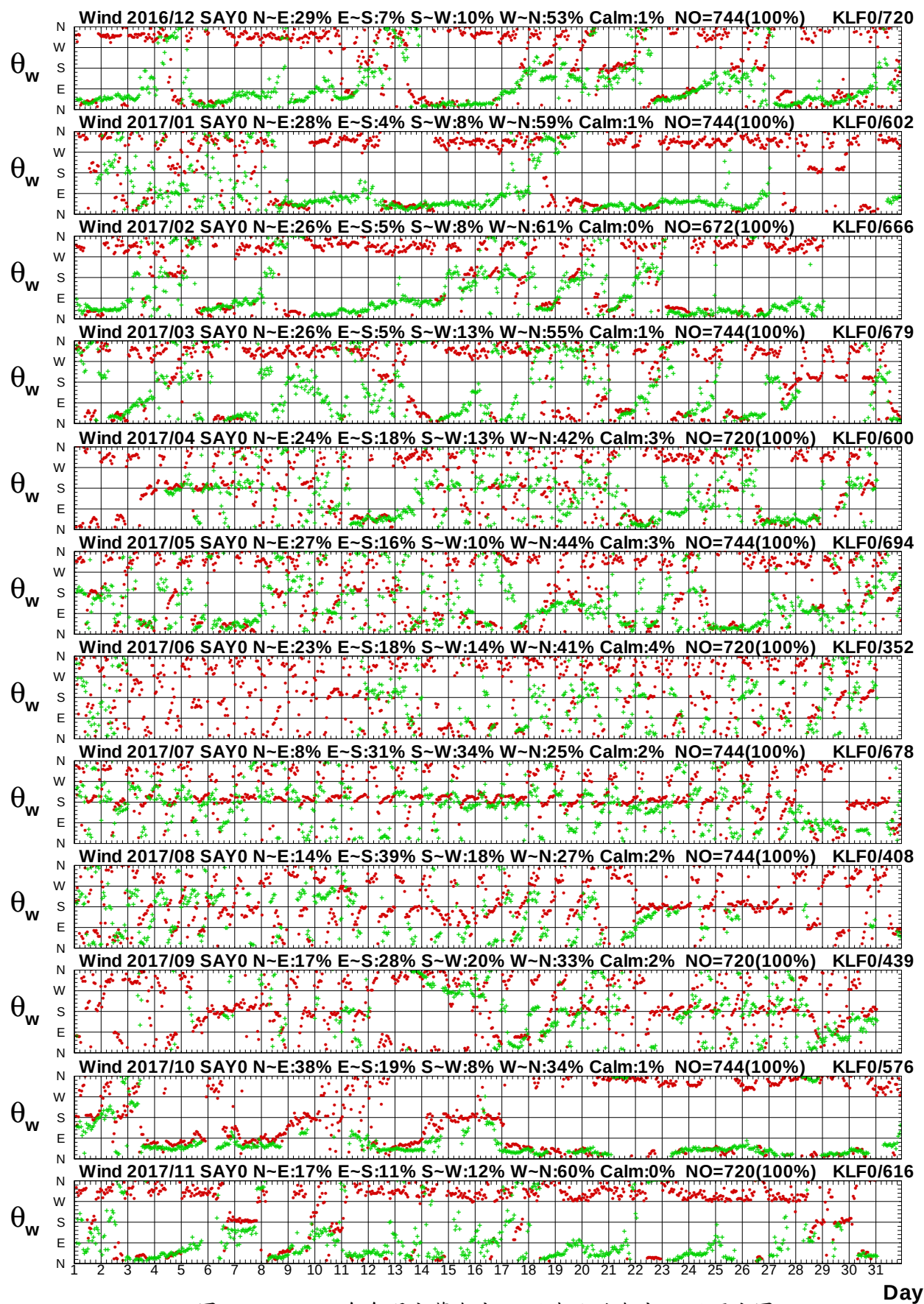


圖1.36b 2017年每月宜蘭海域 Y 站與北端海域 F 站風向圖

W16CSAY0.1HA W16CKLF0.1H0 W171SAY0.1HA W171KLF0.1H0 W172SAY0.1HA W172KLF0.1H0
W173SAY0.1HA W173KLF0.1H0 W174SAY0.1HA W174KLF0.1H0 W175SAY0.1HA W175KLF0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

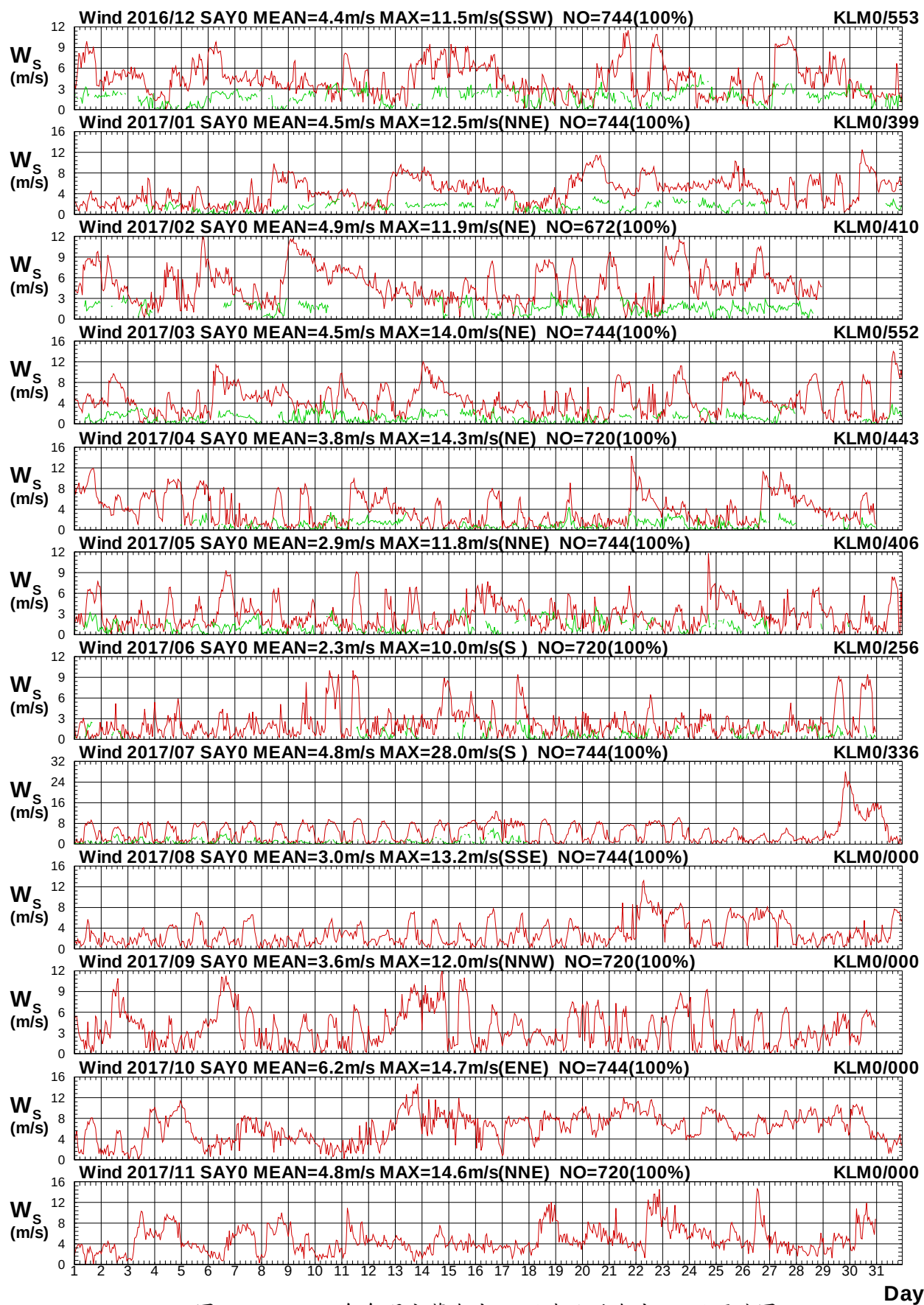


圖1.37a 2017年每月宜蘭海域 Y 站與北端海域 M 站風速圖

W16CSAY0.1HA W16CKLM0.1H0 W171SAY0.1HA W171KLM0.1H0 W172SAY0.1HA W172KLM0.1H0
W173SAY0.1HA W173KLM0.1H0 W174SAY0.1HA W174KLM0.1H0 W175SAY0.1HA W175KLM0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

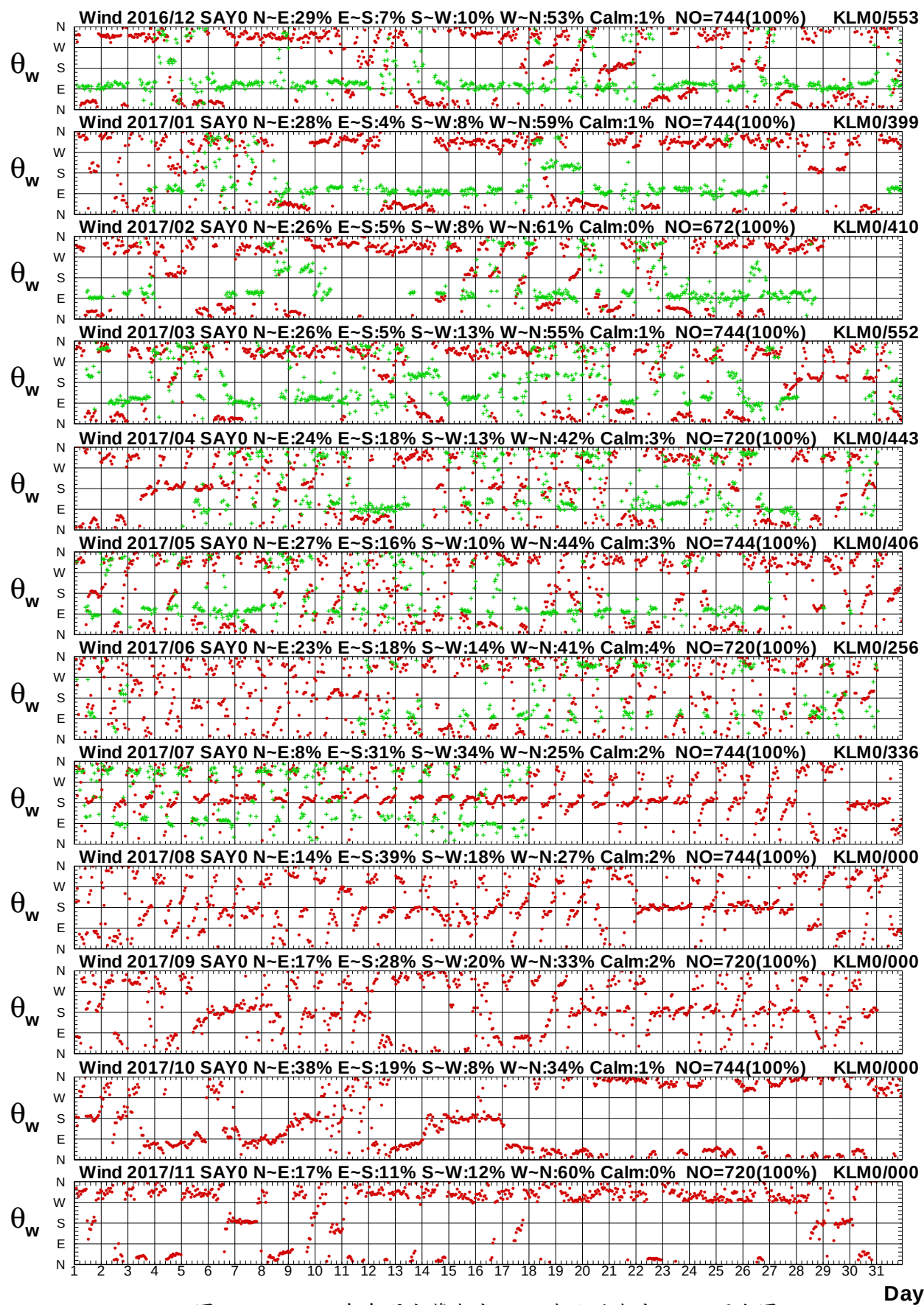


圖1.37b 2017年每月宜蘭海域 Y 站與北端海域 M 站風向圖

W16CSAY0.1HA W16CKLM0.1H0 W171SAY0.1HA W171KLM0.1H0 W172SAY0.1HA W172KLM0.1H0
W173SAY0.1HA W173KLM0.1H0 W174SAY0.1HA W174KLM0.1H0 W175SAY0.1HA W175KLM0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

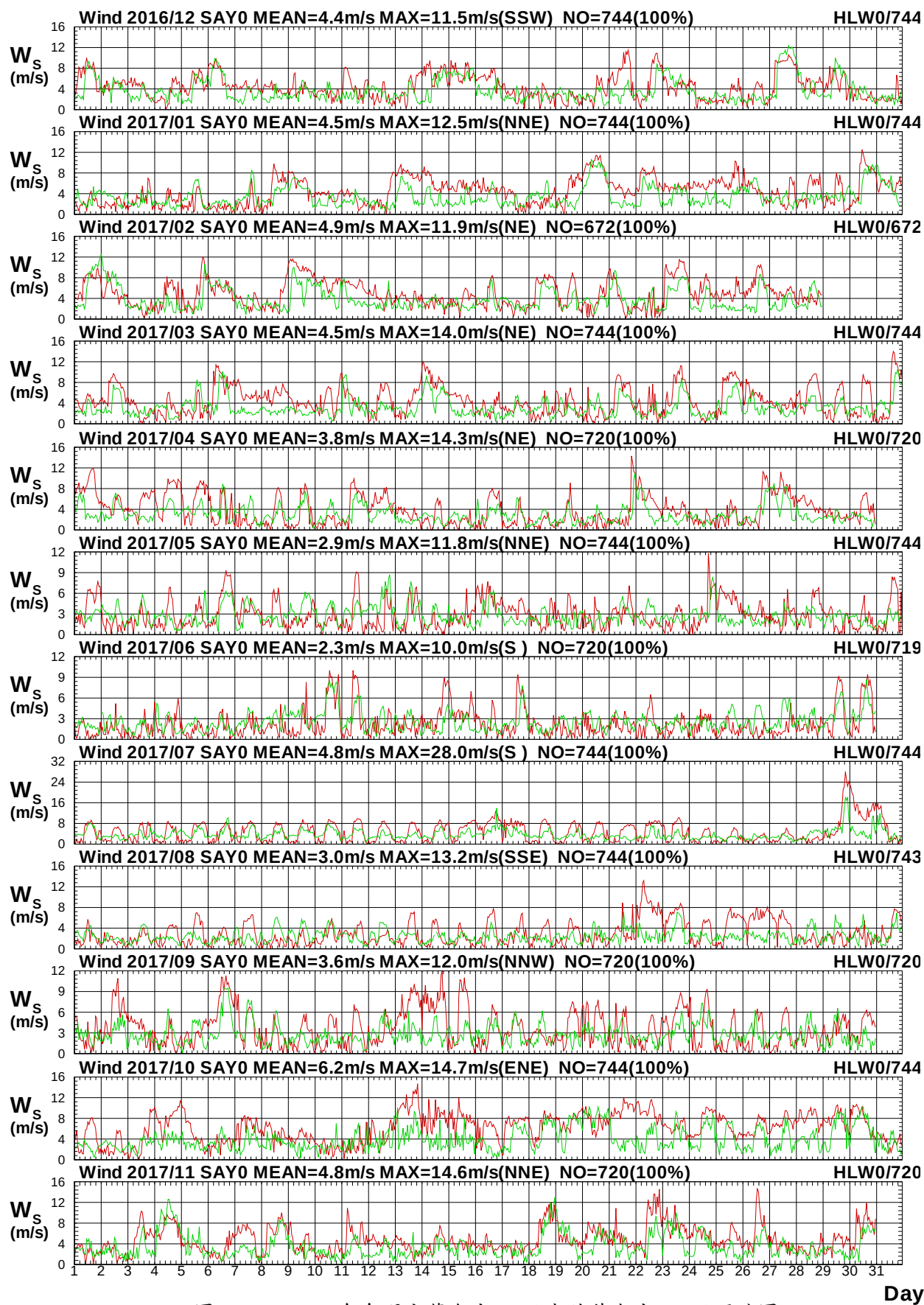


圖1.38a 2017年每月宜蘭海域 Y 站與花蓮海域 W 站風速圖

W16CSAY0.1HA W16CHLW0.1H0 W171SAY0.1HA W171HLW0.1H0 W172SAY0.1HA W172HLW0.1H0
W173SAY0.1HA W173HLW0.1H0 W174SAY0.1HA W174HLW0.1H0 W175SAY0.1HA W175HLW0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

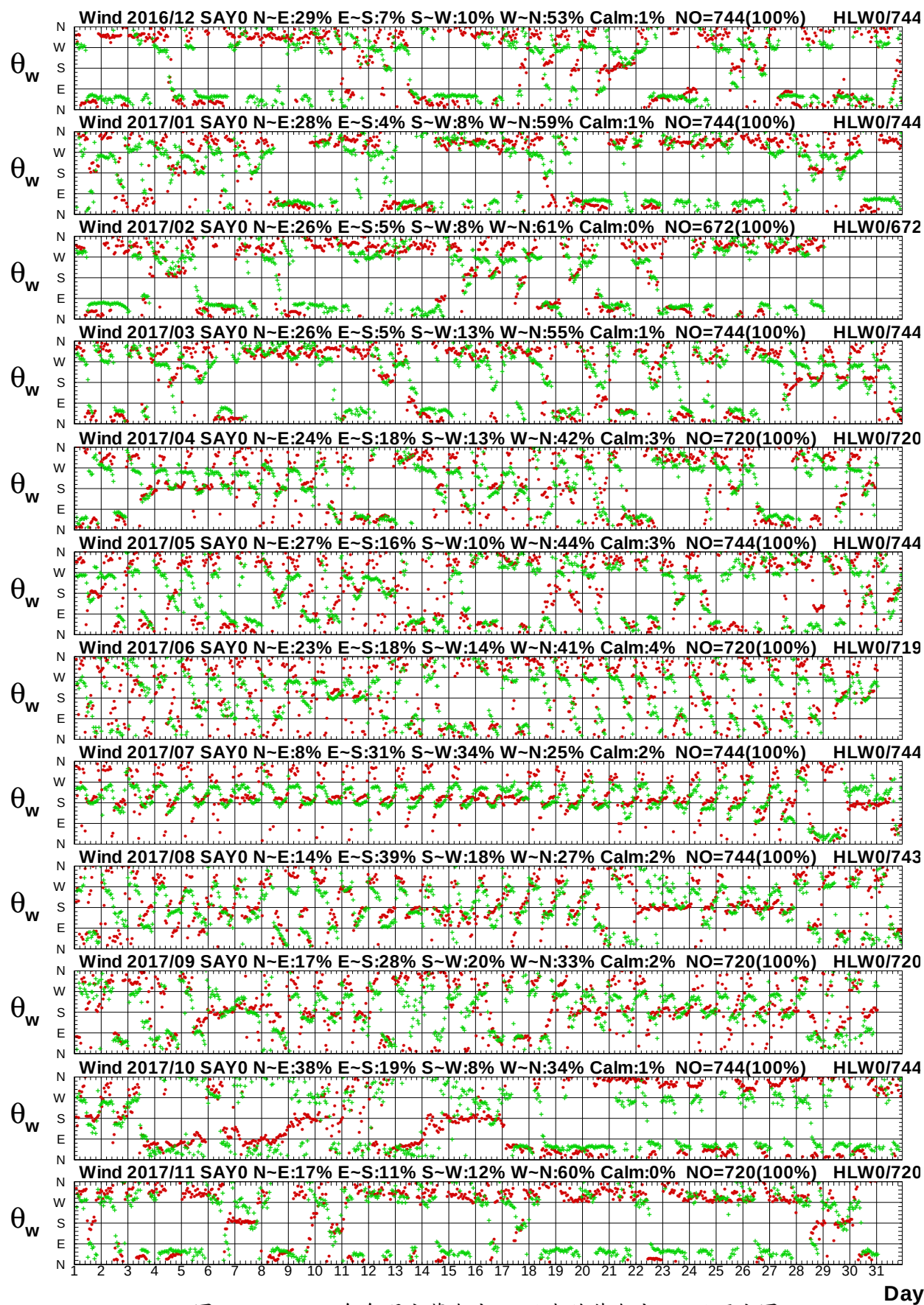


圖1.38b 2017年每月宜蘭海域 Y 站與花蓮海域 W 站風向圖

W16CSAY0.1HA W16CHLW0.1H0 W171SAY0.1HA W171HLW0.1H0 W172SAY0.1HA W172HLW0.1H0
W173SAY0.1HA W173HLW0.1H0 W174SAY0.1HA W174HLW0.1H0 W175SAY0.1HA W175HLW0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

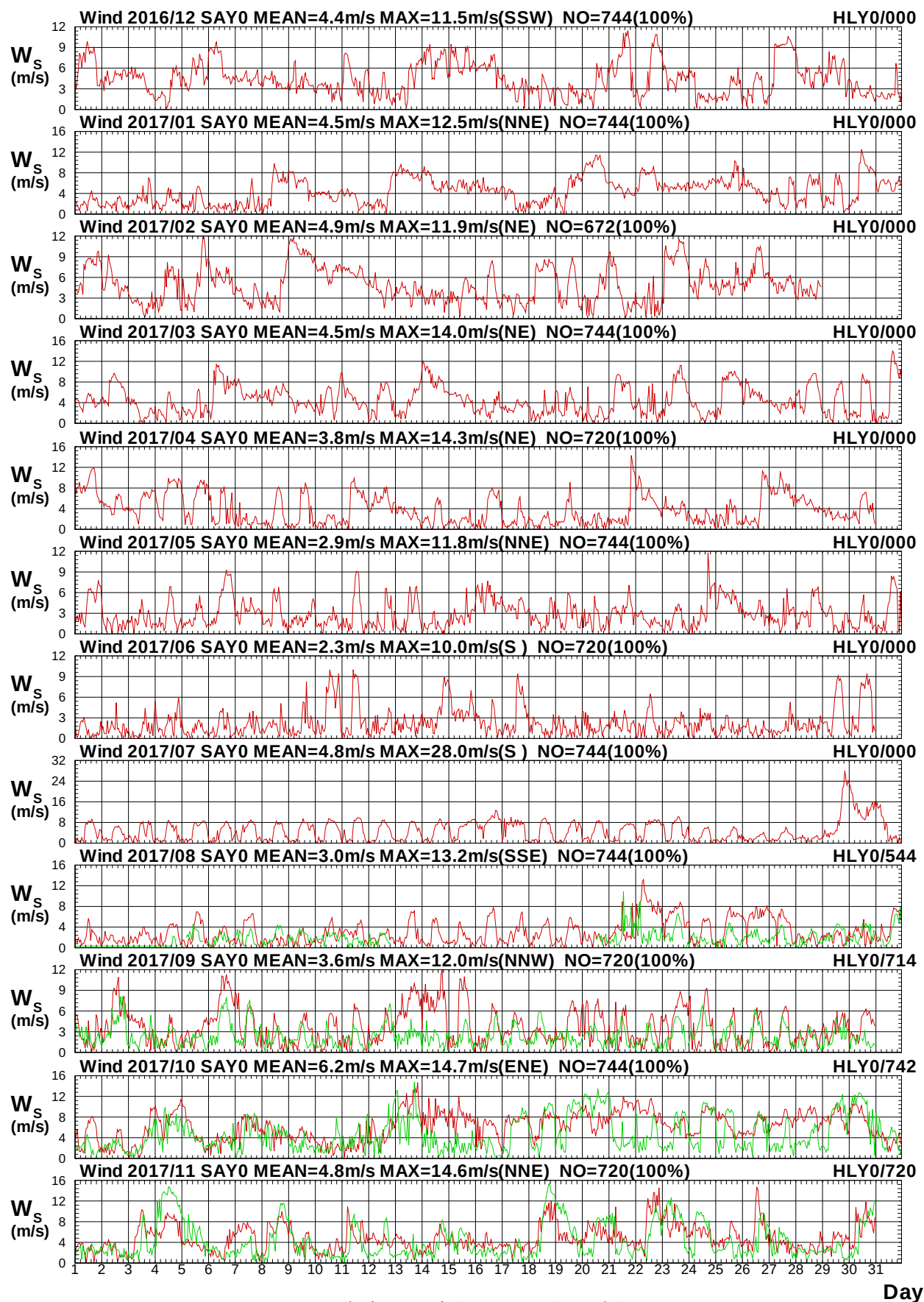


圖1.39a 2017年每月宜蘭海域 Y 站與花蓮海域 Y 站風速圖

W16CSAY0.1HA W16CHLY0.1H0 W171SAY0.1HA W171HLY0.1H0 W172SAY0.1HA W172HLY0.1H0
W173SAY0.1HA W173HLY0.1H0 W174SAY0.1HA W174HLY0.1H0 W175SAY0.1HA W175HLY0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

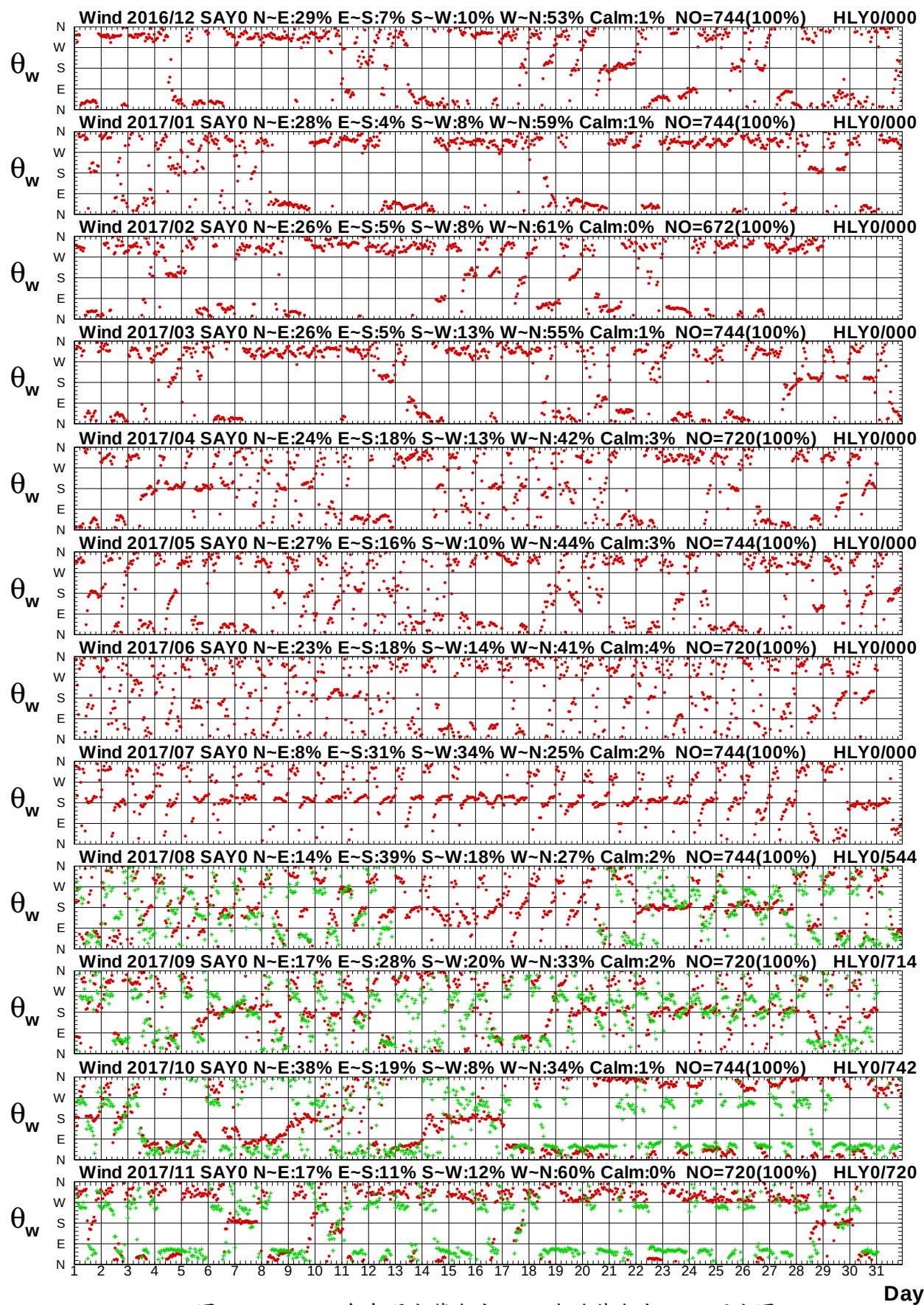


圖1.39b 2017年每月宜蘭海域 Y 站與花蓮海域 Y 站風向圖

W16CSAY0.1HA W16CHLY0.1H0 W171SAY0.1HA W171HLY0.1H0 W172SAY0.1HA W172HLY0.1H0
W173SAY0.1HA W173HLY0.1H0 W174SAY0.1HA W174HLY0.1H0 W175SAY0.1HA W175HLY0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

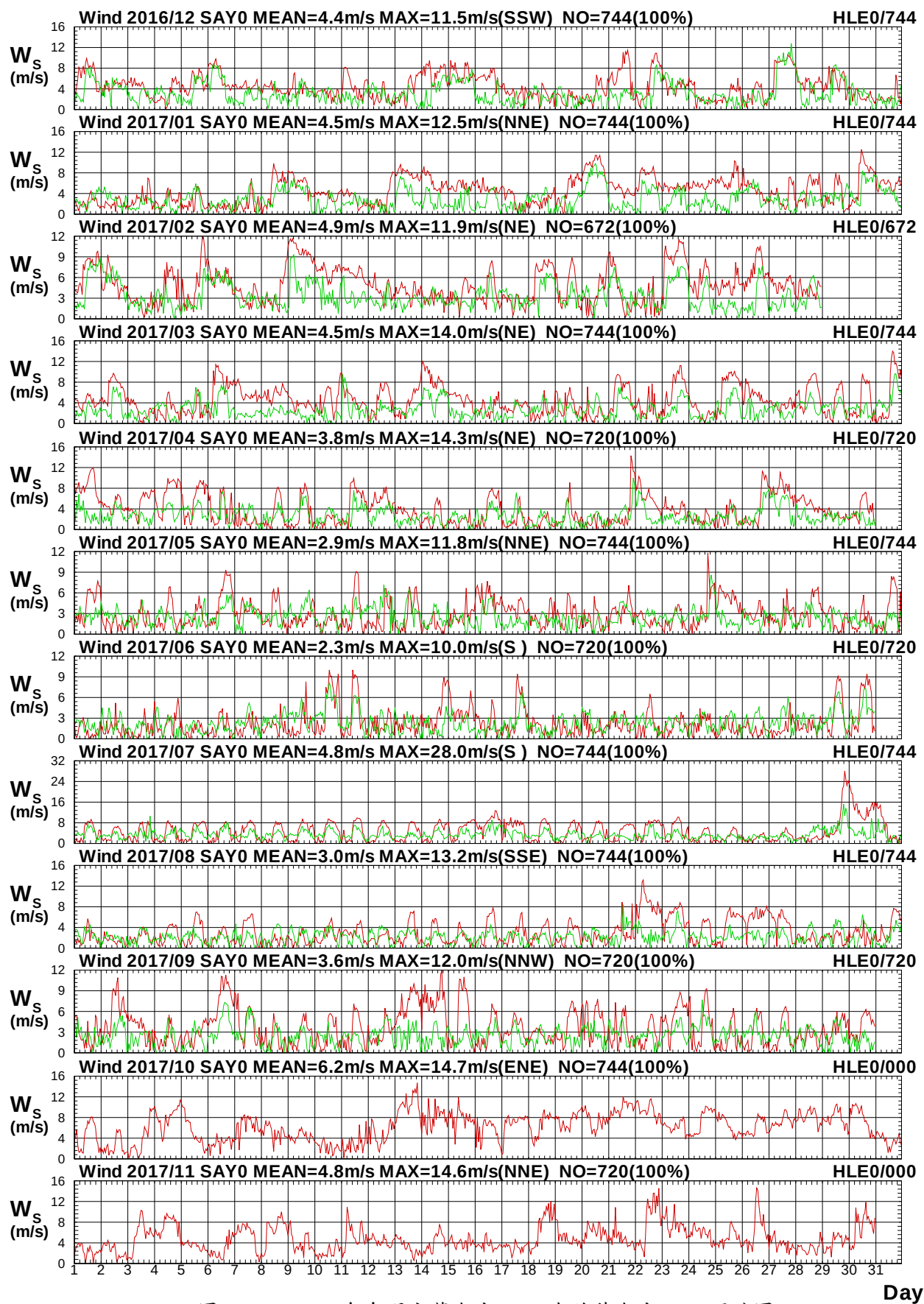


圖1.40a 2017年每月宜蘭海域 Y 站與花蓮海域 E 站風速圖

W16CSAY0.1HA W16CHLE0.1H0 W171SAY0.1HA W171HLE0.1H0 W172SAY0.1HA W172HLE0.1H0
W173SAY0.1HA W173HLE0.1H0 W174SAY0.1HA W174HLE0.1H0 W175SAY0.1HA W175HLE0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

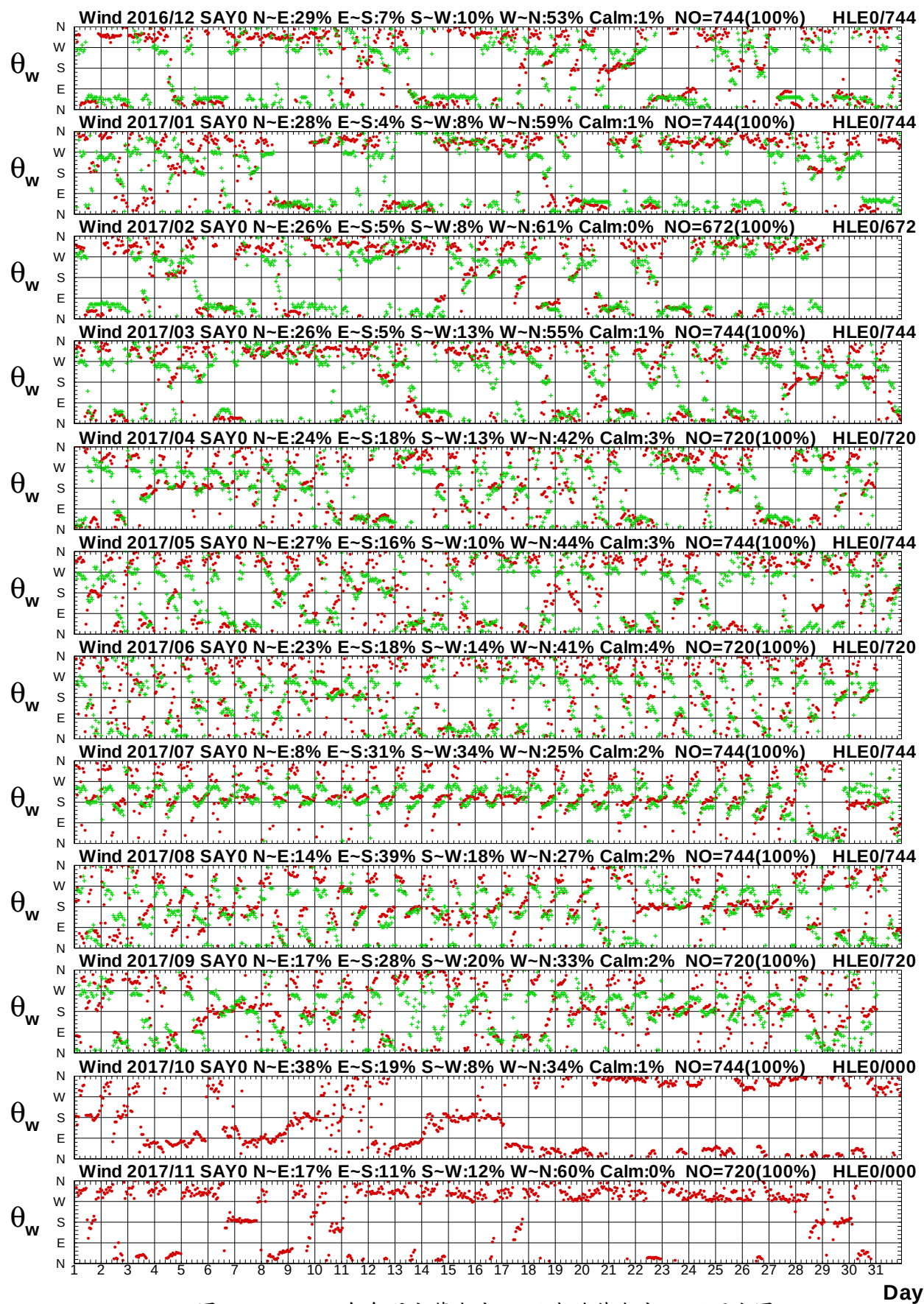


圖1.40b 2017年每月宜蘭海域 Y 站與花蓮海域 E 站風向圖

W16CSAY0.1HA W16CHLE0.1H0 W171SAY0.1HA W171HLE0.1H0 W172SAY0.1HA W172HLE0.1H0
W173SAY0.1HA W173HLE0.1H0 W174SAY0.1HA W174HLE0.1H0 W175SAY0.1HA W175HLE0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

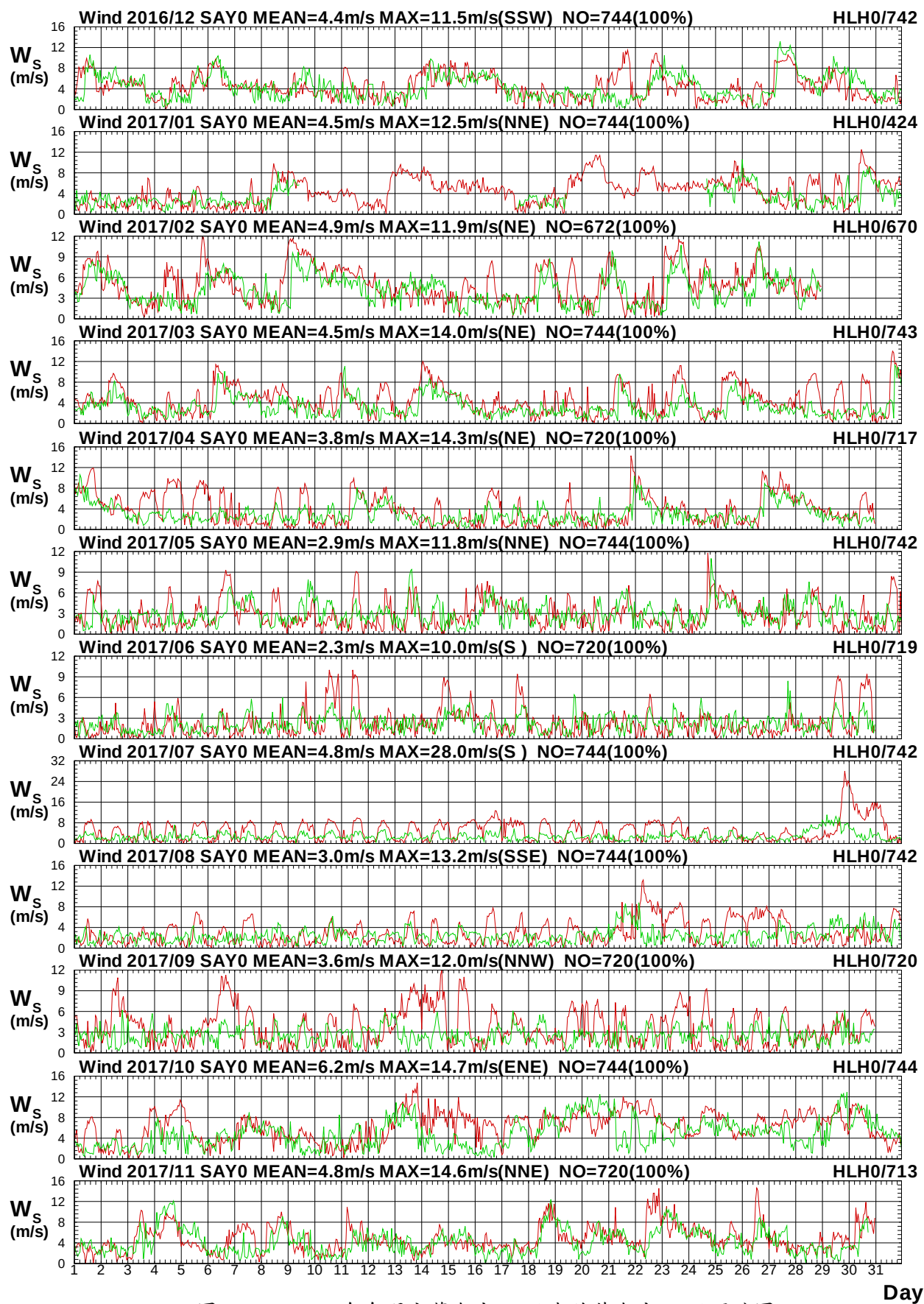


圖1.41a 2017年每月宜蘭海域 Y 站與花蓮海域 H 站風速圖

W16CSAY0.1HA W16CHLH0.1H0 W171SAY0.1HA W171HLH0.1H0 W172SAY0.1HA W172HLH0.1H0
W173SAY0.1HA W173HLH0.1H0 W174SAY0.1HA W174HLH0.1H0 W175SAY0.1HA W175HLH0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

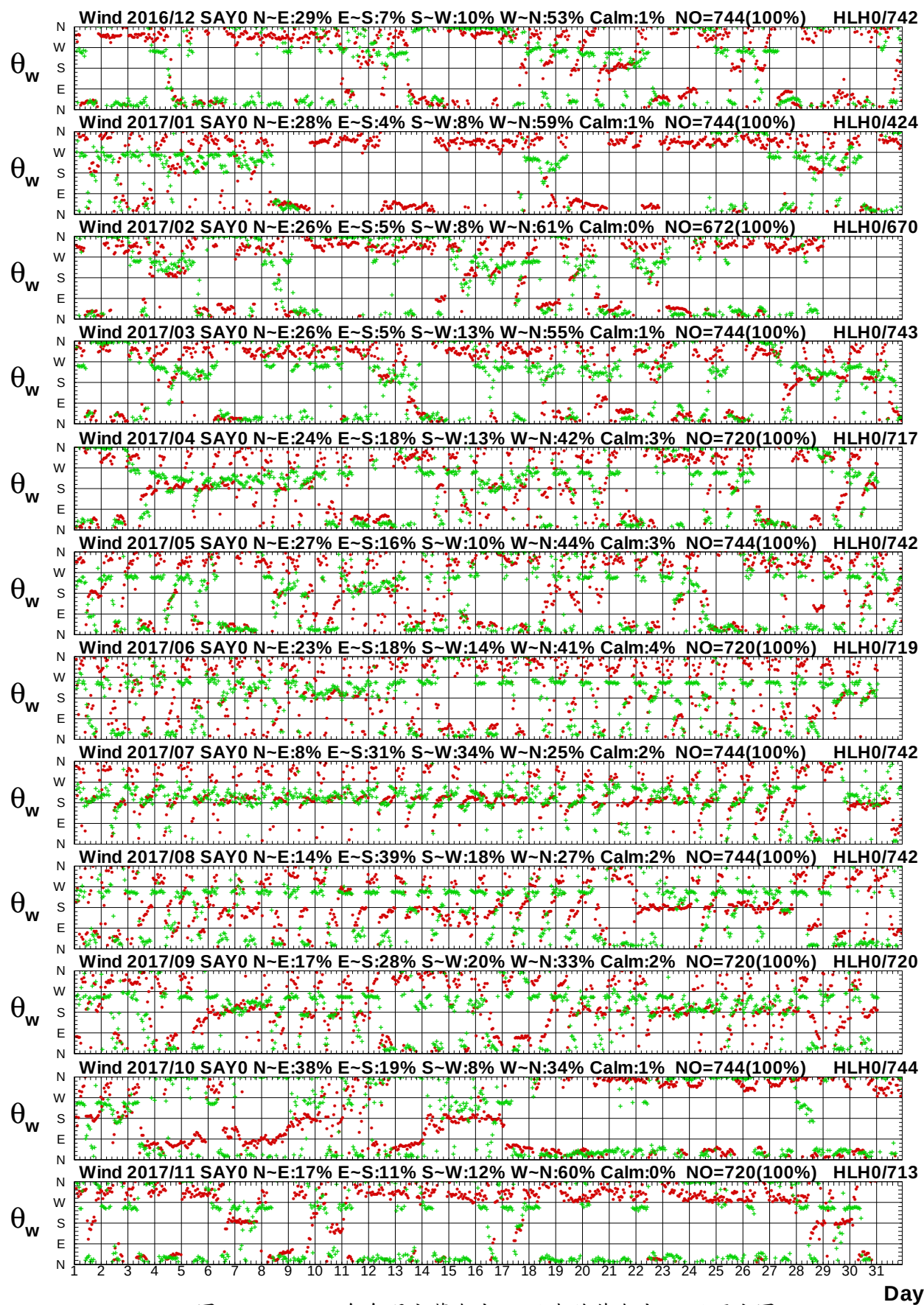


圖1.41b 2017年每月宜蘭海域 Y 站與花蓮海域 H 站風向圖

W16CSAY0.1HA W16CHLH0.1H0 W171SAY0.1HA W171HLH0.1H0 W172SAY0.1HA W172HLH0.1H0
W173SAY0.1HA W173HLH0.1H0 W174SAY0.1HA W174HLH0.1H0 W175SAY0.1HA W175HLH0.1H0

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Wind Speed in Yi-Lan Seas of SAY0 at 2017

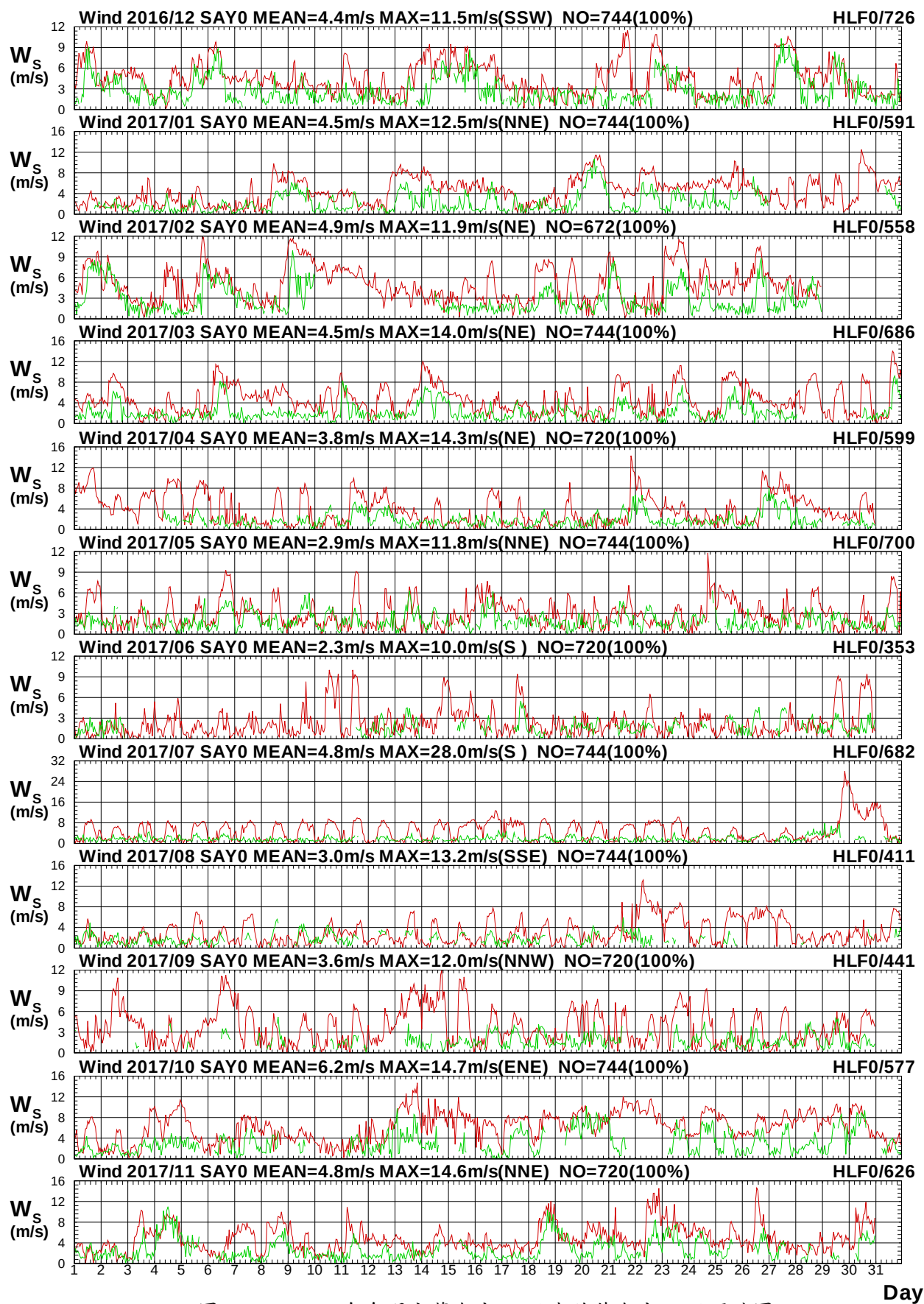


圖1.42a 2017年每月宜蘭海域 Y 站與花蓮海域 F 站風速圖

W16CSAY0.1HA W16CHLF0.1H0 W171SAY0.1HA W171HLF0.1H0 W172SAY0.1HA W172HLF0.1H0
W173SAY0.1HA W173HLF0.1H0 W174SAY0.1HA W174HLF0.1H0 W175SAY0.1HA W175HLF0.1H0

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Wind Direction in Yi-Lan Seas of SAY0 at 2017

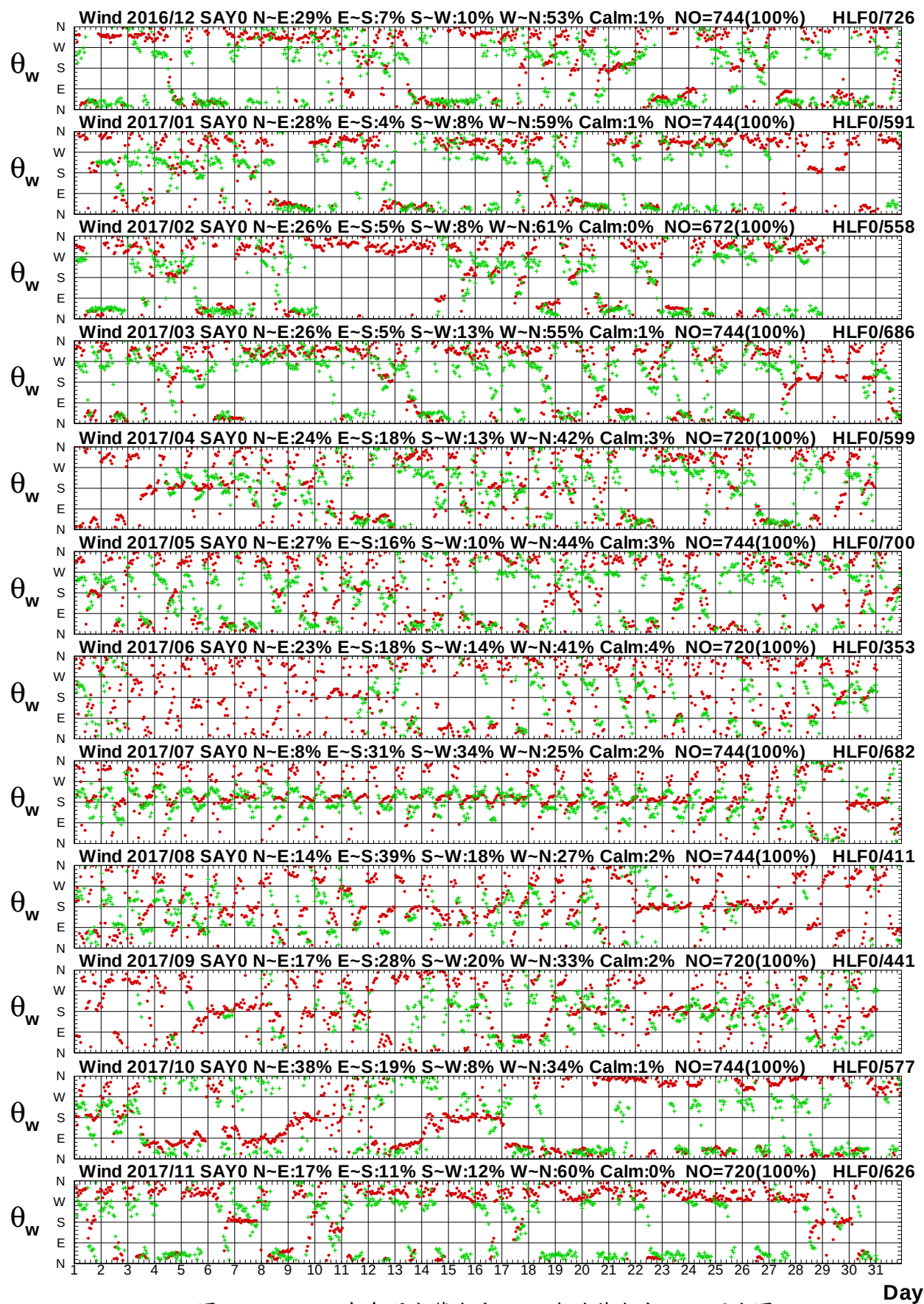


圖1.42b 2017年每月宜蘭海域 Y 站與花蓮海域 F 站風向圖

W16CSAY0.1HA W16CHLF0.1H0 W171SAY0.1HA W171HLF0.1H0 W172SAY0.1HA W172HLF0.1H0
W173SAY0.1HA W173HLF0.1H0 W174SAY0.1HA W174HLF0.1H0 W175SAY0.1HA W175HLF0.1H0

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第二章 2017 年宜蘭海域觀測波浪資料

宜蘭海域波浪之觀測包括測站 **X**、測站 **Y**、測站 **Z** 及測站 **R** 等 4 個測站(測站位置如第 O 章圖 VS1)。本年報取經檢核及補遺之 **X 站** 及 **Y 站** 資料作為主要測站。

本**波浪**年報資料處理之圖表包括：

1. 2017 年**各觀測站**每月**觀測波浪**資料**修補前**記錄表。
2. 2017 年**主要測站**每月**觀測波浪**資料**修補後**記錄表。
3. 2017 年**主要測站修補前後**每月(季)及整年示性波高週期及波向重要統計量統計表。
4. 2017 年**主要測站修補前後**每月**波浪**歷線比較圖。
5. 2017 年**主要測站之觀測波浪與次要觀測站(或其他觀測站)**每月**波浪**歷線比較圖。

表 2.1a 2017 年每月宜蘭海域修補前各測站觀測波浪資料紀錄統計表

海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域
年月/測站	Y	X	Z	R				
2016/12 月	739(99.3%)	744(100%)	743(99.9%)	*	*	*	*	*
2017/ 1 月	742(99.7%)	744(100%)	744(100%)	*	*	*	*	*
2017/ 2 月	669(99.6%)	672(100%)	672(100%)	*	*	*	*	*
2017/ 3 月	743(99.9%)	560(75.3%)	744(100%)	*	*	*	*	*
2017/ 4 月	718(99.7%)	392(54.4%)	718(99.7%)	*	*	*	*	*
2017/ 5 月	743(99.9%)	744(100%)	744(100%)	*	*	*	*	*
2017/ 6 月	718(99.7%)	720(100%)	720(100%)	*	*	*	*	*
2017/ 7 月	734(98.7%)	418(56.2%)	743(99.9%)	*	*	*	*	*
2017/ 8 月	658(88.4%)	281(37.8%)	742(99.7%)	*	*	*	*	*
2017/ 9 月	717(99.6%)	711(98.8%)	719(99.9%)	*	*	*	*	*
2017/10 月	734(98.7%)	719(96.6%)	741(99.6%)	*	*	*	*	*
2017/11 月	353(49.0%)	650(90.3%)	719(99.9%)	*	*	*	*	*
2017/冬季	2150(99.5%)	2160(100%)	2159(99.9%)	*	*	*	*	*
2017/春季	2204(99.8%)	1696(76.8%)	2206(99.9%)	*	*	*	*	*
2017/夏季	2110(95.6%)	1419(64.3%)	2205(99.9%)	*	*	*	*	*
2017/秋季	1804(82.6%)	2080(95.2%)	2179(99.8%)	*	*	*	*	*
2017/整年	8268(94.4%)	7355(84.0%)	8749(99.9%)	*	*	*	*	*
起始年月	2016/12	2016/12	2016/12	*	*	*	*	*
結束年月	2017/11	2017/11	2017/11	*	*	*	*	*
NOPV1B.BAT				港灣技術研究中心				

表 2.1b 2017年每月宜蘭海域修補後各測站波浪資料統計表

海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域
年月/測站	Y							
2016/12 月	744(100%)	*	*	*	*	*	*	*
2017/ 1 月	744(100%)	*	*	*	*	*	*	*
2017/ 2 月	672(100%)	*	*	*	*	*	*	*
2017/ 3 月	744(100%)	*	*	*	*	*	*	*
2017/ 4 月	720(100%)	*	*	*	*	*	*	*
2017/ 5 月	744(100%)	*	*	*	*	*	*	*
2017/ 6 月	720(100%)	*	*	*	*	*	*	*
2017/ 7 月	744(100%)	*	*	*	*	*	*	*
2017/ 8 月	744(100%)	*	*	*	*	*	*	*
2017/ 9 月	720(100%)	*	*	*	*	*	*	*
2017/10 月	744(100%)	*	*	*	*	*	*	*
2017/11 月	720(100%)	*	*	*	*	*	*	*
2017/冬季	2160(100%)	*	*	*	*	*	*	*
2017/春季	2208(100%)	*	*	*	*	*	*	*
2017/夏季	2208(100%)	*	*	*	*	*	*	*
2017/秋季	2184(100%)	*	*	*	*	*	*	*
2017/整年	8760(100%)	*	*	*	*	*	*	*
起始年月	2016/12	*	*	*	*	*	*	*
結束年月	2017/11	*	*	*	*	*	*	*
NOPV1B.BAT							港灣技術研究中心	

表2.2a 2017年宜蘭海域主要測站1修補前示性波高週期及波向重要統計量統計表

觀測 日期 年、月	波高 蒐集 率	H_s 平均 (m)	H_s 最大 (波高/週期/波向) (m/s/來向)	T_p 平均 (s)	T_p 最大 (s)	小波 <0.5m (%)	小浪 ~1.5m (%)	中浪 ~3m (%)	大浪 >3m (%)	T_p <6s (%)	T_p 6~8s (%)	T_p 8~10s (%)	T_p >10s (%)	波向 蒐集 率	波向 N~E (%)	波向 E~S (%)	波向 S~W (%)	波向 W~N (%)	主波向 (百分比) 來向/%
2016/12	100%	1.72	2.6/ 8.8/ESE	9.0	11.3	.0	26.2	73.8	.0	.0	16.4	67.3	16.3	100%	22.5	77.5	.0	.0	ESE/35%
2017/01	100%	1.60	2.4/ 9.1/E	8.6	11.1	.0	38.0	62.0	.0	.0	25.5	71.6	2.8	100%	37.1	60.6	2.3	.0	E /42%
2017/02	100%	1.57	2.5/ 9.3/E	8.2	11.1	.0	39.7	60.3	.0	1.0	40.5	53.3	5.2	100%	49.3	49.3	1.5	.0	E /43%
2017/03	75%	1.43	3.7/10.1/E	8.3	14.7	.0	67.7	30.4	2.0	.7	43.0	45.2	11.1	75%	51.7	48.1	.2	.0	E /44%
2017/04	54%	1.13	2.0/ 9.5/E	7.6	10.6	.0	90.8	9.2	.0	16.6	39.5	43.1	.8	54%	23.7	63.0	13.3	.0	ESE/20%
2017/05	100%	1.09	2.0/ 7.7/ESE	7.2	10.8	.0	91.8	8.2	.0	15.3	59.5	24.7	.4	100%	19.7	74.8	5.5	.0	ESE/26%
2017/06	100%	.89	1.9/ 6.1/SSW	6.8	10.0	.8	96.5	2.6	.0	29.4	47.2	23.1	.3	100%	11.8	64.7	23.5	.0	S /20%
2017/07	56%	.96	2.8/ 9.8/WSW	7.1	15.2	.2	96.4	3.3	.0	28.7	41.1	23.4	6.7	56%	.0	73.4	26.6	.0	SSE/35%
2017/08	38%	1.07	3.9/10.9/ESE	7.6	11.7	11.0	73.0	13.9	2.1	10.3	46.6	40.2	2.8	38%	23.9	75.4	.4	.4	E /53%
2017/09	99%	1.07	3.6/12.8/ENE	8.5	15.9	4.2	72.0	23.5	.3	9.4	50.2	12.9	27.4	99%	58.9	40.7	.3	.1	ENE/40%
2017/10	97%	1.91	4.0/12.1/ENE	9.3	14.5	.0	29.5	61.9	8.6	2.5	25.6	43.4	28.5	97%	86.0	14.0	.0	.0	ENE/64%
2017/11	90%	1.53	3.3/11.3/ENE	8.3	12.3	.0	51.2	48.5	.3	.0	38.5	54.5	7.1	90%	92.5	7.5	.0	.0	ENE/66%
2017/冬	100%	1.63	2.6/ 8.8/ESE	8.6	11.3	.0	34.5	65.5	.0	.3	27.0	64.4	8.2	100%	35.8	62.9	1.3	.0	E /40%
2017/春	77%	1.21	3.7/10.1/E	7.6	14.7	.0	83.6	15.7	.6	10.8	49.5	35.7	4.0	77%	31.2	63.3	5.5	.0	E /30%
2017/夏	64%	.94	3.9/10.9/ESE	7.1	15.2	2.7	91.8	5.1	.4	25.4	45.3	26.6	2.7	64%	10.7	69.4	19.8	.1	SSE/20%
2017/秋	95%	1.51	4.0/12.1/ENE	8.7	15.9	1.4	50.8	44.6	3.2	4.1	38.0	36.4	21.4	95%	78.7	21.1	.1	.0	ENE/56%
2017/年	84%	1.37	4.0/12.1/ENE	8.1	15.9	.9	61.5	36.5	1.1	8.6	38.8	42.6	9.9	84%	42.1	52.4	5.5	.0	E /30%

表2.2b 2017年宜蘭海域主要測站1修補後示性波高週期及波向重要統計量統計表

觀測 日期 年、月	波高 蒐集 率	H_s 平均 (m)	H_s 最大 (波高/週期/波向) (m/s/來向)	T_p 平均 (s)	T_p 最大 (s)	小波 <0.5m (%)	小浪 ~1.5m (%)	中浪 ~3m (%)	大浪 >3m (%)	T_p <6s (%)	T_p 6~8s (%)	T_p 8~10s (%)	T_p >10s (%)	波向 蒐集 率	波向 N~E (%)	波向 E~S (%)	波向 S~W (%)	波向 W~N (%)	主波向 (百分比) 來向/%
2016/12	100%	1.72	2.6/ 8.8/ESE	9.0	11.3	.0	26.2	73.8	.0	.0	16.4	67.3	16.3	100%	22.4	77.6	.0	.0	ESE/35%
2017/01	100%	1.60	2.4/ 9.1/E	8.6	11.1	.0	38.0	62.0	.0	.0	25.5	71.6	2.8	100%	37.1	60.6	2.3	.0	E /42%
2017/02	100%	1.57	2.5/ 9.3/E	8.2	11.1	.0	39.7	60.3	.0	1.0	40.5	53.3	5.2	100%	49.3	49.3	1.5	.0	E /43%
2017/03	100%	1.39	3.7/10.1/E	8.3	14.7	.0	71.5	27.0	1.5	.5	41.1	50.0	8.3	100%	40.1	59.5	.4	.0	E /37%
2017/04	100%	1.12	2.0/ 9.5/E	7.7	10.7	.0	92.6	7.4	.0	11.0	42.8	45.0	1.3	100%	13.3	79.4	7.2	.0	ESE/30%
2017/05	100%	1.09	2.0/ 7.7/ESE	7.2	10.8	.0	91.8	8.2	.0	15.3	59.5	24.7	.4	100%	19.6	74.9	5.5	.0	ESE/26%
2017/06	100%	.89	1.9/ 6.1/SSW	6.8	10.0	.8	96.5	2.6	.0	29.4	47.2	23.1	.3	100%	11.8	64.7	23.5	.0	S /20%
2017/07	100%	1.10	12.3/15.9/ESE	7.8	15.9	2.6	87.2	6.9	3.4	16.1	43.8	25.7	14.4	100%	.0	84.7	15.3	.0	SSE/29%
2017/08	100%	.88	3.9/10.9/ESE	8.5	14.7	23.0	69.6	6.3	1.1	6.9	33.7	39.2	20.2	100%	11.4	81.3	7.1	.1	E /24%
2017/09	100%	1.07	3.6/12.8/ENE	8.5	15.9	4.2	72.4	23.2	.3	9.4	50.0	13.5	27.1	100%	58.1	41.5	.3	.1	ENE/40%
2017/10	100%	1.91	4.0/12.1/ENE	9.3	14.7	.0	29.3	61.7	9.0	2.4	25.1	43.4	29.0	100%	83.2	16.8	.0	.0	ENE/61%
2017/11	100%	1.56	3.3/11.3/ENE	8.5	12.3	.0	48.6	51.0	.4	.0	34.9	55.1	10.0	100%	88.5	11.5	.0	.0	ENE/62%
2017/冬	100%	1.63	2.6/ 8.8/ESE	8.6	11.3	.0	34.5	65.5	.0	.3	27.0	64.4	8.2	100%	35.8	62.9	1.3	.0	E /40%
2017/春	100%	1.20	3.7/10.1/E	7.7	14.7	.0	85.2	14.3	.5	8.9	47.9	39.9	3.4	100%	24.5	71.2	4.3	.0	E /27%
2017/夏	100%	.95	12.3/15.9/ESE	7.7	15.9	8.9	84.3	5.3	1.5	17.3	41.5	29.4	11.7	100%	7.7	77.0	15.2	.0	SSE/22%
2017/秋	100%	1.52	4.0/12.1/ENE	8.8	15.9	1.4	49.9	45.5	3.3	3.9	36.5	37.4	22.1	100%	76.6	23.2	.1	.0	ENE/54%
2017/年	100%	1.32	12.3/15.9/ESE	8.2	15.9	2.6	63.7	32.4	1.3	7.7	38.3	42.7	11.3	100%	36.1	58.7	5.3	.0	E /28%

表2.3a 2017年宜蘭海域主要測站2修補前示性波高週期及波向重要統計量統計表

觀測 日期 年、月	波高 蒐集 率	H_s 平均 (m)	H_s 最大 (波高/週期/波向) (m/s/來向)	T_p 平均 (s)	T_p 最大 (s)	小波 <0.5m (%)	小浪 ~1.5m (%)	中浪 ~3m (%)	大浪 >3m (%)	T_p <6s (%)	T_p 6~8s (%)	T_p 8~10s (%)	T_p >10s (%)	波向 蒐集 率	波向 N~E (%)	波向 E~S (%)	波向 S~W (%)	波向 W~N (%)	主波向 (百分比) 來向/%
2016/12	99%	1.54	3.3/ 7.3/NE	6.4	8.1	.0	53.0	46.8	.1	20.3	79.6	.1	.0	99%	42.9	57.1	.0	.0	E /35%
2017/01	100%	1.32	3.0/ 6.7/NNE	6.2	8.2	.0	69.3	30.7	.0	31.7	68.1	.3	.0	100%	39.6	60.4	.0	.0	E /30%
2017/02	100%	1.39	2.9/ 8.3/NE	6.1	8.3	.0	59.0	41.0	.0	38.7	60.5	.7	.0	100%	51.4	48.6	.0	.0	ENE/32%
2017/03	100%	1.22	3.7/ 6.9/ESE	5.9	8.4	.3	76.6	21.9	1.2	50.5	47.4	2.2	.0	100%	49.0	50.9	.0	.1	ENE/32%
2017/04	100%	.94	2.6/ 5.6/ENE	5.7	8.4	3.5	85.7	10.9	.0	64.3	35.1	.6	.0	100%	29.1	70.9	.0	.0	E /26%
2017/05	100%	.83	1.9/ 6.4/ESE	5.5	7.7	5.8	91.1	3.1	.0	77.9	22.1	.0	.0	100%	30.4	69.6	.0	.0	ESE/26%
2017/06	100%	.56	2.2/ 5.7/ENE	5.1	7.8	58.4	39.3	2.4	.0	91.5	8.5	.0	.0	100%	20.9	79.1	.0	.0	ESE/27%
2017/07	99%	.67	10.1/10.0/ENE	5.2	10.0	51.9	42.5	4.1	1.5	82.6	14.4	2.9	.1	99%	4.4	95.4	.3	.0	SE /40%
2017/08	88%	.62	2.5/ 7.3/ESE	5.7	11.0	44.4	52.3	3.3	.0	67.2	22.8	9.9	.2	88%	17.3	82.5	.0	.2	ESE/30%
2017/09	100%	.98	5.3/ 9.9/ENE	6.0	12.5	34.2	46.0	17.0	2.8	66.7	20.5	11.9	1.0	100%	37.1	62.8	.1	.0	ENE/24%
2017/10	99%	1.95	5.0/10.3/NE	6.7	10.6	1.0	30.1	54.9	14.0	30.5	53.3	15.8	.4	99%	55.0	45.0	.0	.0	ENE/39%
2017/11	49%	1.42	4.0/ 8.2/NE	6.2	8.2	.0	69.1	29.5	1.4	34.3	64.9	.8	.0	49%	68.0	31.4	.0	.6	ENE/39%
2017/冬	100%	1.42	3.3/ 7.3/NE	6.3	8.3	.0	60.5	39.4	.0	30.0	69.7	.4	.0	100%	44.4	55.6	.0	.0	ENE/31%
2017/春	100%	1.00	3.7/ 6.9/ESE	5.7	8.4	3.2	84.4	12.0	.4	64.2	34.8	.9	.0	100%	36.3	63.7	.0	.0	E /26%
2017/夏	96%	.61	10.1/10.0/ENE	5.3	11.0	51.8	44.5	3.3	.5	80.8	15.0	4.1	.1	96%	14.0	85.8	.1	.0	SE /31%
2017/秋	83%	1.46	5.3/ 9.9/ENE	6.3	12.5	14.0	44.1	34.9	7.1	45.6	42.5	11.3	.6	83%	50.4	49.4	.1	.1	ENE/33%
2017/年	94%	1.11	10.1/10.0/ENE	5.9	12.5	17.1	59.2	21.9	1.8	55.5	40.5	3.8	.1	94%	35.8	64.1	.0	.0	E /25%

表2.3b 2017年宜蘭海域主要測站2修補後示性波高週期及波向重要統計量統計表

觀測 日期 年、月	波高 蒐集 率	H_s 平均 (m)	H_s 最大 (波高/週期/波向) (m/s/來向)	T_p 平均 (s)	T_p 最大 (s)	小波 <0.5m (%)	小浪 ~1.5m (%)	中浪 ~3m (%)	大浪 >3m (%)	T_p <6s (%)	T_p 6~8s (%)	T_p 8~10s (%)	T_p >10s (%)	波向 蒐集 率	波向 N~E (%)	波向 E~S (%)	波向 S~W (%)	波向 W~N (%)	主波向 (百分比) 來向/%
2016/12	100%	1.54	3.3/ 7.3/NE	6.4	8.1	.0	52.8	47.0	.1	20.3	79.6	.1	.0	100%	43.3	56.7	.0	.0	E /35%
2017/01	100%	1.32	3.0/ 6.7/NNE	6.2	8.2	.0	69.1	30.9	.0	31.6	68.1	.3	.0	100%	39.8	60.2	.0	.0	E /30%
2017/02	100%	1.39	2.9/ 8.3/NE	6.1	8.3	.0	59.2	40.8	.0	38.7	60.6	.7	.0	100%	51.6	48.4	.0	.0	ENE/32%
2017/03	100%	1.22	3.7/ 6.9/ESE	5.9	8.4	.3	76.6	21.9	1.2	50.5	47.3	2.2	.0	100%	49.1	50.8	.0	.1	ENE/32%
2017/04	100%	.94	2.6/ 5.6/ENE	5.7	8.4	3.5	85.6	11.0	.0	64.4	35.0	.6	.0	100%	29.3	70.7	.0	.0	E /26%
2017/05	100%	.83	1.9/ 6.4/ESE	5.5	7.7	5.8	91.1	3.1	.0	78.0	22.0	.0	.0	100%	30.4	69.6	.0	.0	ESE/26%
2017/06	100%	.56	2.2/ 5.7/ENE	5.1	7.8	58.2	39.4	2.4	.0	91.5	8.5	.0	.0	100%	21.0	79.0	.0	.0	ESE/27%
2017/07	100%	.69	10.1/10.0/ENE	5.2	10.0	51.2	42.3	4.6	1.9	82.4	14.7	2.8	.1	100%	4.3	95.4	.3	.0	SE /40%
2017/08	100%	.59	2.5/ 7.3/ESE	5.7	11.0	50.1	46.9	3.0	.0	70.8	20.3	8.7	.1	100%	17.3	82.5	.0	.1	ESE/31%
2017/09	100%	.99	5.3/ 9.9/ENE	6.0	12.5	34.0	46.0	17.2	2.8	66.8	20.4	11.8	1.0	100%	37.1	62.8	.1	.0	ENE/24%
2017/10	100%	1.95	5.0/10.3/NE	6.7	10.6	.9	30.4	54.7	14.0	30.5	53.5	15.6	.4	100%	55.6	44.4	.0	.0	ENE/39%
2017/11	100%	1.52	4.0/ 8.2/NE	6.2	8.2	.0	56.4	42.5	1.1	30.0	69.6	.4	.0	100%	83.9	15.8	.0	.3	ENE/41%
2017/冬	100%	1.42	3.3/ 7.3/NE	6.3	8.3	.0	60.4	39.5	.0	29.9	69.7	.4	.0	100%	44.7	55.3	.0	.0	ENE/31%
2017/春	100%	1.00	3.7/ 6.9/ESE	5.7	8.4	3.2	84.4	12.0	.4	64.3	34.8	.9	.0	100%	36.3	63.6	.0	.0	E /26%
2017/夏	100%	.61	10.1/10.0/ENE	5.4	11.0	53.1	42.9	3.3	.6	77.7	18.3	3.9	.1	100%	14.1	85.7	.1	.0	ESE/31%
2017/秋	100%	1.49	5.3/ 9.9/ENE	6.3	12.5	11.5	44.1	38.3	6.0	42.3	47.9	9.3	.5	100%	58.8	41.0	.0	.1	ENE/35%
2017/年	100%	1.13	10.1/10.0/ENE	5.9	12.5	17.1	58.0	23.2	1.8	53.7	42.5	3.6	.1	100%	38.4	61.5	.0	.0	ENE/25%

Wave H_s in Yi-Lan Seas of SAX0 at 2017

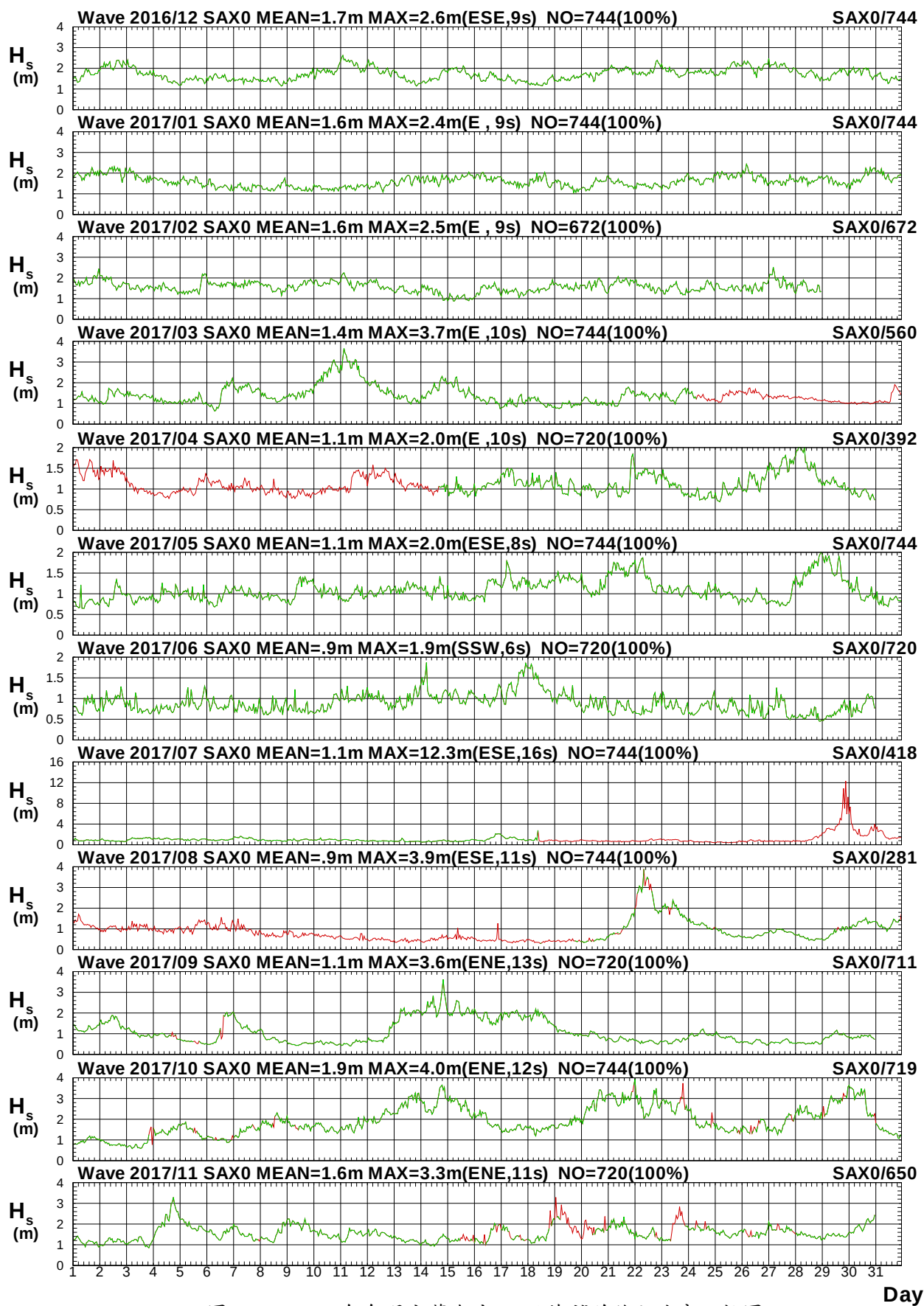


圖2.1a 2017年每月宜蘭海域 X 站修補前後之波高比較圖

V16CSAX0.1HA V16CSAX0.1H0 V171SAX0.1HA V171SAX0.1H0 V172SAX0.1HA V172SAX0.1H0
V173SAX0.1HA V173SAX0.1H0 V174SAX0.1HA V174SAX0.1H0 V175SAX0.1HA V175SAX0.1H0

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Wave T_p in Yi-Lan Seas of SAX0 at 2017

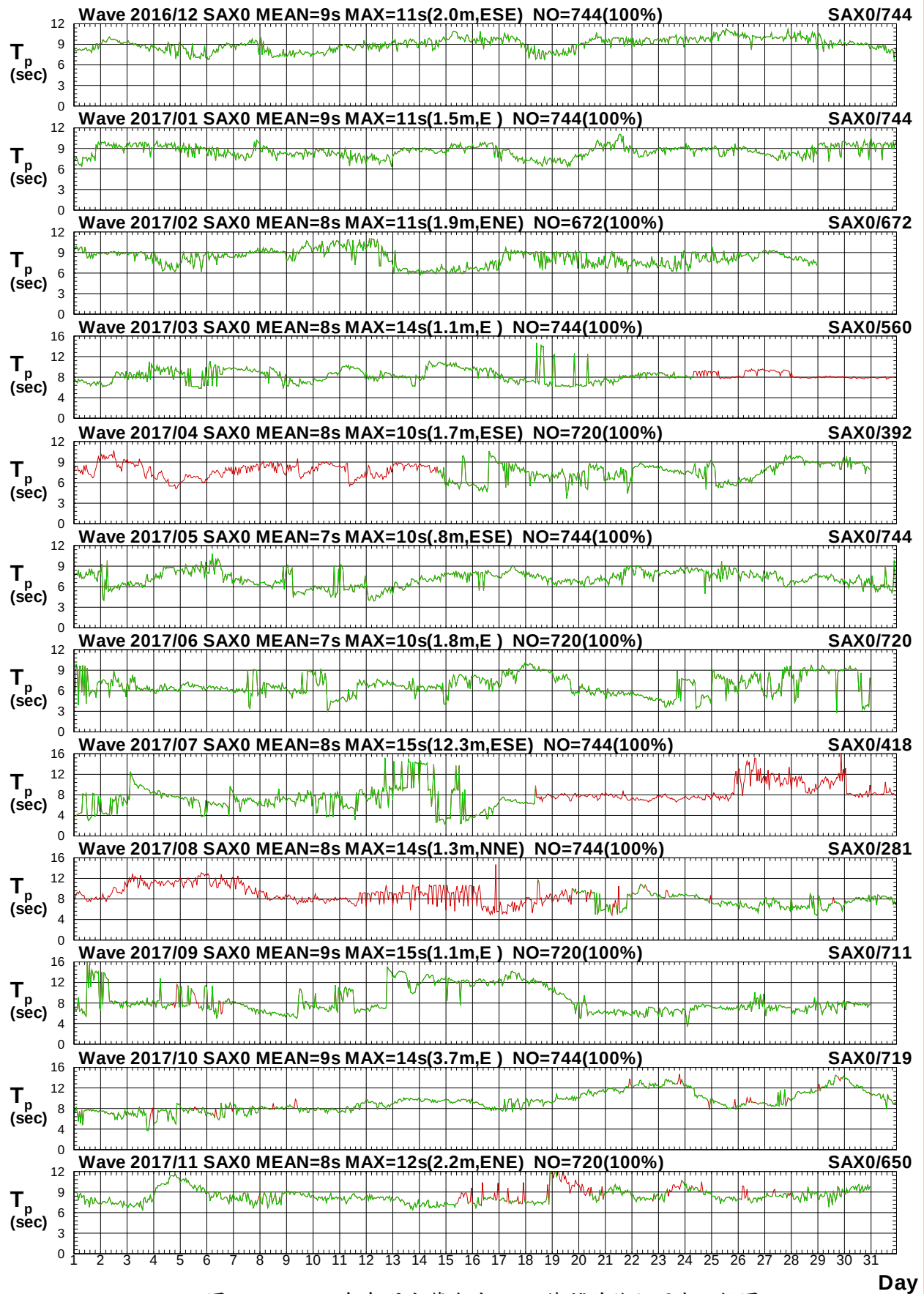


圖2.1b 2017年每月宜蘭海域 X 站修補前後之週期比較圖

V16CSAX0.1HA V16CSAX0.1H0 V171SAX0.1HA V171SAX0.1H0 V172SAX0.1HA V172SAX0.1H0
V173SAX0.1HA V173SAX0.1H0 V174SAX0.1HA V174SAX0.1H0 V175SAX0.1HA V175SAX0.1H0

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Wave Direction in Yi-Lan Seas of SAX0 at 2017

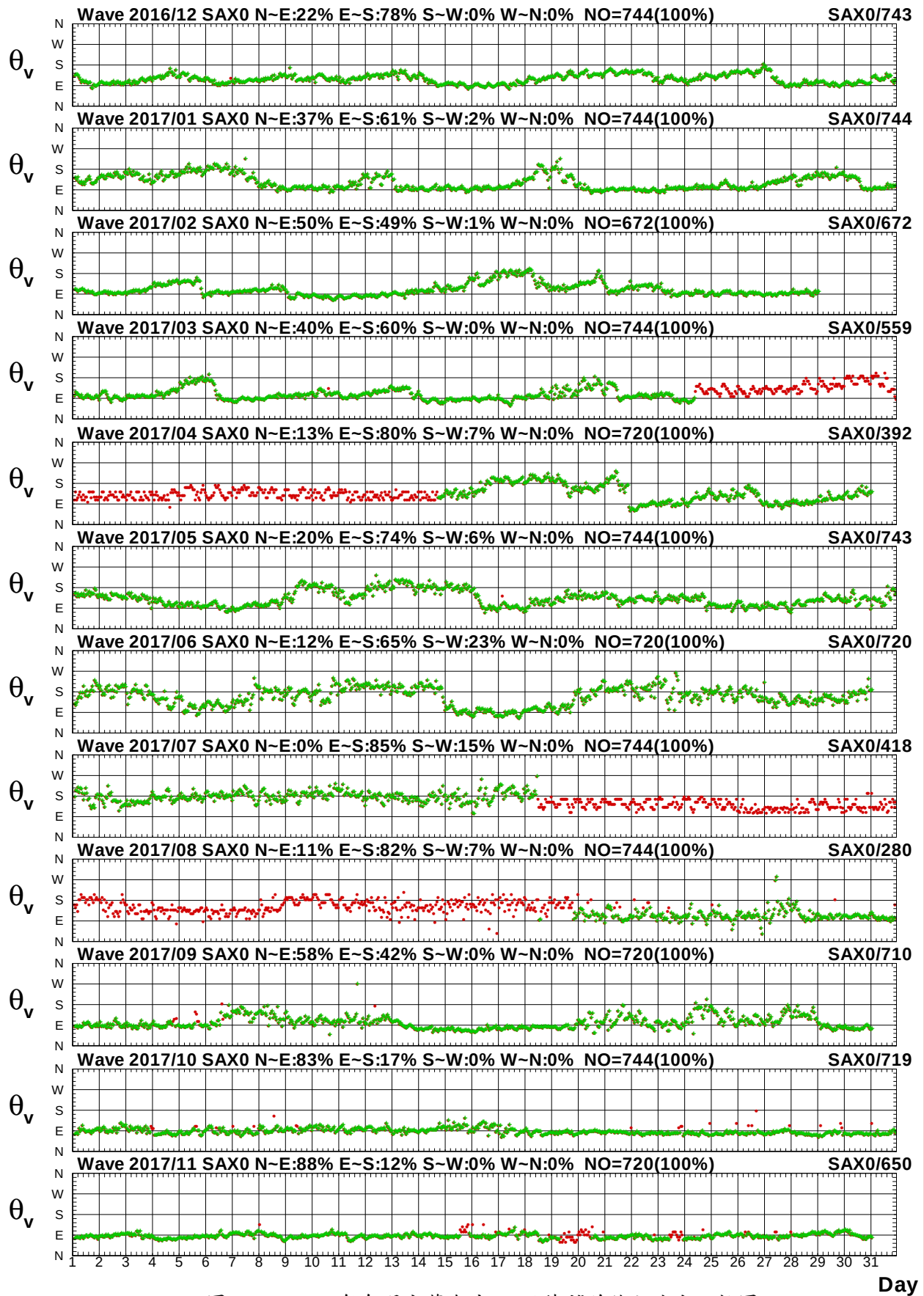


圖2.1c 2017年每月宜蘭海域 X 站修補前後之波向比較圖

V16CSAX0.1HA V16CSAX0.1H0 V171SAX0.1HA V171SAX0.1H0 V172SAX0.1HA V172SAX0.1H0
V173SAX0.1HA V173SAX0.1H0 V174SAX0.1HA V174SAX0.1H0 V175SAX0.1HA V175SAX0.1H0

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Wave H_s in Yi-Lan Seas of SAX0 at 2017

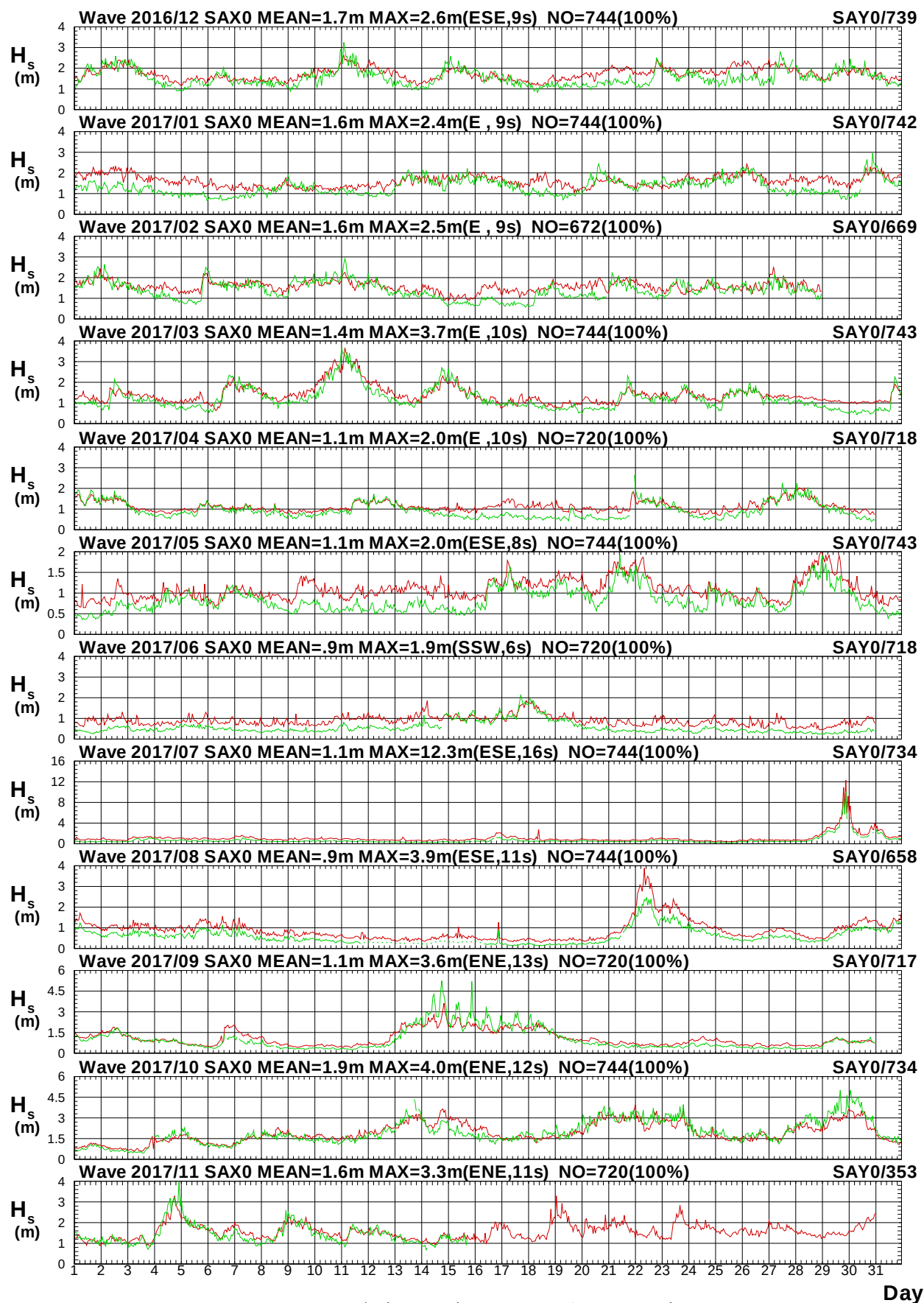


圖2.2a 2017年每月宜蘭海域 X 站與 Y 站波高比較圖

V16CSAX0.1HA V16CSAY0.1H0 V171SAX0.1HA V171SAY0.1H0 V172SAX0.1HA V172SAY0.1H0
V173SAX0.1HA V173SAY0.1H0 V174SAX0.1HA V174SAY0.1H0 V175SAX0.1HA V175SAY0.1H0

Institute of Harbor & Marine Technology

Wave T_p in Yi-Lan Seas of SAX0 at 2017

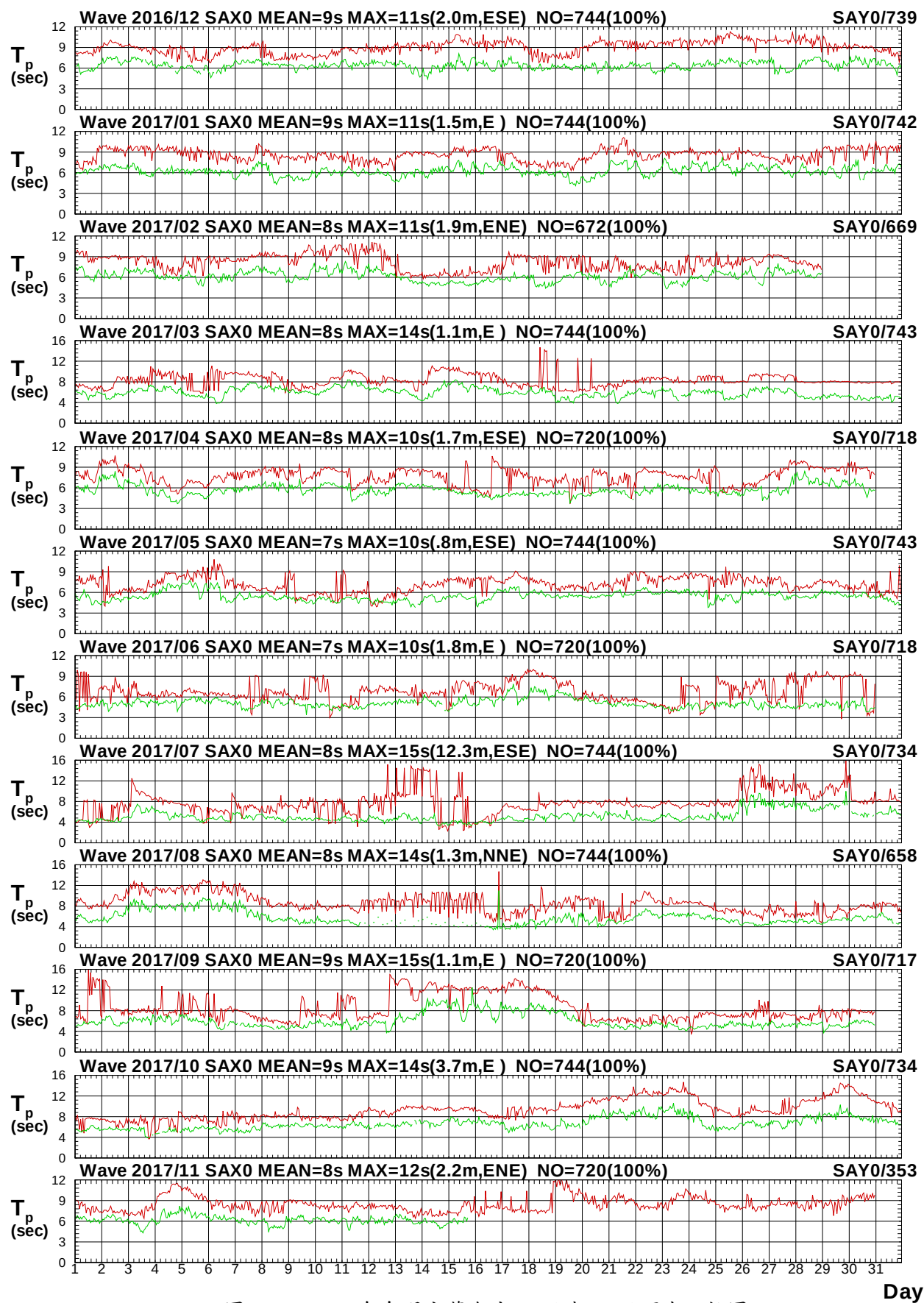


圖2.2b 2017年每月宜蘭海域 X 站與 Y 站週期比較圖

V16CSAX0.1HA V16CSAY0.1H0 V171SAX0.1HA V171SAY0.1H0 V172SAX0.1HA V172SAY0.1H0
V173SAX0.1HA V173SAY0.1H0 V174SAX0.1HA V174SAY0.1H0 V175SAX0.1HA V175SAY0.1H0

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Wave Direction in Yi-Lan Seas of SAX0 at 2017

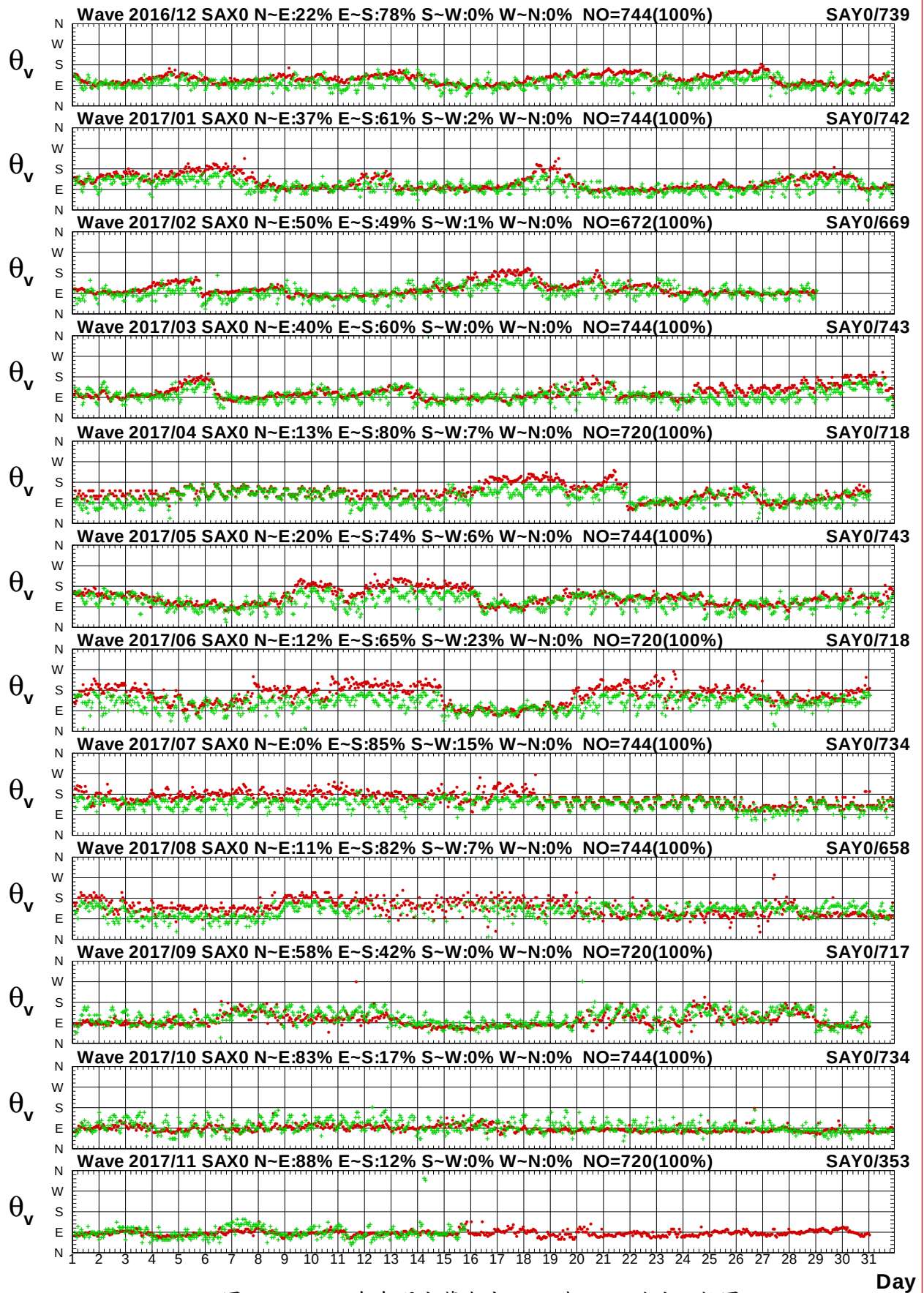


圖2.2c 2017年每月宜蘭海域 X 站與 Y 站波向比較圖

V16CSAX0.1HA V16CSAY0.1H0 V171SAX0.1HA V171SAY0.1H0 V172SAX0.1HA V172SAY0.1H0
V173SAX0.1HA V173SAY0.1H0 V174SAX0.1HA V174SAY0.1H0 V175SAX0.1HA V175SAY0.1H0

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Wave H_s in Yi-Lan Seas of SAX0 at 2017

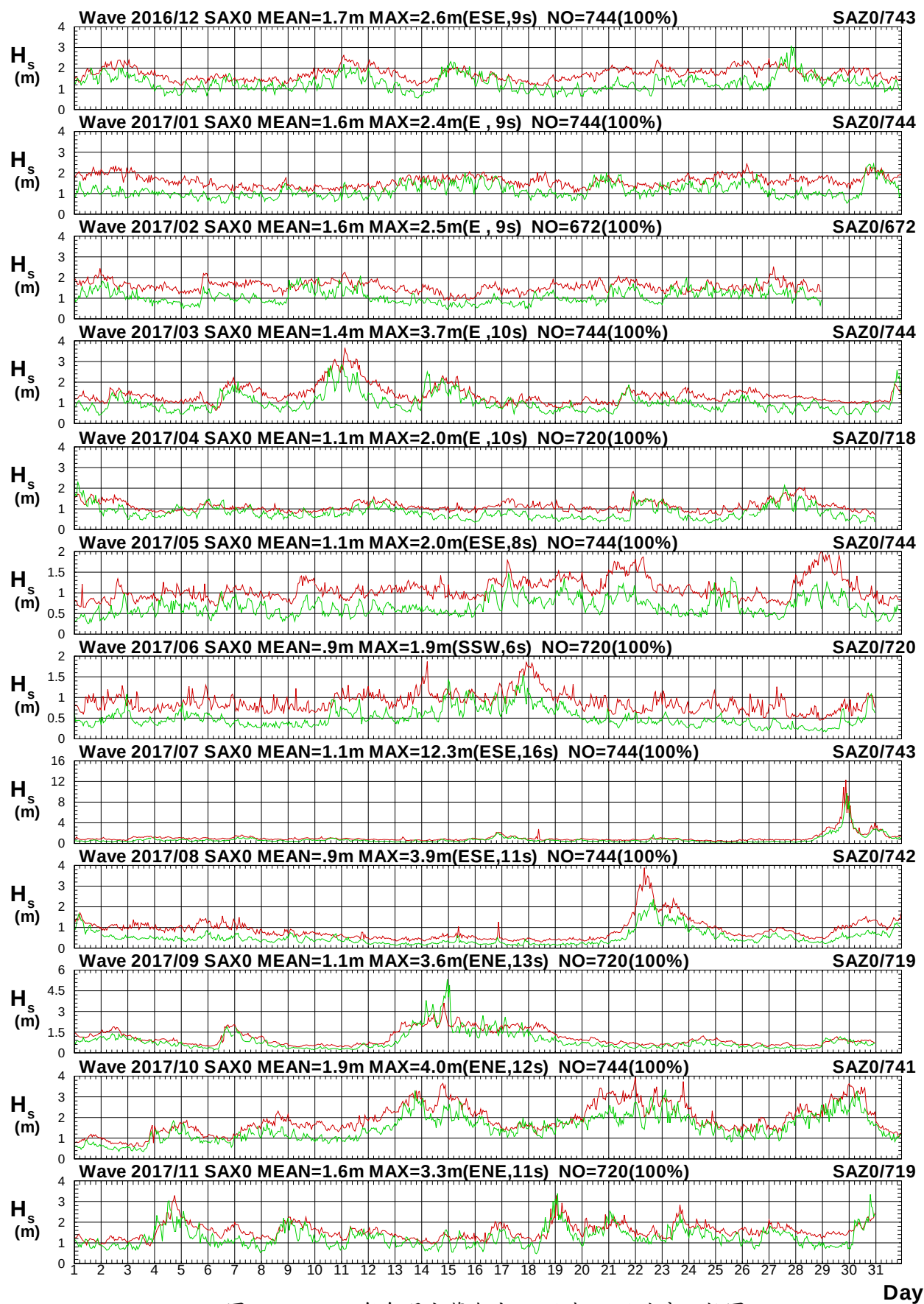


圖2.3a 2017年每月宜蘭海域 X 站與 Z 站波高比較圖

V16CSAX0.1HA V16CSAZ0.1H0 V171SAX0.1HA V171SAZ0.1H0 V172SAX0.1HA V172SAZ0.1H0
V173SAX0.1HA V173SAZ0.1H0 V174SAX0.1HA V174SAZ0.1H0 V175SAX0.1HA V175SAZ0.1H0

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Wave T_p in Yi-Lan Seas of SAX0 at 2017

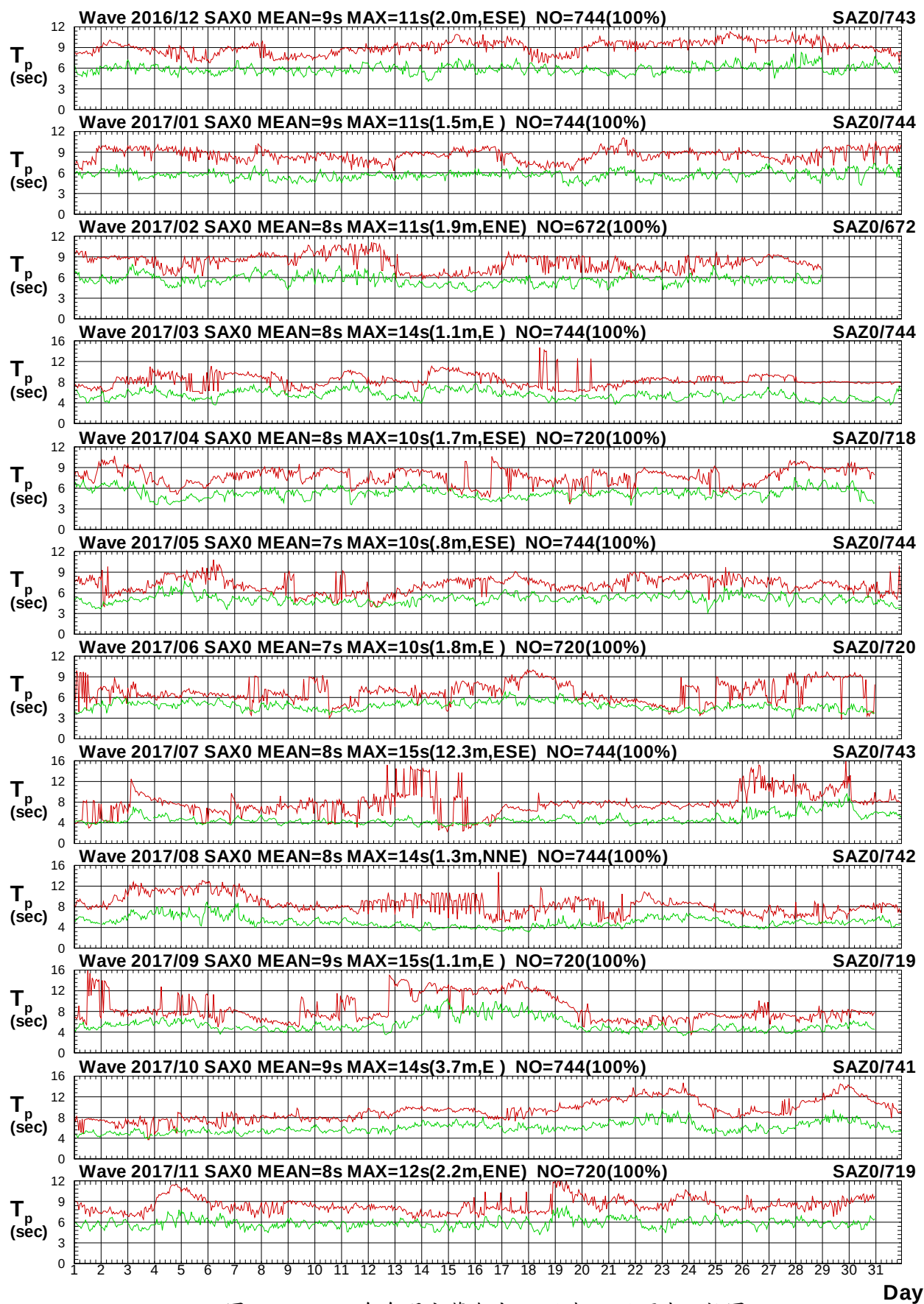


圖2.3b 2017年每月宜蘭海域 X 站與 Z 站週期比較圖

V16CSAX0.1HA V16CSAZ0.1H0 V171SAX0.1HA V171SAZ0.1H0 V172SAX0.1HA V172SAZ0.1H0
V173SAX0.1HA V173SAZ0.1H0 V174SAX0.1HA V174SAZ0.1H0 V175SAX0.1HA V175SAZ0.1H0

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Wave Direction in Yi-Lan Seas of SAX0 at 2017

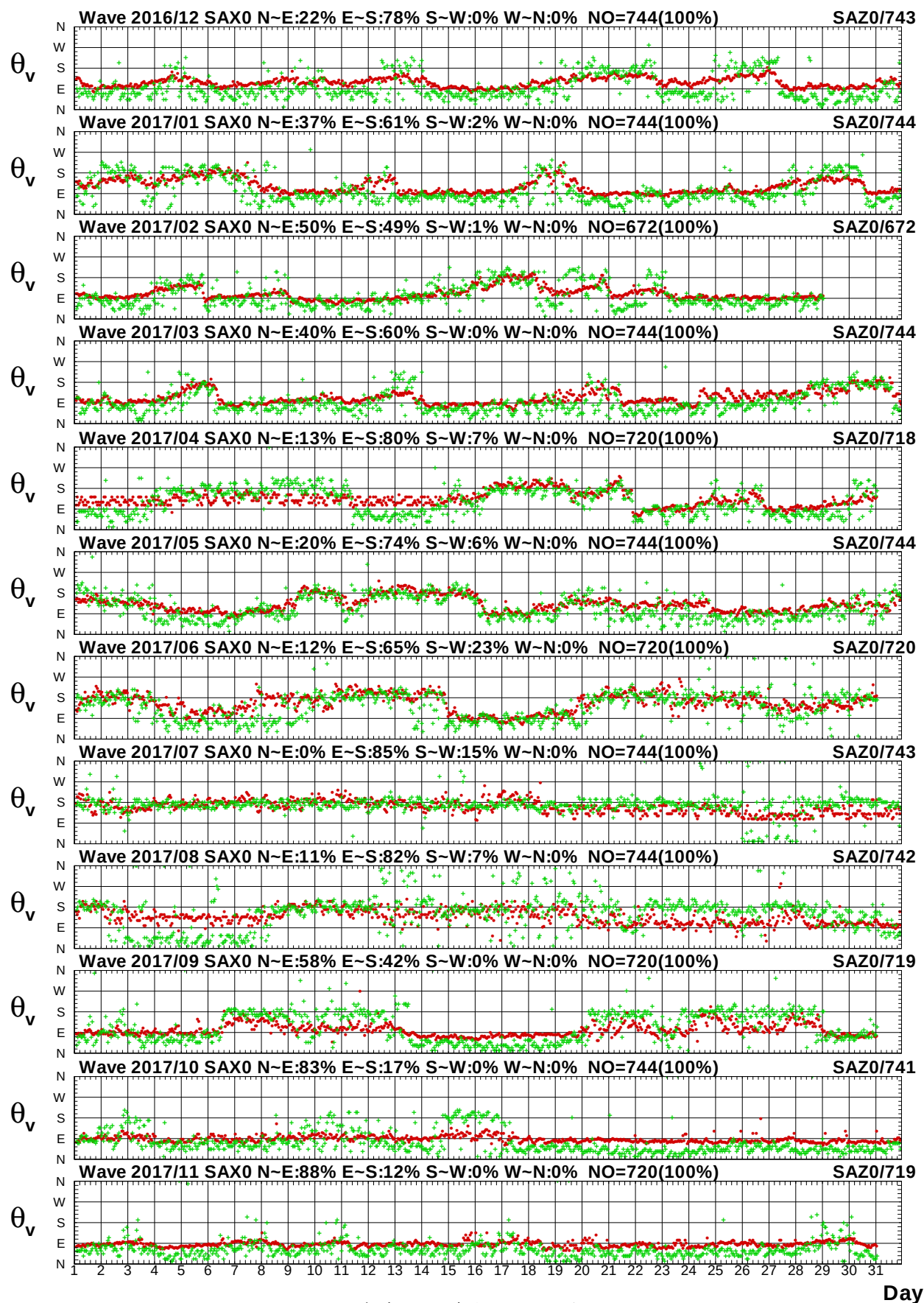


圖2.3c 2017年每月宜蘭海域 X 站與 Z 站波向比較圖

V16CSAX0.1HA V16CSAZ0.1H0 V171SAX0.1HA V171SAZ0.1H0 V172SAX0.1HA V172SAZ0.1H0
V173SAX0.1HA V173SAZ0.1H0 V174SAX0.1HA V174SAZ0.1H0 V175SAX0.1HA V175SAZ0.1H0

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Wave H_s in Yi-Lan Seas of SAX0 at 2017

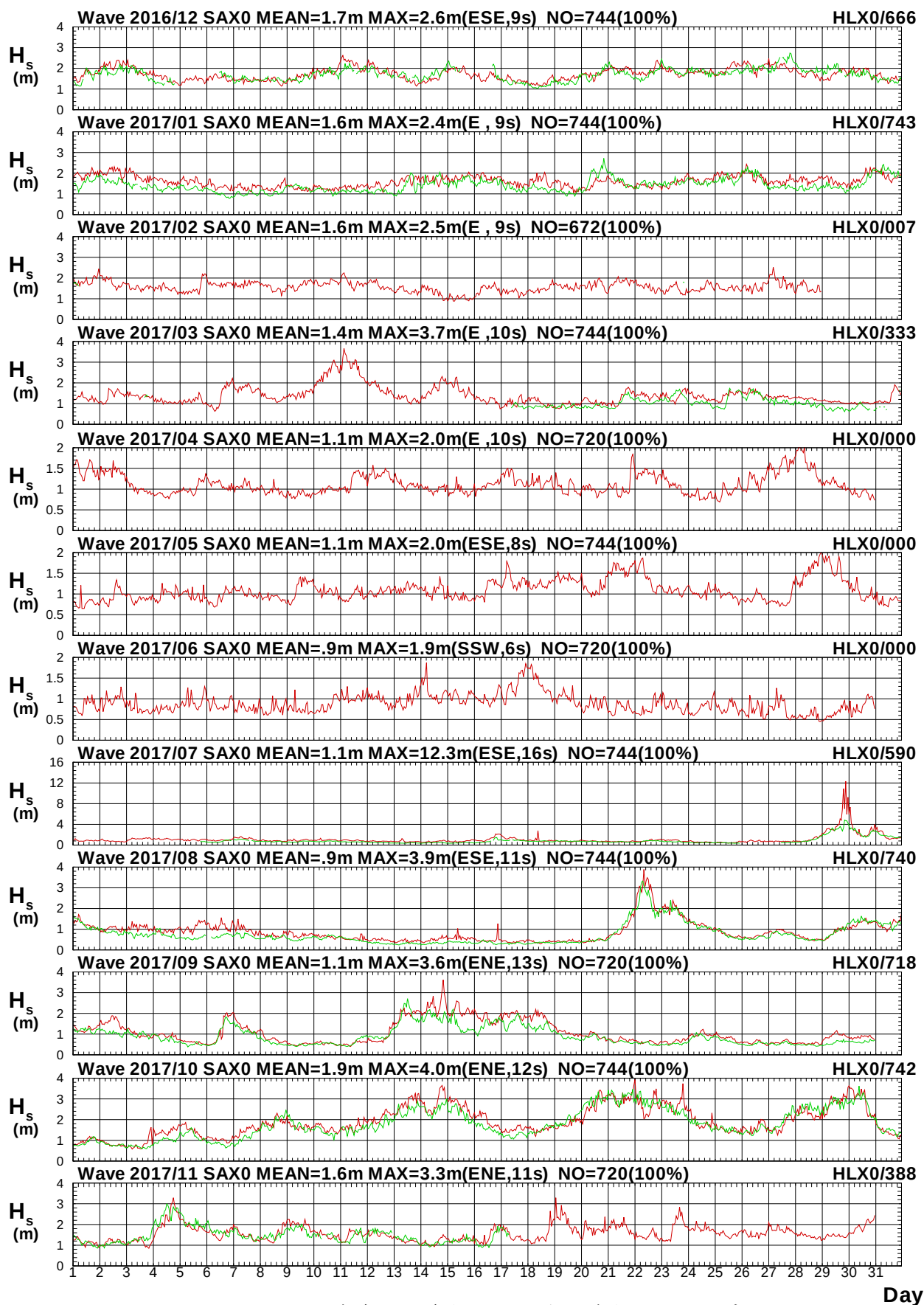


圖2.4a 2017年每月宜蘭海域 X 站與花蓮海域 X 站波高圖

V16CSAX0.1HA V16CHLX0.1H0 V171SAX0.1HA V171HLX0.1H0 V172SAX0.1HA V172HLX0.1H0
V173SAX0.1HA V173HLX0.1H0 V174SAX0.1HA V174HLX0.1H0 V175SAX0.1HA V175HLX0.1H0

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Wave T_p in Yi-Lan Seas of SAX0 at 2017

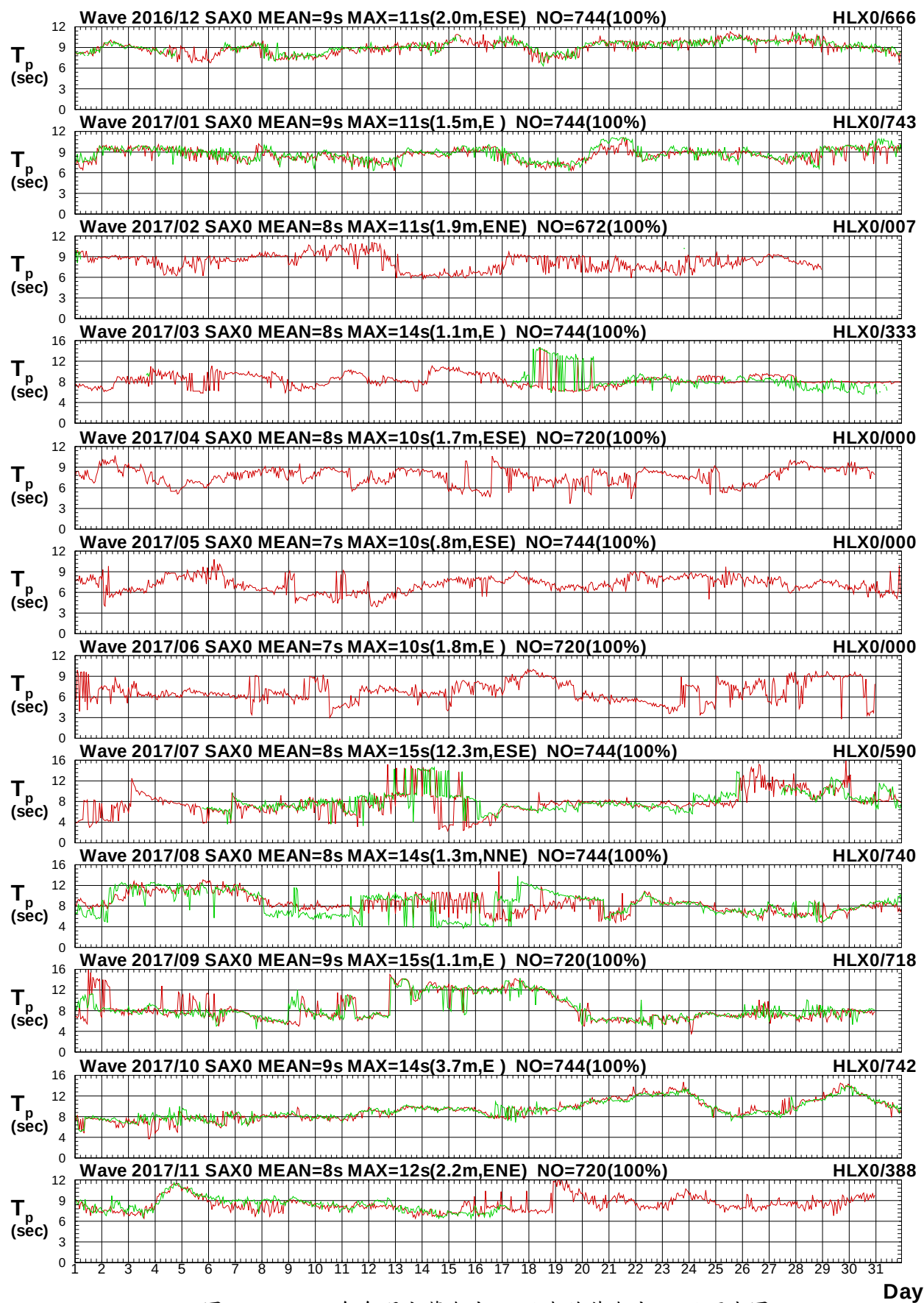


圖2.4b 2017年每月宜蘭海域 X 站與花蓮海域 X 站週期圖

V16CSAX0.1HA V16CHLX0.1H0 V171SAX0.1HA V171HLX0.1H0 V172SAX0.1HA V172HLX0.1H0
V173SAX0.1HA V173HLX0.1H0 V174SAX0.1HA V174HLX0.1H0 V175SAX0.1HA V175HLX0.1H0

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Wave Direction in Yi-Lan Seas of SAX0 at 2017

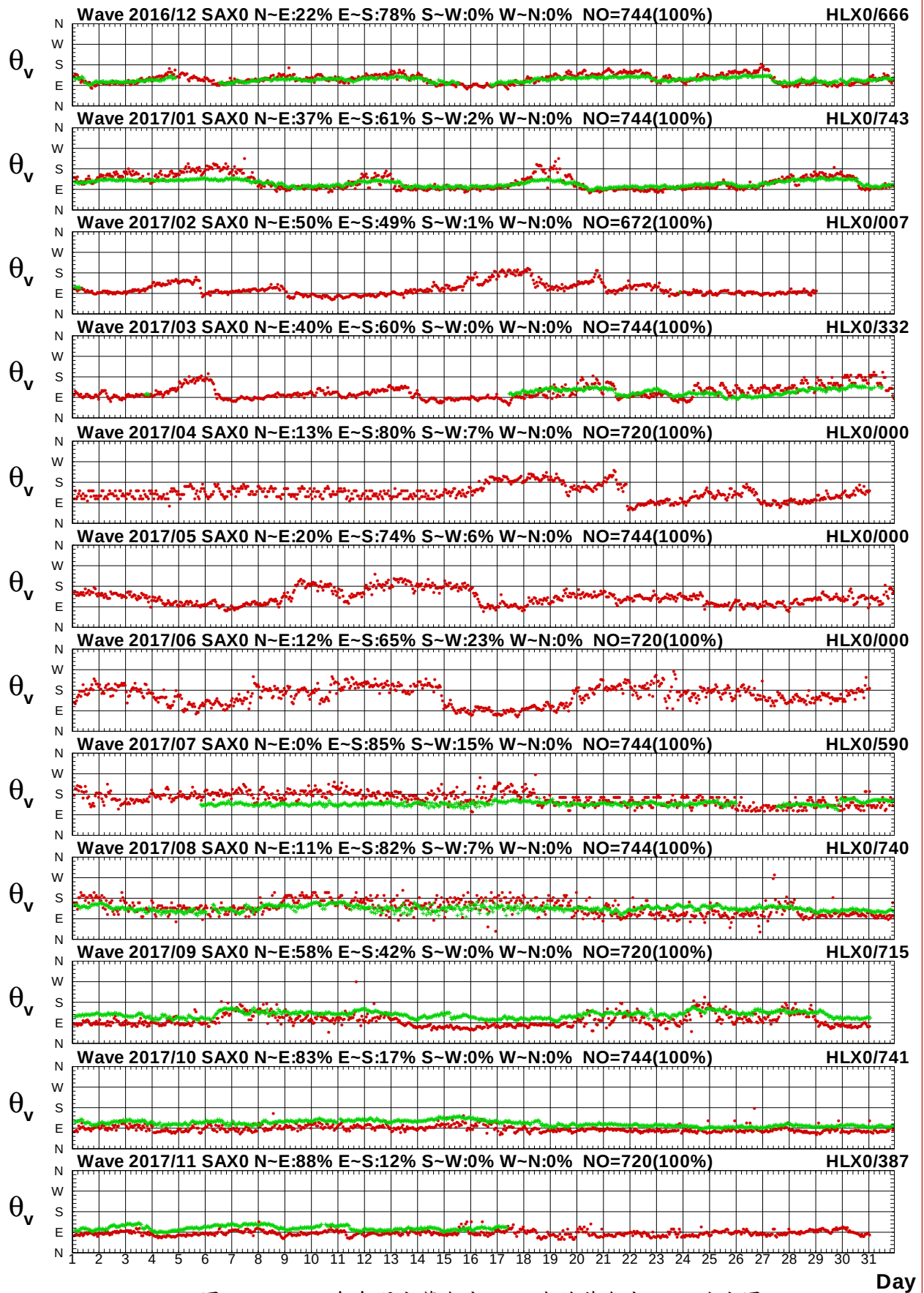


圖2.4c 2017年每月宜蘭海域 X 站與花蓮海域 X 站波向圖

V16CSAX0.1HA V16CHLX0.1H0 V171SAX0.1HA V171HLX0.1H0 V172SAX0.1HA V172HLX0.1H0
V173SAX0.1HA V173HLX0.1H0 V174SAX0.1HA V174HLX0.1H0 V175SAX0.1HA V175HLX0.1H0

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Wave H_s in Yi-Lan Seas of SAX0 at 2017

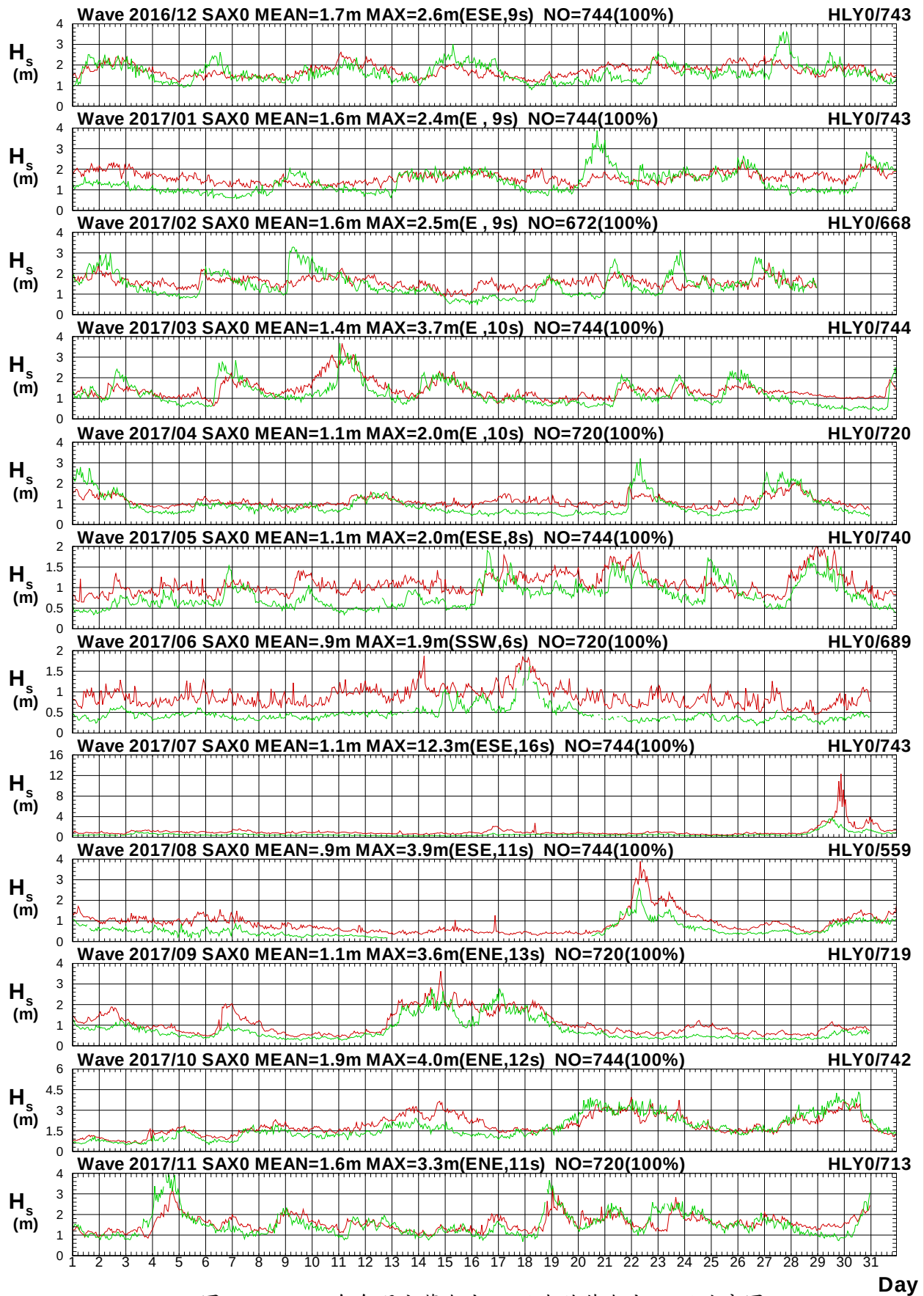


圖2.5a 2017年每月宜蘭海域 X 站與花蓮海域 Y 站波高圖

V16CSAX0.1HA V16CHLY0.1H0 V171SAX0.1HA V171HLY0.1H0 V172SAX0.1HA V172HLY0.1H0
V173SAX0.1HA V173HLY0.1H0 V174SAX0.1HA V174HLY0.1H0 V175SAX0.1HA V175HLY0.1H0

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Wave T_p in Yi-Lan Seas of SAX0 at 2017

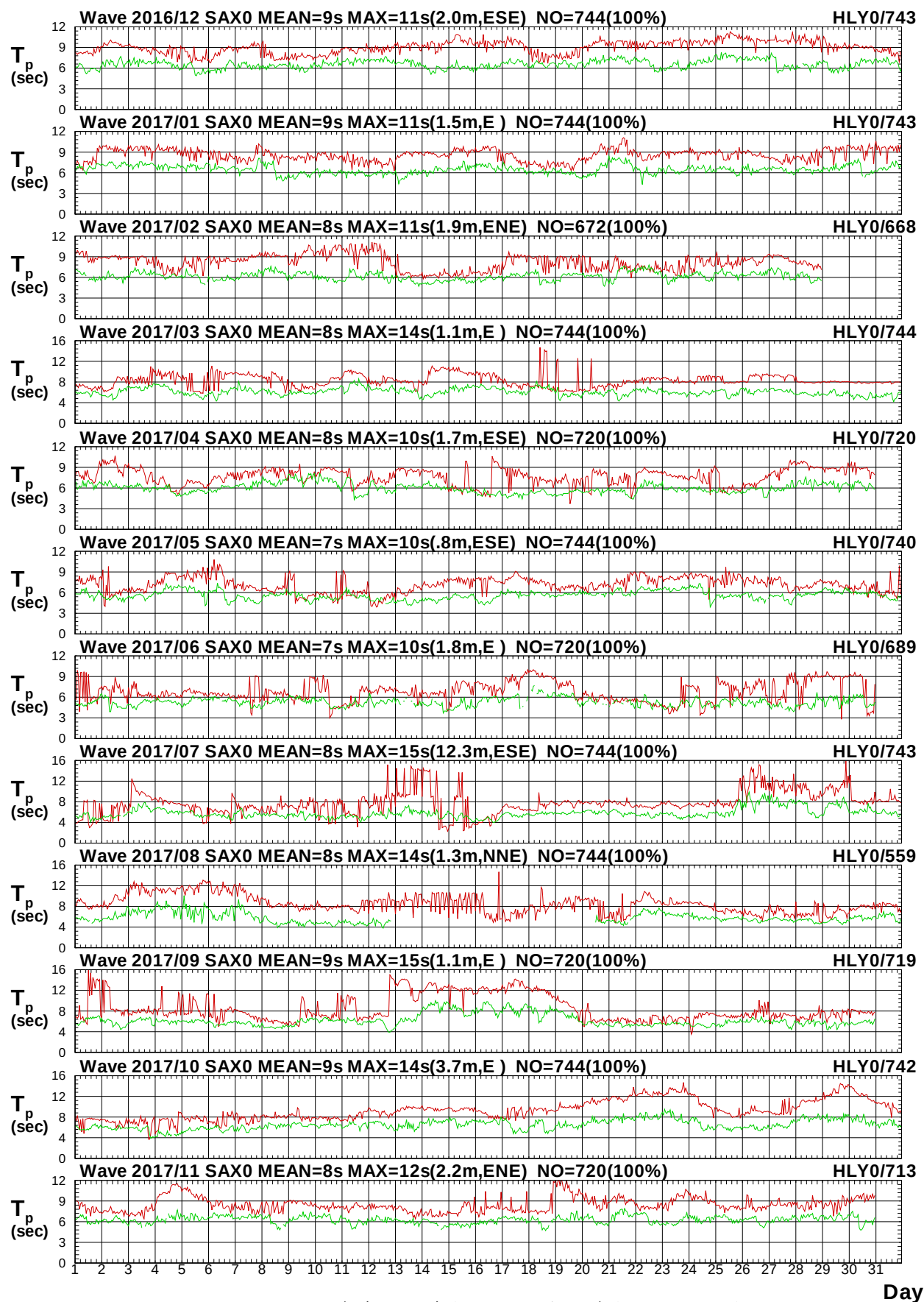


圖2.5b 2017年每月宜蘭海域 X 站與花蓮海域 Y 站週期圖

V16CSAX0.1HA V16CHLY0.1H0 V171SAX0.1HA V171HLY0.1H0 V172SAX0.1HA V172HLY0.1H0
V173SAX0.1HA V173HLY0.1H0 V174SAX0.1HA V174HLY0.1H0 V175SAX0.1HA V175HLY0.1H0

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Wave Direction in Yi-Lan Seas of SAX0 at 2017

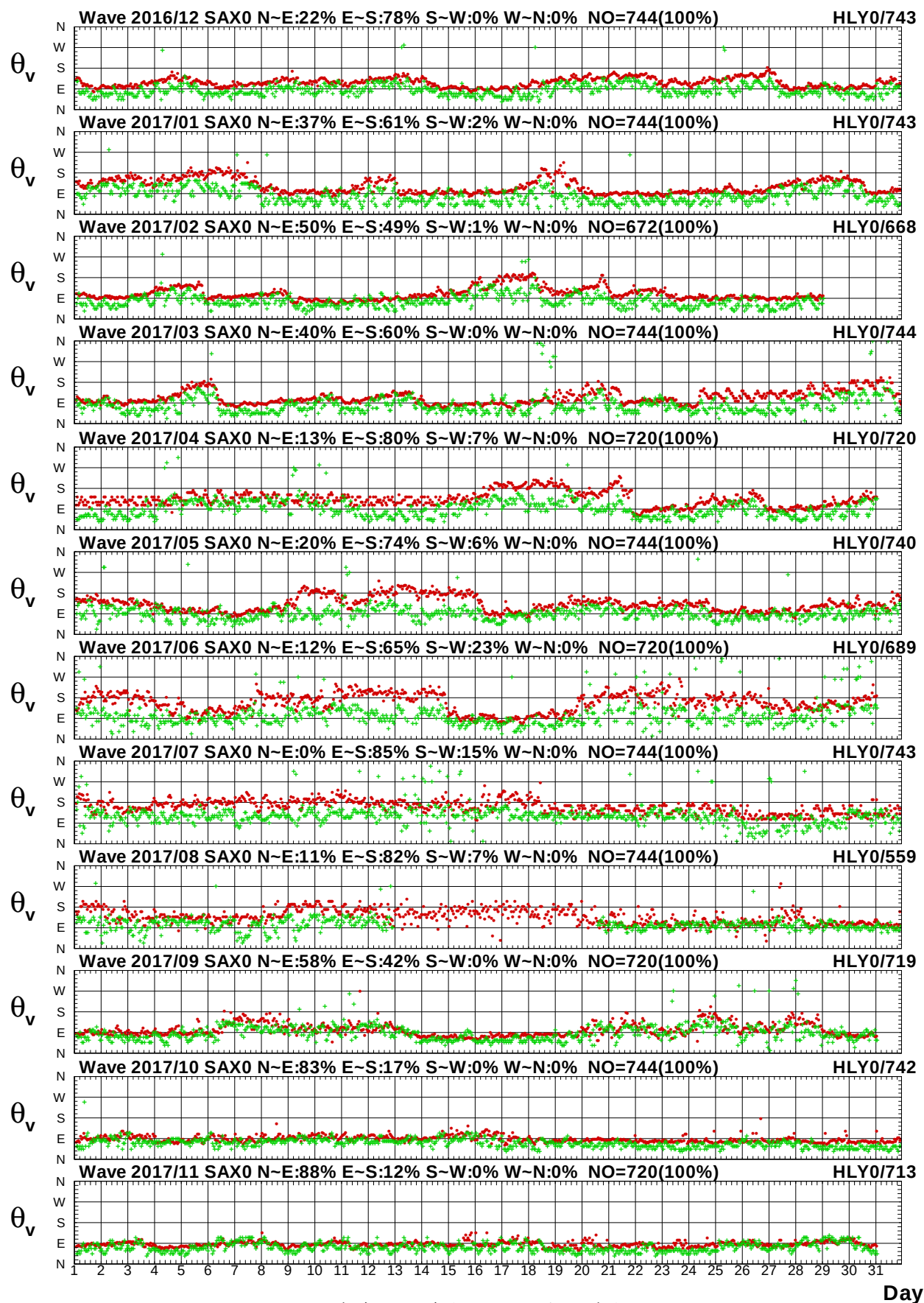


圖2.5c 2017年每月宜蘭海域 X 站與花蓮海域 Y 站波向圖

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V173SAX0.1HA V173HLY0.1H0 V174SAX0.1HA V174HLY0.1H0 V175SAX0.1HA V175HLY0.1H0

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Wave H_s in Yi-Lan Seas of SAX0 at 2017

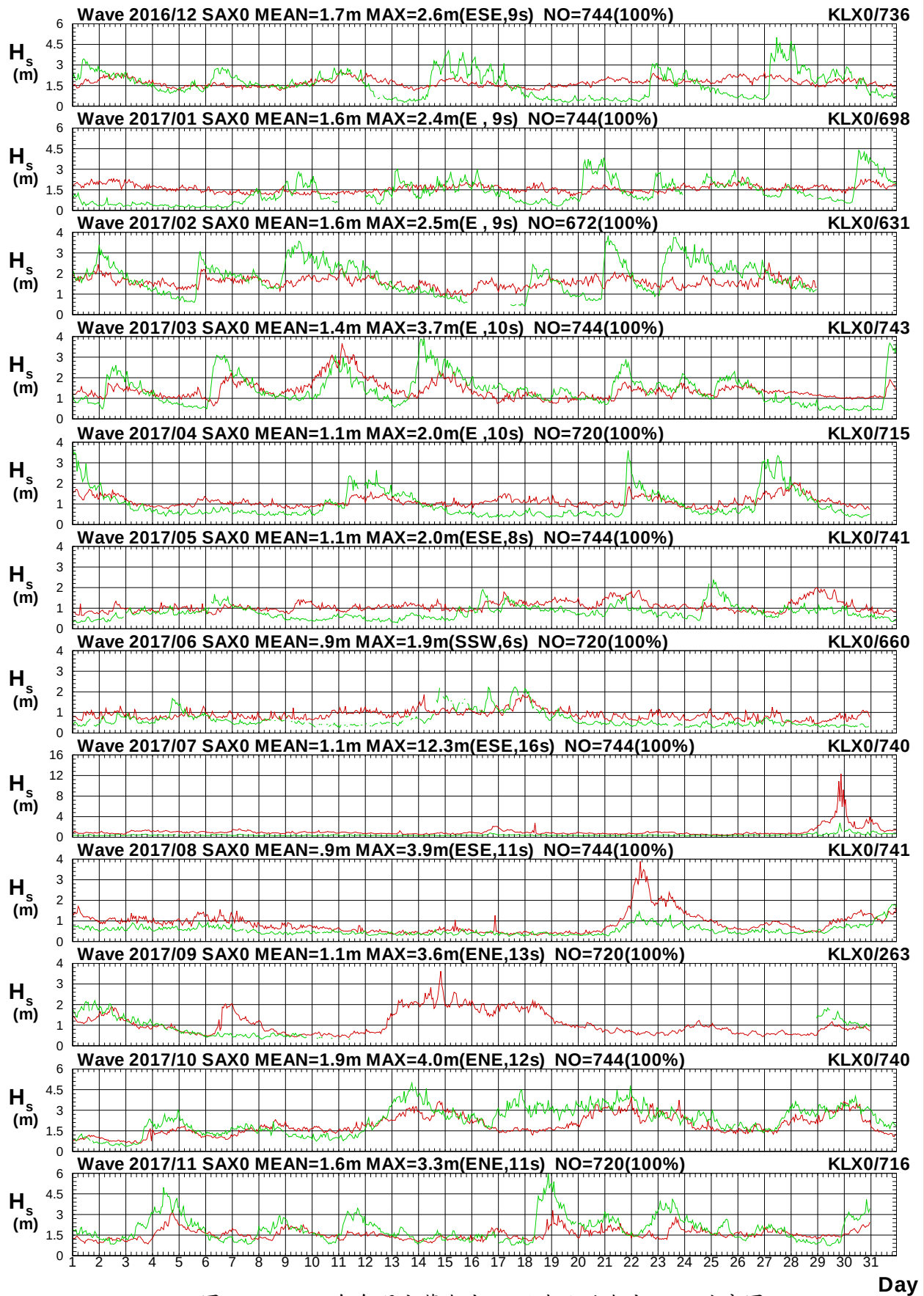


圖2.6a 2017年每月宜蘭海域 X 站與北端海域 X 站波高圖

V16CSAX0.1HA V16CKLX0.1H0 V171SAX0.1HA V171KLX0.1H0 V172SAX0.1HA V172KLX0.1H0
V173SAX0.1HA V173KLX0.1H0 V174SAX0.1HA V174KLX0.1H0 V175SAX0.1HA V175KLX0.1H0

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Wave T_p in Yi-Lan Seas of SAX0 at 2017

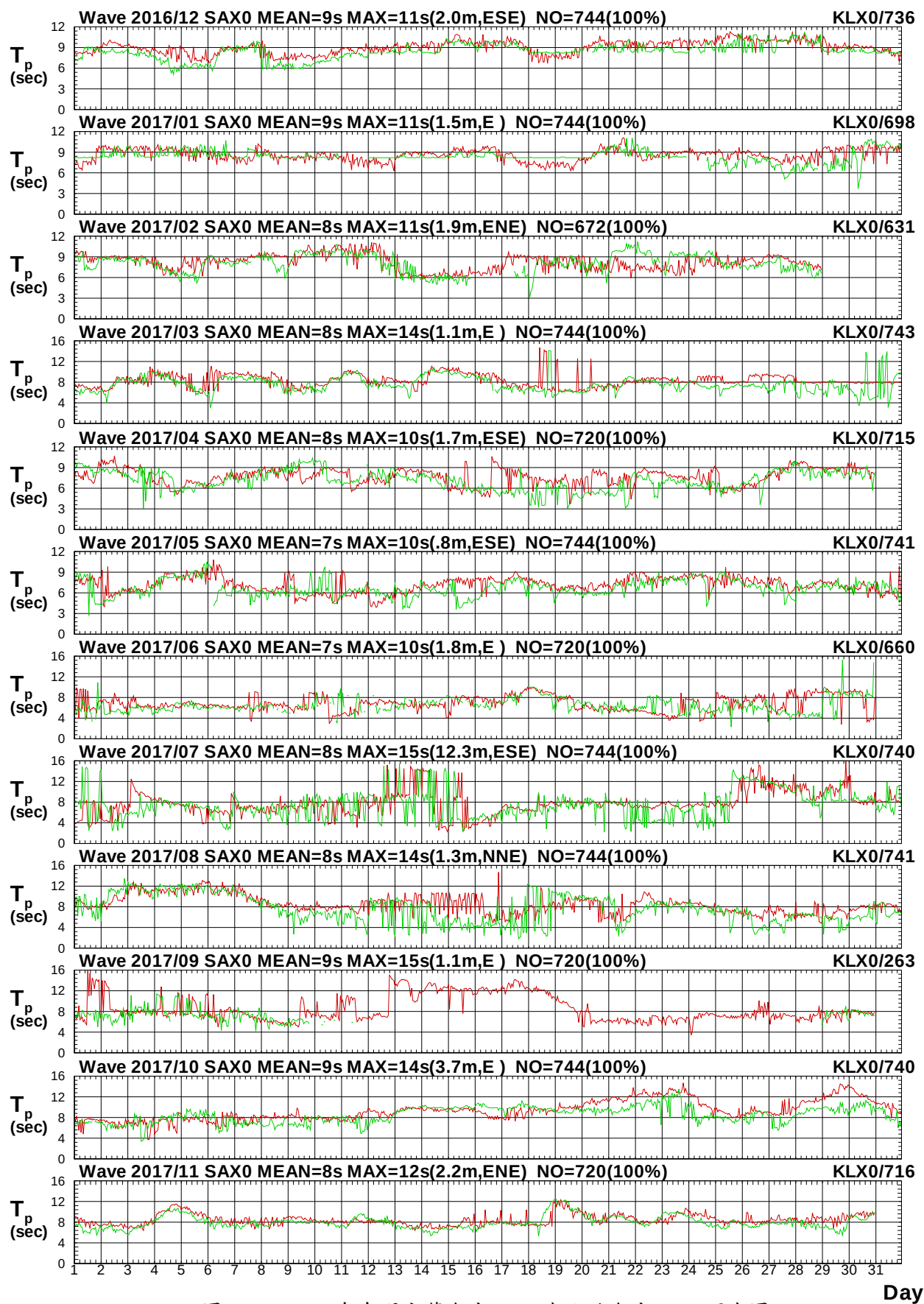


圖2.6b 2017年每月宜蘭海域 X 站與北端海域 X 站週期圖

V16CSAX0.1HA V16CKLX0.1H0 V171SAX0.1HA V171KLX0.1H0 V172SAX0.1HA V172KLX0.1H0
V173SAX0.1HA V173KLX0.1H0 V174SAX0.1HA V174KLX0.1H0 V175SAX0.1HA V175KLX0.1H0

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Wave Direction in Yi-Lan Seas of SAX0 at 2017

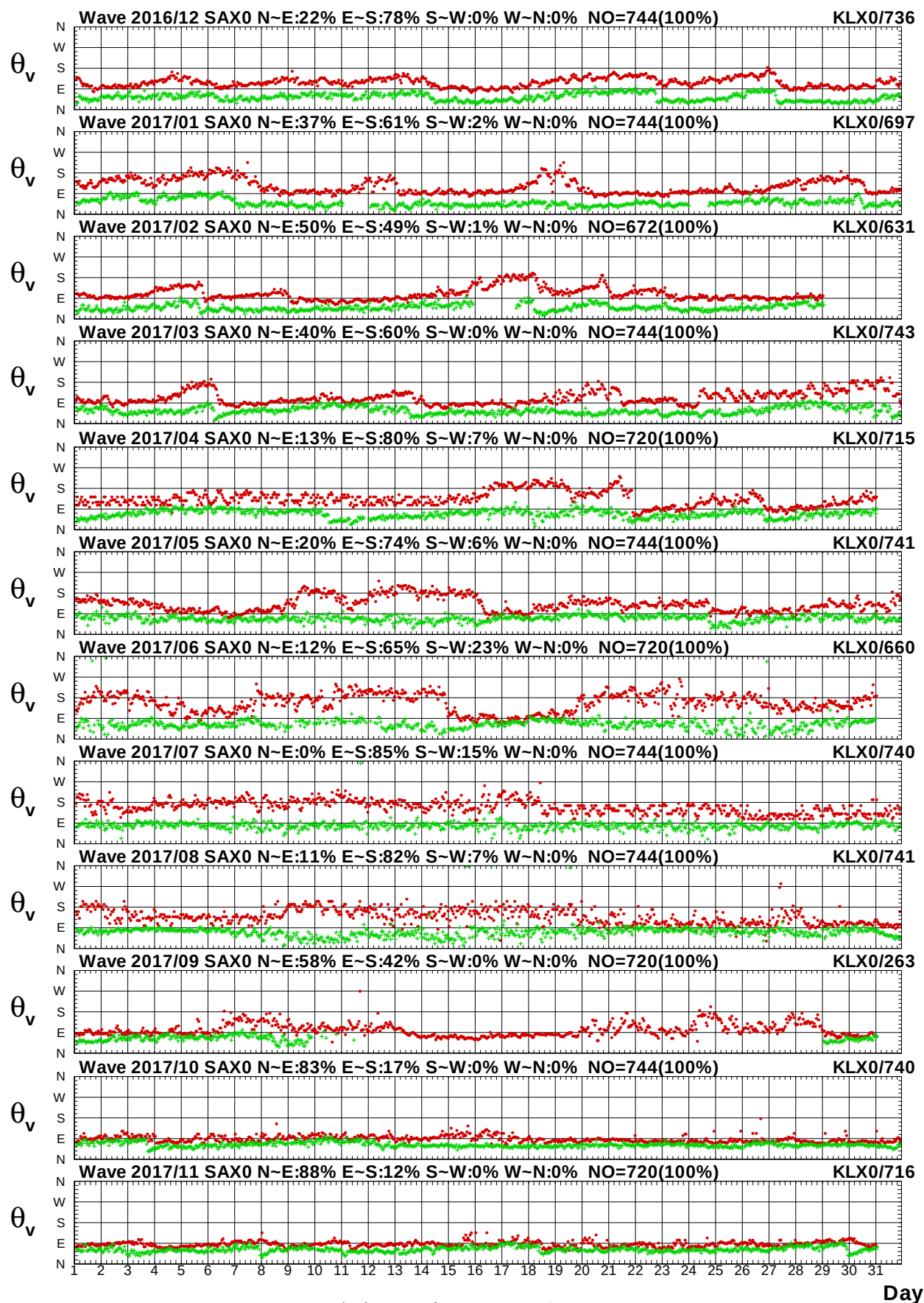


圖2.6c 2017年每月宜蘭海域 X 站與北端海域 X 站波向圖

V16CSAX0.1HA V16CKLX0.1H0 V171SAX0.1HA V171KLX0.1H0 V172SAX0.1HA V172KLX0.1H0
V173SAX0.1HA V173KLX0.1H0 V174SAX0.1HA V174KLX0.1H0 V175SAX0.1HA V175KLX0.1H0

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Wave H_s in Yi-Lan Seas of SAX0 at 2017

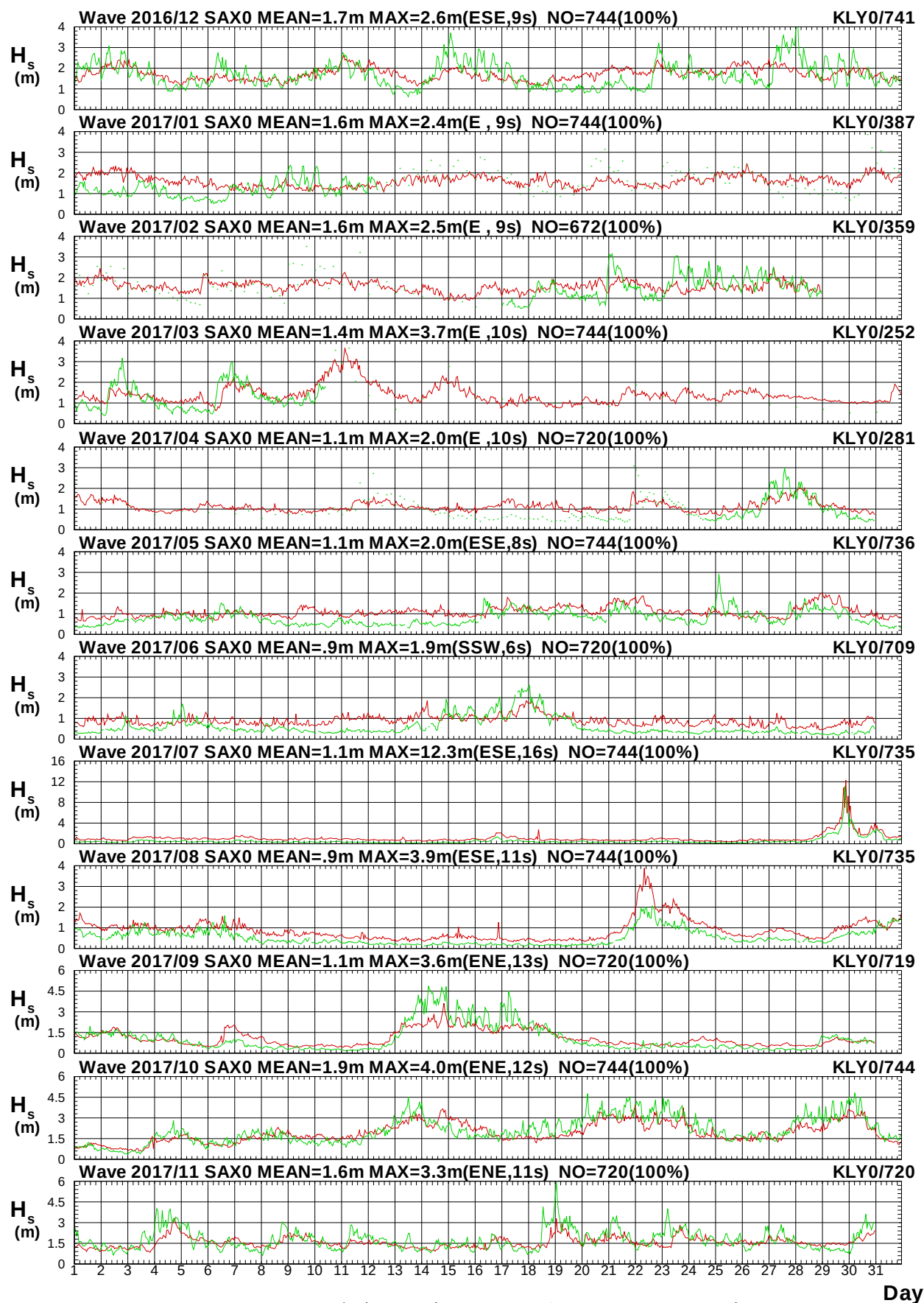


圖2.7a 2017年每月宜蘭海域 X 站與北端海域 Y 站波高圖

V16CSAX0.1HA V16CKLY0.1H0 V171SAX0.1HA V171KLY0.1H0 V172SAX0.1HA V172KLY0.1H0
V173SAX0.1HA V173KLY0.1H0 V174SAX0.1HA V174KLY0.1H0 V175SAX0.1HA V175KLY0.1H0

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Wave T_p in Yi-Lan Seas of SAX0 at 2017

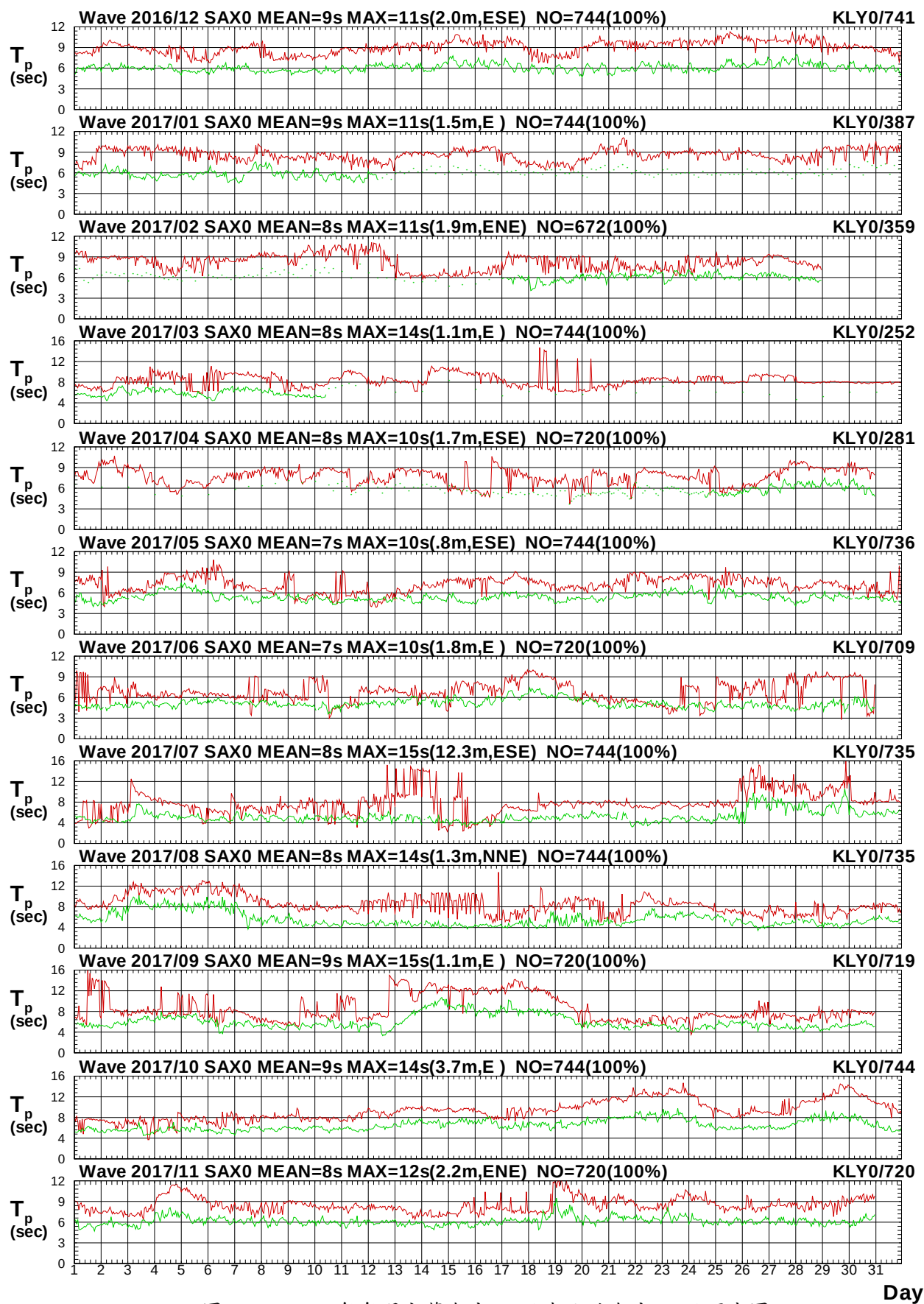


圖2.7b 2017年每月宜蘭海域 X 站與北端海域 Y 站週期圖

V16CSAX0.1HA V16CKLY0.1H0 V171SAX0.1HA V171KLY0.1H0 V172SAX0.1HA V172KLY0.1H0
V173SAX0.1HA V173KLY0.1H0 V174SAX0.1HA V174KLY0.1H0 V175SAX0.1HA V175KLY0.1H0

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Wave Direction in Yi-Lan Seas of SAX0 at 2017

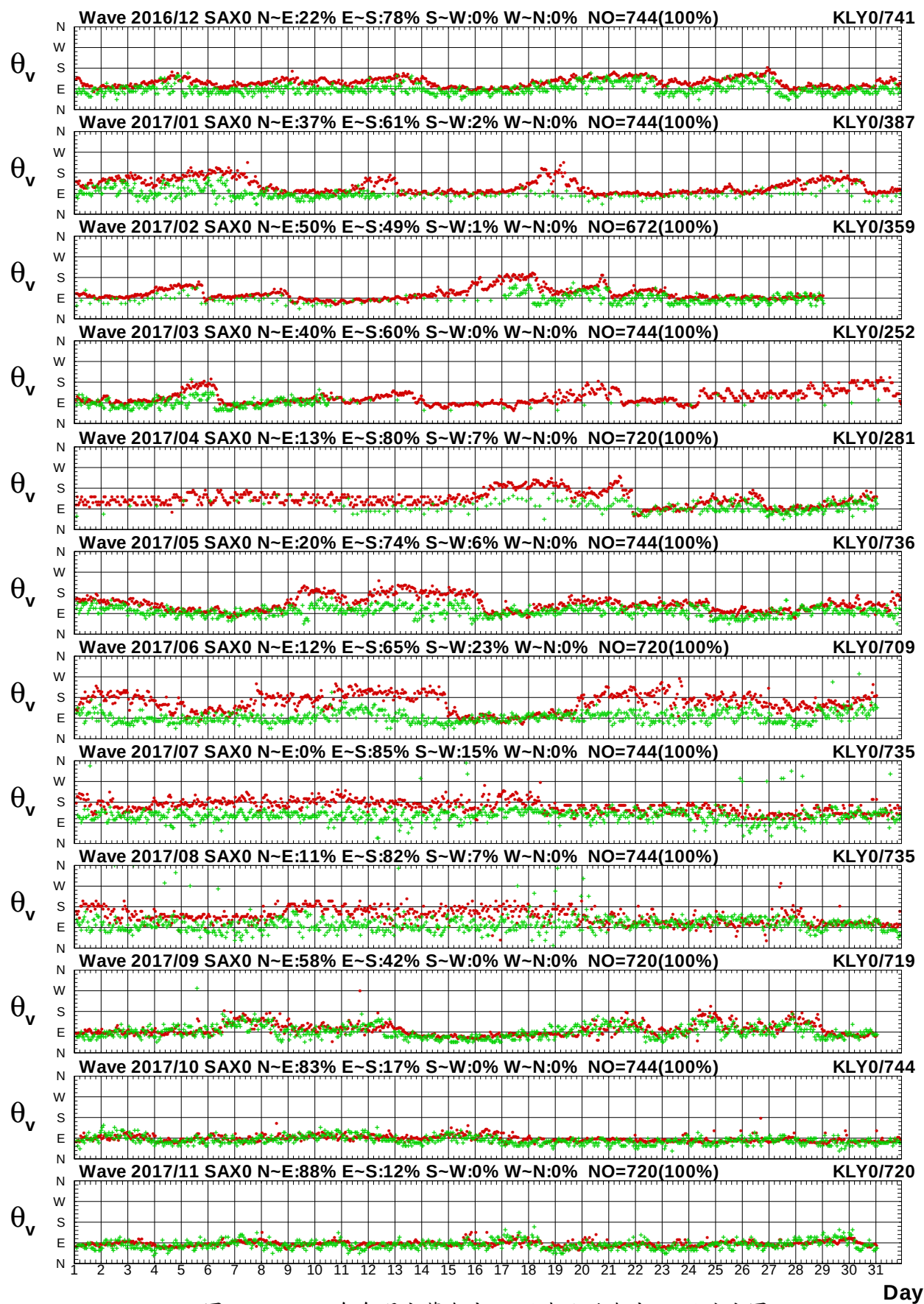


圖2.7c 2017年每月宜蘭海域 X 站與北端海域 Y 站波向圖

V16CSAX0.1HA V16CKLY0.1H0 V171SAX0.1HA V171KLY0.1H0 V172SAX0.1HA V172KLY0.1H0
V173SAX0.1HA V173KLY0.1H0 V174SAX0.1HA V174KLY0.1H0 V175SAX0.1HA V175KLY0.1H0

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Wave H_s in Yi-Lan Seas of SAX0 at 2017

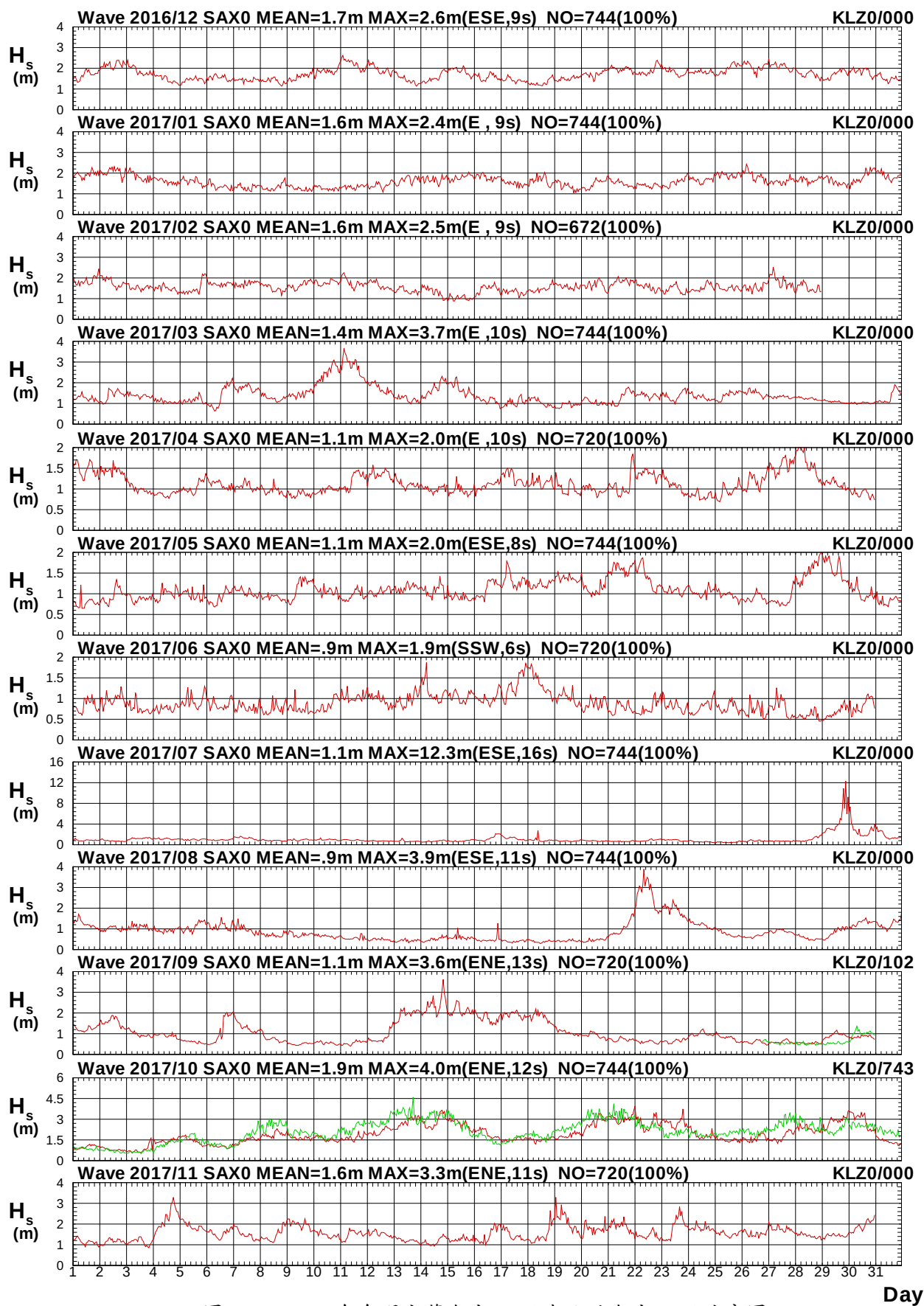


圖2.8a 2017年每月宜蘭海域 X 站與北端海域 Z 站波高圖

V16CSAX0.1HA V16CKLZ0.1H0 V171SAX0.1HA V171KLZ0.1H0 V172SAX0.1HA V172KLZ0.1H0
V173SAX0.1HA V173KLZ0.1H0 V174SAX0.1HA V174KLZ0.1H0 V175SAX0.1HA V175KLZ0.1H0

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Wave T_p in Yi-Lan Seas of SAX0 at 2017

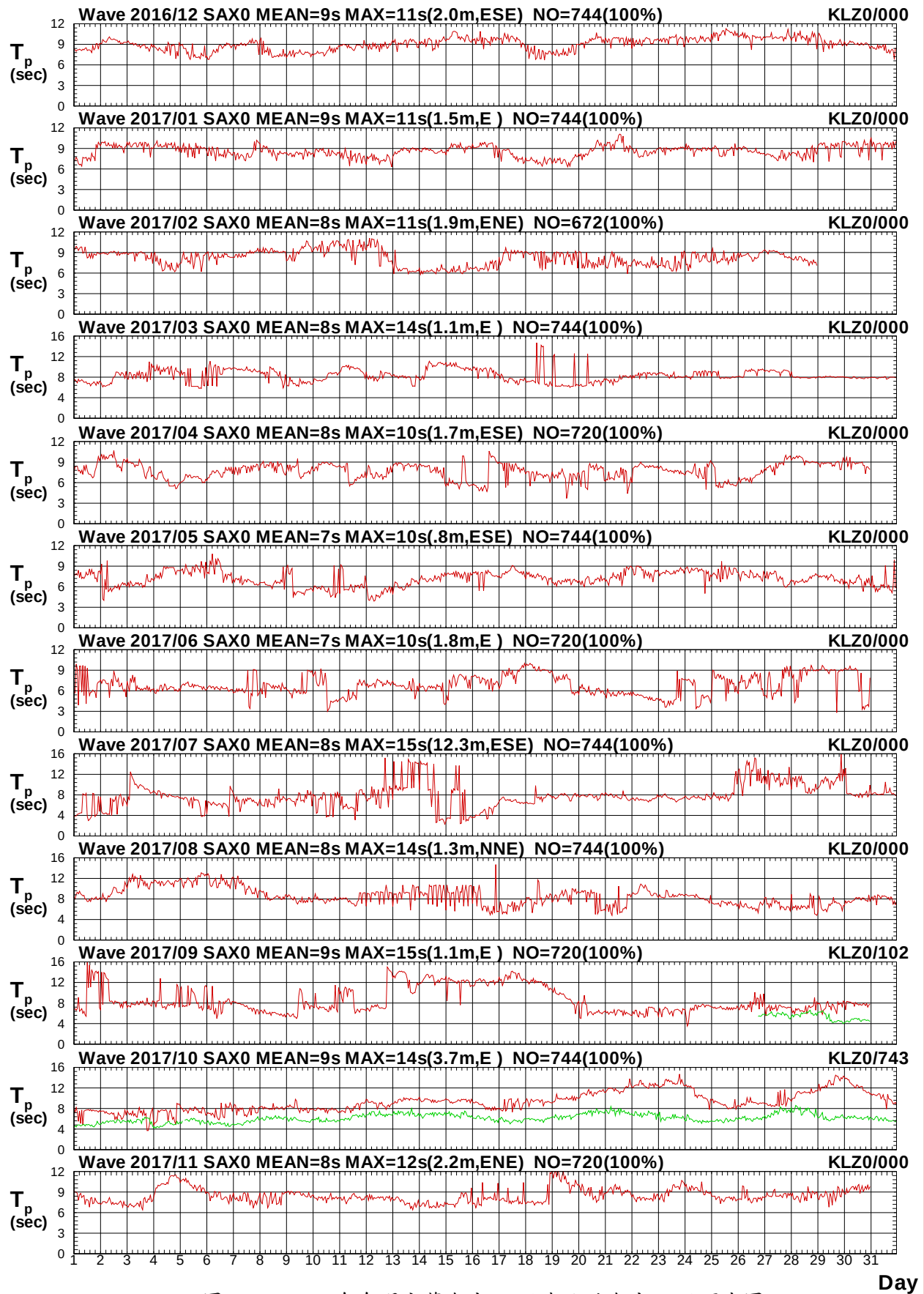


圖2.8b 2017年每月宜蘭海域 X 站與北端海域 Z 站週期圖

V16CSAX0.1HA V16CKLZ0.1H0 V171SAX0.1HA V171KLZ0.1H0 V172SAX0.1HA V172KLZ0.1H0
V173SAX0.1HA V173KLZ0.1H0 V174SAX0.1HA V174KLZ0.1H0 V175SAX0.1HA V175KLZ0.1H0

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Wave Direction in Yi-Lan Seas of SAX0 at 2017

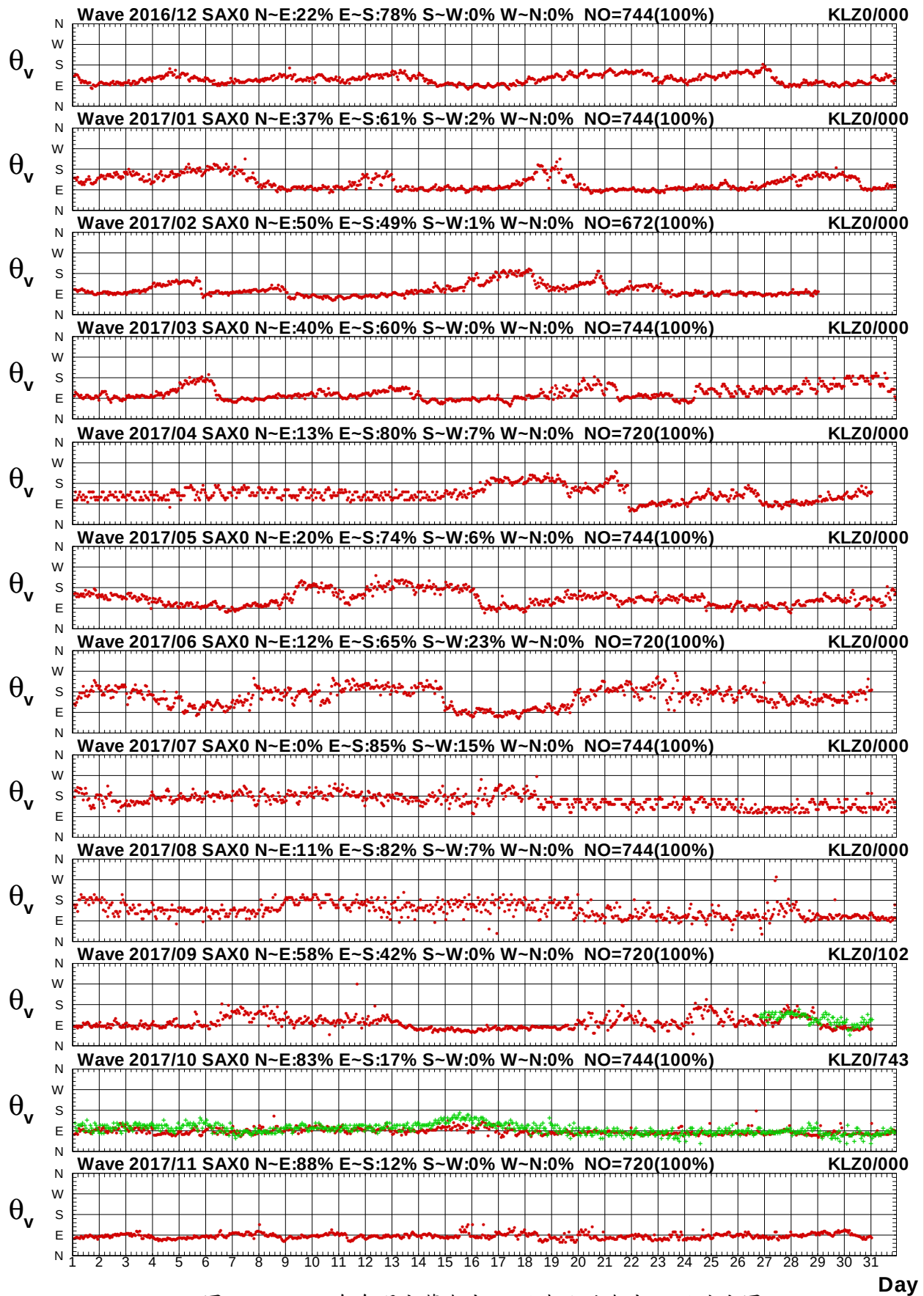


圖2.8c 2017年每月宜蘭海域 X 站與北端海域 Z 站波向圖

V16CSAX0.1HA V16CKLZ0.1H0 V171SAX0.1HA V171KLZ0.1H0 V172SAX0.1HA V172KLZ0.1H0
V173SAX0.1HA V173KLZ0.1H0 V174SAX0.1HA V174KLZ0.1H0 V175SAX0.1HA V175KLZ0.1H0

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Wave H_s in Yi-Lan Seas of SAX0 at 2017

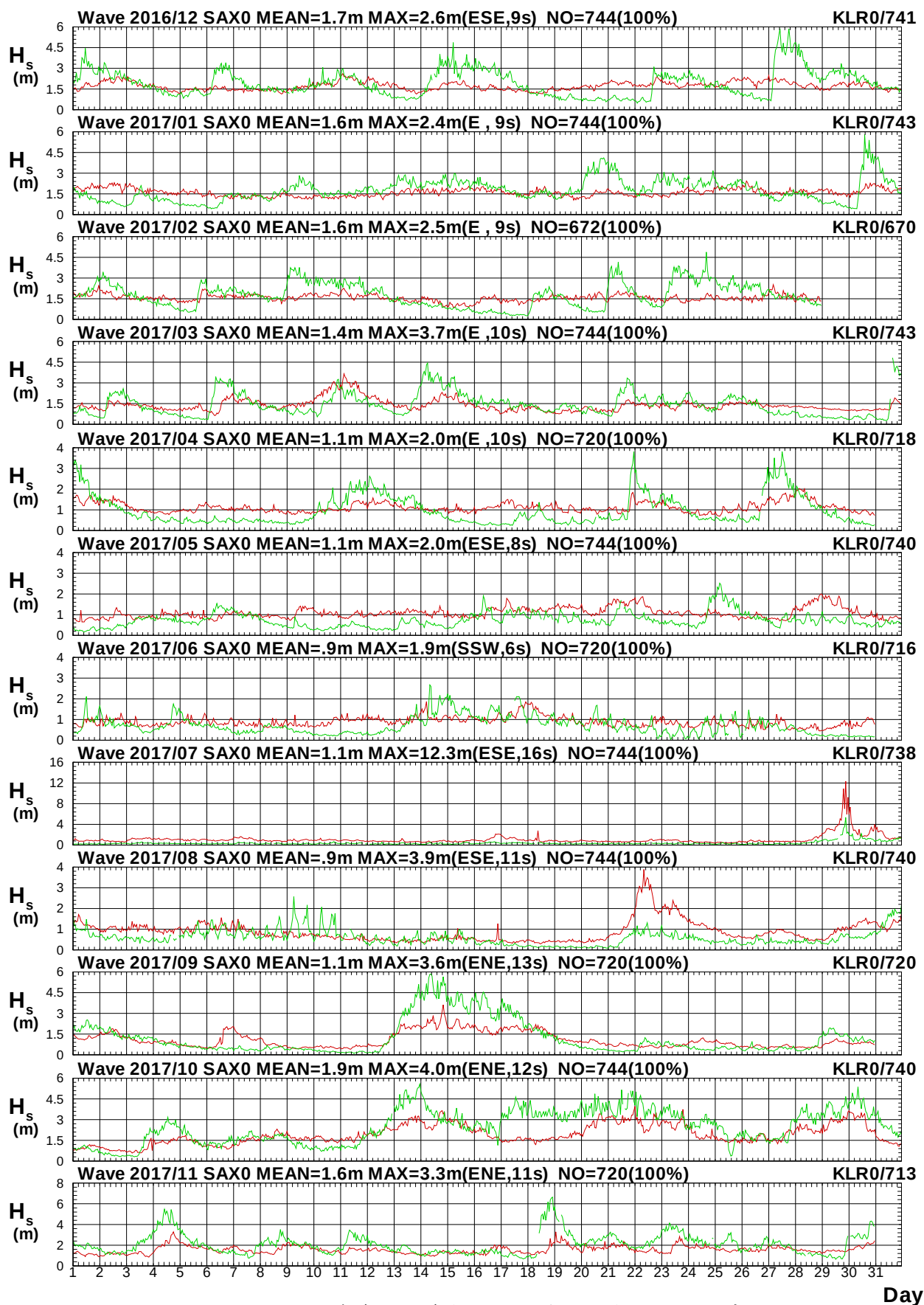


圖2.9a 2017年每月宜蘭海域 X 站與北端海域 R 站波高圖

V16CSAX0.1HA V16CKLR0.1H0 V171SAX0.1HA V171KLR0.1H0 V172SAX0.1HA V172KLR0.1H0
V173SAX0.1HA V173KLR0.1H0 V174SAX0.1HA V174KLR0.1H0 V175SAX0.1HA V175KLR0.1H0

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Wave T_p in Yi-Lan Seas of SAX0 at 2017

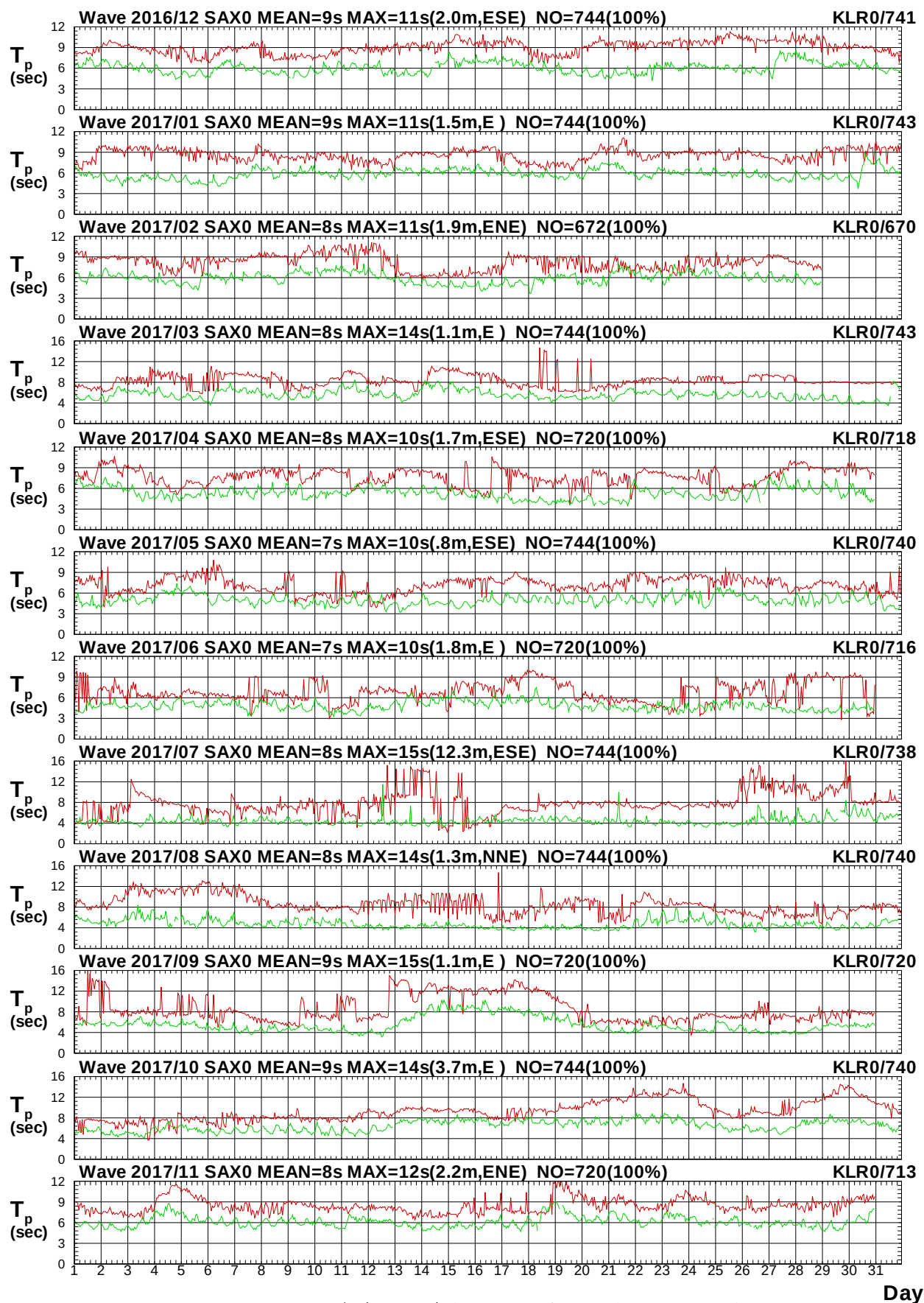


圖2.9b 2017年每月宜蘭海域 X 站與北端海域 R 站週期圖

V16CSAX0.1HA V16CKLR0.1H0 V171SAX0.1HA V171KLR0.1H0 V172SAX0.1HA V172KLR0.1H0
V173SAX0.1HA V173KLR0.1H0 V174SAX0.1HA V174KLR0.1H0 V175SAX0.1HA V175KLR0.1H0

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Wave Direction in Yi-Lan Seas of SAX0 at 2017

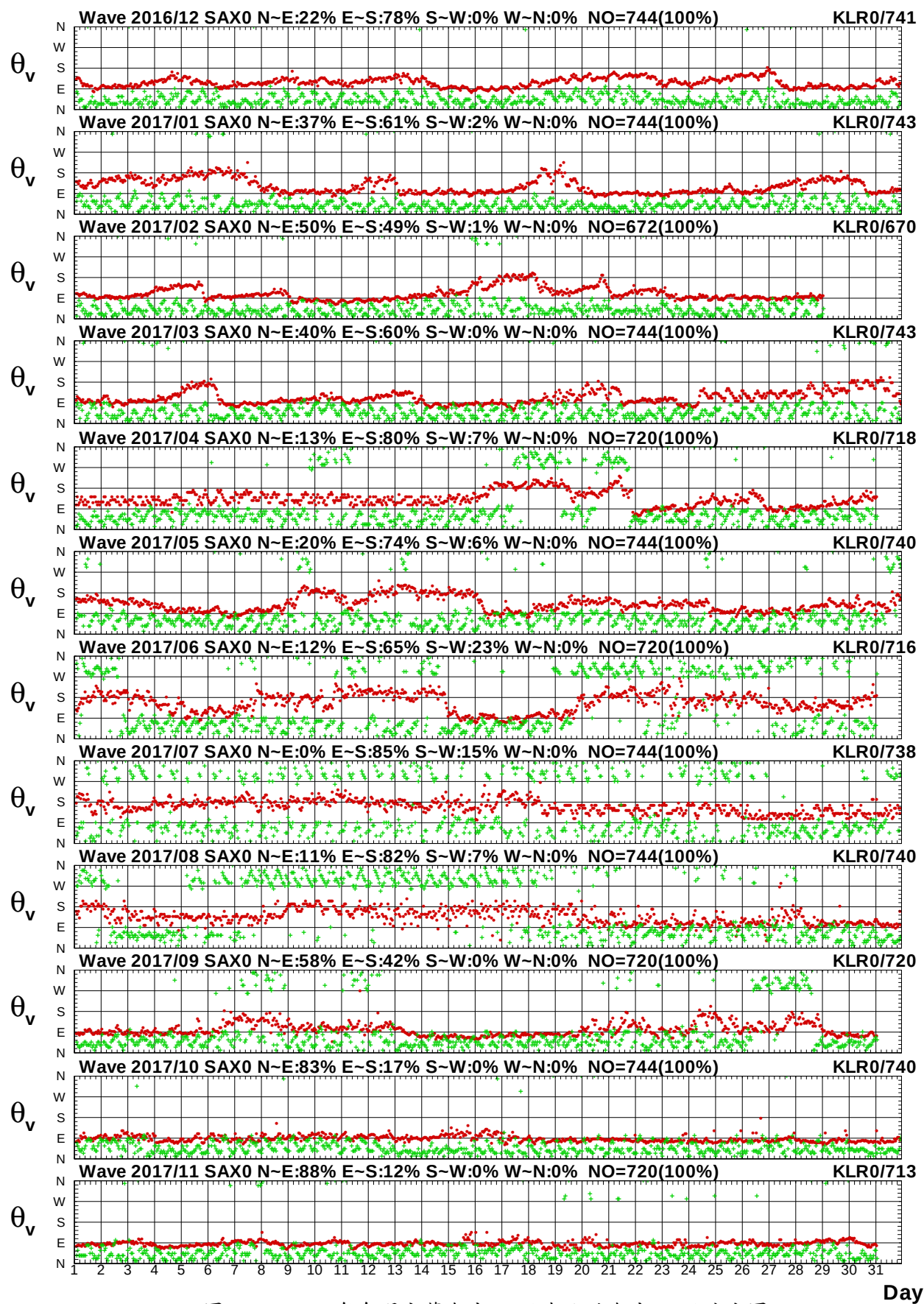


圖2.9c 2017年每月宜蘭海域 X 站與北端海域 R 站波向圖

V16CSAX0.1HA V16CKLR0.1H0 V171SAX0.1HA V171KLR0.1H0 V172SAX0.1HA V172KLR0.1H0
V173SAX0.1HA V173KLR0.1H0 V174SAX0.1HA V174KLR0.1H0 V175SAX0.1HA V175KLR0.1H0

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Wave H_s in Yi-Lan Seas of SAY0 at 2017

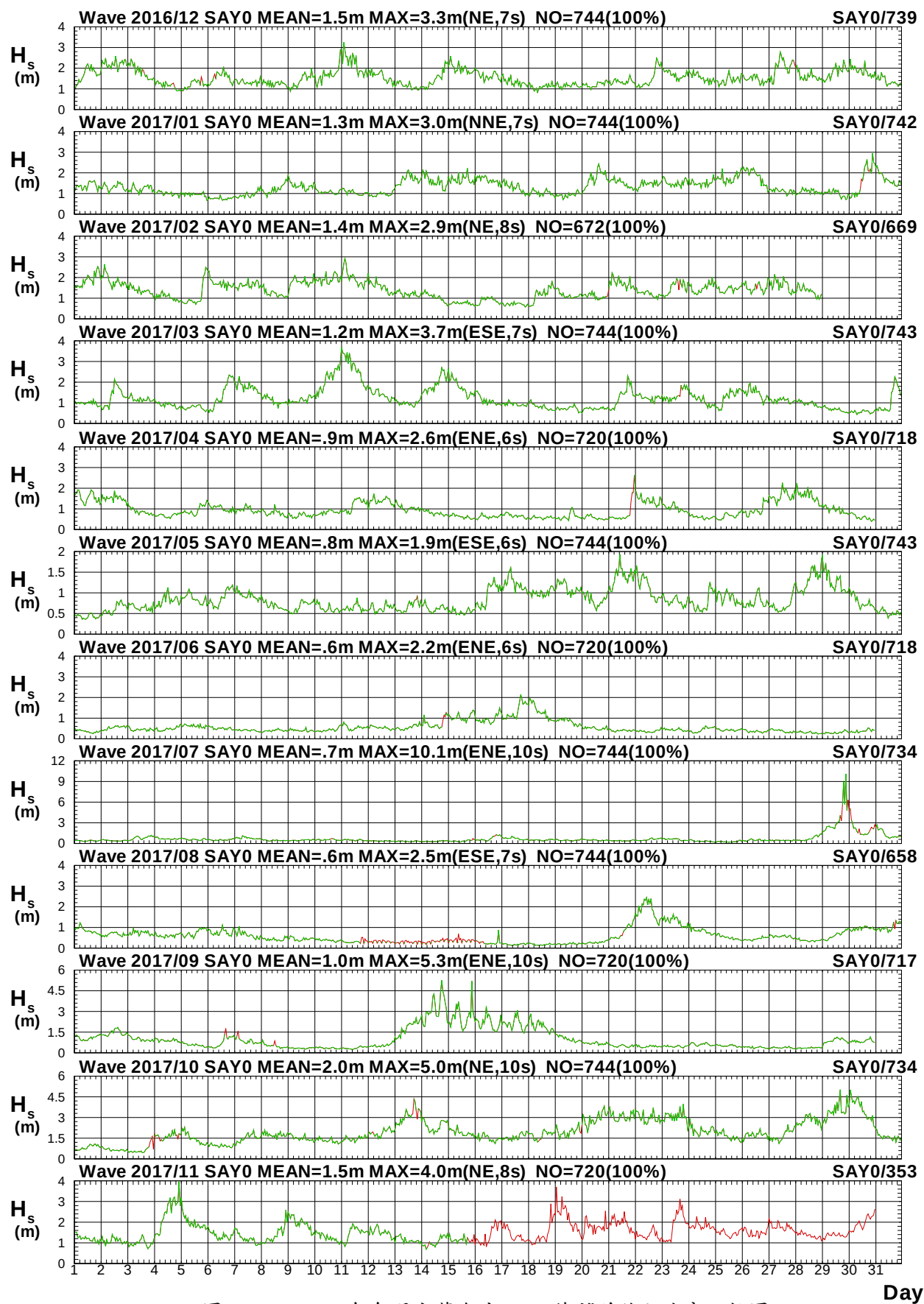


圖2.10a 2017年每月宜蘭海域 Y 站修補前後之波高比較圖

V16CSAY0.1HA V16CSAY0.1H0 V171SAY0.1HA V171SAY0.1H0 V172SAY0.1HA V172SAY0.1H0
V173SAY0.1HA V173SAY0.1H0 V174SAY0.1HA V174SAY0.1H0 V175SAY0.1HA V175SAY0.1H0

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Wave T_p in Yi-Lan Seas of SAY0 at 2017

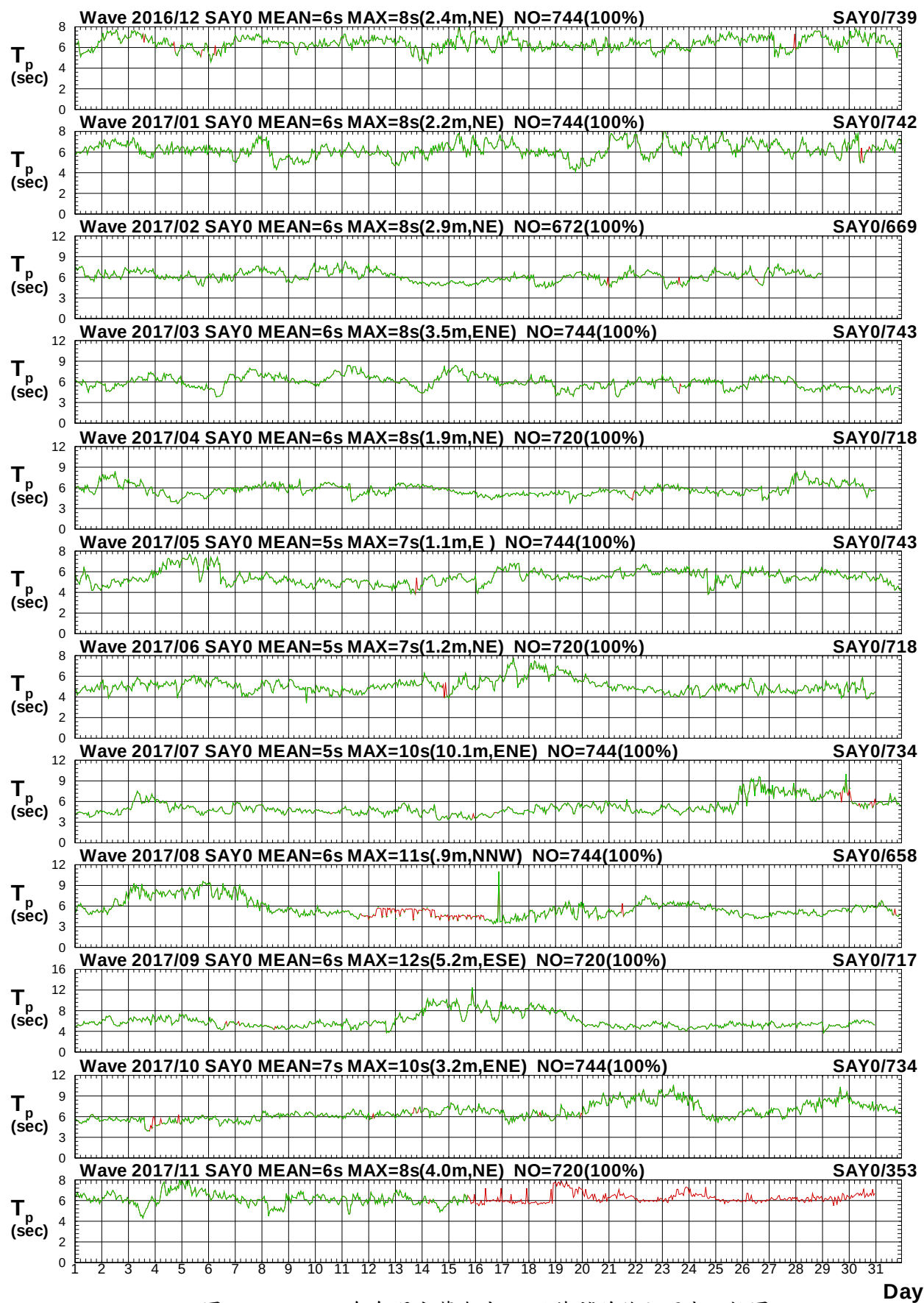


圖2.10b 2017年每月宜蘭海域 Y 站修補前後之週期比較圖

V16CSAY0.1HA V16CSAY0.1H0 V171SAY0.1HA V171SAY0.1H0 V172SAY0.1HA V172SAY0.1H0
V173SAY0.1HA V173SAY0.1H0 V174SAY0.1HA V174SAY0.1H0 V175SAY0.1HA V175SAY0.1H0

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Wave Direction in Yi-Lan Seas of SAY0 at 2017

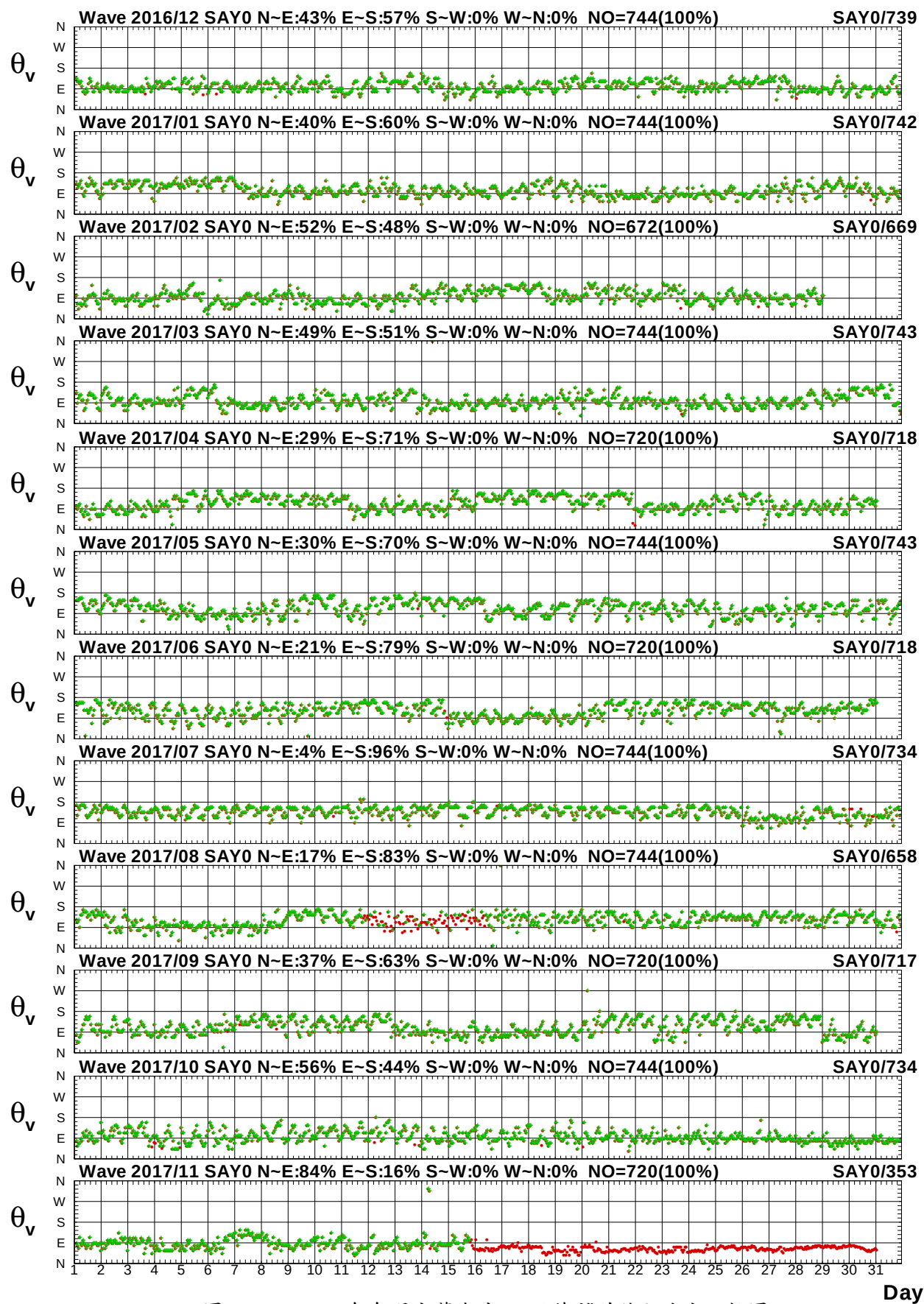


圖2.10c 2017年每月宜蘭海域 Y 站修補前後之波向比較圖

V16CSAY0.1HA V16CSAY0.1H0 V171SAY0.1HA V171SAY0.1H0 V172SAY0.1HA V172SAY0.1H0
V173SAY0.1HA V173SAY0.1H0 V174SAY0.1HA V174SAY0.1H0 V175SAY0.1HA V175SAY0.1H0

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Wave H_s in Yi-Lan Seas of SAY0 at 2017

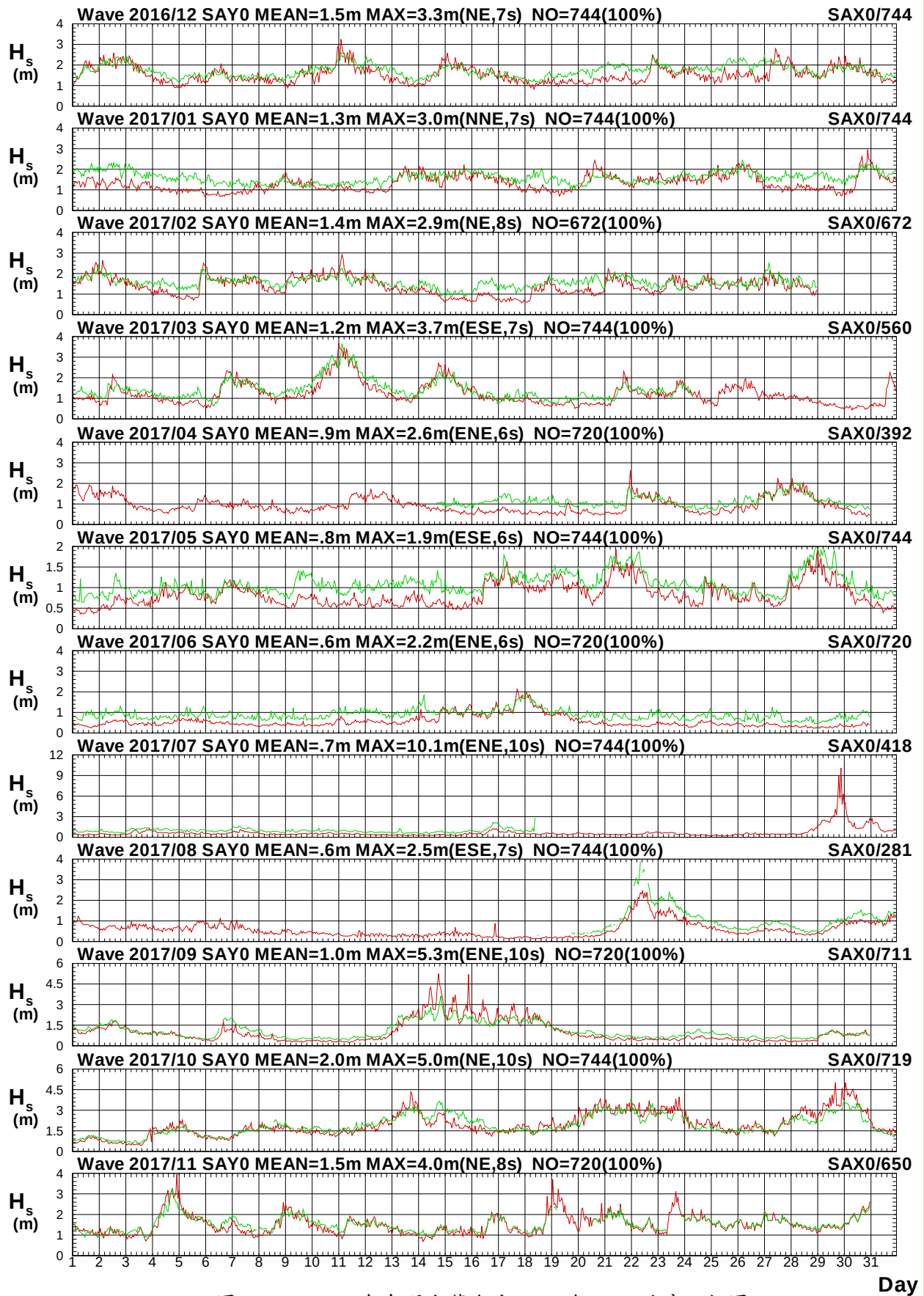


圖2.11a 2017年每月宜蘭海域 Y 站與 X 站波高比較圖

V16CSAY0.1HA V16CSAX0.1H0 V171SAY0.1HA V171SAX0.1H0 V172SAY0.1HA V172SAX0.1H0
V173SAY0.1HA V173SAX0.1H0 V174SAY0.1HA V174SAX0.1H0 V175SAY0.1HA V175SAX0.1H0

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Wave T_p in Yi-Lan Seas of SAY0 at 2017

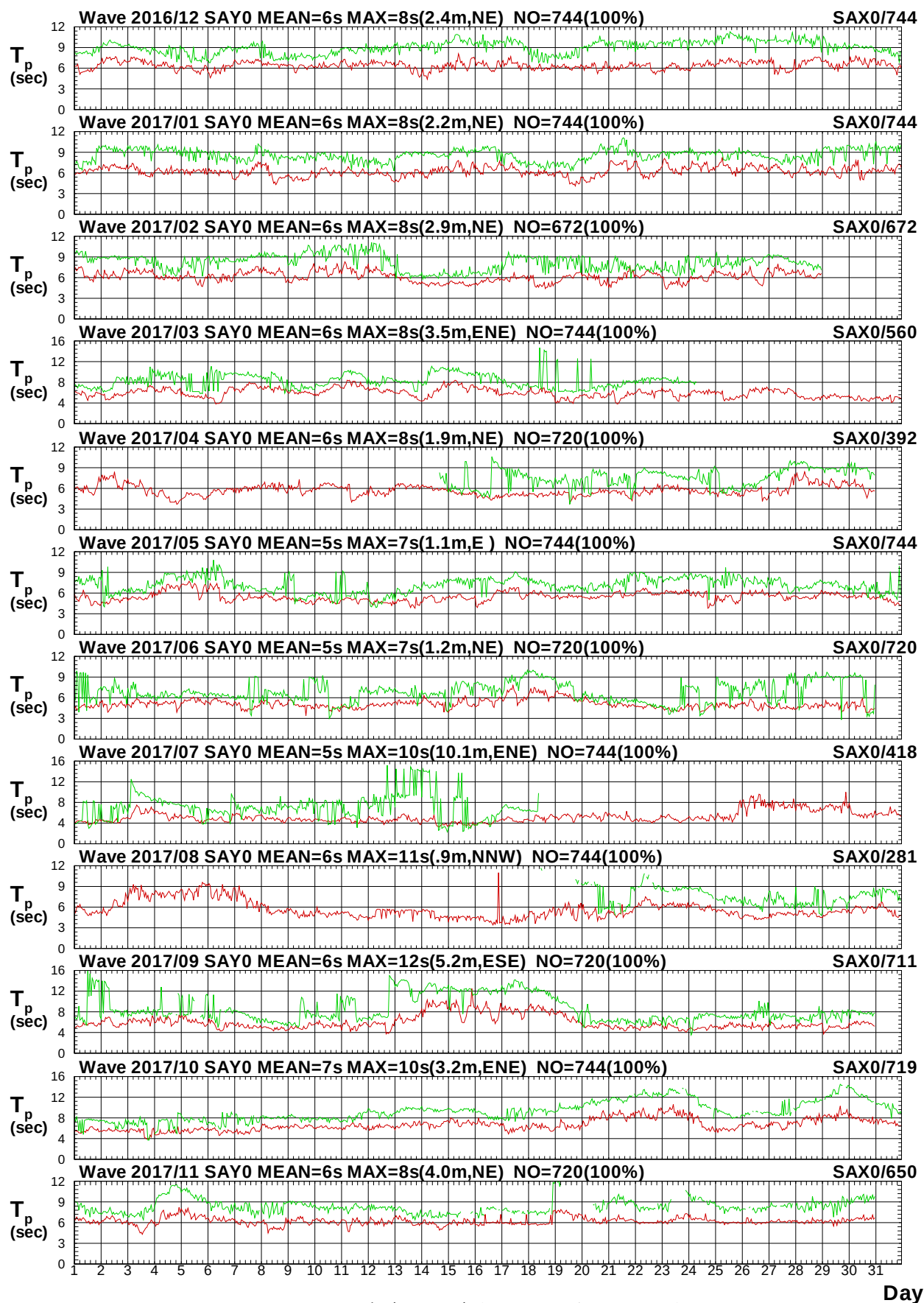


圖2.11b 2017年每月宜蘭海域 Y 站與 X 站週期比較圖

V16CSAY0.1HA V16CSAX0.1H0 V171SAY0.1HA V171SAX0.1H0 V172SAY0.1HA V172SAX0.1H0
V173SAY0.1HA V173SAX0.1H0 V174SAY0.1HA V174SAX0.1H0 V175SAY0.1HA V175SAX0.1H0

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Wave Direction in Yi-Lan Seas of SAY0 at 2017

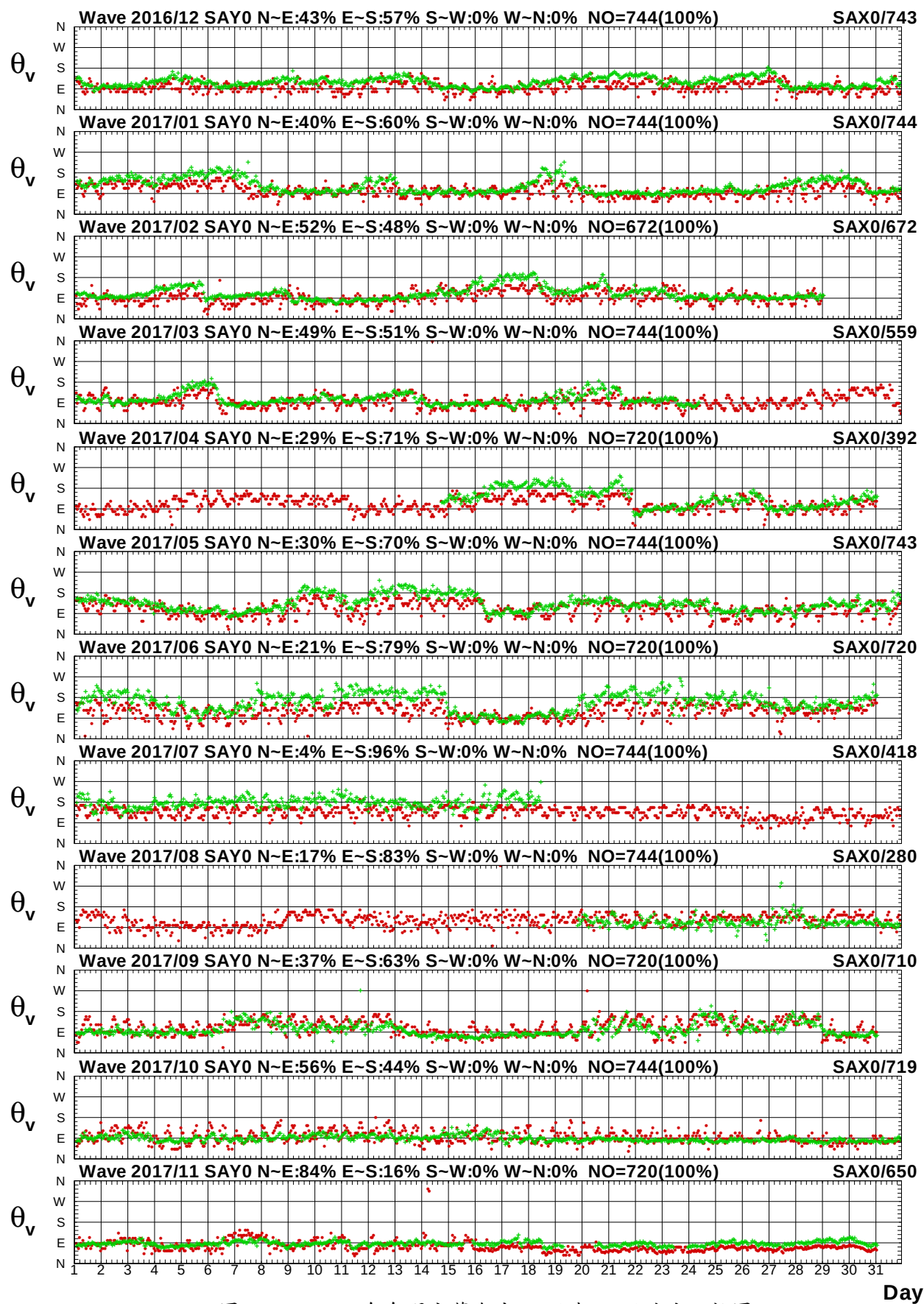


圖2.11c 2017年每月宜蘭海域 Y 站與 X 站波向比較圖

V16CSAY0.1HA V16CSAX0.1H0 V171SAY0.1HA V171SAX0.1H0 V172SAY0.1HA V172SAX0.1H0
V173SAY0.1HA V173SAX0.1H0 V174SAY0.1HA V174SAX0.1H0 V175SAY0.1HA V175SAX0.1H0

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Wave H_s in Yi-Lan Seas of SAY0 at 2017

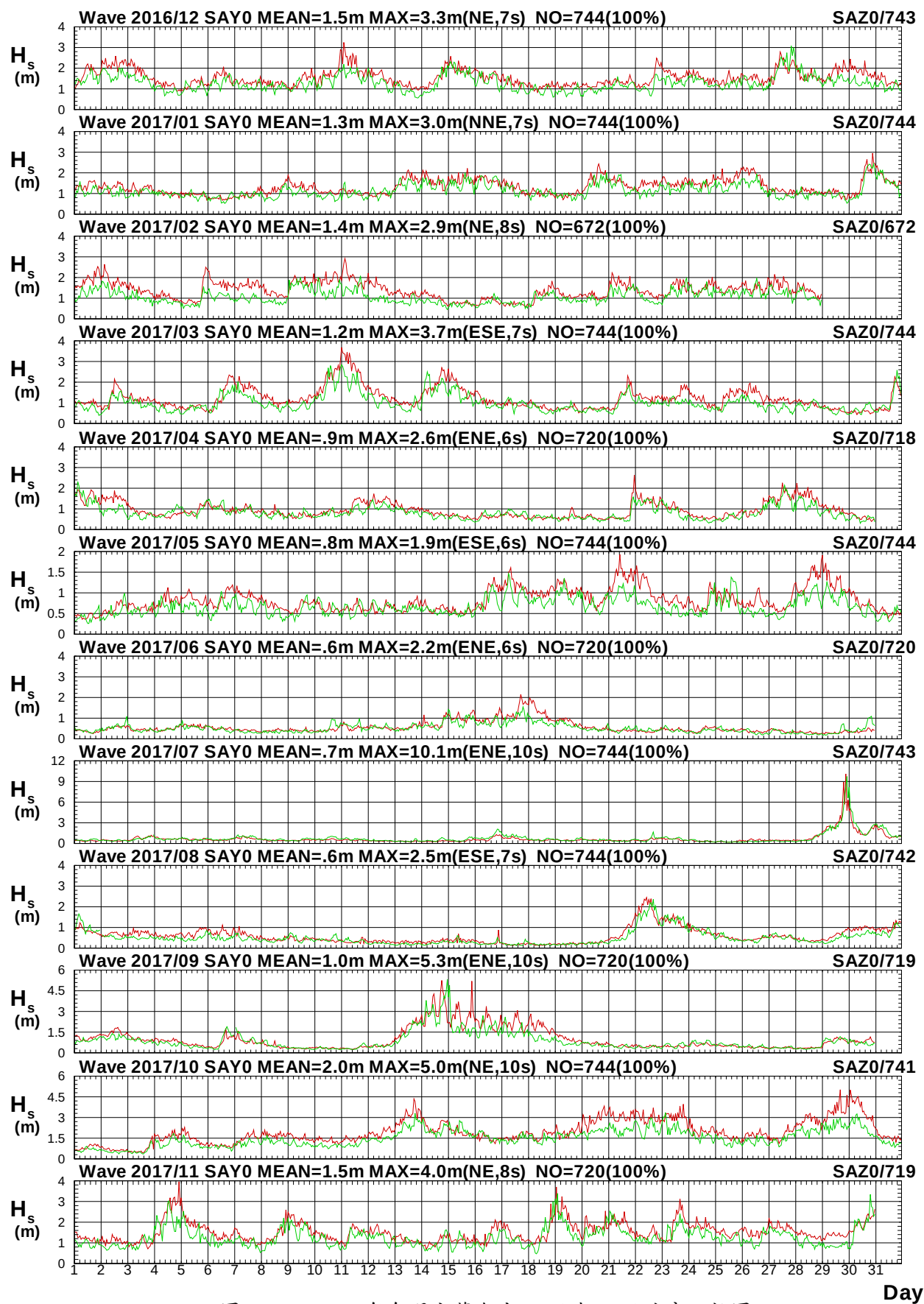


圖2.12a 2017年每月宜蘭海域 Y 站與 Z 站波高比較圖

V16CSAY0.1HA V16CSAZ0.1H0 V171SAY0.1HA V171SAZ0.1H0 V172SAY0.1HA V172SAZ0.1H0
V173SAY0.1HA V173SAZ0.1H0 V174SAY0.1HA V174SAZ0.1H0 V175SAY0.1HA V175SAZ0.1H0

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Wave T_p in Yi-Lan Seas of SAY0 at 2017

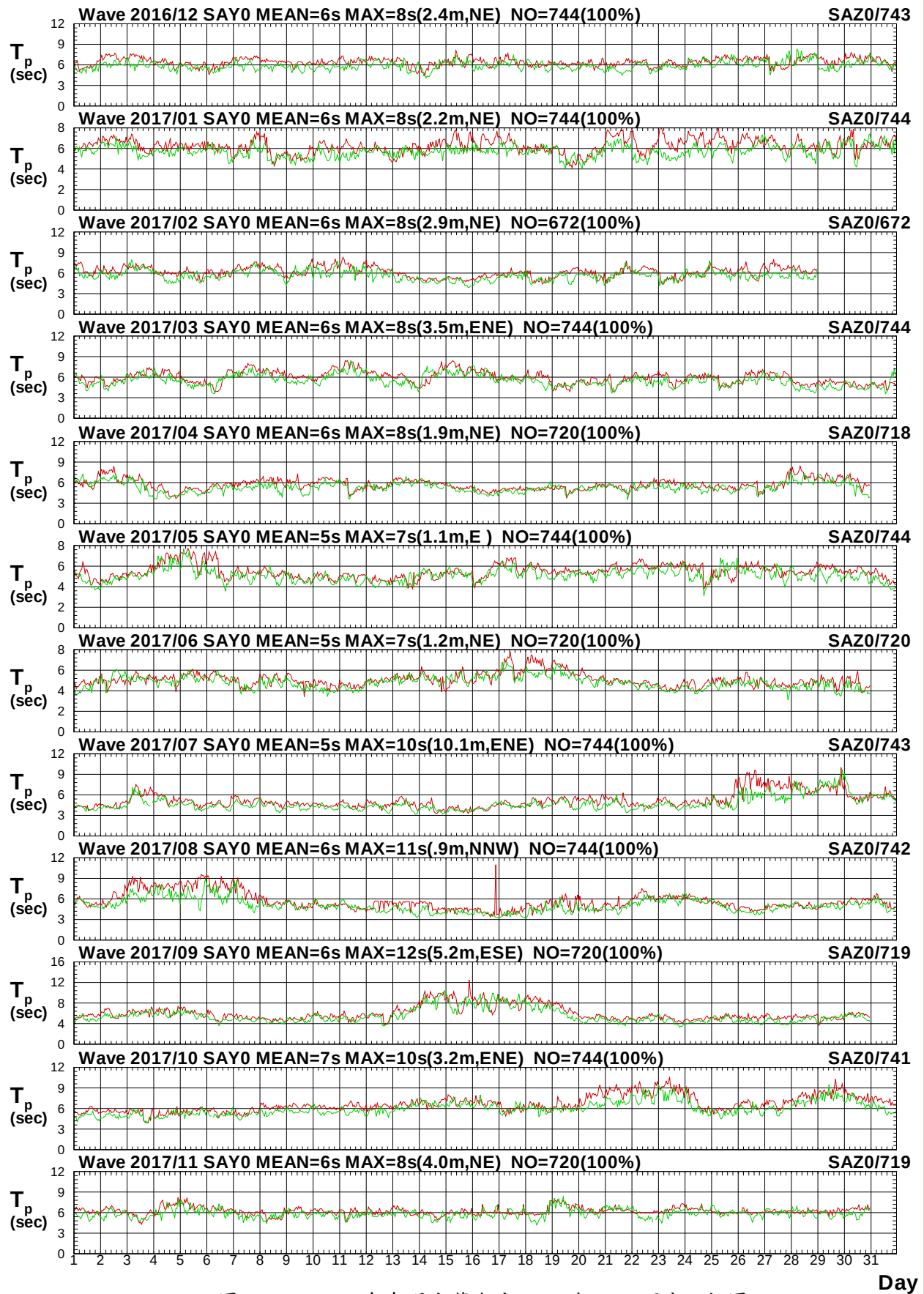


圖2.12b 2017年每月宜蘭海域 Y 站與 Z 站週期比較圖

V16CSAY0.1HA V16CSAZ0.1H0 V171SAY0.1HA V171SAZ0.1H0 V172SAY0.1HA V172SAZ0.1H0
V173SAY0.1HA V173SAZ0.1H0 V174SAY0.1HA V174SAZ0.1H0 V175SAY0.1HA V175SAZ0.1H0

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Wave Direction in Yi-Lan Seas of SAY0 at 2017

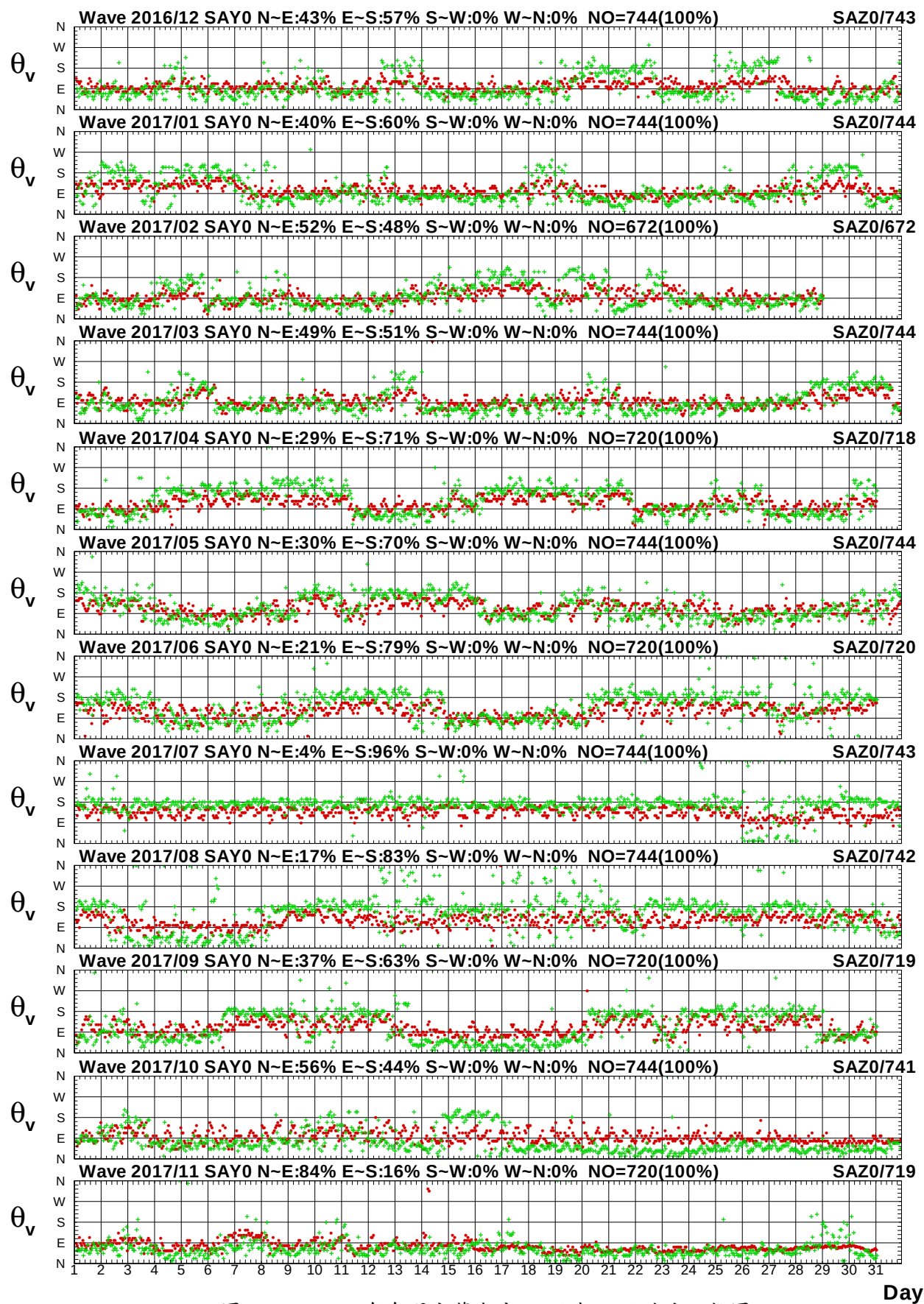


圖2.12c 2017年每月宜蘭海域 Y 站與 Z 站波向比較圖

V16CSAY0.1HA V16CSAZ0.1H0 V171SAY0.1HA V171SAZ0.1H0 V172SAY0.1HA V172SAZ0.1H0
V173SAY0.1HA V173SAZ0.1H0 V174SAY0.1HA V174SAZ0.1H0 V175SAY0.1HA V175SAZ0.1H0

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Wave H_s in Yi-Lan Seas of SAY0 at 2017

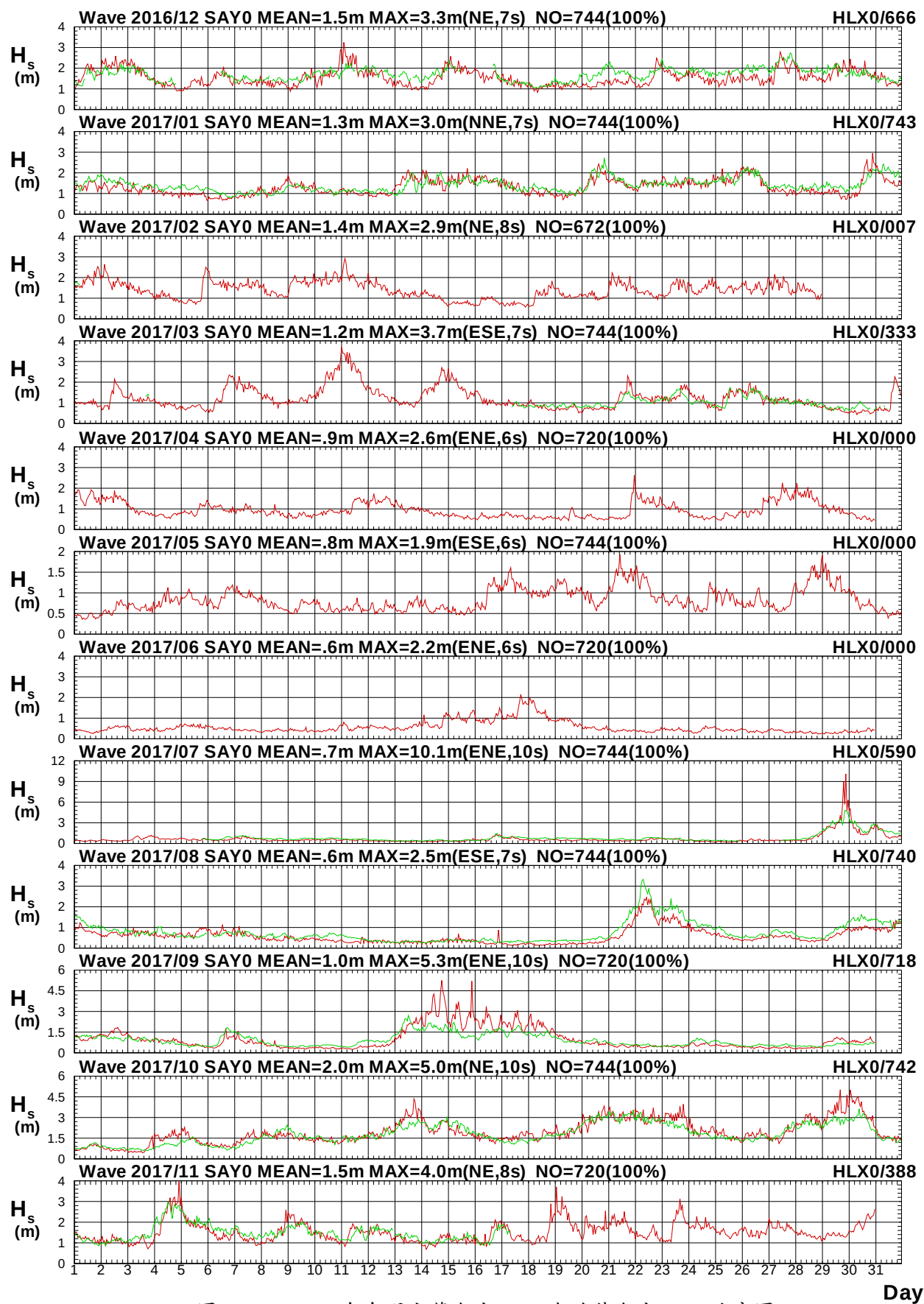


圖2.13a 2017年每月宜蘭海域 Y 站與花蓮海域 X 站波高圖

V16CSAY0.1HA V16CHLX0.1H0 V171SAY0.1HA V171HLX0.1H0 V172SAY0.1HA V172HLX0.1H0
V173SAY0.1HA V173HLX0.1H0 V174SAY0.1HA V174HLX0.1H0 V175SAY0.1HA V175HLX0.1H0

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Wave T_p in Yi-Lan Seas of SAY0 at 2017

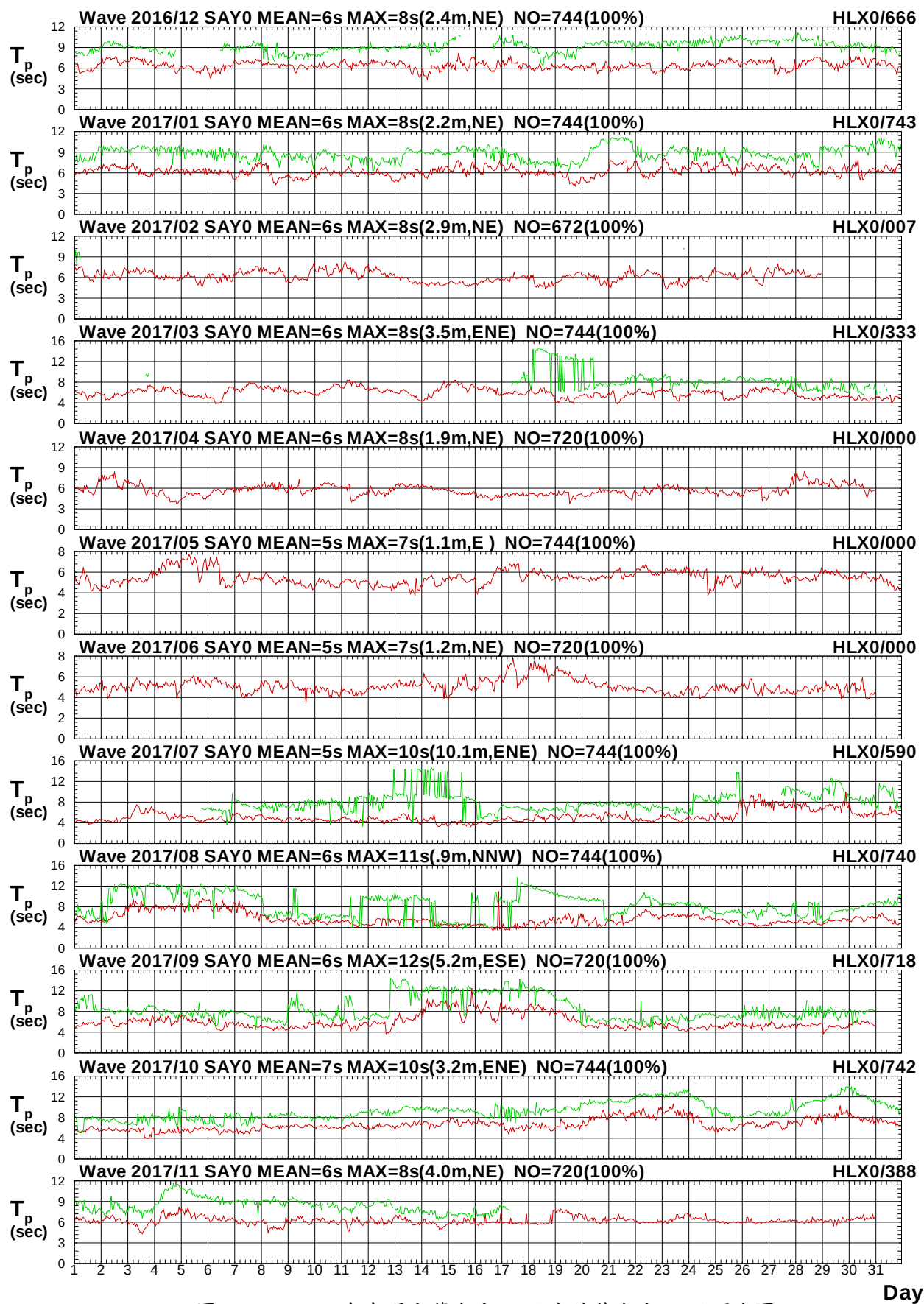


圖2.13b 2017年每月宜蘭海域 Y 站與花蓮海域 X 站週期圖

V16CSAY0.1HA V16CHLX0.1H0 V171SAY0.1HA V171HLX0.1H0 V172SAY0.1HA V172HLX0.1H0
V173SAY0.1HA V173HLX0.1H0 V174SAY0.1HA V174HLX0.1H0 V175SAY0.1HA V175HLX0.1H0

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Wave Direction in Yi-Lan Seas of SAY0 at 2017

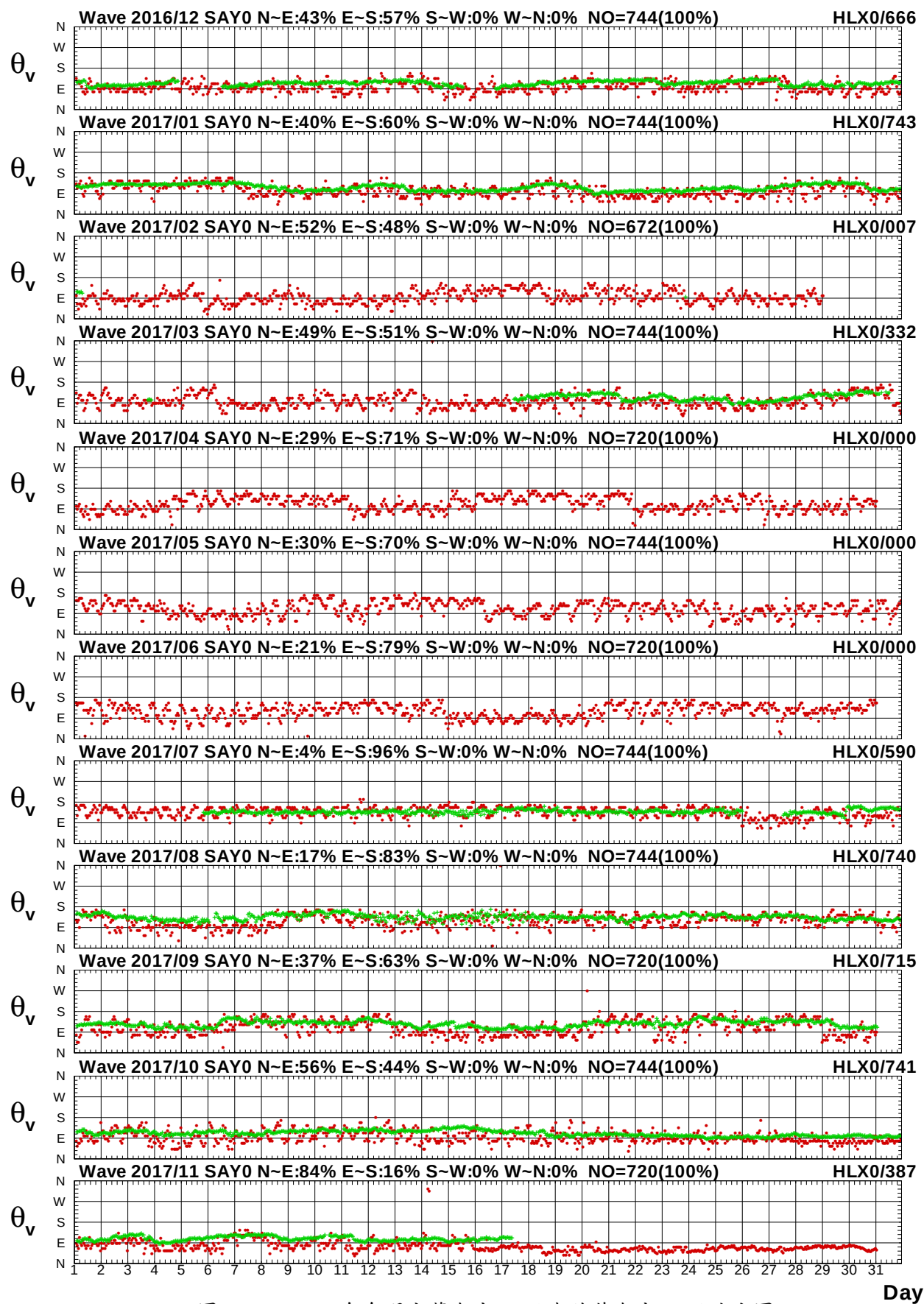


圖2.13c 2017年每月宜蘭海域 Y 站與花蓮海域 X 站波向圖

V16CSAY0.1HA V16CHLX0.1H0 V171SAY0.1HA V171HLX0.1H0 V172SAY0.1HA V172HLX0.1H0
V173SAY0.1HA V173HLX0.1H0 V174SAY0.1HA V174HLX0.1H0 V175SAY0.1HA V175HLX0.1H0

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Wave H_s in Yi-Lan Seas of SAY0 at 2017

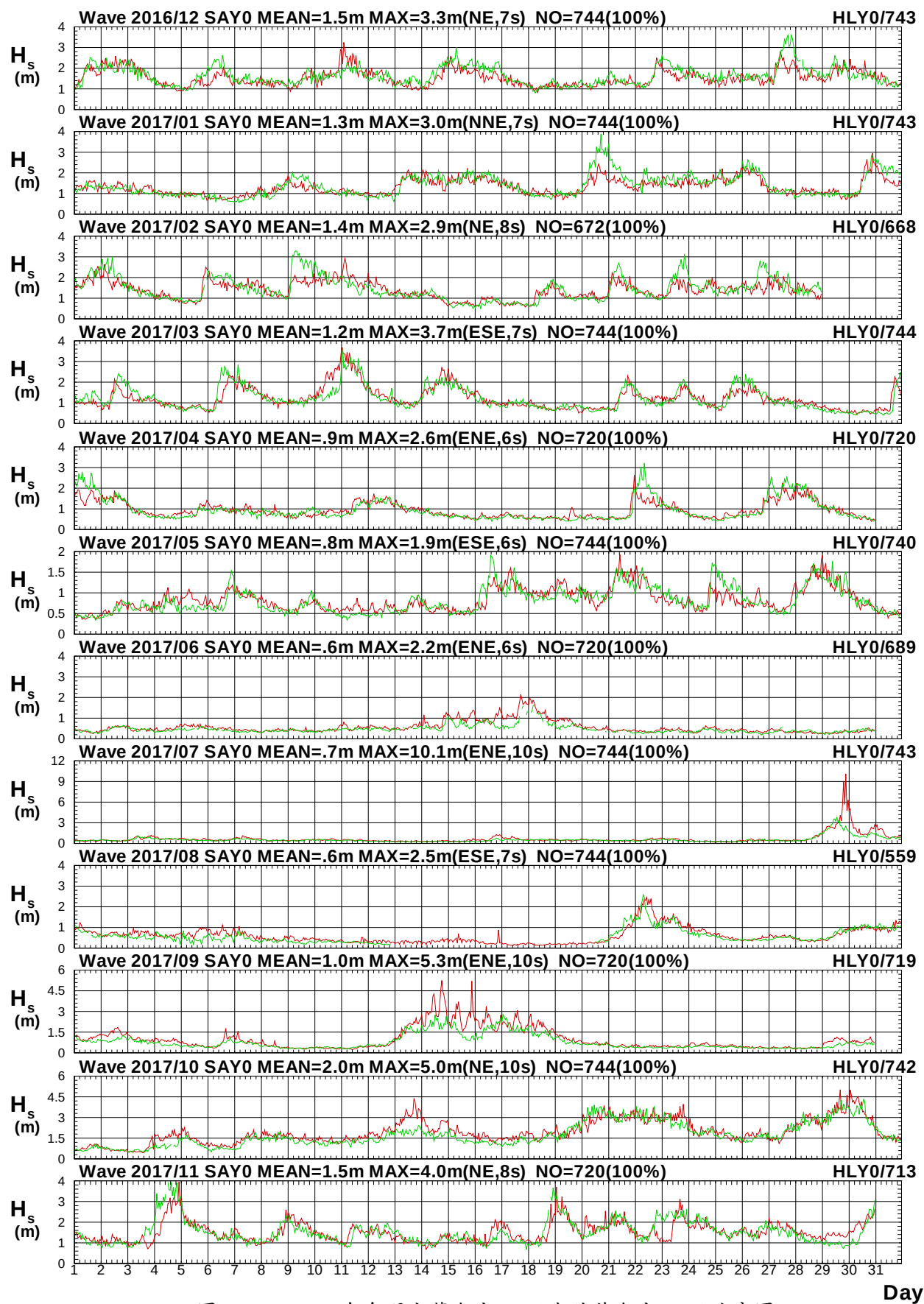


圖2.14a 2017年每月宜蘭海域 Y 站與花蓮海域 Y 站波高圖

V16CSAY0.1HA V16CHLY0.1H0 V171SAY0.1HA V171HLY0.1H0 V172SAY0.1HA V172HLY0.1H0
V173SAY0.1HA V173HLY0.1H0 V174SAY0.1HA V174HLY0.1H0 V175SAY0.1HA V175HLY0.1H0

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Wave T_p in Yi-Lan Seas of SAY0 at 2017

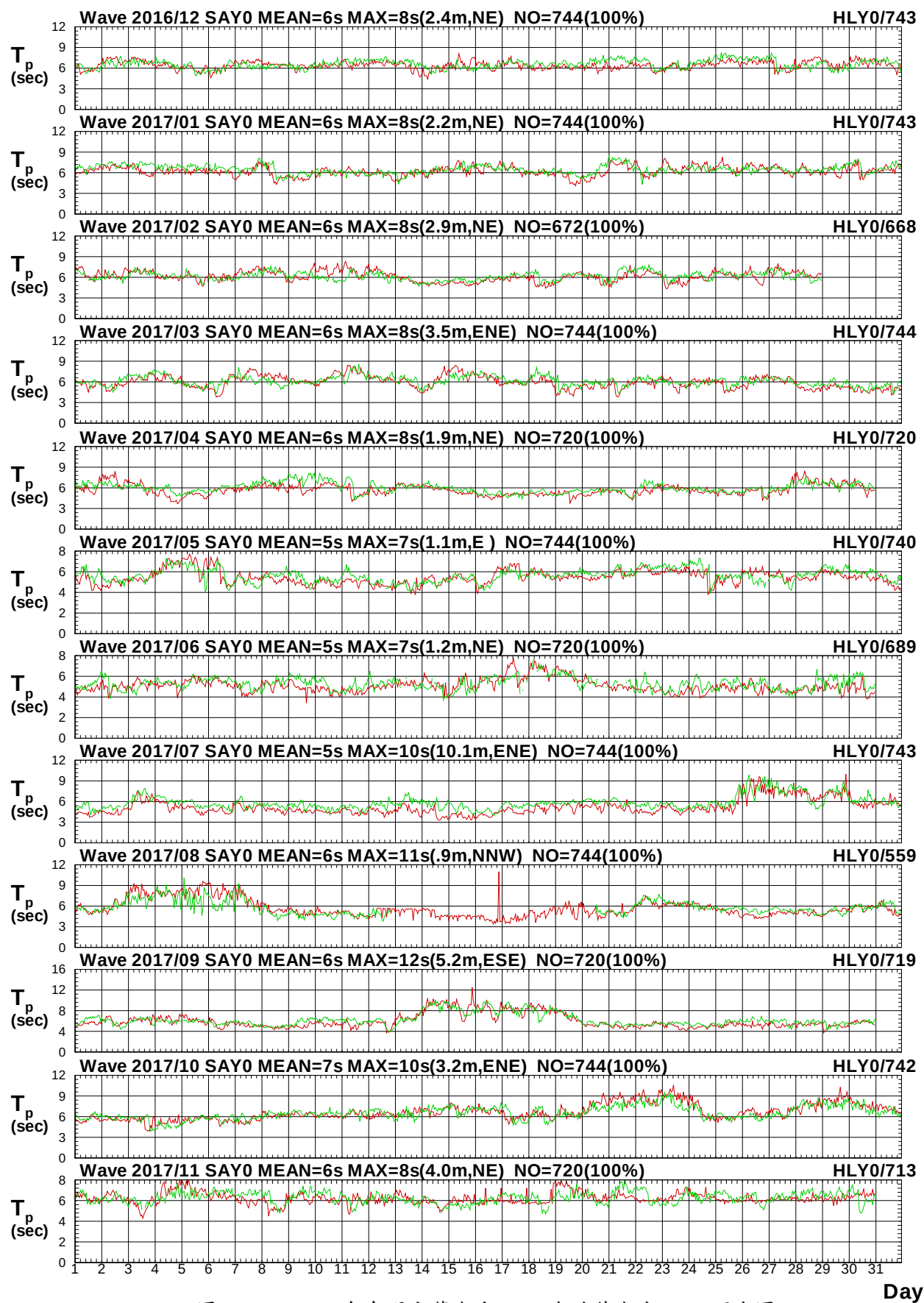


圖2.14b 2017年每月宜蘭海域 Y 站與花蓮海域 Y 站週期圖

V16CSAY0.1HA V16CHLY0.1H0 V171SAY0.1HA V171HLY0.1H0 V172SAY0.1HA V172HLY0.1H0
V173SAY0.1HA V173HLY0.1H0 V174SAY0.1HA V174HLY0.1H0 V175SAY0.1HA V175HLY0.1H0

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Wave Direction in Yi-Lan Seas of SAY0 at 2017

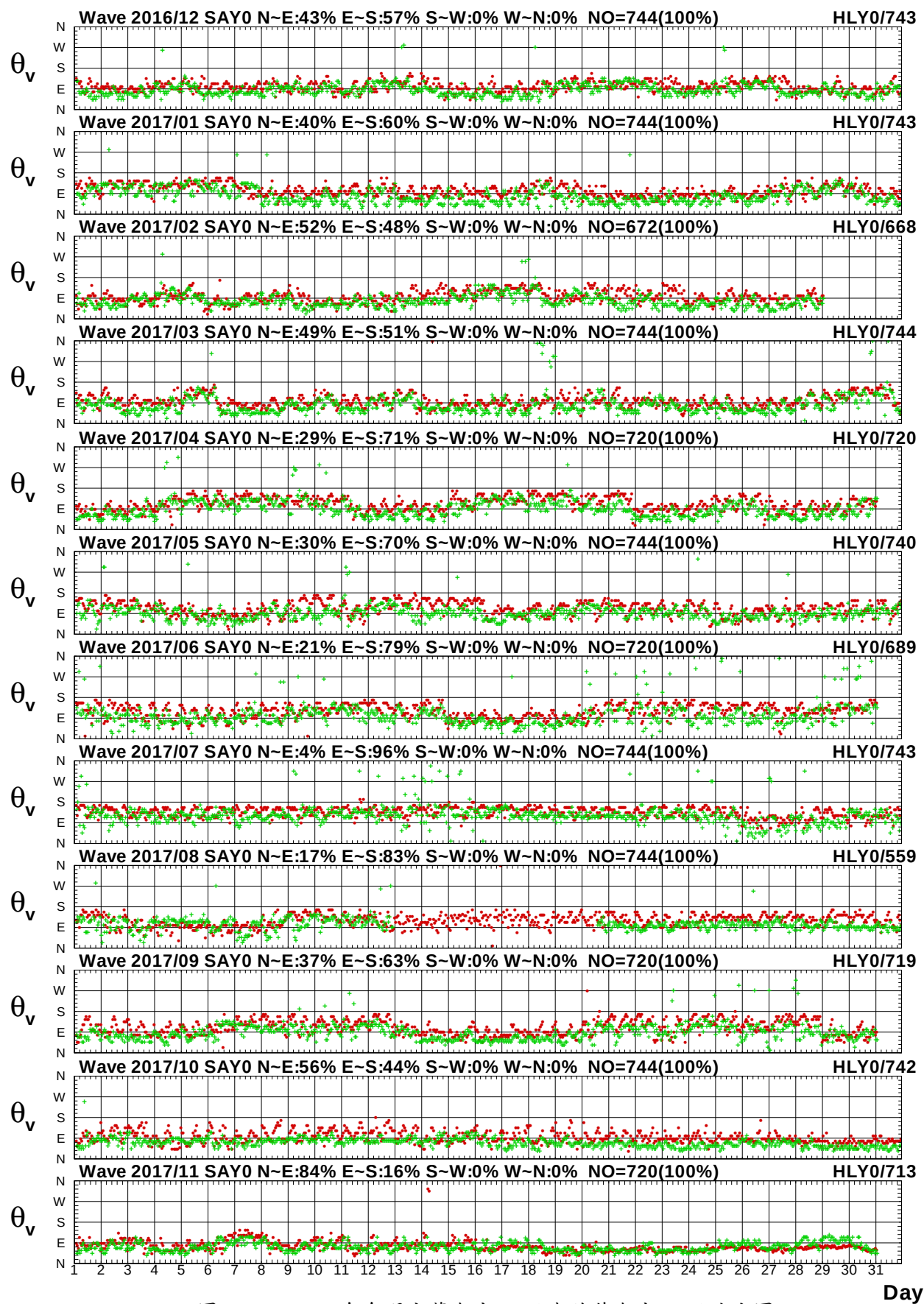


圖2.14c 2017年每月宜蘭海域 Y 站與花蓮海域 Y 站波向圖

V16CSAY0.1HA V16CHLY0.1H0 V171SAY0.1HA V171HLY0.1H0 V172SAY0.1HA V172HLY0.1H0
V173SAY0.1HA V173HLY0.1H0 V174SAY0.1HA V174HLY0.1H0 V175SAY0.1HA V175HLY0.1H0

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Wave H_s in Yi-Lan Seas of SAY0 at 2017

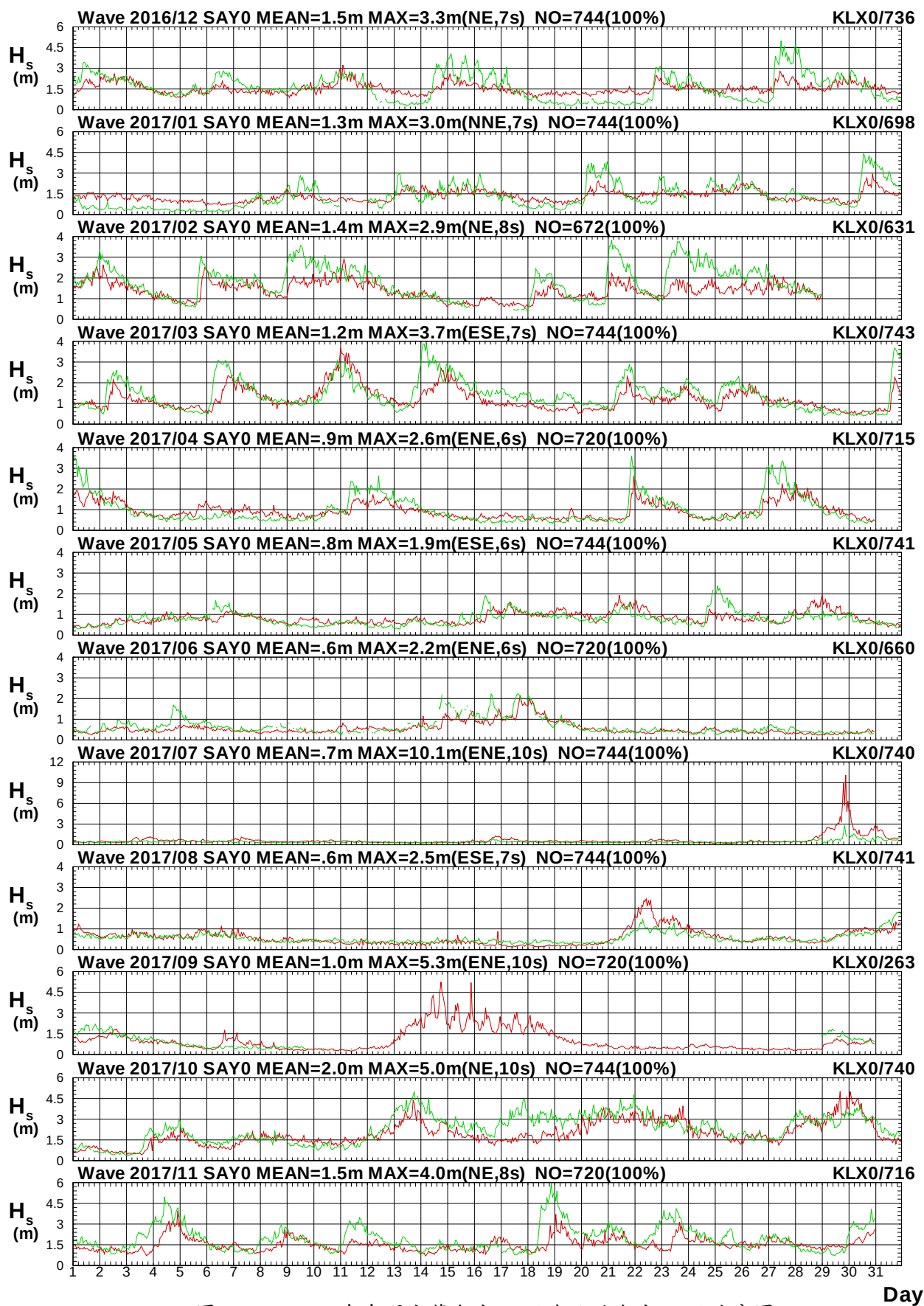


圖2.15a 2017年每月宜蘭海域 Y 站與北端海域 X 站波高圖

V16CSAY0.1HA V16CKLX0.1H0 V171SAY0.1HA V171KLX0.1H0 V172SAY0.1HA V172KLX0.1H0
V173SAY0.1HA V173KLX0.1H0 V174SAY0.1HA V174KLX0.1H0 V175SAY0.1HA V175KLX0.1H0

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Wave T_p in Yi-Lan Seas of SAY0 at 2017

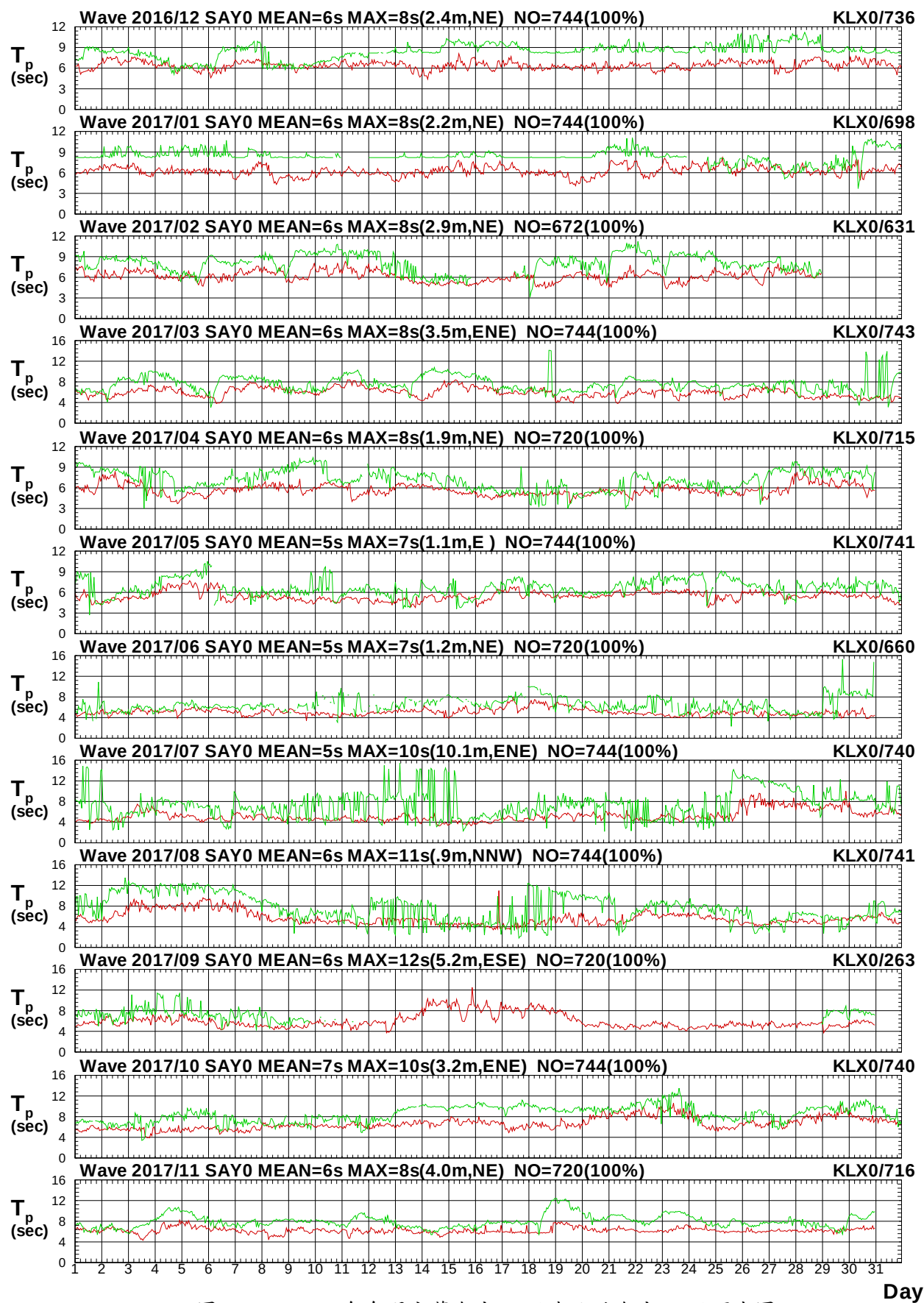


圖2.15b 2017年每月宜蘭海域 Y 站與北端海域 X 站週期圖

V16CSAY0.1HA V16CKLX0.1H0 V171SAY0.1HA V171KLX0.1H0 V172SAY0.1HA V172KLX0.1H0
V173SAY0.1HA V173KLX0.1H0 V174SAY0.1HA V174KLX0.1H0 V175SAY0.1HA V175KLX0.1H0

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Wave Direction in Yi-Lan Seas of SAY0 at 2017

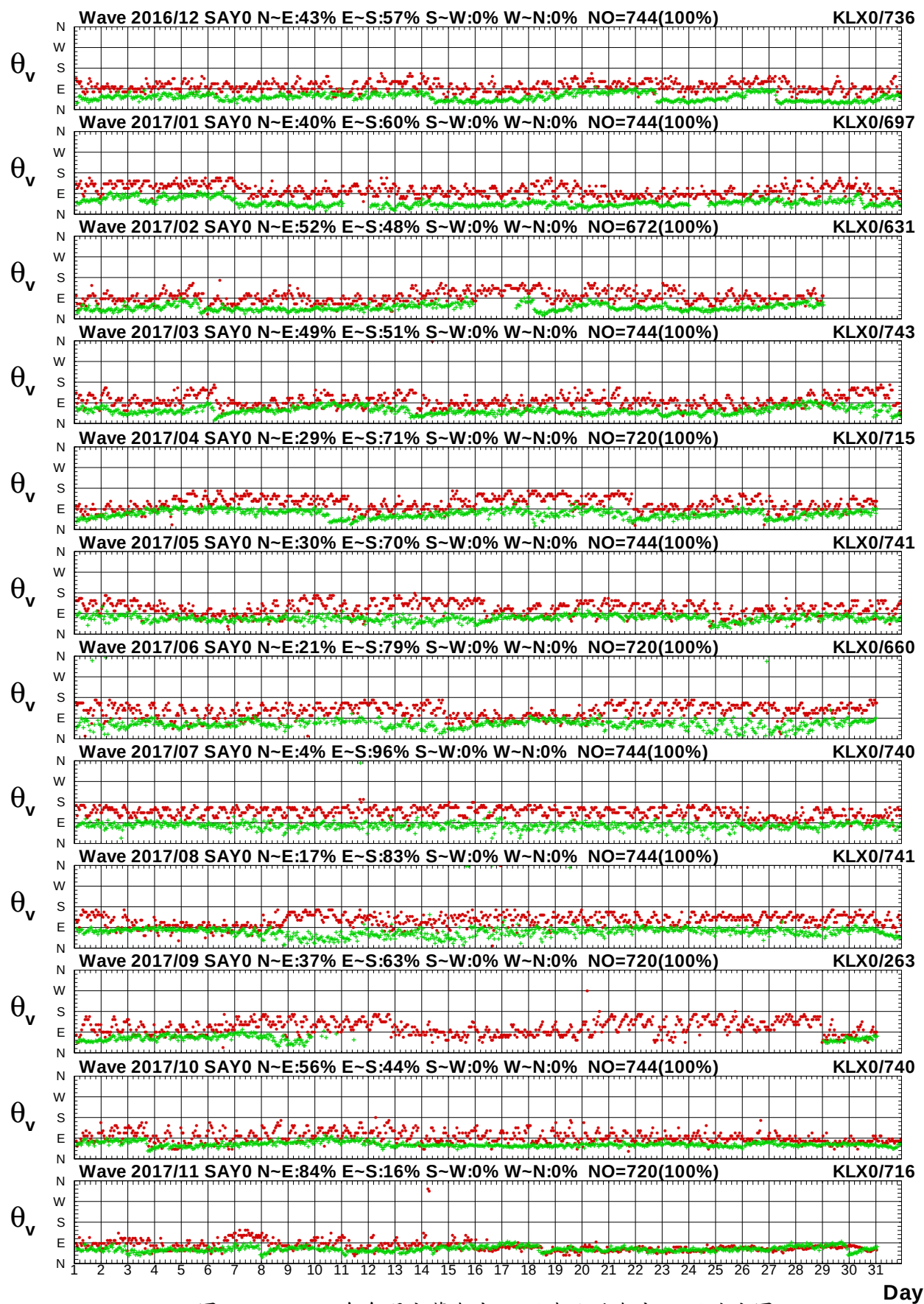


圖2.15c 2017年每月宜蘭海域 Y 站與北端海域 X 站波向圖

V16CSAY0.1HA V16CKLX0.1H0 V171SAY0.1HA V171KLX0.1H0 V172SAY0.1HA V172KLX0.1H0
V173SAY0.1HA V173KLX0.1H0 V174SAY0.1HA V174KLX0.1H0 V175SAY0.1HA V175KLX0.1H0

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Wave H_s in Yi-Lan Seas of SAY0 at 2017

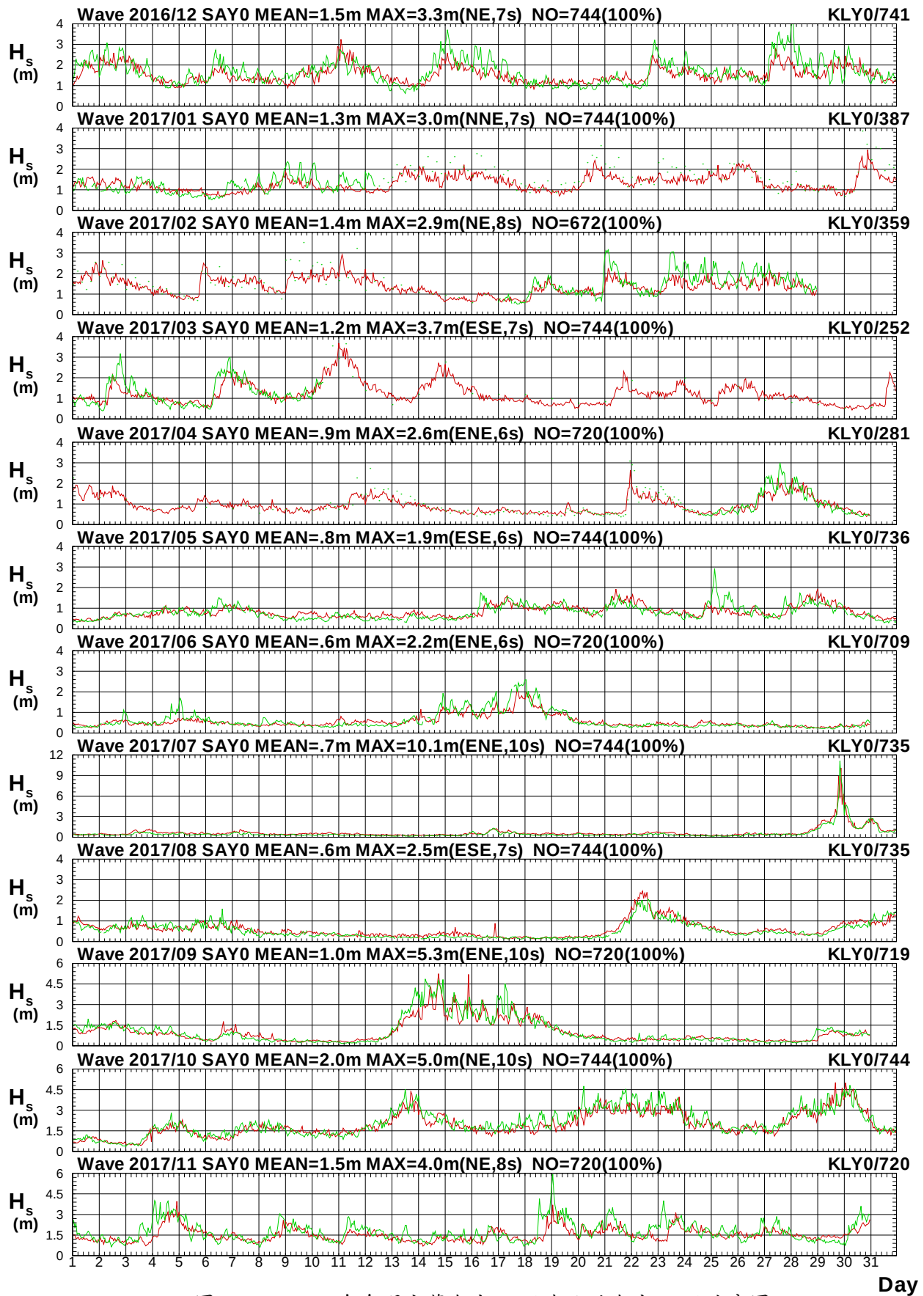


圖2.16a 2017年每月宜蘭海域 Y 站與北端海域 Y 站波高圖

V16CSAY0.1HA V16CKLY0.1H0 V171SAY0.1HA V171KLY0.1H0 V172SAY0.1HA V172KLY0.1H0
V173SAY0.1HA V173KLY0.1H0 V174SAY0.1HA V174KLY0.1H0 V175SAY0.1HA V175KLY0.1H0

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Wave T_p in Yi-Lan Seas of SAY0 at 2017

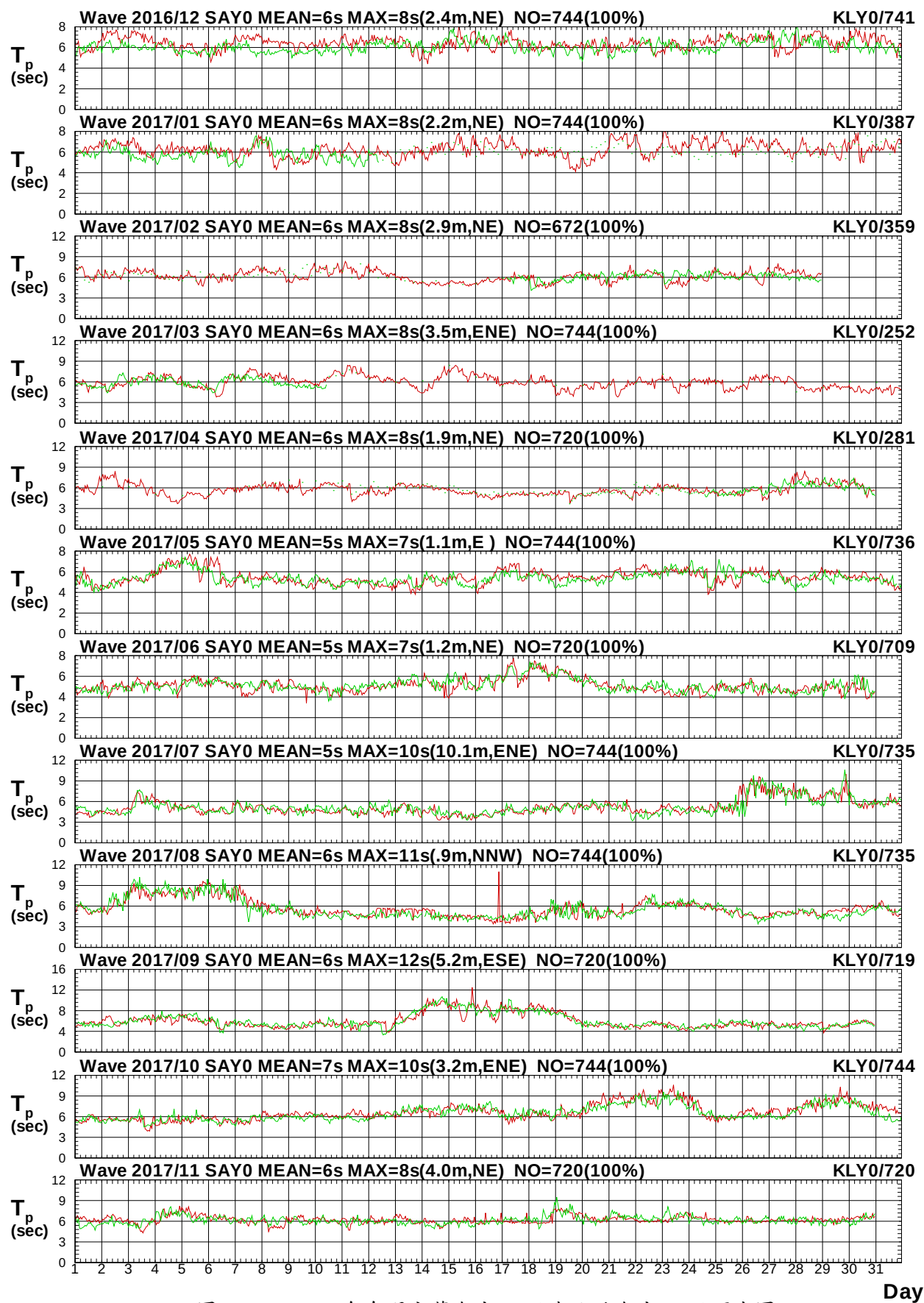


圖2.16b 2017年每月宜蘭海域 Y 站與北端海域 Y 站週期圖

V16CSAY0.1HA V16CKLY0.1H0 V171SAY0.1HA V171KLY0.1H0 V172SAY0.1HA V172KLY0.1H0
V173SAY0.1HA V173KLY0.1H0 V174SAY0.1HA V174KLY0.1H0 V175SAY0.1HA V175KLY0.1H0

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Wave Direction in Yi-Lan Seas of SAY0 at 2017

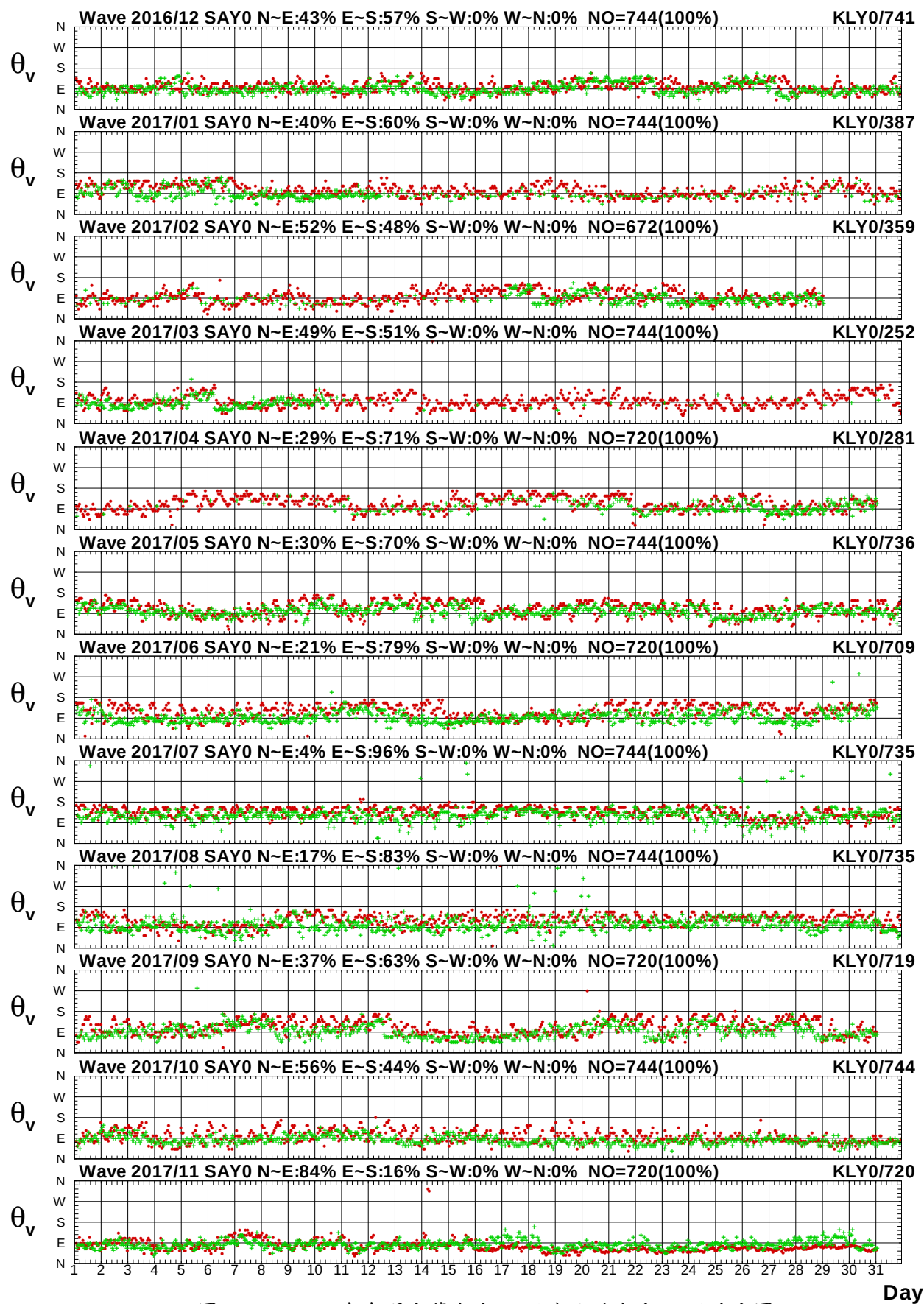


圖2.16c 2017年每月宜蘭海域 Y 站與北端海域 Y 站波向圖

V16CSAY0.1HA V16CKLY0.1H0 V171SAY0.1HA V171KLY0.1H0 V172SAY0.1HA V172KLY0.1H0
V173SAY0.1HA V173KLY0.1H0 V174SAY0.1HA V174KLY0.1H0 V175SAY0.1HA V175KLY0.1H0

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Wave H_s in Yi-Lan Seas of SAY0 at 2017

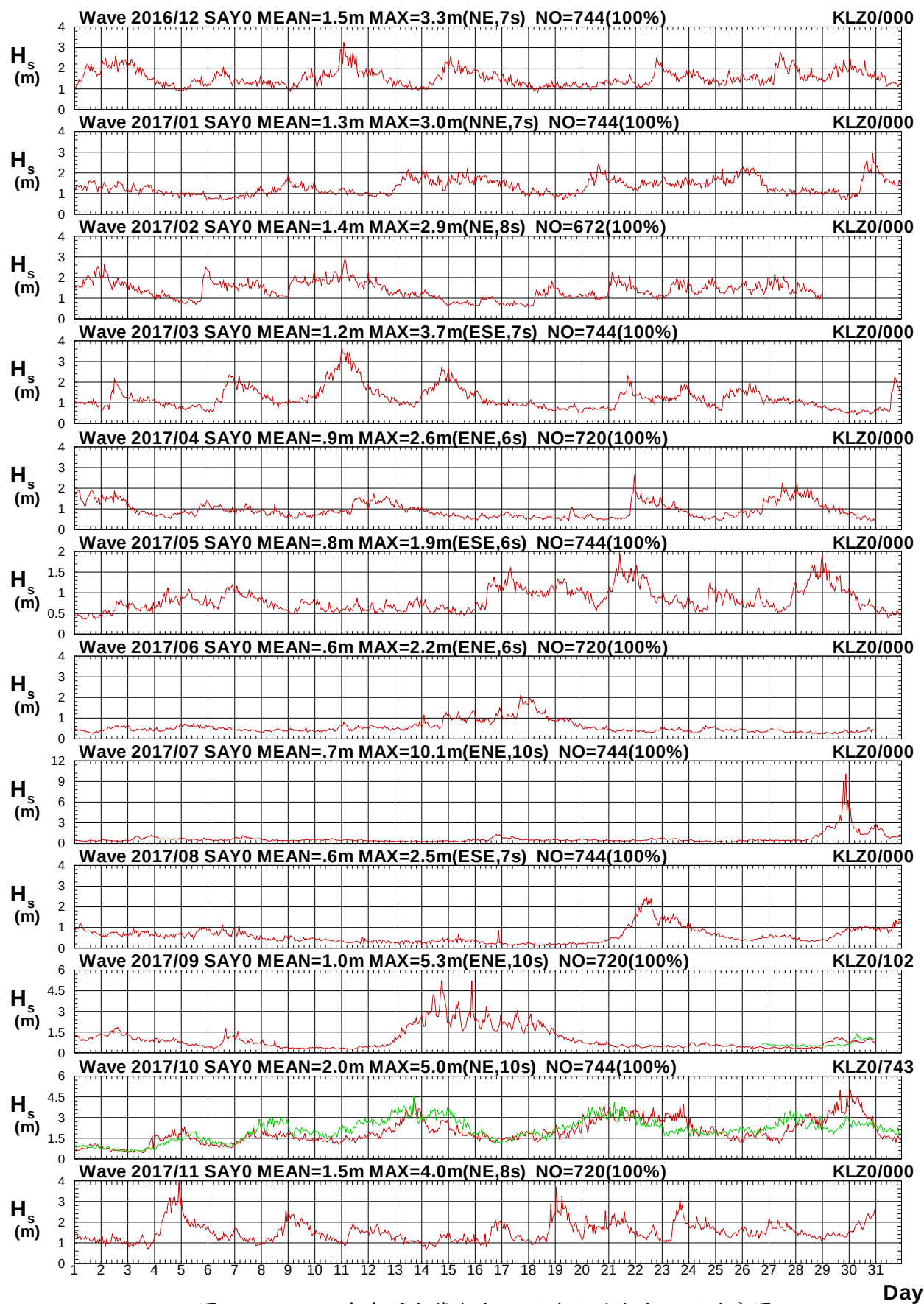


圖2.17a 2017年每月宜蘭海域 Y 站與北端海域 Z 站波高圖

V16CSAY0.1HA V16CKLZ0.1H0 V171SAY0.1HA V171KLZ0.1H0 V172SAY0.1HA V172KLZ0.1H0
V173SAY0.1HA V173KLZ0.1H0 V174SAY0.1HA V174KLZ0.1H0 V175SAY0.1HA V175KLZ0.1H0

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Wave T_p in Yi-Lan Seas of SAY0 at 2017

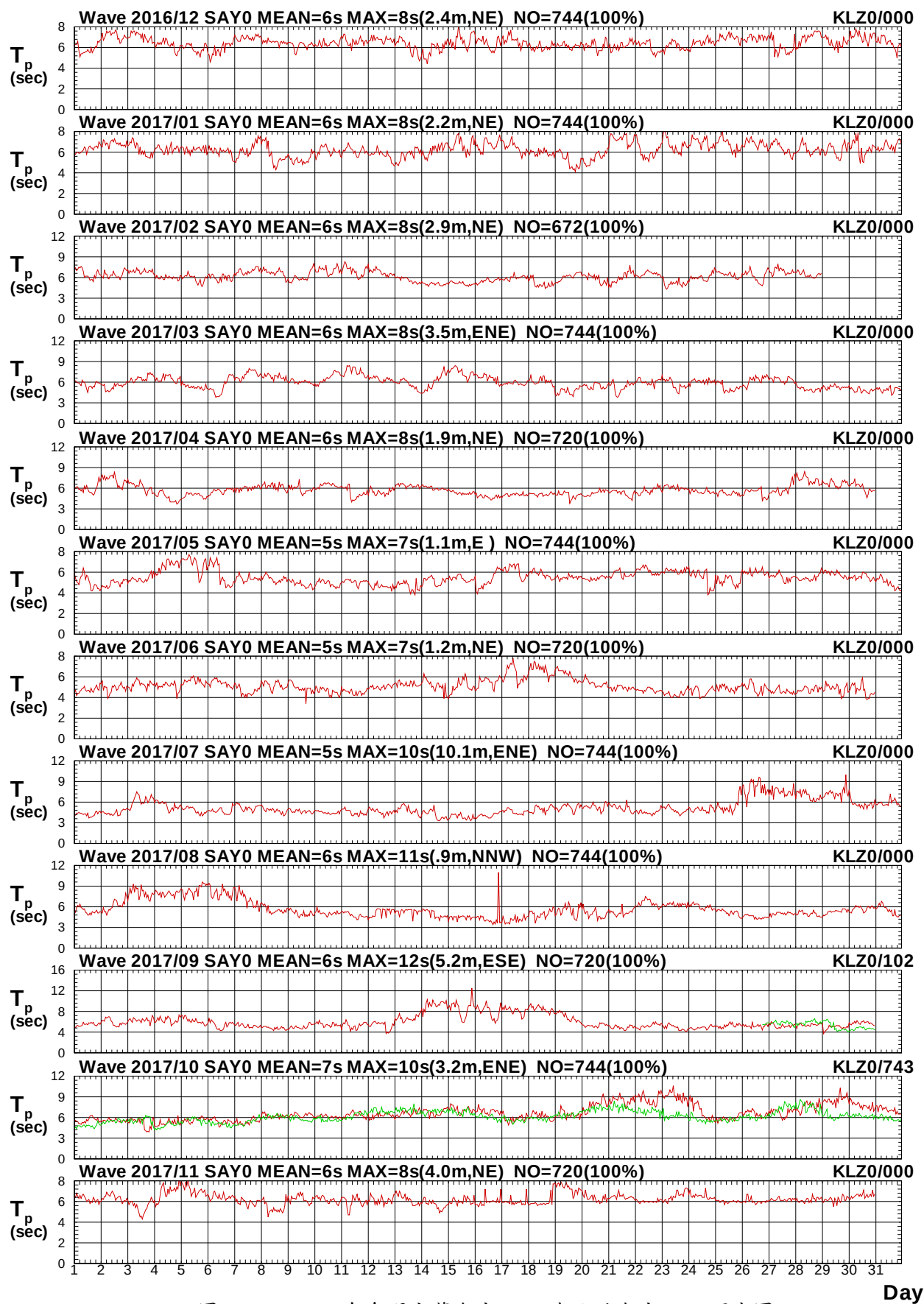


圖2.17b 2017年每月宜蘭海域 Y 站與北端海域 Z 站週期圖

V16CSAY0.1HA V16CKLZ0.1H0 V171SAY0.1HA V171KLZ0.1H0 V172SAY0.1HA V172KLZ0.1H0
V173SAY0.1HA V173KLZ0.1H0 V174SAY0.1HA V174KLZ0.1H0 V175SAY0.1HA V175KLZ0.1H0

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Wave Direction in Yi-Lan Seas of SAY0 at 2017

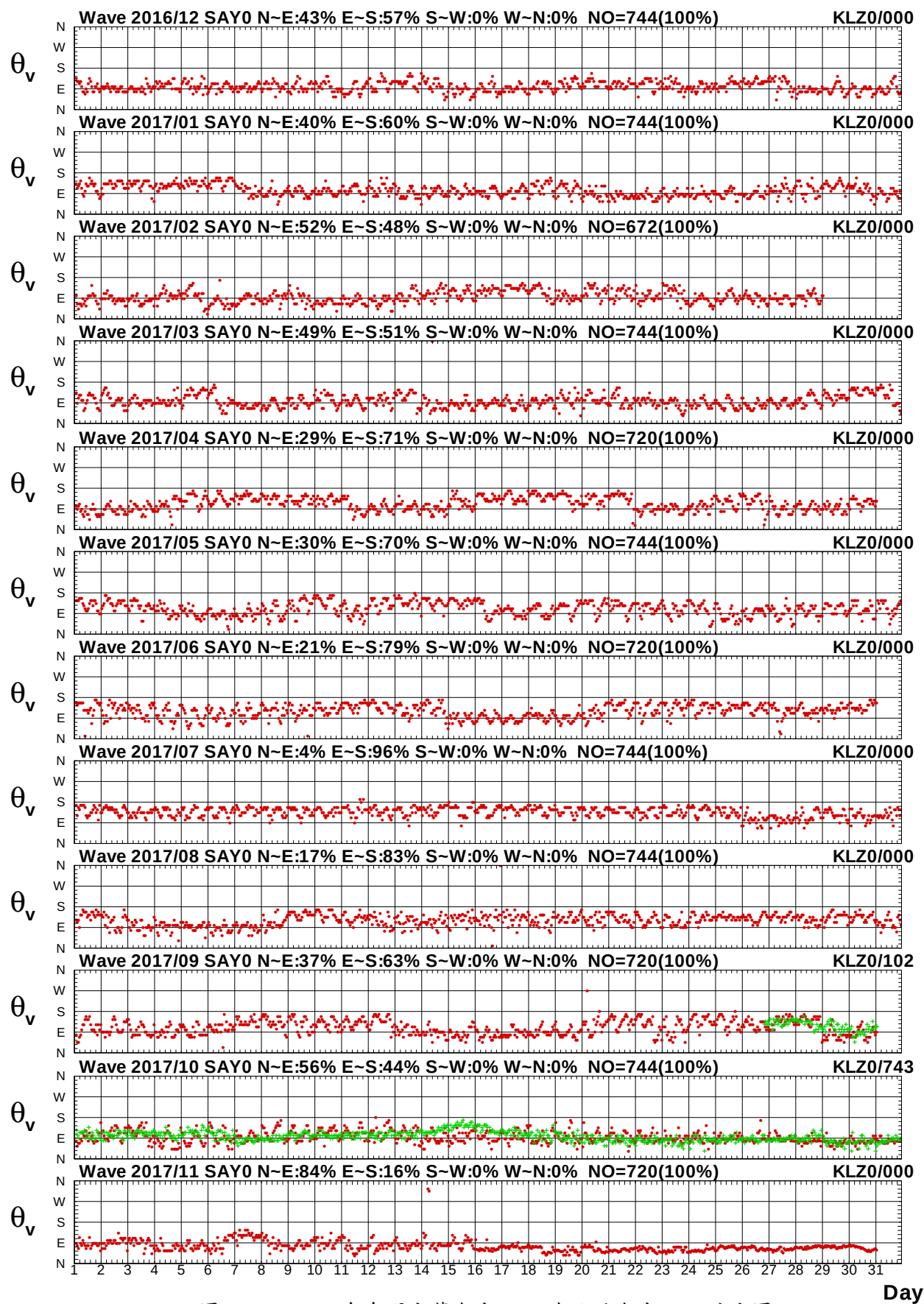


圖2.17c 2017年每月宜蘭海域 Y 站與北端海域 Z 站波向圖

V16CSAY0.1HA V16CKLZ0.1H0 V171SAY0.1HA V171KLZ0.1H0 V172SAY0.1HA V172KLZ0.1H0
V173SAY0.1HA V173KLZ0.1H0 V174SAY0.1HA V174KLZ0.1H0 V175SAY0.1HA V175KLZ0.1H0

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Wave H_s in Yi-Lan Seas of SAY0 at 2017

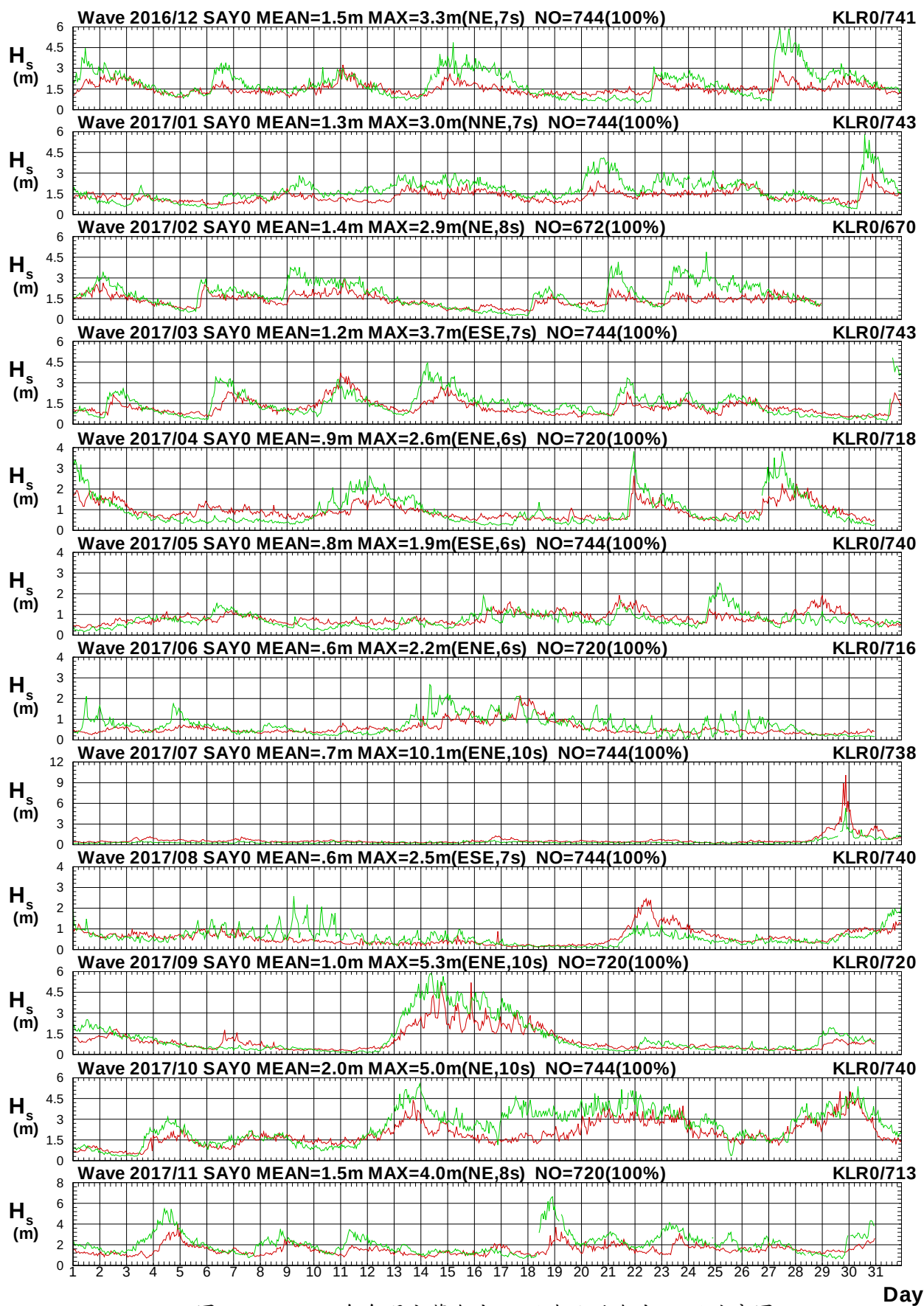


圖2.18a 2017年每月宜蘭海域 Y 站與北端海域 R 站波高圖

V16CSAY0.1HA V16CKLR0.1H0 V171SAY0.1HA V171KLR0.1H0 V172SAY0.1HA V172KLR0.1H0
V173SAY0.1HA V173KLR0.1H0 V174SAY0.1HA V174KLR0.1H0 V175SAY0.1HA V175KLR0.1H0

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Wave T_p in Yi-Lan Seas of SAY0 at 2017

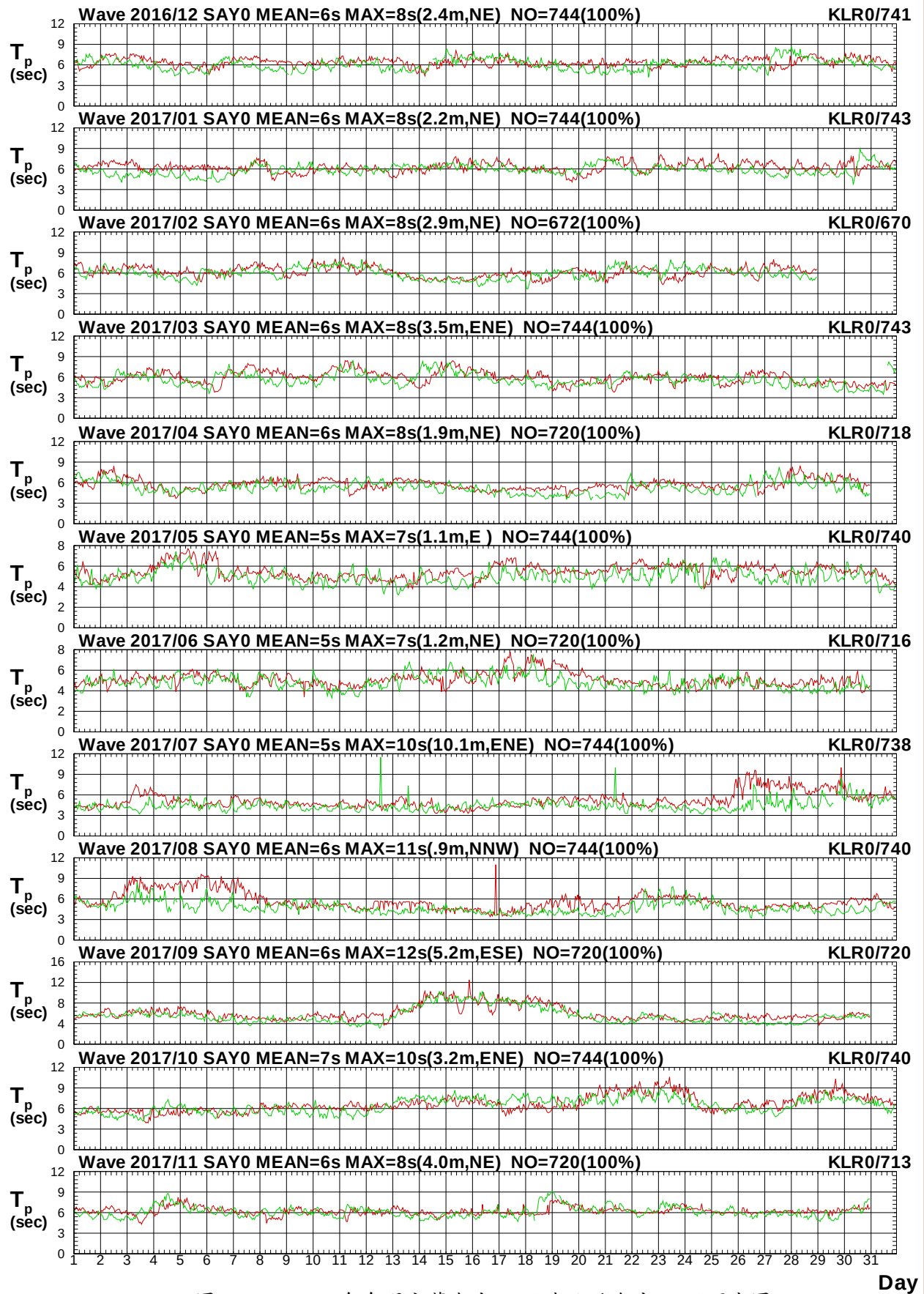


圖2.18b 2017年每月宜蘭海域 Y 站與北端海域 R 站週期圖

V16CSAY0.1HA V16CKLR0.1H0 V171SAY0.1HA V171KLR0.1H0 V172SAY0.1HA V172KLR0.1H0
V173SAY0.1HA V173KLR0.1H0 V174SAY0.1HA V174KLR0.1H0 V175SAY0.1HA V175KLR0.1H0

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Wave Direction in Yi-Lan Seas of SAY0 at 2017

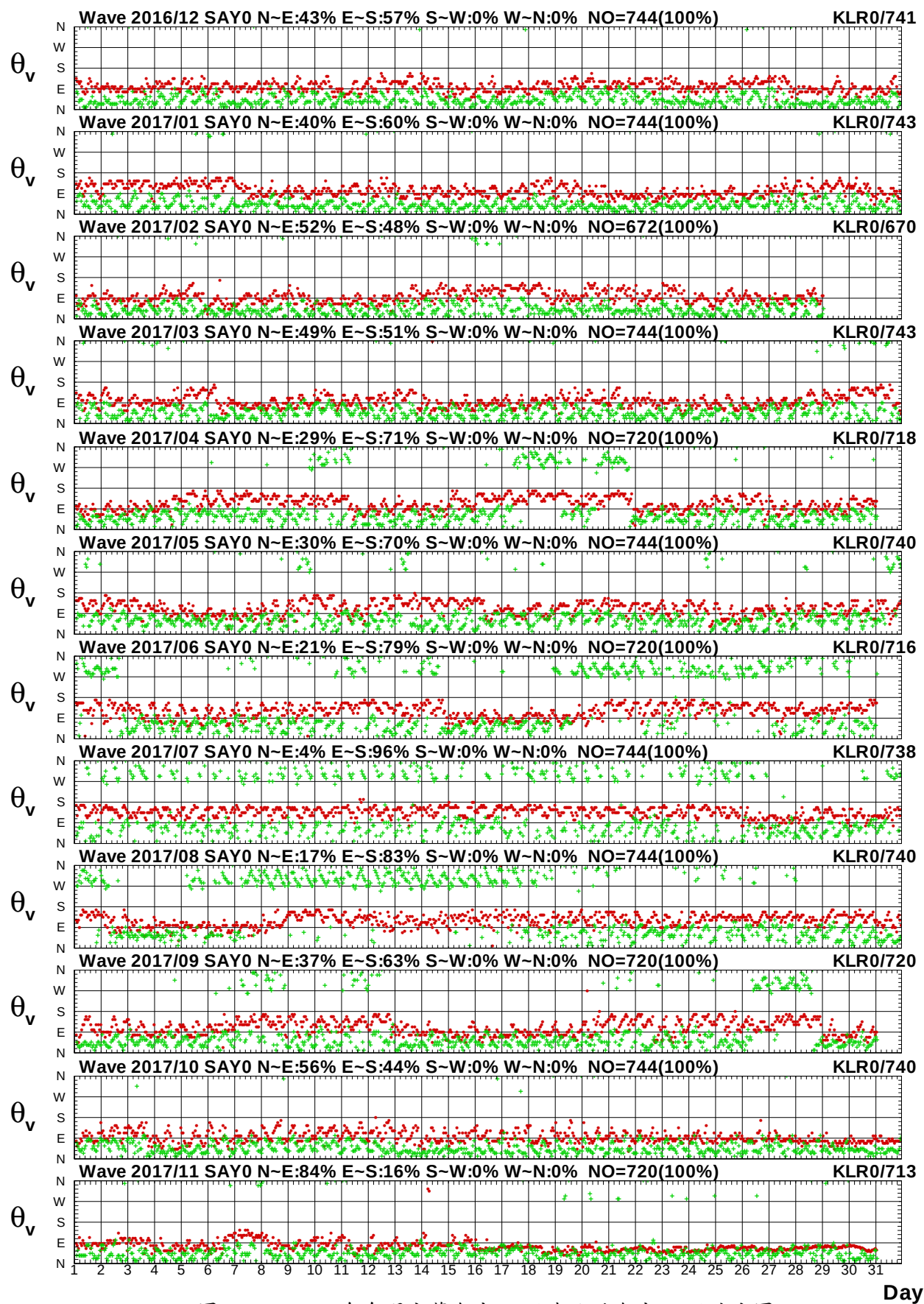


圖2.18c 2017年每月宜蘭海域 Y 站與北端海域 R 站波向圖

V16CSAY0.1HA V16CKLR0.1H0 V171SAY0.1HA V171KLR0.1H0 V172SAY0.1HA V172KLR0.1H0
V173SAY0.1HA V173KLR0.1H0 V174SAY0.1HA V174KLR0.1H0 V175SAY0.1HA V175KLR0.1H0

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第三章 2017 年宜蘭海域觀測潮汐資料

宜蘭海域潮汐之觀測包括測站 **T**、測站 **X**、測站 **F**、測站 **J**、測站 **P** 及測站 **K** 等 6 個測站(測站位置如第 O 章圖 TS1)。測站 **T** 與測站 **F**、測站 **X**、測站 **J** 及測站 **P** 等 4 個測站特性相近，而測站 **K** 與其他測站特性皆不相近。本年報取經檢核及補遺之測站 **T** 及測站 **K** 資料作為主要測站。

本**潮汐**年報資料處理之圖表包括：

1. 2017 年**各觀測站**每月**觀測潮汐**資料**修補前**記錄統計表。
2. 2017 年**各觀測站**每月**觀測潮汐**資料**修補後**記錄統計表。
3. 2017 年**各觀測站****修補前後**每月**潮位**歷線比較圖。
4. 2017 年**各觀測站**之**觀測潮位**與**計算天文潮位**每月**潮汐**歷線比較圖。
5. 2017 年**主要測站**之**觀測潮位**與**次要觀測站**每月**潮汐**歷線比較圖。

表 3.1a 2017 年每月宜蘭海域修補前各測站觀測潮汐資料紀錄表

海域 年月/測站	宜蘭海域 T	宜蘭海域 K	宜蘭海域 X	宜蘭海域 F	宜蘭海域 J	宜蘭海域 P	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域
2016/12 月	744(100%)	690(92.7%)	744(100%)	737(99.1%)	737(99.1%)	*	*	*	*	*	*	*
2017/ 1 月	744(100%)	607(81.6%)	744(100%)	609(81.9%)	612(82.3%)	*	*	*	*	*	*	*
2017/ 2 月	672(100%)	665(99.0%)	672(100%)	668(99.4%)	670(99.7%)	*	*	*	*	*	*	*
2017/ 3 月	744(100%)	687(92.3%)	560(75.3%)	686(92.2%)	685(92.1%)	*	*	*	*	*	*	*
2017/ 4 月	720(100%)	615(85.4%)	392(54.4%)	614(85.3%)	617(85.7%)	*	*	*	*	*	*	*
2017/ 5 月	744(100%)	645(86.7%)	744(100%)	698(93.8%)	705(94.8%)	*	*	*	*	*	*	*
2017/ 6 月	720(100%)	332(46.1%)	720(100%)	362(50.3%)	363(50.4%)	*	*	*	*	*	*	*
2017/ 7 月	744(100%)	506(68.0%)	418(56.2%)	655(88.0%)	680(91.4%)	380(51.1%)	*	*	*	*	*	*
2017/ 8 月	717(96.4%)	371(49.9%)	281(37.8%)	420(56.5%)	418(56.2%)	417(56.0%)	*	*	*	*	*	*
2017/ 9 月	720(100%)	445(61.8%)	711(98.8%)	450(62.5%)	447(62.1%)	450(62.5%)	*	*	*	*	*	*
2017/10 月	744(100%)	581(78.1%)	719(96.6%)	562(75.5%)	580(78.0%)	562(75.5%)	*	*	*	*	*	*
2017/11 月	610(84.7%)	625(86.8%)	650(90.3%)	599(83.2%)	617(85.7%)	601(83.5%)	*	*	*	*	*	*
2017/冬季	2160(100%)	1962(90.8%)	2160(100%)	2014(93.2%)	2019(93.5%)	*	*	*	*	*	*	*
2017/春季	2208(100%)	1947(88.2%)	1696(76.8%)	1998(90.5%)	2007(90.9%)	*	*	*	*	*	*	*
2017/夏季	2181(98.8%)	1209(54.8%)	1419(64.3%)	1437(65.1%)	1461(66.2%)	797(36.1%)	*	*	*	*	*	*
2017/秋季	2074(95.0%)	1651(75.6%)	2080(95.2%)	1611(73.8%)	1644(75.3%)	1613(73.9%)	*	*	*	*	*	*
2017/整年	8623(98.4%)	6769(77.3%)	7355(84.0%)	7060(80.6%)	7131(81.4%)	2410(27.5%)	*	*	*	*	*	*
起始年月	2016/12	2016/12	2016/12	2016/12	2016/12	2017/07	*	*	*	*	*	*
結束年月	2017/11	2017/11	2017/11	2017/11	2017/11	2017/11	*	*	*	*	*	*

表 3.1b 2017年每月宜蘭海域修補後各測站潮汐資料紀錄表

海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域
年月/測站	T	K	X	F	J	P						
2016/12 月	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	*	*	*	*	*	*
2017/ 1 月	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	*	*	*	*	*	*
2017/ 2 月	672(100%)	672(100%)	672(100%)	672(100%)	672(100%)	672(100%)	*	*	*	*	*	*
2017/ 3 月	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	*	*	*	*	*	*
2017/ 4 月	720(100%)	720(100%)	720(100%)	720(100%)	720(100%)	720(100%)	*	*	*	*	*	*
2017/ 5 月	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	*	*	*	*	*	*
2017/ 6 月	720(100%)	720(100%)	720(100%)	720(100%)	720(100%)	720(100%)	*	*	*	*	*	*
2017/ 7 月	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	*	*	*	*	*	*
2017/ 8 月	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	*	*	*	*	*	*
2017/ 9 月	720(100%)	720(100%)	720(100%)	720(100%)	720(100%)	720(100%)	*	*	*	*	*	*
2017/10 月	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	744(100%)	*	*	*	*	*	*
2017/11 月	720(100%)	720(100%)	720(100%)	720(100%)	720(100%)	720(100%)	*	*	*	*	*	*
2017/冬季	2160(100%)	2160(100%)	2160(100%)	2160(100%)	2160(100%)	2160(100%)	*	*	*	*	*	*
2017/春季	2208(100%)	2208(100%)	2208(100%)	2208(100%)	2208(100%)	2208(100%)	*	*	*	*	*	*
2017/夏季	2208(100%)	2208(100%)	2208(100%)	2208(100%)	2208(100%)	2208(100%)	*	*	*	*	*	*
2017/秋季	2184(100%)	2184(100%)	2184(100%)	2184(100%)	2184(100%)	2184(100%)	*	*	*	*	*	*
2017/整年	8760(100%)	8760(100%)	8760(100%)	8760(100%)	8760(100%)	8760(100%)	*	*	*	*	*	*
起始年月	2016/12	2016/12	2016/12	2016/12	2016/12	2016/12	*	*	*	*	*	*
結束年月	2017/11	2017/11	2017/11	2017/11	2017/11	2017/11	*	*	*	*	*	*

表3.2a 2017年宜蘭海域 T 站修補前潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	T	95	162	129	152	12.4	14.0	13.2	13.8	59	99	205	-10	744(100%)
2	2017/01	T	94	149	128	143	12.4	14.0	13.4	14.0	59	95	191	-7	744(100%)
3	2017/02	T	95	151	133	144	12.4	15.0	13.4	14.2	53	100	190	3	672(100%)
4	2017/03	T	98	154	136	149	13.1	26.0	15.6	21.4	56	104	187	18	744(100%)
5	2017/04	T	97	184	134	166	12.7	26.0	13.8	16.0	56	105	195	5	720(100%)
6	2017/05	T	97	160	132	153	12.5	14.0	13.3	14.0	59	103	197	-9	744(100%)
7	2017/06	T	97	157	125	147	12.4	14.0	13.2	13.6	57	116	212	6	720(100%)
8	2017/07	T	95	154	127	148	12.6	25.0	13.8	16.0	58	116	213	9	744(100%)
9	2017/08	T	94	151	131	145	12.4	15.0	13.4	14.2	55	118	214	22	717(96%)
10	2017/09	T	103	158	138	150	12.8	23.0	14.5	17.2	53	117	195	30	720(100%)
11	2017/10	T	96	160	138	154	13.1	26.0	15.7	21.0	56	114	203	23	744(100%)
12	2017/11	T	101	189	152	180	12.4	15.0	13.6	14.3	48	98	190	-2	610(85%)
13	2017/冬	T	95	162	129	145	12.4	15.0	13.3	14.0	171	98	205	-10	2160(100%)
14	2017/春	T	97	184	134	154	12.7	26.0	14.2	16.9	171	104	197	-9	2208(100%)
15	2017/夏	T	95	157	128	145	12.5	25.0	13.5	14.5	170	117	214	6	2181(99%)
16	2017/秋	T	100	189	142	162	12.8	26.0	14.6	17.6	157	111	203	-2	2074(95%)
17	2017/年	T	97	189	133	153	12.6	26.0	13.9	15.8	669	107	214	-10	8623(98%)

表3.2b 2017年宜蘭海域 T 站修補後潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	T	95	162	129	152	12.4	14.0	13.2	13.8	59	99	205	-10	744(100%)
2	2017/01	T	94	149	128	143	12.4	14.0	13.4	14.0	59	95	191	-7	744(100%)
3	2017/02	T	95	151	133	144	12.4	15.0	13.4	14.2	53	100	190	3	672(100%)
4	2017/03	T	98	154	136	149	13.1	26.0	15.6	21.4	56	104	187	18	744(100%)
5	2017/04	T	97	184	134	166	12.7	26.0	13.8	16.0	56	105	195	5	720(100%)
6	2017/05	T	97	160	132	153	12.5	14.0	13.3	14.0	59	103	197	-9	744(100%)
7	2017/06	T	97	157	125	147	12.4	14.0	13.2	13.6	57	116	212	6	720(100%)
8	2017/07	T	95	154	127	148	12.6	25.0	13.8	16.0	58	116	213	9	744(100%)
9	2017/08	T	95	151	131	145	12.4	15.0	13.4	14.2	58	118	214	22	744(100%)
10	2017/09	T	103	158	138	150	12.8	23.0	14.5	17.2	53	117	195	30	720(100%)
11	2017/10	T	96	160	138	154	13.1	26.0	15.7	21.0	56	114	203	23	744(100%)
12	2017/11	T	94	189	147	177	12.4	15.0	13.8	14.4	57	96	190	-2	720(100%)
13	2017/冬	T	95	162	129	145	12.4	15.0	13.3	14.0	171	98	205	-10	2160(100%)
14	2017/春	T	97	184	134	154	12.7	26.0	14.2	16.9	171	104	197	-9	2208(100%)
15	2017/夏	T	96	157	128	145	12.5	25.0	13.5	14.5	173	117	214	6	2208(100%)
16	2017/秋	T	98	189	141	162	12.8	26.0	14.6	17.4	166	109	203	-2	2184(100%)
17	2017/年	T	96	189	133	152	12.6	26.0	13.9	15.7	681	107	214	-10	8760(100%)

表3.3a 2017年宜蘭海域 K 站修補前潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	K	51	115	83	113	14.0	25.0	18.2	25.0	37	-197	-112	-275	690(93%)
2	2017/01	K	47	107	78	99	13.4	25.0	17.2	25.0	38	-200	-144	-276	607(82%)
3	2017/02	K	51	102	79	99	15.3	27.0	22.0	26.3	35	-198	-143	-264	665(99%)
4	2017/03	K	53	93	75	88	14.1	26.0	18.4	25.5	43	-192	-137	-248	687(92%)
5	2017/04	K	57	90	74	84	14.2	26.0	19.2	25.3	34	-188	-130	-264	615(85%)
6	2017/05	K	54	104	82	101	15.0	25.0	21.0	25.0	38	-192	-132	-277	645(87%)
7	2017/06	K	71	122	112	122	12.6	25.0	17.7	25.0	10	-179	-121	-256	332(46%)
8	2017/07	K	58	113	95	109	15.2	26.0	22.0	25.5	23	-176	-117	-256	506(68%)
9	2017/08	K	55	101	92	0	15.3	30.0	22.7	100.0	9	-174	-119	-242	371(50%)
10	2017/09	K	62	95	85	95	17.0	25.0	25.0	25.0	16	-169	-122	-232	445(62%)
11	2017/10	K	54	85	77	83	15.4	25.0	22.0	25.0	27	-174	-125	-235	581(78%)
12	2017/11	K	61	140	95	121	15.3	26.0	22.5	25.3	35	-191	-117	-268	625(87%)
13	2017/冬	K	50	115	80	102	14.2	27.0	18.9	25.4	110	-198	-112	-276	1962(91%)
14	2017/春	K	54	104	77	91	14.4	26.0	19.3	25.3	115	-191	-130	-277	1947(88%)
15	2017/夏	K	61	122	98	113	14.6	30.0	20.8	26.5	42	-176	-117	-256	1209(55%)
16	2017/秋	K	59	140	86	104	15.6	26.0	22.9	25.1	78	-179	-117	-268	1651(76%)
17	2017/年	K	55	140	83	102	14.7	30.0	20.2	25.4	345	-187	-112	-277	6769(77%)

表3.3b 2017年宜蘭海域 K 站修補後潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	K	56	116	90	111	13.4	26.0	16.5	25.3	47	-196	-112	-275	744(100%)
2	2017/01	K	52	131	91	122	13.6	25.0	16.9	24.6	54	-200	-144	-276	744(100%)
3	2017/02	K	51	106	81	102	15.6	27.0	22.4	26.3	39	-198	-143	-264	672(100%)
4	2017/03	K	54	93	76	89	13.9	26.0	17.7	25.5	49	-193	-137	-258	744(100%)
5	2017/04	K	58	111	81	98	13.8	26.0	17.1	24.8	45	-188	-130	-266	720(100%)
6	2017/05	K	56	136	90	125	13.8	26.0	17.4	25.2	53	-191	-132	-277	744(100%)
7	2017/06	K	54	114	92	108	12.6	25.0	15.3	17.2	56	-174	-116	-256	720(100%)
8	2017/07	K	56	112	94	109	13.6	26.0	17.8	24.8	54	-175	-117	-256	744(100%)
9	2017/08	K	57	108	88	99	14.7	25.0	20.4	25.0	50	-173	-119	-242	744(100%)
10	2017/09	K	59	96	85	94	13.3	25.0	16.7	23.0	47	-171	-122	-232	720(100%)
11	2017/10	K	55	98	82	92	14.0	28.0	18.5	25.0	50	-174	-125	-243	744(100%)
12	2017/11	K	58	140	91	118	14.0	26.0	18.7	25.0	48	-192	-117	-270	720(100%)
13	2017/冬	K	53	131	88	112	14.1	27.0	18.4	25.4	140	-198	-112	-276	2160(100%)
14	2017/春	K	56	136	82	104	13.8	26.0	17.3	25.2	147	-191	-130	-277	2208(100%)
15	2017/夏	K	55	114	91	107	13.6	26.0	17.7	24.2	160	-174	-116	-256	2208(100%)
16	2017/秋	K	57	140	86	101	13.8	28.0	17.9	24.8	145	-179	-117	-270	2184(100%)
17	2017/年	K	55	140	87	107	13.8	28.0	17.9	25.0	592	-185	-112	-277	8760(100%)

表3.4a 2017年宜蘭海域 X 站修補前潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	X	94	164	128	151	12.4	14.0	13.2	13.8	59	2726	2831	2622	744(100%)
2	2017/01	X	93	147	126	141	12.4	15.0	13.4	14.2	59	2724	2814	2618	744(100%)
3	2017/02	X	93	150	130	143	12.6	26.0	14.1	16.6	52	2730	2820	2637	672(100%)
4	2017/03	X	91	138	127	134	12.7	25.0	14.4	17.0	43	2729	2804	2653	560(75%)
5	2017/04	X	97	185	150	180	12.4	15.0	13.8	15.0	31	2728	2819	2627	392(54%)
6	2017/05	X	97	159	131	154	12.5	14.0	13.2	13.8	59	2724	2820	2610	744(100%)
7	2017/06	X	97	161	125	148	12.4	14.0	13.1	13.2	57	2734	2830	2619	720(100%)
8	2017/07	X	86	123	110	120	12.4	13.0	13.0	13.0	33	2736	2809	2649	418(56%)
9	2017/08	X	105	177	144	177	13.4	25.0	16.0	25.0	16	2673	2761	2574	281(38%)
10	2017/09	X	98	142	134	141	13.2	25.0	15.8	21.0	54	2678	2755	2589	711(99%)
11	2017/10	X	98	158	130	152	14.7	27.0	19.9	25.5	45	2679	2768	2588	719(97%)
12	2017/11	X	96	189	147	179	13.7	26.0	17.4	25.3	40	2667	2767	2570	650(90%)
13	2017/冬	X	94	164	128	144	12.5	26.0	13.5	14.8	170	2726	2831	2618	2160(100%)
14	2017/春	X	95	185	134	157	12.5	25.0	13.7	15.1	133	2726	2820	2610	1696(77%)
15	2017/夏	X	95	177	124	147	12.6	25.0	13.5	14.6	106	2723	2830	2574	1419(64%)
16	2017/秋	X	97	189	137	158	13.8	27.0	17.6	25.0	139	2675	2768	2570	2080(95%)
17	2017/年	X	95	189	131	152	12.9	27.0	14.6	17.9	548	2711	2831	2570	7355(84%)

表3.4b 2017年宜蘭海域 X 站修補後潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	X	94	164	128	151	12.4	14.0	13.2	13.8	59	2726	2831	2622	744(100%)
2	2017/01	X	93	147	126	141	12.4	15.0	13.4	14.2	59	2724	2814	2618	744(100%)
3	2017/02	X	93	150	130	143	12.6	26.0	14.1	16.6	52	2730	2820	2637	672(100%)
4	2017/03	X	98	158	136	151	12.6	25.0	14.0	16.4	58	2729	2812	2643	744(100%)
5	2017/04	X	97	161	132	149	12.4	15.0	13.2	13.8	57	2732	2819	2627	720(100%)
6	2017/05	X	97	159	131	154	12.5	14.0	13.2	13.8	59	2724	2820	2610	744(100%)
7	2017/06	X	97	161	125	148	12.4	14.0	13.1	13.2	57	2734	2830	2619	720(100%)
8	2017/07	X	95	154	128	148	12.6	25.0	13.7	15.8	58	2741	2841	2637	744(100%)
9	2017/08	X	96	152	131	145	12.4	14.0	13.4	14.0	58	2678	2761	2571	744(100%)
10	2017/09	X	98	158	141	155	12.5	16.0	13.8	15.0	57	2677	2755	2589	720(100%)
11	2017/10	X	95	161	137	154	12.9	25.0	15.0	19.2	57	2679	2768	2588	744(100%)
12	2017/11	X	94	189	146	177	12.4	15.0	13.7	14.4	57	2668	2767	2570	720(100%)
13	2017/冬	X	94	164	128	144	12.5	26.0	13.5	14.8	170	2726	2831	2618	2160(100%)
14	2017/春	X	97	161	133	150	12.5	25.0	13.5	14.6	174	2728	2820	2610	2208(100%)
15	2017/夏	X	96	161	128	146	12.5	25.0	13.4	14.4	173	2717	2841	2571	2208(100%)
16	2017/秋	X	96	189	142	162	12.6	25.0	14.2	15.9	171	2675	2768	2570	2184(100%)
17	2017/年	X	96	189	133	152	12.5	26.0	13.6	15.0	688	2712	2841	2570	8760(100%)

表3.5a 2017年宜蘭海域 F 站修補前潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	F	91	195	139	184	12.8	25.0	14.4	18.2	57	-216	-112	-323	737(99%)
2	2017/01	F	87	189	138	181	13.6	25.0	16.6	25.0	44	-219	-126	-318	609(82%)
3	2017/02	F	92	147	127	140	12.6	26.0	14.1	16.4	52	-215	-129	-311	668(99%)
4	2017/03	F	92	165	128	138	12.4	15.0	13.5	14.2	53	-211	-130	-295	686(92%)
5	2017/04	F	91	165	126	147	13.6	25.0	17.2	24.8	43	-208	-120	-347	614(85%)
6	2017/05	F	94	184	132	177	13.8	26.0	16.9	25.3	48	-211	-117	-319	698(94%)
7	2017/06	F	108	199	161	199	15.8	25.0	23.0	25.0	19	-198	-102	-302	362(50%)
8	2017/07	F	94	183	145	168	13.8	25.0	17.6	25.0	44	-199	-112	-307	655(88%)
9	2017/08	F	87	155	127	155	13.2	25.0	15.8	25.0	19	-201	-104	-288	420(57%)
10	2017/09	F	95	127	121	127	13.6	25.0	17.3	25.0	24	-193	-118	-274	450(63%)
11	2017/10	F	85	135	118	132	13.2	25.0	16.4	21.3	31	-195	-113	-283	562(76%)
12	2017/11	F	97	163	140	158	14.4	25.0	19.3	24.7	38	-214	-126	-308	599(83%)
13	2017/冬	F	90	195	135	169	13.0	26.0	14.9	19.2	153	-216	-112	-323	2014(93%)
14	2017/春	F	92	184	128	153	13.2	26.0	15.7	21.4	144	-210	-117	-347	1998(91%)
15	2017/夏	F	96	199	145	170	14.1	25.0	18.2	25.0	82	-200	-102	-307	1437(65%)
16	2017/秋	F	93	163	128	145	13.8	25.0	17.6	24.6	93	-202	-113	-308	1611(74%)
17	2017/年	F	92	199	133	161	13.4	26.0	16.3	22.8	472	-208	-102	-347	7060(81%)

表3.5b 2017年宜蘭海域 F 站修補後潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	F	92	159	125	147	12.4	14.0	13.1	13.4	59	-216	-112	-323	744(100%)
2	2017/01	F	92	145	125	139	12.4	14.0	13.4	14.0	59	-220	-126	-318	744(100%)
3	2017/02	F	92	147	127	140	12.6	26.0	14.1	16.4	52	-215	-129	-311	672(100%)
4	2017/03	F	97	158	134	150	12.4	15.0	13.5	14.2	59	-211	-130	-297	744(100%)
5	2017/04	F	94	179	134	164	12.7	26.0	13.9	16.2	56	-209	-120	-347	720(100%)
6	2017/05	F	94	156	128	149	12.5	14.0	13.2	13.8	59	-210	-117	-319	744(100%)
7	2017/06	F	95	153	122	143	12.4	14.0	13.2	13.8	57	-196	-102	-302	720(100%)
8	2017/07	F	94	151	124	146	12.8	25.0	14.4	18.2	57	-198	-110	-307	744(100%)
9	2017/08	F	95	147	128	141	12.6	25.0	14.1	16.4	57	-198	-104	-288	744(100%)
10	2017/09	F	98	157	134	148	12.9	26.0	15.2	19.6	55	-194	-118	-277	720(100%)
11	2017/10	F	92	159	133	151	12.4	15.0	13.9	15.0	59	-195	-109	-286	744(100%)
12	2017/11	F	92	182	142	173	12.4	15.0	13.7	14.4	57	-215	-126	-321	720(100%)
13	2017/冬	F	92	159	125	141	12.5	26.0	13.5	14.6	170	-217	-112	-323	2160(100%)
14	2017/春	F	95	179	132	152	12.5	26.0	13.5	14.7	174	-210	-117	-347	2208(100%)
15	2017/夏	F	94	153	125	142	12.6	25.0	13.9	15.9	171	-197	-102	-307	2208(100%)
16	2017/秋	F	94	182	137	157	12.6	26.0	14.3	16.1	171	-201	-109	-321	2184(100%)
17	2017/年	F	94	182	130	149	12.6	26.0	13.8	15.4	686	-206	-102	-347	8760(100%)

表3.6a 2017年宜蘭海域 J 站修補前潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	J	81	158	121	149	13.3	26.0	15.8	22.8	55	-207	-113	-321	737(99%)
2	2017/01	J	75	151	119	140	13.6	25.0	17.2	24.8	44	-208	-127	-302	612(82%)
3	2017/02	J	85	167	132	154	13.2	25.0	15.6	20.4	50	-204	-136	-302	670(100%)
4	2017/03	J	92	130	116	126	14.3	27.0	18.6	25.8	40	-201	-123	-277	685(92%)
5	2017/04	J	85	147	114	126	13.4	26.0	16.6	23.3	42	-194	-117	-461	617(86%)
6	2017/05	J	80	165	116	153	13.0	24.0	14.5	19.0	48	-197	-119	-299	705(95%)
7	2017/06	J	98	176	156	176	15.3	26.0	21.3	26.0	18	-182	-103	-283	363(50%)
8	2017/07	J	83	144	116	140	14.0	26.0	18.1	25.5	47	-174	-94	-268	680(91%)
9	2017/08	J	83	147	132	147	14.9	26.0	21.5	26.0	19	-175	-92	-259	418(56%)
10	2017/09	J	92	146	132	143	13.1	25.0	16.0	20.0	26	-173	-95	-261	447(62%)
11	2017/10	J	88	136	122	134	13.2	25.0	16.4	21.7	30	-181	-103	-256	580(78%)
12	2017/11	J	98	158	137	151	15.0	25.0	20.8	25.0	34	-194	-110	-288	617(86%)
13	2017/冬	J	81	167	123	149	13.3	26.0	16.1	22.6	149	-206	-113	-321	2019(94%)
14	2017/春	J	85	165	117	135	13.5	27.0	16.4	23.6	130	-197	-117	-461	2007(91%)
15	2017/夏	J	86	176	129	154	14.4	26.0	19.4	25.6	84	-176	-92	-283	1461(66%)
16	2017/秋	J	93	158	130	144	13.8	25.0	17.8	24.6	90	-183	-95	-288	1644(75%)
17	2017/年	J	85	176	124	147	13.7	27.0	17.1	24.9	453	-192	-92	-461	7131(81%)

表3.6b 2017年宜蘭海域 J 站修補後潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	J	82	186	131	173	12.6	24.0	13.8	16.0	58	-207	-113	-321	744(100%)
2	2017/01	J	82	169	135	165	12.9	25.0	14.7	18.6	57	-209	-126	-311	744(100%)
3	2017/02	J	85	167	132	154	13.2	25.0	15.6	20.4	50	-204	-136	-302	672(100%)
4	2017/03	J	99	160	126	145	14.2	27.0	18.4	26.0	48	-201	-123	-290	744(100%)
5	2017/04	J	87	176	117	138	13.2	26.0	15.4	21.0	51	-196	-102	-461	720(100%)
6	2017/05	J	82	179	119	163	12.7	25.0	13.7	15.8	58	-196	-114	-299	744(100%)
7	2017/06	J	91	155	123	137	12.9	26.0	14.8	18.8	55	-182	-102	-283	720(100%)
8	2017/07	J	86	150	120	144	13.1	26.0	15.4	21.2	56	-173	-74	-268	744(100%)
9	2017/08	J	90	153	128	145	13.1	25.0	15.8	21.0	56	-175	-92	-259	744(100%)
10	2017/09	J	95	165	137	156	12.9	25.0	15.3	19.0	55	-173	-85	-272	720(100%)
11	2017/10	J	91	167	130	148	13.1	25.0	15.8	21.0	56	-181	-103	-278	744(100%)
12	2017/11	J	89	179	137	165	12.9	26.0	15.0	19.0	55	-195	-110	-321	720(100%)
13	2017/冬	J	83	186	132	165	12.9	25.0	14.6	18.1	165	-207	-113	-321	2160(100%)
14	2017/春	J	89	179	122	148	13.3	27.0	15.7	22.3	157	-198	-102	-461	2208(100%)
15	2017/夏	J	89	155	124	142	13.0	26.0	15.3	19.9	167	-176	-74	-283	2208(100%)
16	2017/秋	J	92	179	135	156	13.0	26.0	15.3	19.4	166	-183	-85	-321	2184(100%)
17	2017/年	J	88	186	129	154	13.0	27.0	15.2	19.8	655	-191	-74	-461	8760(100%)

表3.7a 2017年宜蘭海域 P 站修補前潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	P													
2	2017/01	P													
3	2017/02	P													
4	2017/03	P													
5	2017/04	P													
6	2017/05	P													
7	2017/06	P													
8	2017/07	P	104	198	149	189	13.4	25.0	16.4	25.0	26	-206	-114	-312	380(51%)
9	2017/08	P	88	157	129	157	13.2	25.0	15.7	25.0	19	-205	-109	-295	417(56%)
10	2017/09	P	97	129	123	129	13.6	25.0	17.1	25.0	24	-199	-123	-282	450(63%)
11	2017/10	P	85	137	119	133	12.8	24.0	15.4	18.0	32	-202	-120	-290	562(76%)
12	2017/11	P	98	165	141	159	14.4	25.0	19.3	24.7	38	-214	-125	-310	601(84%)
13	2017/冬	P													
14	2017/春	P													
15	2017/夏	P	97	198	139	173	13.3	25.0	15.9	22.3	45	-206	-109	-312	797(36%)
16	2017/秋	P	93	165	129	146	13.7	25.0	17.3	24.4	94	-206	-120	-310	1613(74%)
17	2017/年	P	94	198	132	156	13.6	25.0	16.9	23.9	139	-206	-109	-312	2410(28%)

表3.7b 2017年宜蘭海域 P 站修補後潮差週期及潮位重要統計量統計表

序 號	日期 (年/月)	測 站	平均 潮差 (公分)	最大 潮差 (公分)	1/3 潮差 (公分)	1/10 潮差 (公分)	平均 週期 (時)	最大 週期 (時)	1/3 週期 (時)	1/10 週期 (時)	潮差 個數 (個)	平均 潮位 (公分)	最高 潮位 (公分)	最低 潮位 (公分)	水位 點數 (個)
1	2016/12	P	95	162	129	152	12.4	14.0	13.2	13.8	59	99	205	-10	744(100%)
2	2017/01	P	94	149	128	143	12.4	14.0	13.4	14.0	59	95	191	-7	744(100%)
3	2017/02	P	95	151	133	144	12.4	15.0	13.4	14.2	53	100	190	3	672(100%)
4	2017/03	P	98	154	136	149	13.1	26.0	15.6	21.4	56	104	187	18	744(100%)
5	2017/04	P	97	184	134	166	12.7	26.0	13.8	16.0	56	105	195	5	720(100%)
6	2017/05	P	97	160	132	153	12.5	14.0	13.3	14.0	59	103	197	-9	744(100%)
7	2017/06	P	97	157	125	147	12.4	14.0	13.2	13.6	57	116	212	6	720(100%)
8	2017/07	P	94	154	126	147	12.6	25.0	13.8	16.2	58	-205	-111	-312	744(100%)
9	2017/08	P	93	149	129	142	12.4	15.0	13.4	14.2	59	-202	-109	-295	744(100%)
10	2017/09	P	99	158	136	150	12.9	25.0	15.1	19.2	55	-200	-122	-288	720(100%)
11	2017/10	P	93	160	135	151	12.4	15.0	13.9	15.0	59	-202	-114	-293	744(100%)
12	2017/11	P	92	184	143	174	12.4	15.0	13.8	14.6	57	-215	-125	-316	720(100%)
13	2017/冬	P	95	162	129	145	12.4	15.0	13.3	14.0	171	98	205	-10	2160(100%)
14	2017/春	P	97	184	134	154	12.7	26.0	14.2	16.9	171	104	197	-9	2208(100%)
15	2017/夏	P	95	157	127	144	12.5	25.0	13.4	14.5	174	-99	212	-312	2208(100%)
16	2017/秋	P	95	184	138	158	12.6	25.0	14.2	16.1	171	-206	-114	-316	2184(100%)
17	2017/年	P	95	184	132	151	12.6	26.0	13.8	15.4	687	-26	212	-316	8760(100%)

Tidal Level in Su-Ao Harbor of SAT0 at 2017

1 ○ 8 ● 15 ● 22 ●

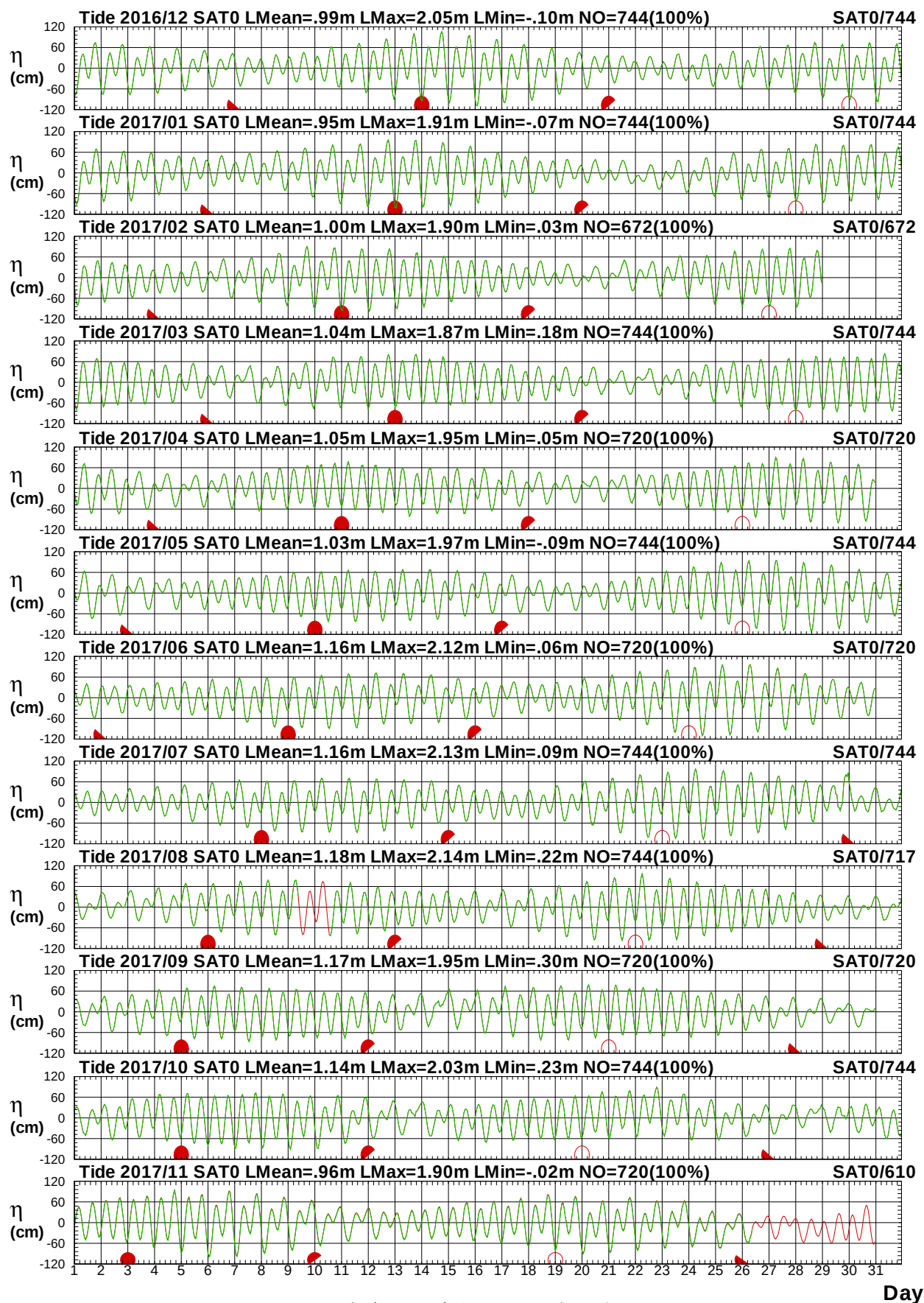


圖3.1.1 2017年每月宜蘭海域 T 站修補前後之潮位比較圖

T16CSAT0.1HA T16CSAT0.1H0 T171SAT0.1HA T171SAT0.1H0 T172SAT0.1HA T172SAT0.1H0
T173SAT0.1HA T173SAT0.1H0 T174SAT0.1HA T174SAT0.1H0 T175SAT0.1HA T175SAT0.1H0

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Tidal Level in Su-Ao Harbor of SAT0 at 2017

1 ○ 8 ● 15 ● 22 ●

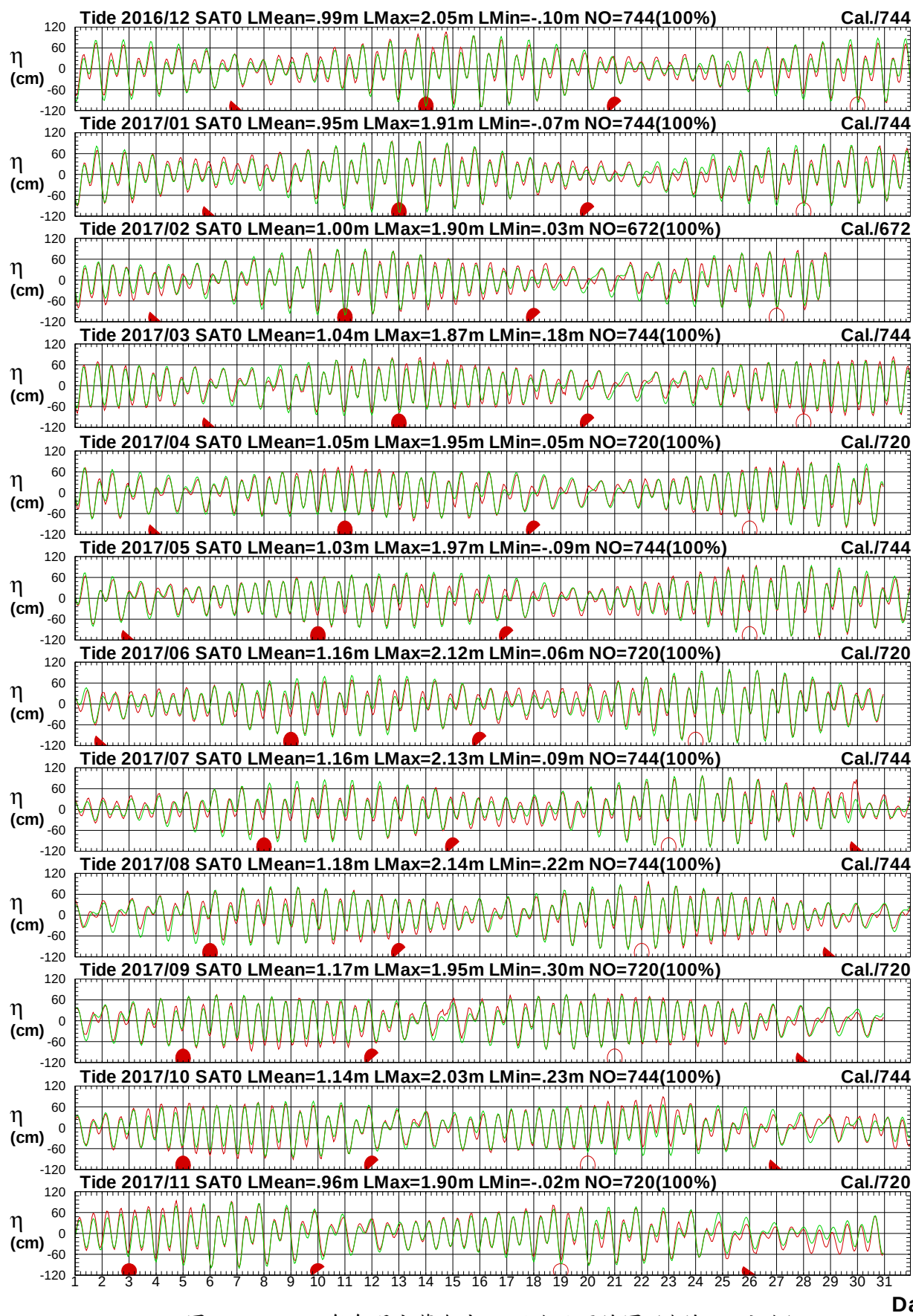


圖3.1.2 2017年每月宜蘭海域 T 站潮位歷線圖 (綠線: 天文潮)

T16CSAT0.1HA T16CSAT0.1HC T171SAT0.1HA T171SAT0.1HC T172SAT0.1HA T172SAT0.1HC
T173SAT0.1HA T173SAT0.1HC T174SAT0.1HA T174SAT0.1HC T175SAT0.1HA T175SAT0.1HC

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Tidal Level in Su-Ao Harbor of SAF0 at 2017

1 ○ 8 ● 15 ● 22 ●

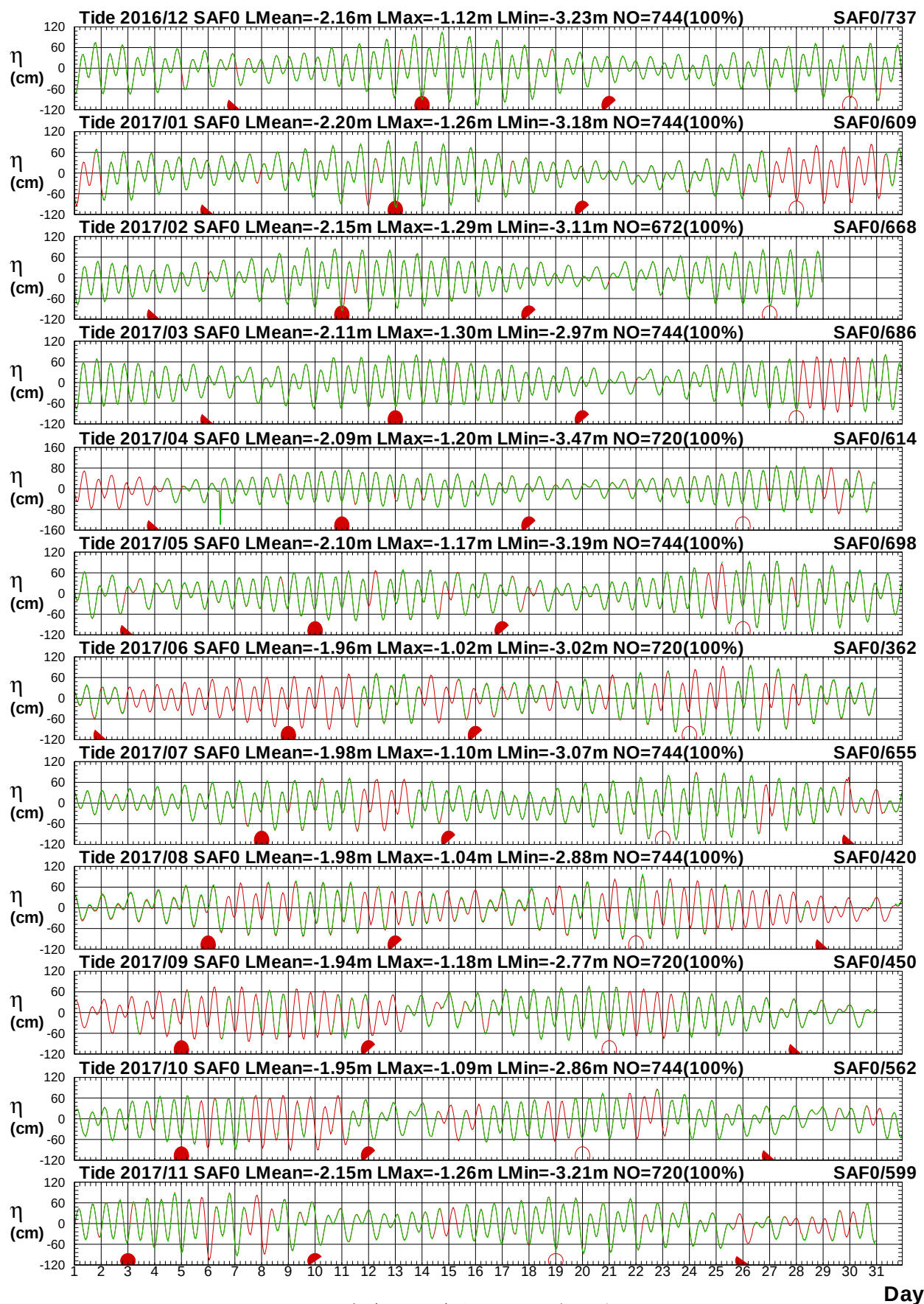


圖3.1.3 2017年每月宜蘭海域 F 站修補前後之潮位比較圖

T16CSAF0.1HA T16CSAF0.1H0 T171SAF0.1HA T171SAF0.1H0 T172SAF0.1HA T172SAF0.1H0
T173SAF0.1HA T173SAF0.1H0 T174SAF0.1HA T174SAF0.1H0 T175SAF0.1HA T175SAF0.1H0

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Tidal Level in Su-Ao Harbor of SAF0 at 2017

1 ○ 8 ● 15 ● 22 ●

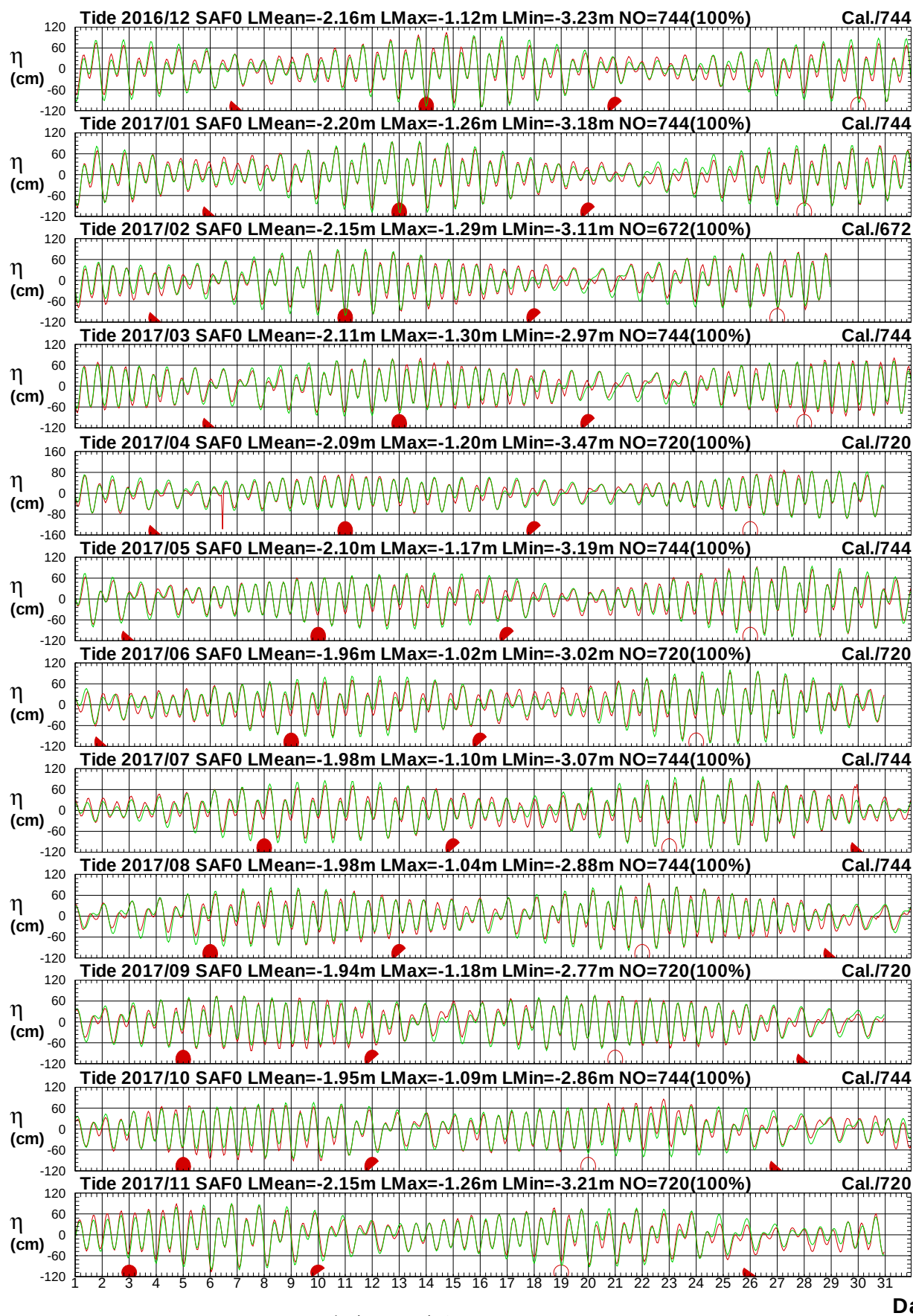


圖3.1.4 2017年每月宜蘭海域 F 站潮位歷線圖 (綠線: 天文潮)

T16CSAF0.1HA T16CSAT0.1HC T171SAF0.1HA T171SAT0.1HC T172SAF0.1HA T172SAT0.1HC
T173SAF0.1HA T173SAT0.1HC T174SAF0.1HA T174SAT0.1HC T175SAF0.1HA T175SAT0.1HC

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Tidal Level in Su-Ao Harbor of SAX0 at 2017

1 ○ 8 ● 15 ● 22 ●

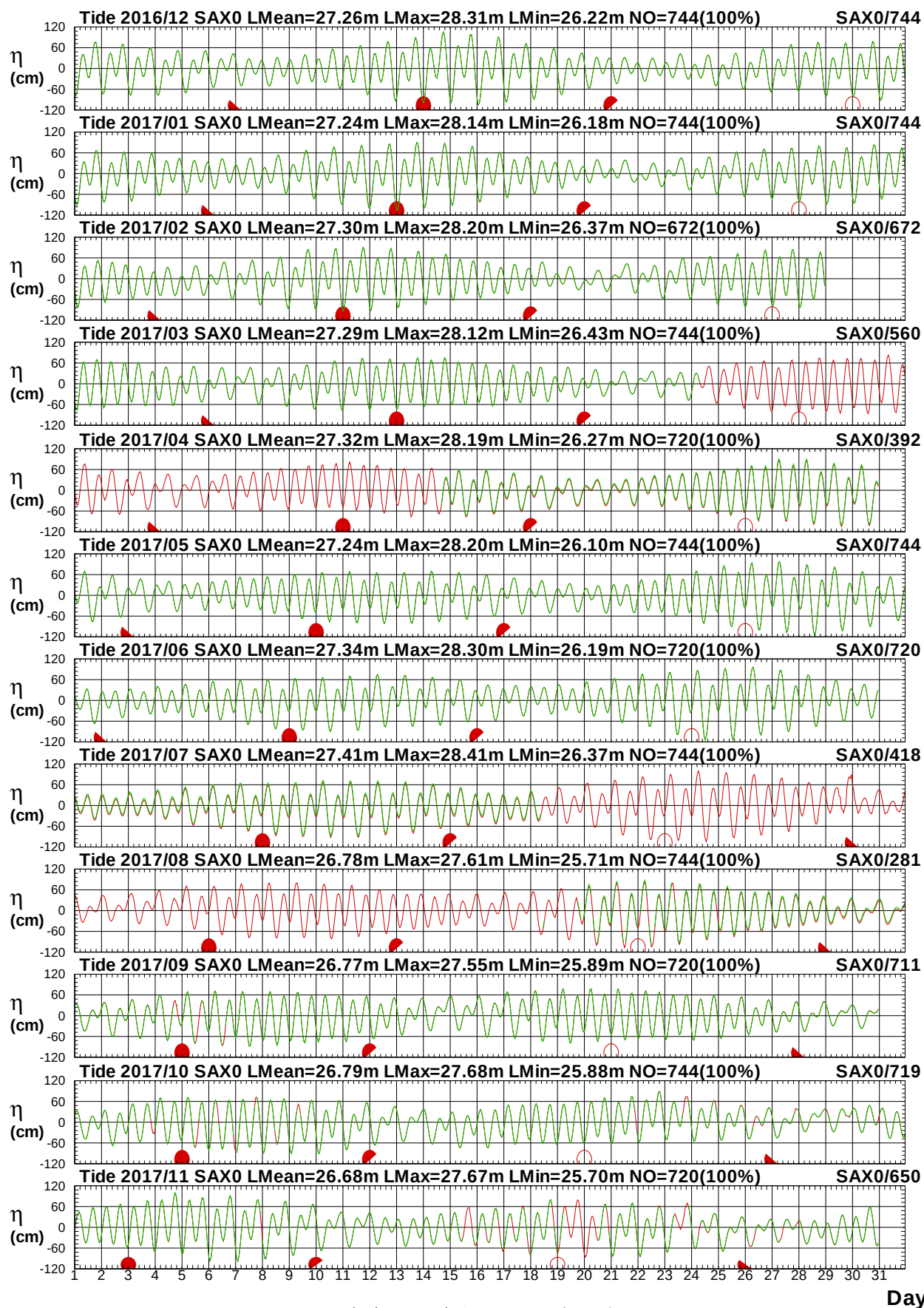


圖3.1.5 2017年每月宜蘭海域 X 站修補前後之潮位比較圖

T16CSAX0.1HA T16CSAX0.1H0 T171SAX0.1HA T171SAX0.1H0 T172SAX0.1HA T172SAX0.1H0
T173SAX0.1HA T173SAX0.1H0 T174SAX0.1HA T174SAX0.1H0 T175SAX0.1HA T175SAX0.1H0

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Tidal Level in Su-Ao Harbor of SAX0 at 2017

1 ○ 8 ● 15 ● 22 ●

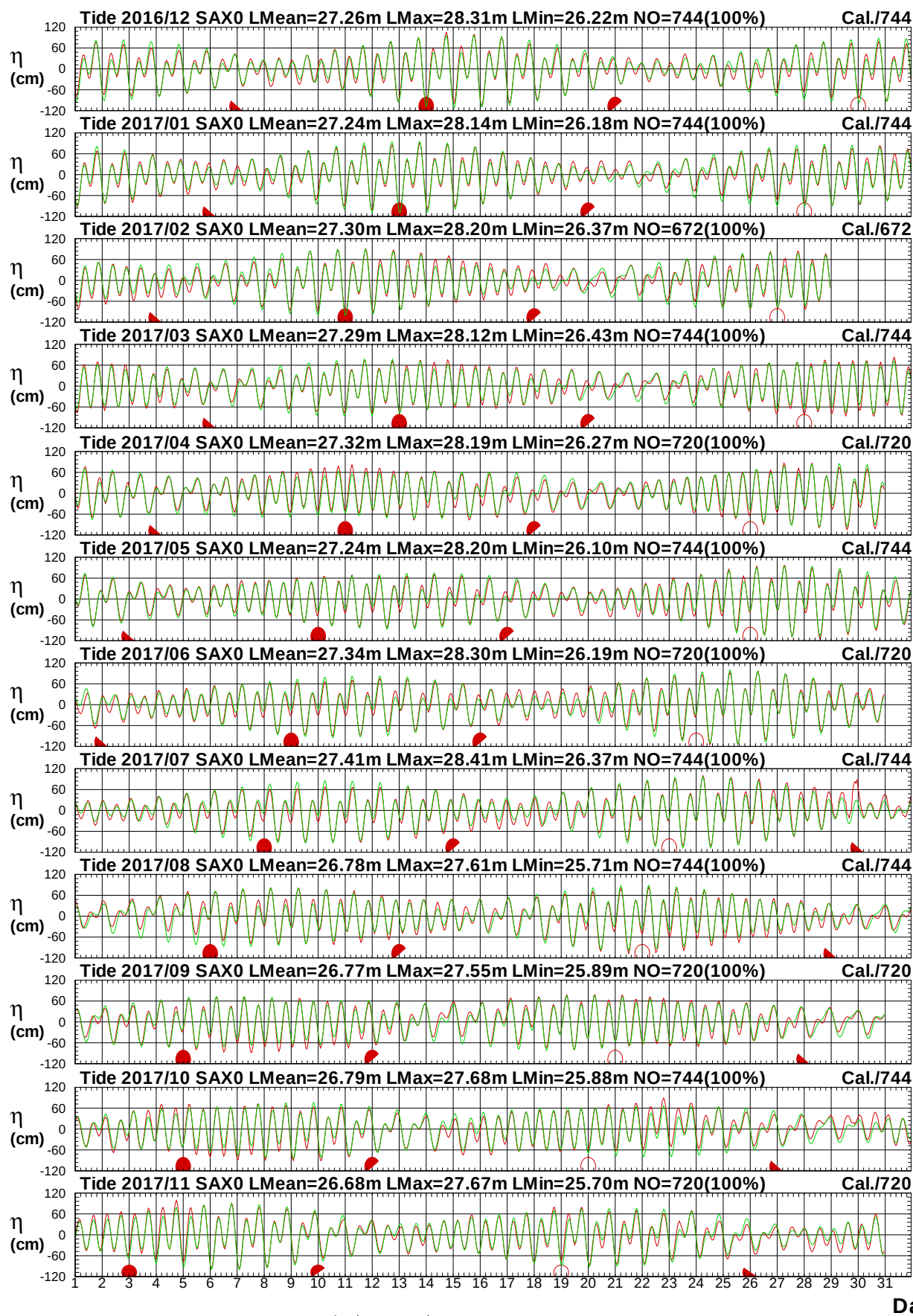


圖3.1.6 2017年每月宜蘭海域 X 站潮位歷線圖 (綠線: 天文潮)

T16CSAX0.1HA T16CSAT0.1HC T171SAX0.1HA T171SAT0.1HC T172SAX0.1HA T172SAT0.1HC
T173SAX0.1HA T173SAT0.1HC T174SAX0.1HA T174SAT0.1HC T175SAX0.1HA T175SAT0.1HC

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Tidal Level in Su-Ao Harbor of SAJ0 at 2017

1 ○ 8 ● 15 ● 22 ●

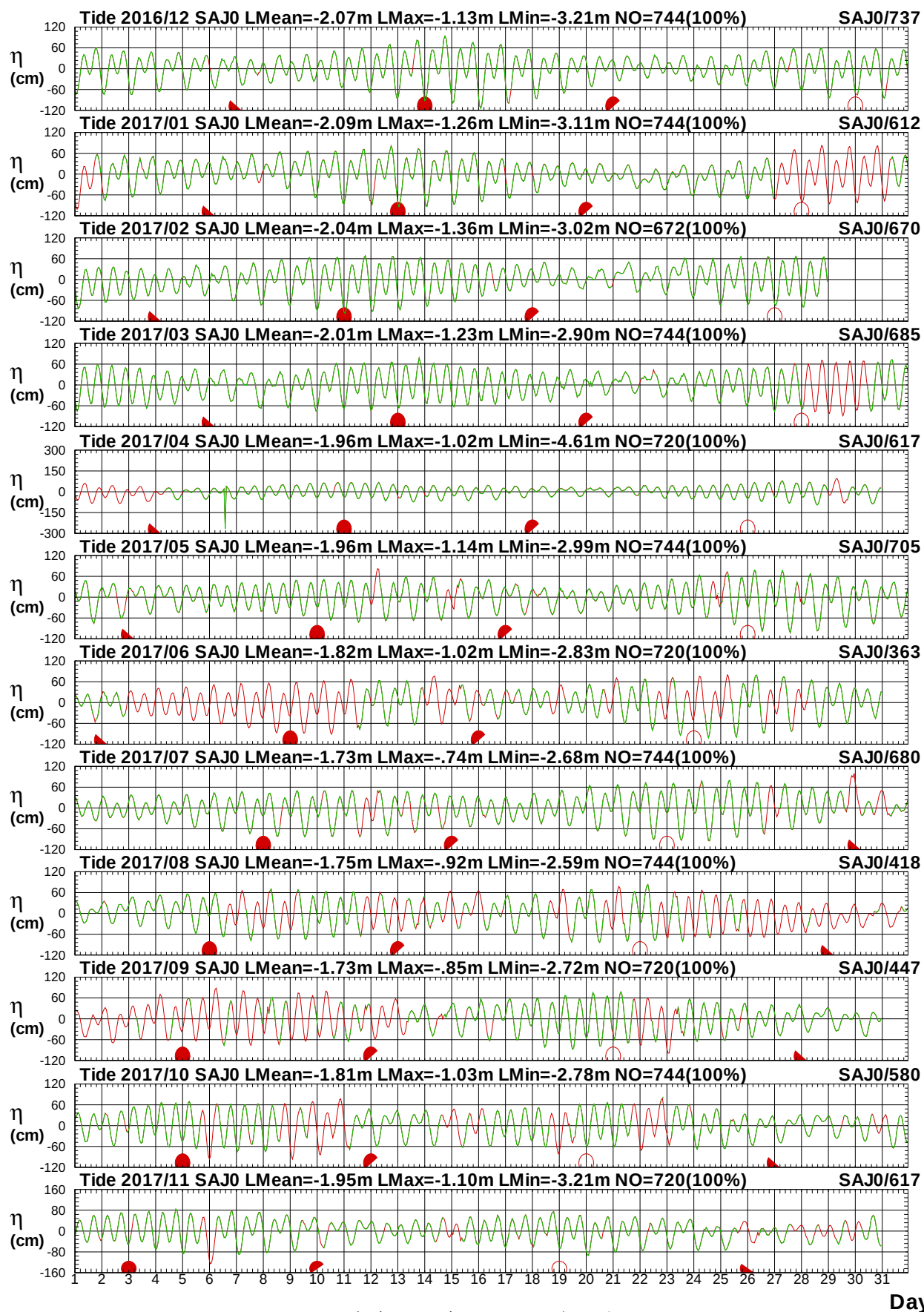


圖3.1.7 2017年每月宜蘭海域 J 站修補前後之潮位比較圖

T16CSAJ0.1HA T16CSAJ0.1H0 T171SAJ0.1HA T171SAJ0.1H0 T172SAJ0.1HA T172SAJ0.1H0
T173SAJ0.1HA T173SAJ0.1H0 T174SAJ0.1HA T174SAJ0.1H0 T175SAJ0.1HA T175SAJ0.1H0

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Tidal Level in Su-Ao Harbor of SAJ0 at 2017

1 ○ 8 ● 15 ● 22 ●

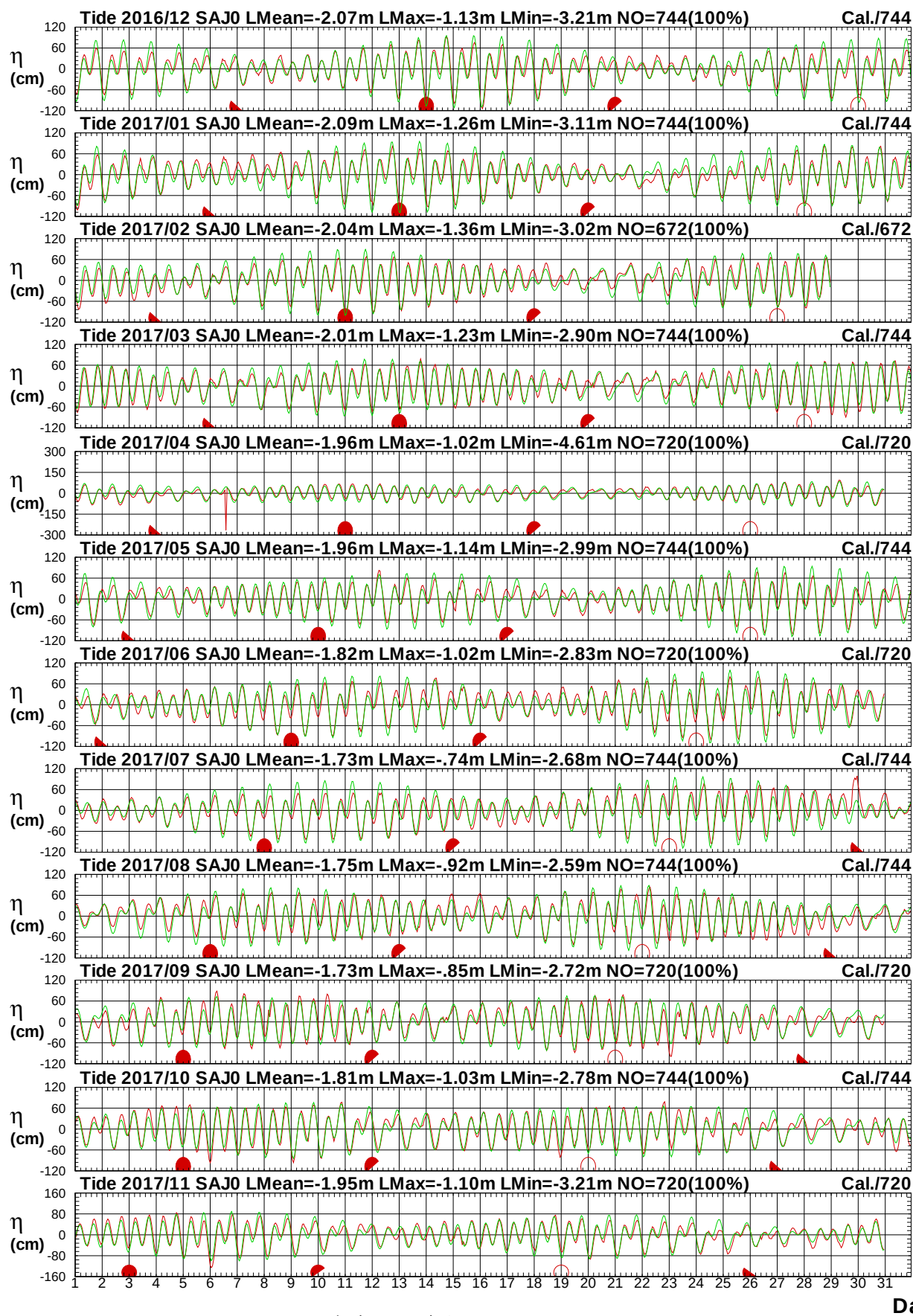


圖3.1.8 2017年每月宜蘭海域 J 站潮位歷線圖 (綠線: 天文潮)

T16CSAJ0.1HA T16CSAT0.1HC T171SAJ0.1HA T171SAT0.1HC T172SAJ0.1HA T172SAT0.1HC
T173SAJ0.1HA T173SAT0.1HC T174SAJ0.1HA T174SAT0.1HC T175SAJ0.1HA T175SAT0.1HC

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Tidal Level in Su-Ao Harbor of SAP0 at 2017

1 ○ 8 ● 15 ● 22 ●

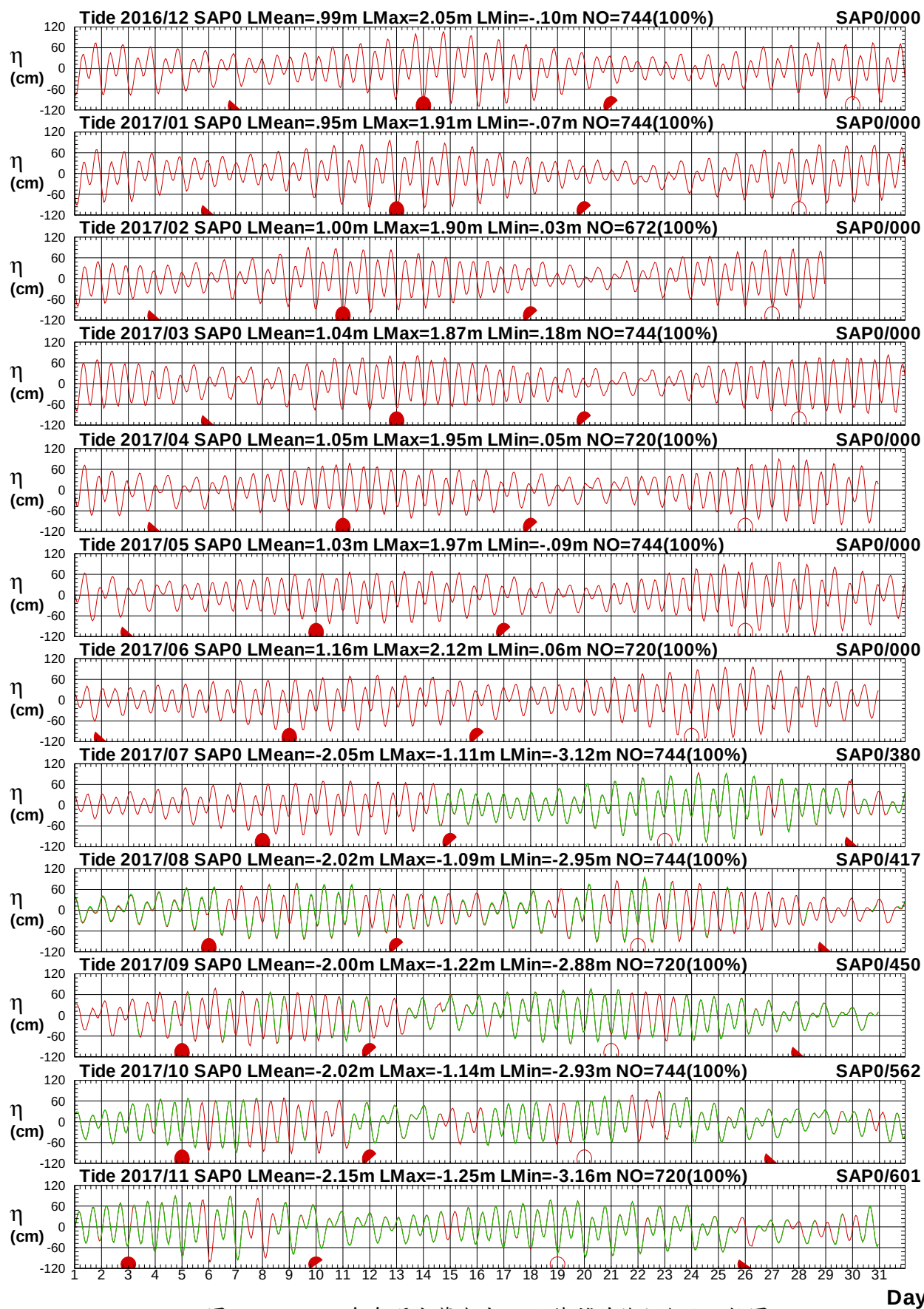


圖3.1.9 2017年每月宜蘭海域 P 站修補前後之潮位比較圖

T16CSAP0.1HA T16CSAP0.1H0 T171SAP0.1HA T171SAP0.1H0 T172SAP0.1HA T172SAP0.1H0
T173SAP0.1HA T173SAP0.1H0 T174SAP0.1HA T174SAP0.1H0 T175SAP0.1HA T175SAP0.1H0

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Tidal Level in Su-Ao Harbor of SAP0 at 2017

1 ○ 8 ● 15 ● 22 ●

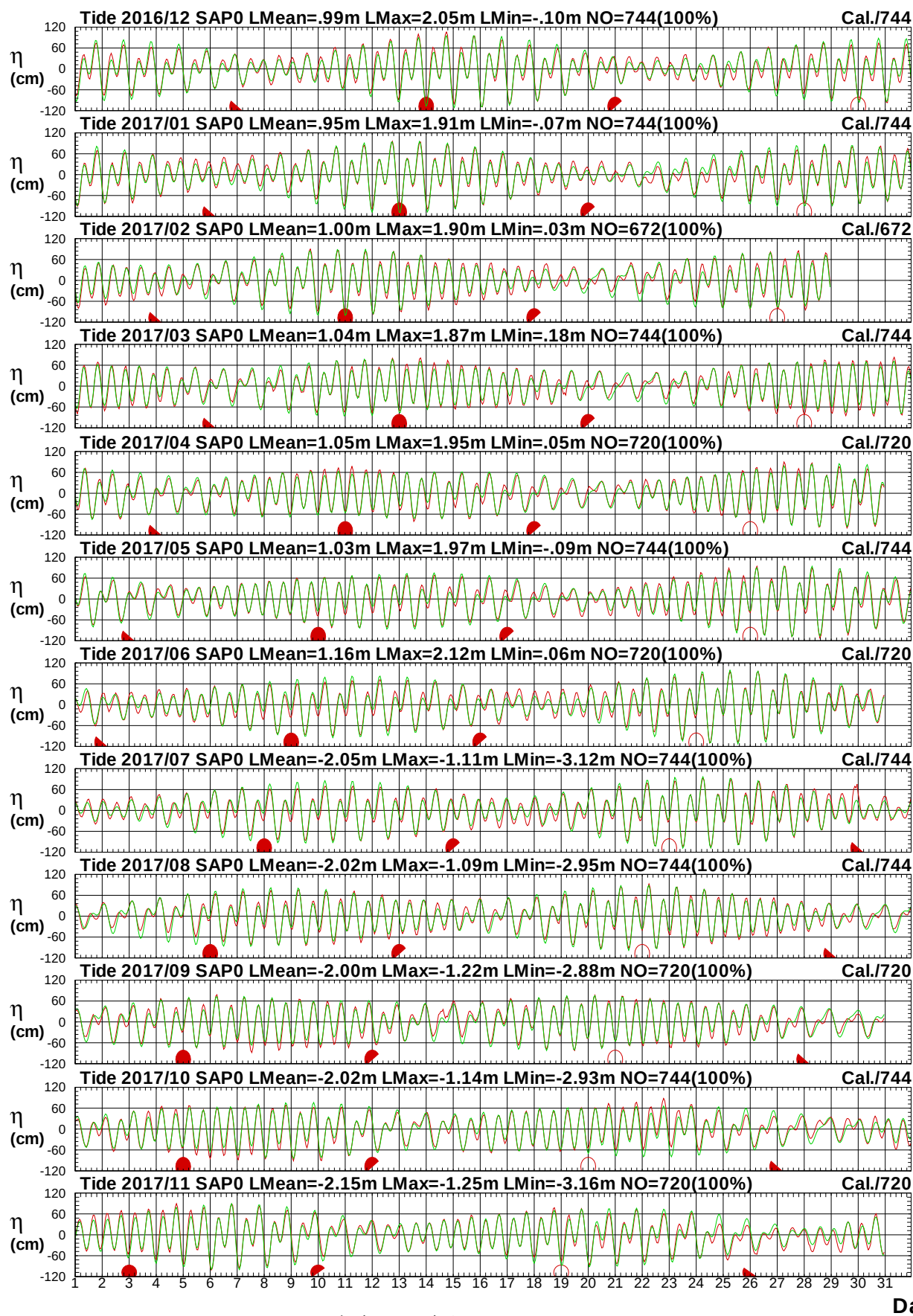


圖3.1.10 2017年每月宜蘭海域 P 站潮位歷線圖 (綠線: 天文潮)

T16CSAP0.1HA T16CSAT0.1HC T171SAP0.1HA T171SAT0.1HC T172SAP0.1HA T172SAT0.1HC
T173SAP0.1HA T173SAT0.1HC T174SAP0.1HA T174SAT0.1HC T175SAP0.1HA T175SAT0.1HC

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Tidal Level in Su-Ao Harbor of SAT0 at 2017

1 ○ 8 ● 15 ● 22 ●

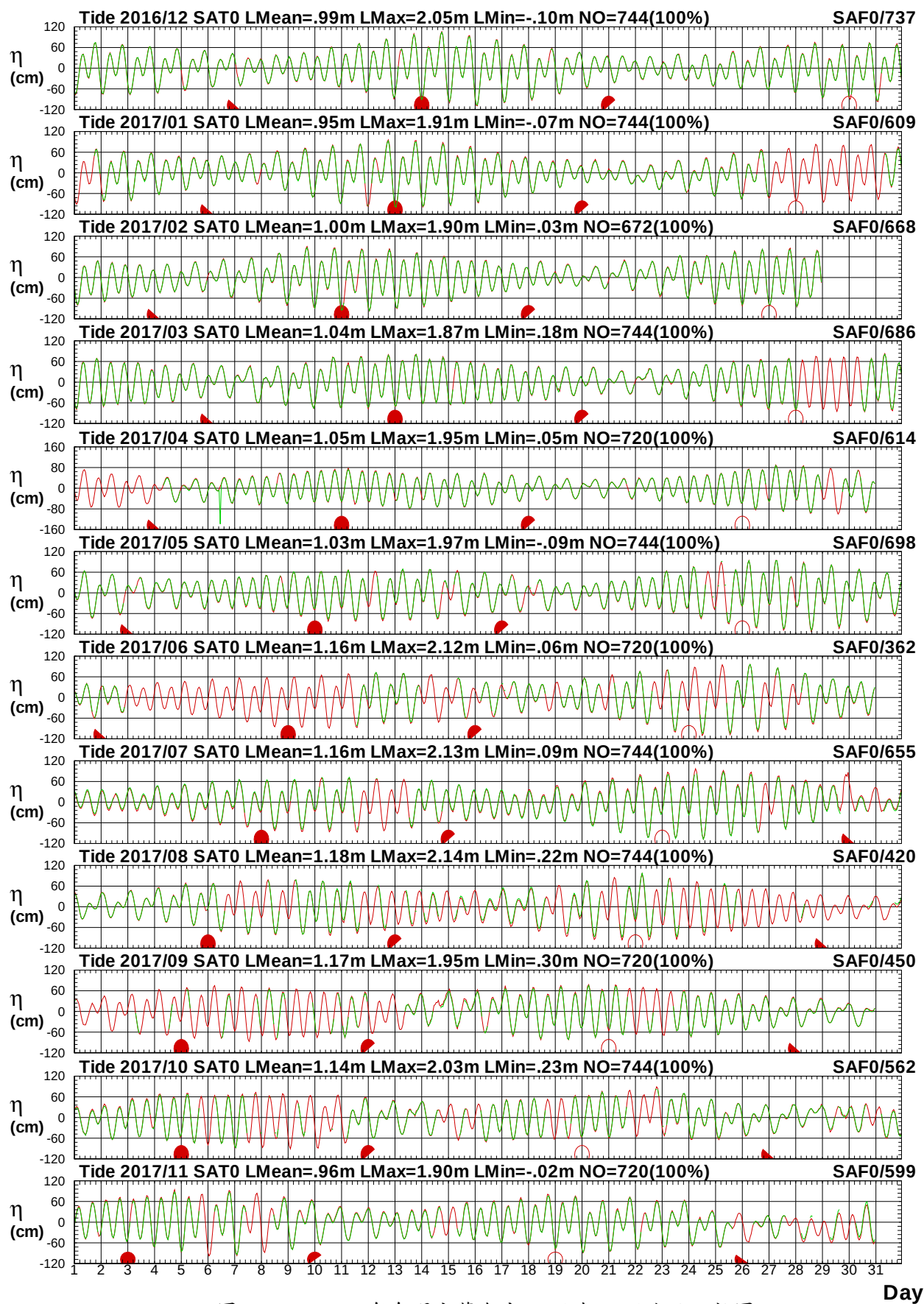


圖3.1.11 2017年每月宜蘭海域 T 站與 F 站潮位比較圖

T16CSAT0.1HA T16CSAF0.1H0 T171SAT0.1HA T171SAF0.1H0 T172SAT0.1HA T172SAF0.1H0
T173SAT0.1HA T173SAF0.1H0 T174SAT0.1HA T174SAF0.1H0 T175SAT0.1HA T175SAF0.1H0

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Tidal Level in Su-Ao Harbor of SAT0 at 2017

1 ○ 8 ● 15 ● 22 ●

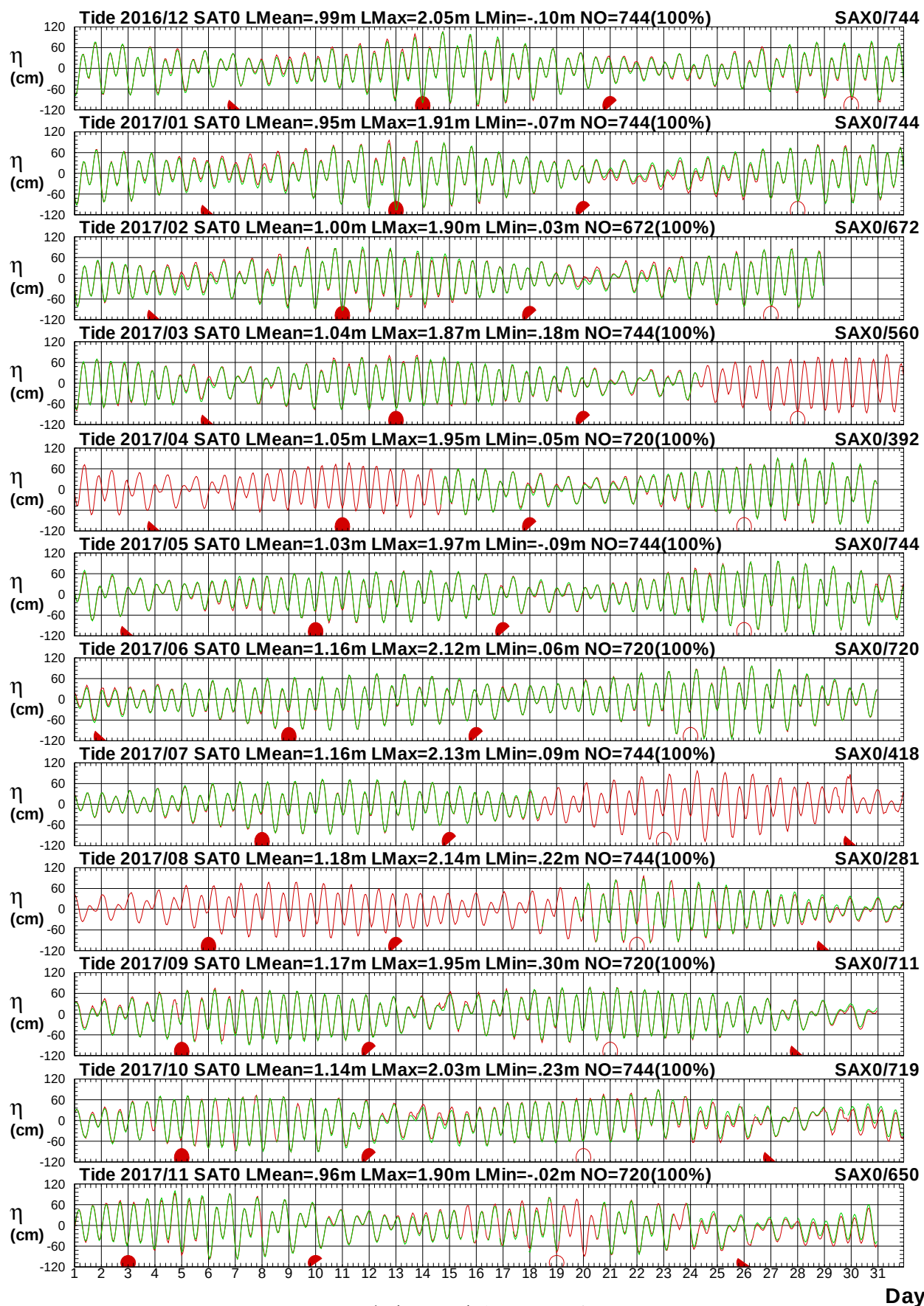


圖3.1.12 2017年每月宜蘭海域 T 站與 X 站潮位比較圖

T16CSAT0.1HA T16CSAX0.1H0 T171SAT0.1HA T171SAX0.1H0 T172SAT0.1HA T172SAX0.1H0
T173SAT0.1HA T173SAX0.1H0 T174SAT0.1HA T174SAX0.1H0 T175SAT0.1HA T175SAX0.1H0

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Tidal Level in Su-Ao Harbor of SAT0 at 2017

1 ○ 8 ● 15 ● 22 ●

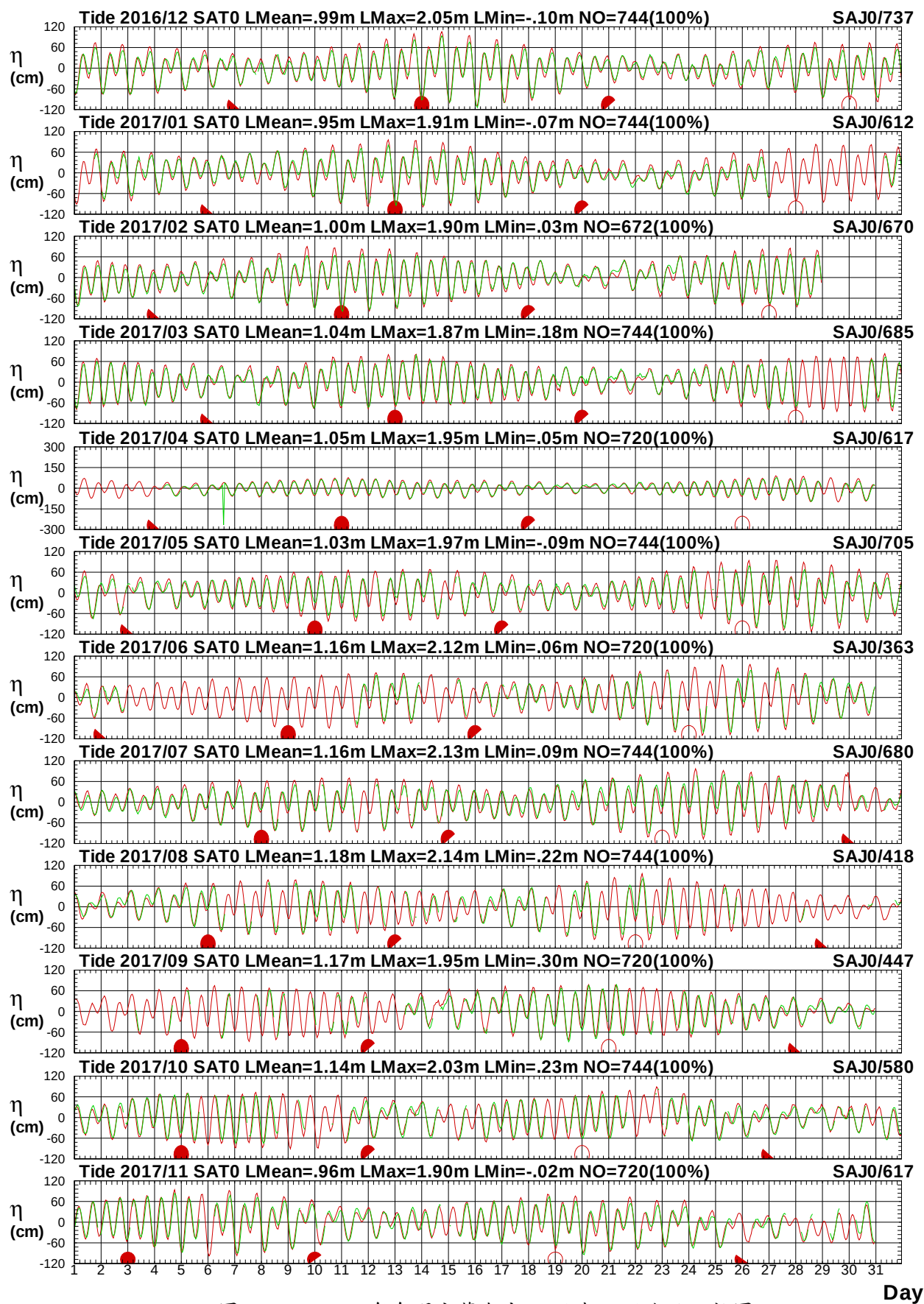


圖3.1.13 2017年每月宜蘭海域 T 站與 J 站潮位比較圖

T16CSAT0.1HA T16CSAJ0.1H0 T171SAT0.1HA T171SAJ0.1H0 T172SAT0.1HA T172SAJ0.1H0
T173SAT0.1HA T173SAJ0.1H0 T174SAT0.1HA T174SAJ0.1H0 T175SAT0.1HA T175SAJ0.1H0

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Tidal Level in Su-Ao Harbor of SAT0 at 2017

1 ○ 8 ● 15 ● 22 ●

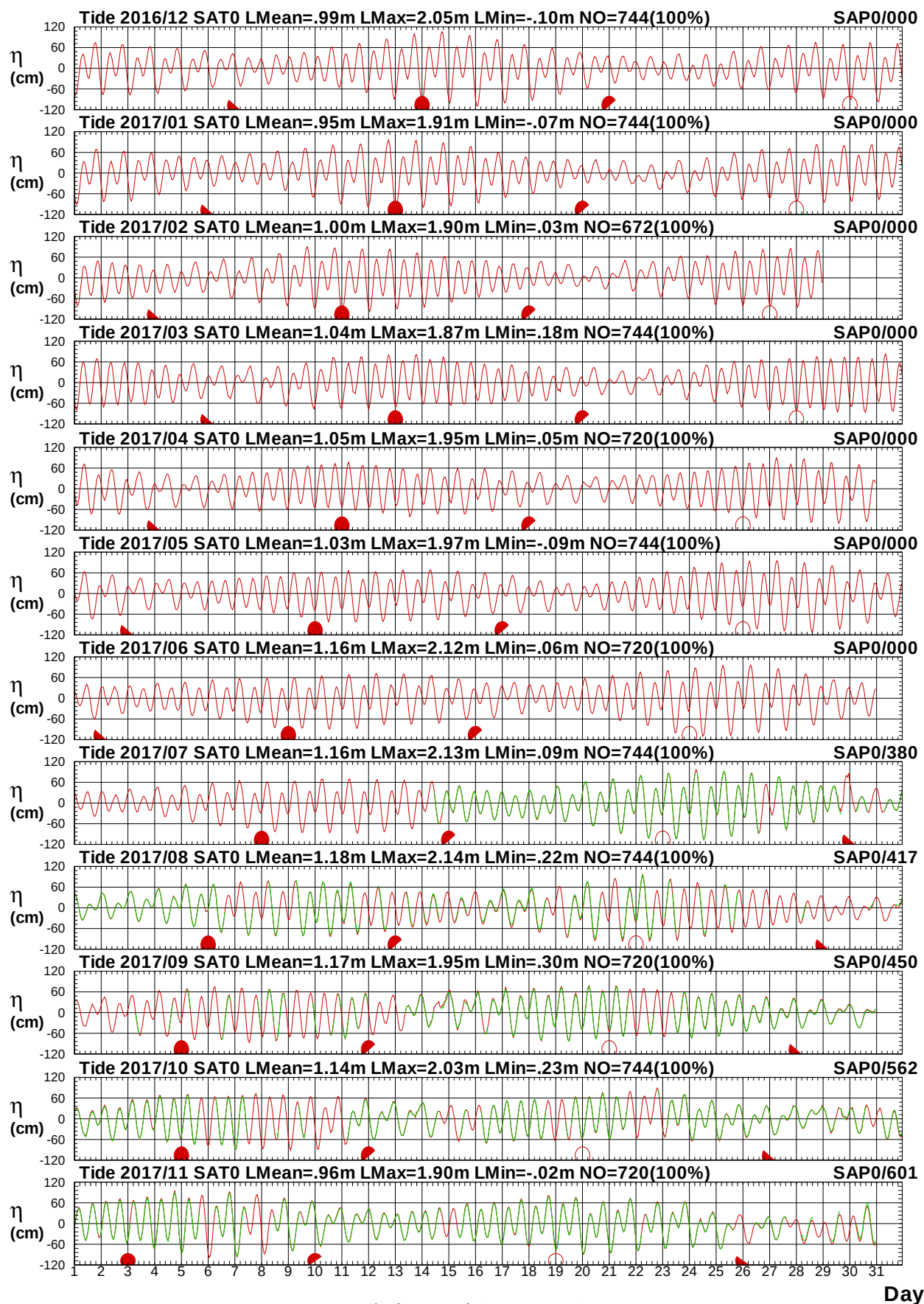


圖3.1.14 2017年每月宜蘭海域 T 站與 P 站潮位比較圖

T16CSAT0.1HA T16CSAP0.1H0 T171SAT0.1HA T171SAP0.1H0 T172SAT0.1HA T172SAP0.1H0
T173SAT0.1HA T173SAP0.1H0 T174SAT0.1HA T174SAP0.1H0 T175SAT0.1HA T175SAP0.1H0

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Tidal Level in Su-Ao Harbor of SAK0 at 2017

1 ○ 8 ● 15 ● 22 ●

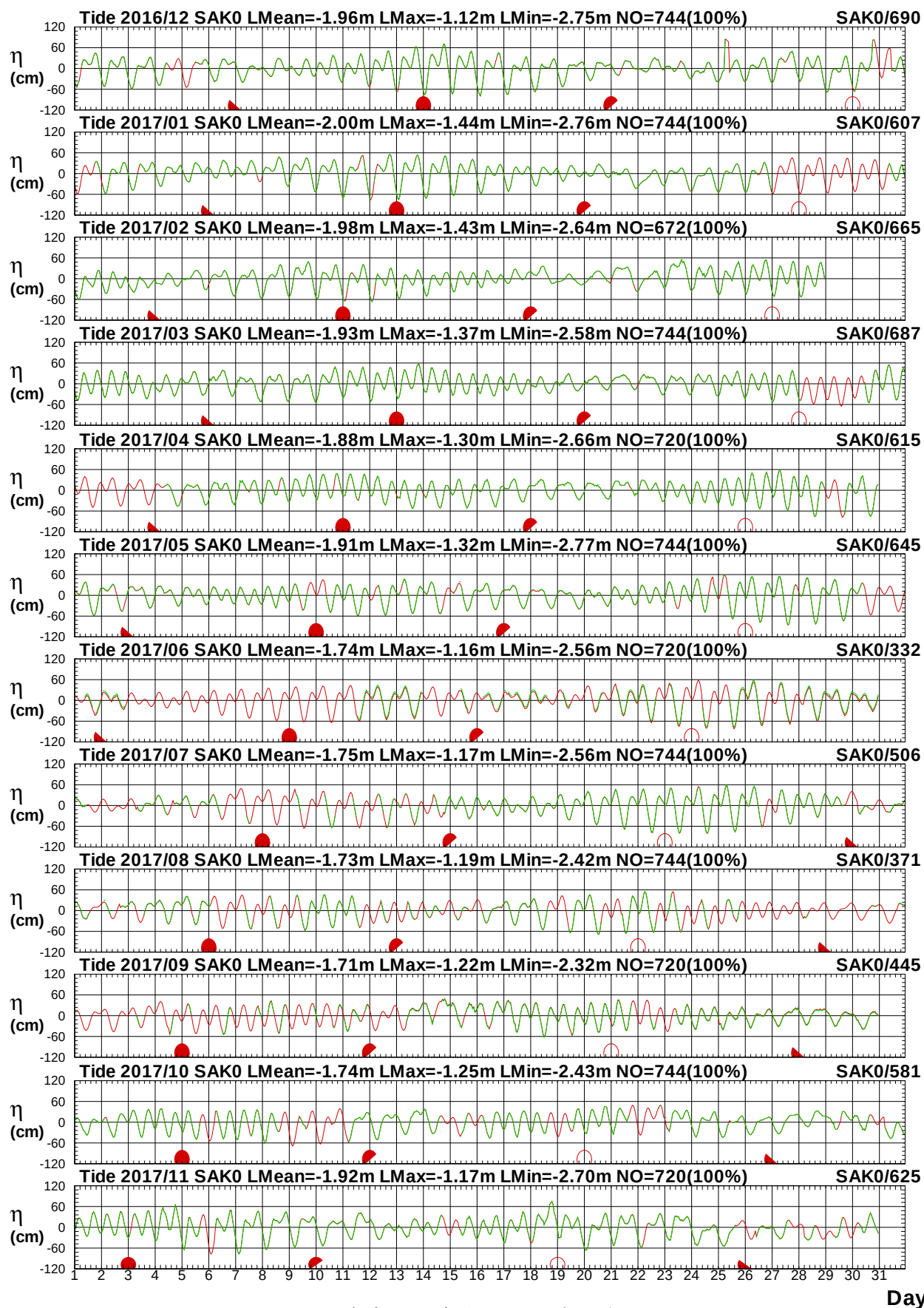


圖3.2.1 2017年每月宜蘭海域 K 站修補前後之潮位比較圖

T16CSAK0.1HA T16CSAK0.1H0 T171SAK0.1HA T171SAK0.1H0 T172SAK0.1HA T172SAK0.1H0
T173SAK0.1HA T173SAK0.1H0 T174SAK0.1HA T174SAK0.1H0 T175SAK0.1HA T175SAK0.1H0

Institute of Harbor & Marine Technology

Tidal Level in Su-Ao Harbor of SAK0 at 2017

1 ○ 8 ● 15 ● 22 ●

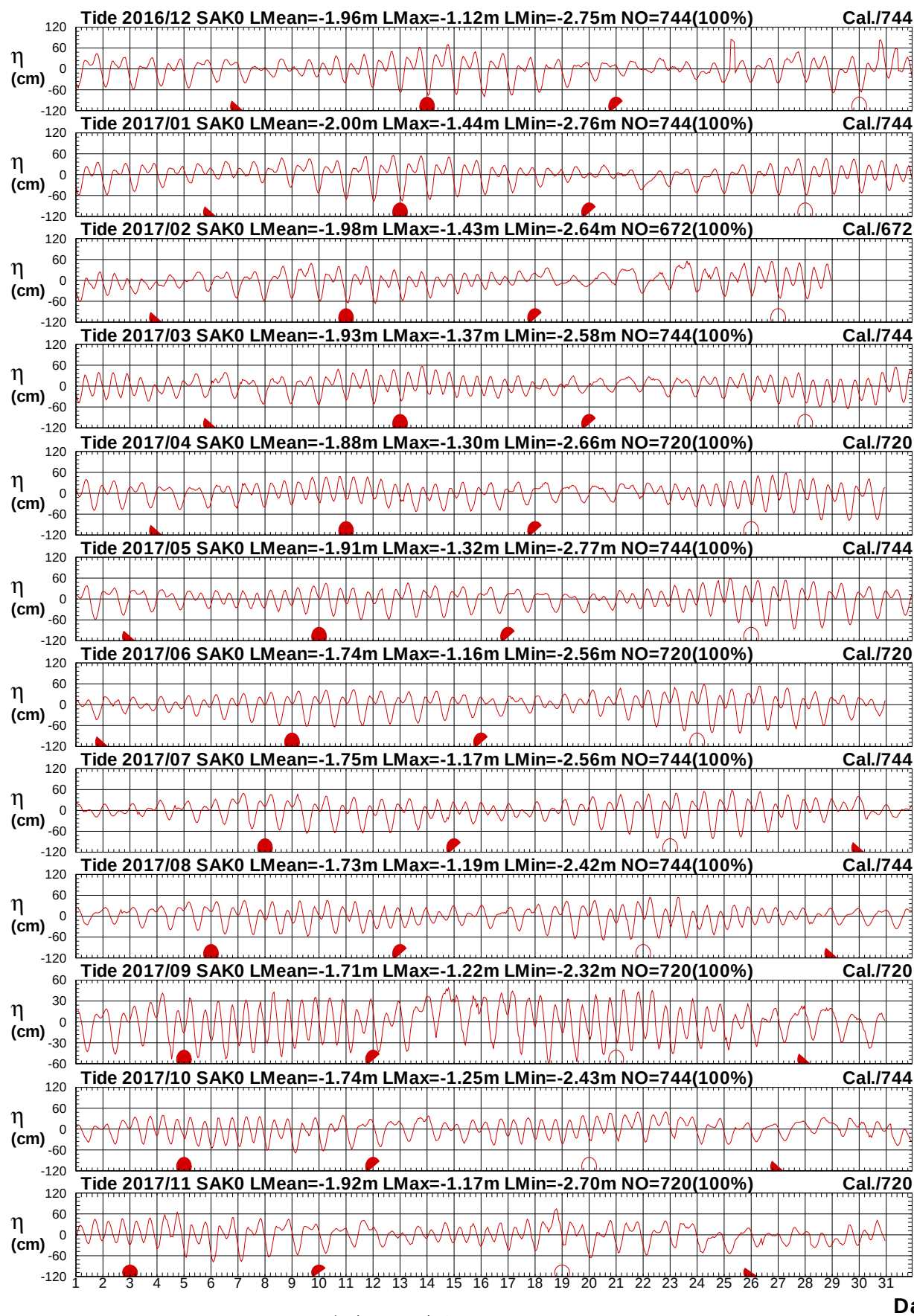


圖3.2.2 2017年每月宜蘭海域 K 站潮位歷線圖 (綠線: 天文潮)

T16CSAK0.1HA T16CSAK0.1HC T171SAK0.1HA T171SAK0.1HC T172SAK0.1HA T172SAK0.1HC
T173SAK0.1HA T173SAK0.1HC T174SAK0.1HA T174SAK0.1HC T175SAK0.1HA T175SAK0.1HC

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第四章 2017 年宜蘭海域觀測海流資料

宜蘭海域海流之觀測包括測站 X 及測站 Y 等 2 個測站(測站位置如第 O 章圖 CS1)。本年報利用調和分析方法觀測海流可分解為計算潮流(包括平均流)及計算殘(餘)流(或稱非潮流)。

本海流年報資料處理之圖表包括：

1. 2017 年各觀測站每月觀測海流資料記錄表。
2. 2017 年各觀測站每月計算潮流資料記錄表。
3. 2017 年各觀測站每月觀測流速及流向重要統計量統計表。
4. 2017 年各觀測站每月計算潮流流速及流向重要統計量統計表。
5. 2017 年各觀測站每月計算殘(餘)流流速及流向重要統計量統計表。
6. 2017 年各觀測站之觀測海流與計算潮流歷線比較圖。
7. 2017 年各觀測站之觀測海流與計算殘(餘)流歷線比較圖。
8. 2017 年各觀測站之觀測海流、計算潮流及計算殘流等 3 個向量分布圖。
9. 2017 年各觀測站之觀測海流、計算潮流及計算殘流等 3 個向量行進圖。

表 4.1a 2017 年每月蘇澳海域各測站觀測海流資料紀錄表

海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域
年月/測站	X	Y										
2016/12 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 1 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 2 月	672(100%)	672(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 3 月	560(75.3%)	739(99.3%)	*	*	*	*	*	*	*	*	*	*
2017/ 4 月	392(54.4%)	720(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 5 月	744(100%)	732(98.4%)	*	*	*	*	*	*	*	*	*	*
2017/ 6 月	720(100%)	716(99.4%)	*	*	*	*	*	*	*	*	*	*
2017/ 7 月	418(56.2%)	734(98.7%)	*	*	*	*	*	*	*	*	*	*
2017/ 8 月	281(37.8%)	680(91.4%)	*	*	*	*	*	*	*	*	*	*
2017/ 9 月	711(98.8%)	712(98.9%)	*	*	*	*	*	*	*	*	*	*
2017/10 月	719(96.6%)	740(99.5%)	*	*	*	*	*	*	*	*	*	*
2017/11 月	650(90.3%)	714(99.2%)	*	*	*	*	*	*	*	*	*	*
2017/冬季	2160(100%)	2160(100%)	*	*	*	*	*	*	*	*	*	*
2017/春季	1696(76.8%)	2191(99.2%)	*	*	*	*	*	*	*	*	*	*
2017/夏季	1419(64.3%)	2130(96.5%)	*	*	*	*	*	*	*	*	*	*
2017/秋季	2080(95.2%)	2166(99.2%)	*	*	*	*	*	*	*	*	*	*
2017/整年	7355(84.0%)	8647(98.7%)	*	*	*	*	*	*	*	*	*	*
起始年月	2016/12	2016/12	*	*	*	*	*	*	*	*	*	*
結束年月	2017/11	2017/11	*	*	*	*	*	*	*	*	*	*

表 4.1b 2017 年每月蘇澳海域計算潮流各測站資料紀錄表

海域 年月/測站	宜蘭海域 X	宜蘭海域 Y	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域	宜蘭海域
2016/12 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 1 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 2 月	672(100%)	672(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 3 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 4 月	720(100%)	720(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 5 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 6 月	720(100%)	720(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 7 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 8 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/ 9 月	720(100%)	720(100%)	*	*	*	*	*	*	*	*	*	*
2017/10 月	744(100%)	744(100%)	*	*	*	*	*	*	*	*	*	*
2017/11 月	720(100%)	720(100%)	*	*	*	*	*	*	*	*	*	*
2017/冬季	2160(100%)	2160(100%)	*	*	*	*	*	*	*	*	*	*
2017/春季	2208(100%)	2208(100%)	*	*	*	*	*	*	*	*	*	*
2017/夏季	2208(100%)	2208(100%)	*	*	*	*	*	*	*	*	*	*
2017/秋季	2184(100%)	2184(100%)	*	*	*	*	*	*	*	*	*	*
2017/整年	8760(100%)	8760(100%)	*	*	*	*	*	*	*	*	*	*
起始年月	2016/12	2016/12	*	*	*	*	*	*	*	*	*	*
結束年月	2017/11	2017/11	*	*	*	*	*	*	*	*	*	*

表 4.2a 2017 年宜蘭海域 X 站觀測流速及流向重要統計量統計表

序 號	日期 (年/月)	觀測 點數	流速 平均值 (cm/s)	平均流 流速/流向 (cm/s)/(來向)	最大流 流速/流向 (cm/s)/(來向)	1/2 節流 <25.7 (%)	1 節流 ~51.4 (%)	2 節流 ~103 (%)	大流 >103 (%)	流向 N~E (%)	流向 E~S (%)	流向 S~W (%)	流向 W~N (%)	主要流向 方向/百分比
1	2016/12	744(100%)	15.5	5.5/WNW	63.6/SW	86.6	12.6	.8	.0	24.6	6.9	39.9	28.6	SW /14.2%
2	2017/01	744(100%)	15.7	4.8/W	67.9/NNE	84.7	14.8	.5	.0	25.3	6.3	45.2	23.3	SW /17.9%
3	2017/02	672(100%)	14.1	5.2/W	44.5/SW	91.1	8.9	.0	.0	24.9	4.3	46.4	24.4	SW /18.8%
4	2017/03	560(75%)	13.9	4.7/W	49.0/NNE	90.9	9.1	.0	.0	23.9	6.4	45.0	24.6	SW /15.7%
5	2017/04	392(54%)	15.7	6.1/N	55.8/NNE	82.1	16.6	1.3	.0	46.7	7.9	23.2	22.2	NNE/17.3%
6	2017/05	744(100%)	16.2	6.8/NNE	70.2/N	85.3	13.7	.9	.0	43.7	10.1	23.4	22.8	NNE/16.9%
7	2017/06	720(100%)	14.8	2.9/NNW	57.1/NE	87.2	12.1	.7	.0	31.7	9.2	36.5	22.6	SW /16.0%
8	2017/07	418(56%)	19.0	14.5/NE	50.4/NNE	73.4	26.6	.0	.0	70.8	7.2	17.0	5.0	NE /37.6%
9	2017/08	281(38%)	17.3	6.3/N	65.6/N	79.0	19.2	1.8	.0	36.3	17.4	26.0	20.3	NNE/17.8%
10	2017/09	711(99%)	16.0	4.6/N	63.4/SW	83.1	16.2	.7	.0	42.5	13.5	28.1	15.9	NNE/21.0%
11	2017/10	719(97%)	17.3	5.7/SW	79.4/SW	80.7	18.8	.6	.0	22.0	17.0	47.3	13.8	SSW/21.0%
12	2017/11	650(90%)	15.6	4.6/S	79.0/S	86.2	12.8	1.1	.0	20.0	30.2	35.1	14.8	S /12.2%
13	2017/冬	2160(100%)	15.2	5.1/W	67.9/NNE	87.3	12.2	.5	.0	24.9	5.9	43.8	25.5	SW /16.9%
14	2017/春	1696(77%)	15.3	4.5/N	70.2/N	86.4	12.9	.7	.0	37.9	8.4	30.5	23.3	NNE/14.9%
15	2017/夏	1419(64%)	16.5	6.2/NNE	65.6/N	81.5	17.8	.7	.0	44.1	10.2	28.7	17.0	NE /17.1%
16	2017/秋	2080(95%)	16.3	1.7/SSW	79.4/SW	83.2	16.0	.8	.0	28.4	19.9	36.9	14.8	SSW/14.2%
17	2017/年	7355(84%)	15.8	2.5/NW	79.4/SW	84.8	14.5	.7	.0	32.6	11.3	35.9	20.3	NNE/13.0%

表4.2b 2017年宜蘭海域 X 站潮流流速及流向重要統計量統計表

序 號	日期 (年/月)	觀測 點數	流速 平均值 (cm/s)	平均流 流速/流向 (cm/s)/(來向)	最大流 流速/流向 (cm/s)/(來向)	1/2節流 <25.7 (%)	1節流 ~51.4 (%)	2節流 ~103 (%)	大流 >103 (%)	流向 N~E (%)	流向 E~S (%)	流向 S~W (%)	流向 W~N (%)	主要流向 方向/百分比
1	2016/12	744(100%)	5.7	2.5/NW	12.7/NNE	100.0	.0	.0	.0	38.4	.1	34.0	27.4	NNE/23.5%
2	2017/01	744(100%)	5.7	2.5/NW	11.9/SW	100.0	.0	.0	.0	34.4	.8	33.6	31.2	NNE/20.8%
3	2017/02	672(100%)	5.6	2.5/NW	12.5/NNE	100.0	.0	.0	.0	30.5	1.8	33.0	34.7	NNE/16.5%
4	2017/03	744(100%)	5.5	2.5/NW	13.6/NNE	100.0	.0	.0	.0	29.7	2.4	34.7	33.2	N /15.2%
5	2017/04	720(100%)	5.5	2.5/NW	14.0/NNE	100.0	.0	.0	.0	32.1	1.5	35.0	31.4	N /17.8%
6	2017/05	744(100%)	5.7	2.5/NW	13.6/NNE	100.0	.0	.0	.0	35.8	1.3	35.3	27.6	N /19.8%
7	2017/06	720(100%)	5.7	2.5/NW	12.4/NNE	100.0	.0	.0	.0	37.4	.8	33.9	27.9	NNE/24.0%
8	2017/07	744(100%)	5.8	2.5/NW	11.6/SW	100.0	.0	.0	.0	34.4	1.1	33.6	30.9	NNE/21.2%
9	2017/08	744(100%)	5.7	2.5/NW	12.7/NNE	100.0	.0	.0	.0	31.5	2.3	33.2	33.1	N /18.1%
10	2017/09	720(100%)	5.6	2.5/NW	13.6/NNE	100.0	.0	.0	.0	29.9	2.4	34.7	33.1	N /17.6%
11	2017/10	744(100%)	5.5	2.5/NW	14.0/NNE	100.0	.0	.0	.0	31.0	1.7	36.0	31.2	N /17.3%
12	2017/11	720(100%)	5.6	2.5/NW	13.6/NNE	100.0	.0	.0	.0	34.7	1.0	34.6	29.7	N /20.4%
13	2017/冬	2160(100%)	5.7	2.5/NW	12.7/NNE	100.0	.0	.0	.0	34.6	.9	33.6	31.0	NNE/20.4%
14	2017/春	2208(100%)	5.6	2.5/NW	14.0/NNE	100.0	.0	.0	.0	32.5	1.8	35.0	30.7	N /17.6%
15	2017/夏	2208(100%)	5.7	2.5/NW	12.7/NNE	100.0	.0	.0	.0	34.4	1.4	33.6	30.7	NNE/20.6%
16	2017/秋	2184(100%)	5.5	2.5/NW	14.0/NNE	100.0	.0	.0	.0	31.9	1.7	35.1	31.3	N /18.5%
17	2017/年	8760(100%)	5.6	2.5/NW	14.0/NNE	100.0	.0	.0	.0	33.3	1.4	34.3	30.9	NNE/17.8%

表 4.2c 2017 年宜蘭海域 X 站殘流流速及流向重要統計量統計表

序 號	日期 (年/月)	觀測 點數	流速 平均值 (cm/s)	平均流 流速/流向 (cm/s)/(來向)	最大流 流速/流向 (cm/s)/(來向)	1/2 節流 <25.7 (%)	1 節流 ~51.4 (%)	2 節流 ~103 (%)	大流 >103 (%)	流向 N~E (%)	流向 E~S (%)	流向 S~W (%)	流向 W~N (%)	主要流向 方向/百分比
1	2016/12	744(100%)	12.1	.0/S	56.0/NE	93.8	5.8	.4	.0	30.1	20.3	32.9	16.7	NNE/10.5%
2	2017/01	744(100%)	12.1	.0/N	49.4/N	94.0	6.0	.0	.0	32.9	16.5	34.1	16.4	SSW/11.4%
3	2017/02	672(100%)	11.3	.0/WNW	43.4/S	95.1	4.9	.0	.0	30.8	15.8	35.0	18.5	SSW/11.6%
4	2017/03	560(75%)	10.5	.0/NNE	36.6/SSW	96.8	3.2	.0	.0	31.3	17.7	33.9	17.1	NE /10.9%
5	2017/04	392(54%)	12.0	.0/NW	39.0/SSW	93.4	6.6	.0	.0	33.7	17.1	34.9	14.3	SW /12.0%
6	2017/05	744(100%)	13.7	.0/NNE	56.9/N	91.4	8.5	.1	.0	33.2	13.8	34.8	18.1	SSW/12.6%
7	2017/06	720(100%)	12.8	.0/NE	53.5/SW	91.4	8.3	.3	.0	32.5	14.4	37.1	16.0	SW /13.8%
8	2017/07	418(56%)	11.7	.1/NNE	41.6/SSW	94.5	5.5	.0	.0	41.1	8.6	38.5	11.7	NE /18.4%
9	2017/08	281(38%)	14.9	.2/S	59.4/SW	84.7	14.9	.4	.0	29.2	20.3	32.7	17.8	NNE/13.9%
10	2017/09	711(99%)	13.6	.1/N	63.7/SW	89.7	9.7	.6	.0	32.8	19.0	32.1	16.2	NNE/14.9%
11	2017/10	719(97%)	14.9	.1/NNE	68.2/SW	88.5	11.3	.3	.0	33.1	17.2	35.6	14.0	SSW/16.3%
12	2017/11	650(90%)	13.5	.1/WSW	88.1/S	89.8	9.5	.6	.0	22.6	25.8	25.8	25.7	N /10.8%
13	2017/冬	2160(100%)	12.2	.0/W	56.9/NE	93.4	6.3	.2	.0	31.0	17.3	34.5	17.2	SSW/12.1%
14	2017/春	1696(77%)	14.0	.0/ENE	63.2/NE	89.8	10.0	.2	.0	33.4	14.6	37.5	14.4	SSW/13.1%
15	2017/夏	1419(64%)	14.8	.0/SSE	62.3/SW	86.8	13.0	.2	.0	34.5	13.0	39.5	13.0	SW /14.1%
16	2017/秋	2080(95%)	14.8	.0/W	90.8/S	86.9	12.7	.4	.0	30.3	21.1	31.1	17.5	NNE/13.0%
17	2017/年	7355(84%)	14.9	.0/WSW	86.0/S	86.6	13.0	.4	.0	32.8	15.9	36.6	14.7	SSW/12.9%

表 4.3a 2017 年宜蘭海域 Y 站觀測流速及流向重要統計量統計表

序 號	日期 (年/月)	觀測 點數	流速 平均值 (cm/s)	平均流 流速/流向 (cm/s)/(來向)	最大流 流速/流向 (cm/s)/(來向)	1/2 節流 <25.7 (%)	1 節流 ~51.4 (%)	2 節流 ~103 (%)	大流 >103 (%)	流向 N~E (%)	流向 E~S (%)	流向 S~W (%)	流向 W~N (%)	主要流向 方向/百分比
1	2016/12	744(100%)	20.3	8.3/SSE	78.1/SE	70.6	25.7	3.8	.0	5.6	51.3	12.6	30.4	SSE/21.2%
2	2017/01	744(100%)	20.0	9.7/SSE	82.2/SE	71.0	25.4	3.6	.0	5.6	56.2	9.8	28.4	SE /22.4%
3	2017/02	672(100%)	20.2	8.5/SSE	86.9/SSE	71.1	24.6	4.3	.0	5.8	51.5	10.9	31.8	SSE/24.3%
4	2017/03	739(99%)	20.1	9.2/SSE	72.6/SSE	69.6	28.7	1.8	.0	3.9	57.0	8.1	31.0	SE /26.3%
5	2017/04	720(100%)	20.6	9.5/SSE	74.2/SE	67.8	28.6	3.6	.0	5.0	53.9	7.9	33.2	SSE/25.1%
6	2017/05	732(98%)	22.3	8.7/SSE	66.1/SSE	65.2	30.2	4.6	.0	4.6	55.6	9.2	30.6	SSE/24.7%
7	2017/06	716(99%)	23.6	12.3/SSE	84.8/SSE	62.0	29.7	8.2	.0	7.3	52.7	11.2	28.9	SSE/24.3%
8	2017/07	734(99%)	24.3	11.1/SSE	90.4/NW	61.9	31.5	6.7	.0	5.4	51.4	12.7	30.5	SE /19.9%
9	2017/08	680(91%)	20.7	7.6/SSE	79.7/SSE	71.6	24.7	3.7	.0	11.6	45.1	12.8	30.4	SSE/19.4%
10	2017/09	712(99%)	23.3	11.3/SSE	96.0/SSE	66.0	26.1	7.9	.0	8.3	49.7	11.0	31.0	SSE/19.9%
11	2017/10	740(100%)	23.5	13.6/SSE	104.5/SE	65.7	25.8	8.4	.1	7.3	55.8	10.4	26.5	SSE/27.8%
12	2017/11	714(99%)	24.3	11.8/SSE	82.7/SSE	60.4	32.2	7.4	.0	6.3	56.2	10.8	26.8	SSE/27.2%
13	2017/冬	2160(100%)	20.2	8.8/SSE	86.9/SSE	70.9	25.2	3.9	.0	5.7	53.1	11.1	30.1	SSE/22.5%
14	2017/春	2191(99%)	21.0	9.1/SSE	74.2/SE	67.5	29.2	3.3	.0	4.5	55.5	8.4	31.6	SSE/23.7%
15	2017/夏	2130(97%)	22.9	10.4/SSE	90.4/NW	65.0	28.7	6.2	.0	8.0	49.8	12.2	30.0	SSE/21.1%
16	2017/秋	2166(99%)	23.7	12.2/SSE	104.5/SE	64.0	28.0	7.9	.0	7.3	53.9	10.7	28.1	SSE/25.0%
17	2017/年	8647(99%)	21.9	10.1/SSE	104.5/SE	66.9	27.8	5.3	.0	6.4	53.1	10.6	29.9	SSE/23.1%

表4.3b 2017年宜蘭海域 Y 站潮流流速及流向重要統計量統計表

序 號	日期 (年/月)	觀測 點數	流速 平均值 (cm/s)	平均流 流速/流向 (cm/s)/(來向)	最大流 流速/流向 (cm/s)/(來向)	1/2節流 <25.7 (%)	1節流 ~51.4 (%)	2節流 ~103 (%)	大流 >103 (%)	流向 N~E (%)	流向 E~S (%)	流向 S~W (%)	流向 W~N (%)	主要流向 方向/百分比
1	2016/12	744(100%)	18.1	10.1/SSE	55.3/SSE	76.7	22.4	.8	.0	1.3	59.9	8.3	30.4	SSE/39.8%
2	2017/01	744(100%)	18.0	10.1/SSE	54.7/SSE	76.2	23.0	.8	.0	1.6	59.5	7.1	31.7	SSE/40.5%
3	2017/02	672(100%)	17.6	10.1/SSE	52.3/SSE	74.7	24.9	.4	.0	1.2	60.6	7.0	31.3	SSE/39.3%
4	2017/03	744(100%)	17.9	10.1/SSE	48.2/SSE	73.5	26.5	.0	.0	1.7	59.7	6.5	32.1	SSE/40.3%
5	2017/04	720(100%)	18.0	10.1/SSE	49.4/SSE	74.0	26.0	.0	.0	1.9	60.3	6.8	31.0	SSE/41.0%
6	2017/05	744(100%)	18.2	10.1/SSE	53.6/SSE	74.1	25.3	.7	.0	1.3	60.8	6.2	31.7	SSE/39.9%
7	2017/06	720(100%)	18.2	10.1/SSE	55.4/SSE	74.7	24.4	.8	.0	1.0	60.1	7.4	31.5	SSE/39.7%
8	2017/07	744(100%)	17.7	10.2/SSE	55.0/SSE	76.1	23.1	.8	.0	1.7	59.5	7.5	31.2	SSE/39.1%
9	2017/08	744(100%)	17.4	10.2/SSE	52.5/SSE	75.4	24.3	.3	.0	1.7	59.8	6.7	31.7	SSE/40.6%
10	2017/09	720(100%)	17.6	10.1/SSE	47.3/SSE	74.7	25.3	.0	.0	1.5	60.8	6.5	31.1	SSE/40.8%
11	2017/10	744(100%)	17.7	10.1/SSE	44.9/SSE	75.0	25.0	.0	.0	1.3	60.9	7.0	30.8	SSE/41.5%
12	2017/11	720(100%)	18.0	10.1/SSE	50.0/SSE	74.4	25.6	.0	.0	1.1	60.3	7.6	31.0	SSE/41.5%
13	2017/冬	2160(100%)	17.9	10.1/SSE	55.3/SSE	75.9	23.4	.7	.0	1.4	60.0	7.5	31.1	SSE/39.9%
14	2017/春	2208(100%)	18.0	10.1/SSE	53.6/SSE	73.9	25.9	.2	.0	1.7	60.2	6.5	31.6	SSE/40.4%
15	2017/夏	2208(100%)	17.8	10.2/SSE	55.4/SSE	75.4	24.0	.6	.0	1.5	59.8	7.2	31.5	SSE/39.8%
16	2017/秋	2184(100%)	17.7	10.1/SSE	50.0/SSE	74.7	25.3	.0	.0	1.3	60.7	7.1	31.0	SSE/41.3%
17	2017/年	8760(100%)	17.8	10.1/SSE	55.4/SSE	75.0	24.6	.4	.0	1.5	60.2	7.1	31.3	SSE/40.3%

表 4.3c 2017 年宜蘭海域 Y 站殘流流速及流向重要統計量統計表

序 號	日期 (年/月)	觀測 點數	流速 平均值 (cm/s)	平均流 流速/流向 (cm/s)/(來向)	最大流 流速/流向 (cm/s)/(來向)	1/2 節流 <25.7 (%)	1 節流 ~51.4 (%)	2 節流 ~103 (%)	大流 >103 (%)	流向 N~E (%)	流向 E~S (%)	流向 S~W (%)	流向 W~N (%)	主要流向 方向/百分比
1	2016/12	744(100%)	11.6	.0/NNW	40.2/SSE	94.9	5.1	.0	.0	18.0	32.1	11.8	38.0	NNW/13.2%
2	2017/01	744(100%)	10.0	.0/SE	34.4/SE	97.8	2.2	.0	.0	18.8	34.3	16.3	30.6	SE /11.2%
3	2017/02	672(100%)	13.3	.0/ENE	55.4/SE	89.0	10.6	.4	.0	14.0	32.4	12.5	41.1	NNW/17.9%
4	2017/03	739(99%)	9.7	.1/SE	34.1/NW	97.8	2.2	.0	.0	18.8	32.2	14.1	34.9	NW /11.9%
5	2017/04	720(100%)	10.1	.0/ESE	46.3/SSE	96.7	3.3	.0	.0	16.9	33.2	15.6	34.3	NNW/14.2%
6	2017/05	732(98%)	10.5	.3/NW	42.3/SSE	97.3	2.7	.0	.0	20.9	29.4	17.6	32.1	SSE/ 9.3%
7	2017/06	716(99%)	12.4	.0/NW	51.2/SSE	92.5	7.5	.0	.0	17.3	31.3	15.8	35.6	NNW/13.1%
8	2017/07	734(99%)	12.7	.0/SE	79.2/NW	92.5	7.4	.1	.0	18.5	31.6	16.2	33.7	NW /11.6%
9	2017/08	680(91%)	12.7	.1/NNW	63.9/SSE	92.5	7.4	.1	.0	18.1	30.9	15.6	35.4	NW /13.4%
10	2017/09	712(99%)	12.9	.2/SSE	71.2/SE	91.9	7.6	.6	.0	15.2	33.0	14.2	37.6	NW /13.6%
11	2017/10	740(100%)	12.1	.2/SSE	63.6/SE	94.5	5.3	.3	.0	16.9	30.7	19.2	33.2	NNW/12.7%
12	2017/11	714(99%)	13.5	.1/SSE	42.7/NW	91.5	8.5	.0	.0	18.3	33.3	14.3	34.0	NNW/12.5%
13	2017/冬	2160(100%)	11.8	.0/NE	51.5/S	93.7	6.3	.0	.0	17.4	33.4	13.7	35.5	NNW/13.3%
14	2017/春	2191(99%)	11.0	.1/NW	48.5/NW	96.1	3.9	.0	.0	16.0	35.1	14.1	34.8	NNW/11.8%
15	2017/夏	2129(97%)	13.1	.1/NW	85.8/NW	91.2	8.6	.2	.0	16.5	31.6	16.5	35.4	NW /11.9%
16	2017/秋	2166(99%)	13.3	.1/SSE	66.4/SE	91.2	8.5	.3	.0	16.7	32.2	15.7	35.4	NNW/12.7%
17	2017/年	8647(99%)	13.3	.0/NNW	86.5/NW	91.4	8.4	.3	.0	16.2	33.9	13.8	36.1	NNW/12.7%

Current Direction in Su-Ao Harbor of SAX0 at 2017

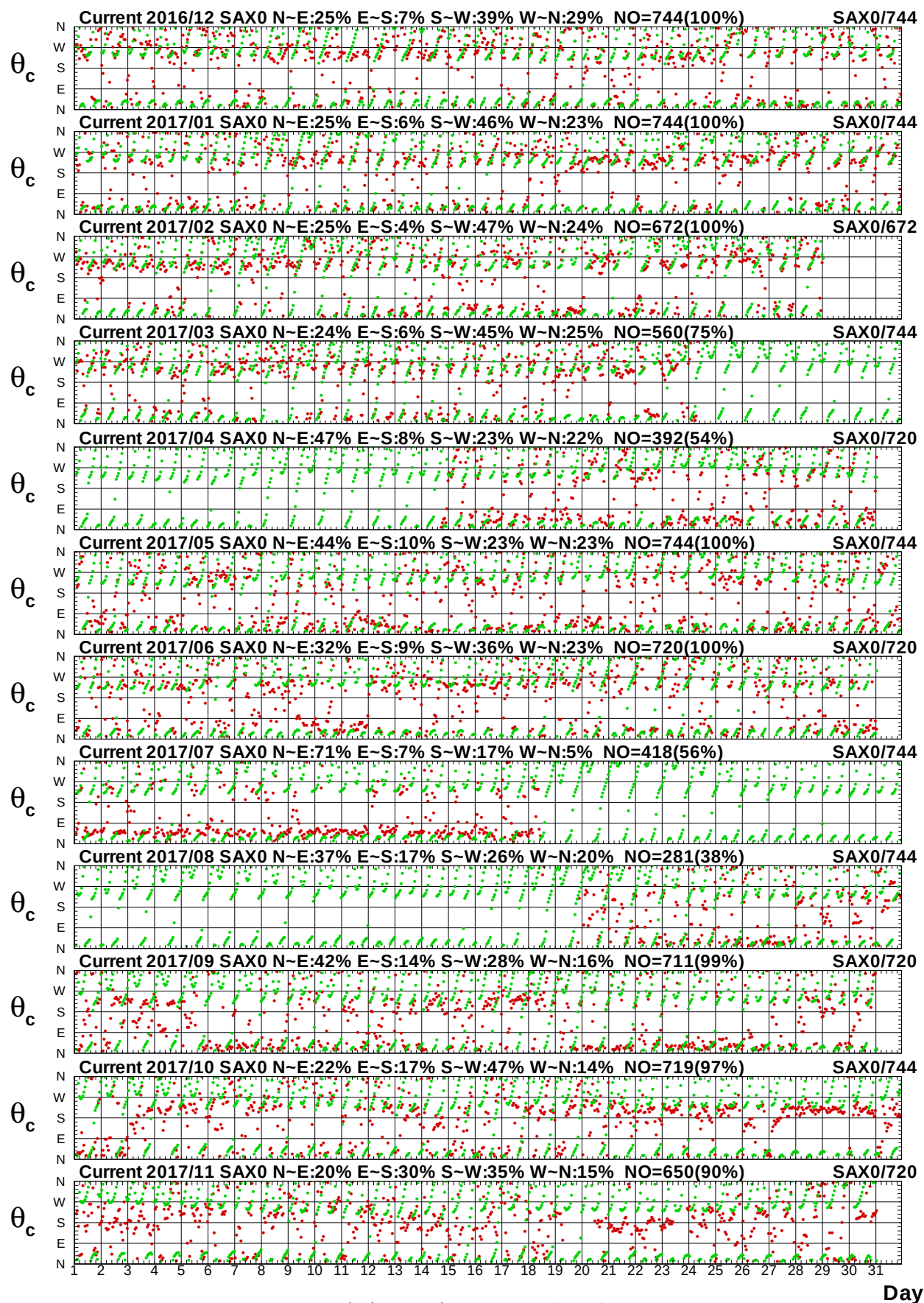


圖4.1b 2017年每月宜蘭海域 X 站觀測與潮流流向比較圖

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C173SAX0.1H0 C173SAX0.1HD C174SAX0.1H0 C174SAX0.1HD C175SAX0.1H0 C175SAX0.1HD

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Current Speed in Su-Ao Harbor of SAX0 at 2017

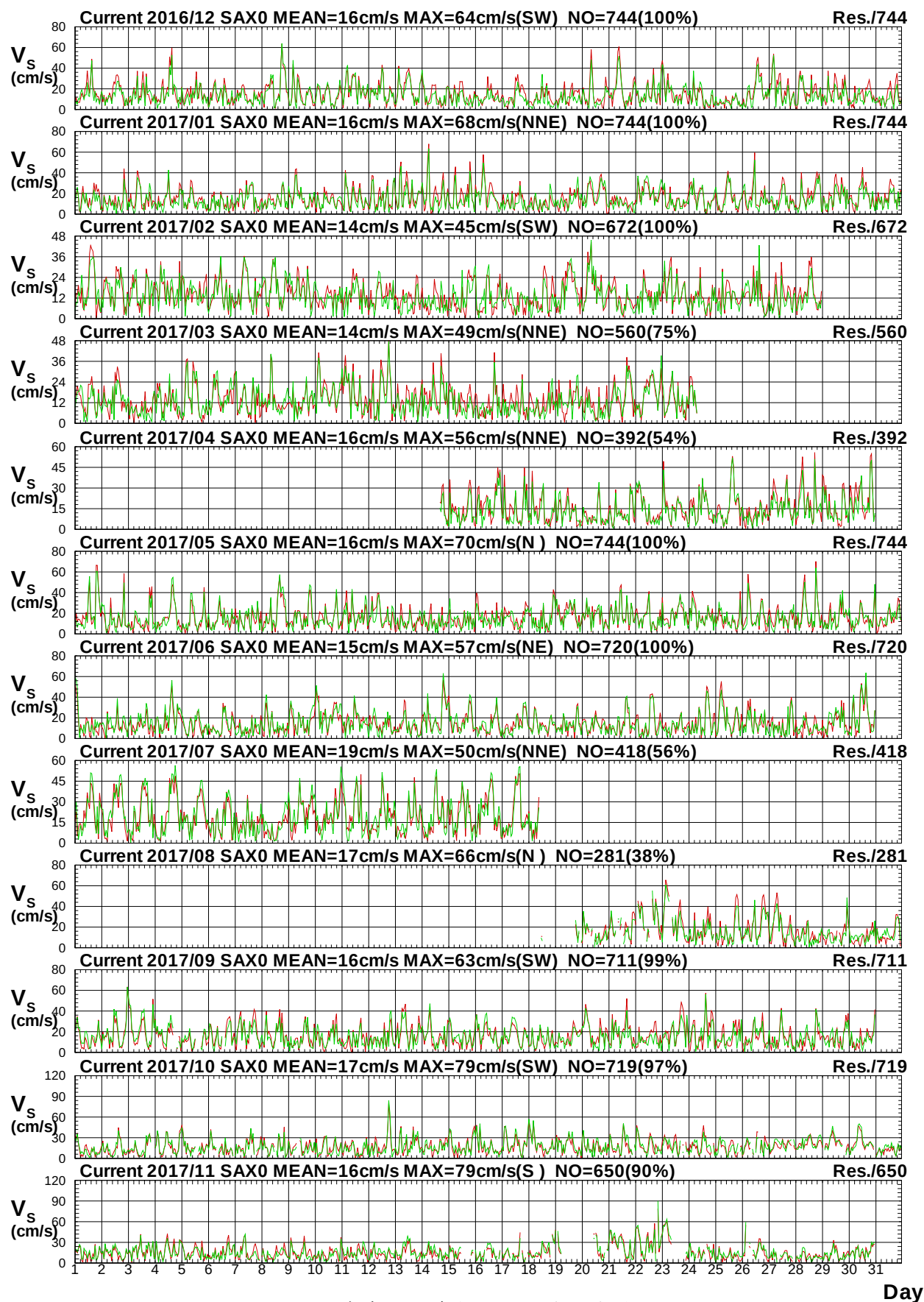


圖4.2a 2017年每月宜蘭海域 X 站觀測與殘流流速比較圖

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C173SAX0.1H0 C173SAX0.1HR C174SAX0.1H0 C174SAX0.1HR C175SAX0.1H0 C175SAX0.1HR

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Current Direction in Su-Ao Harbor of SAX0 at 2017

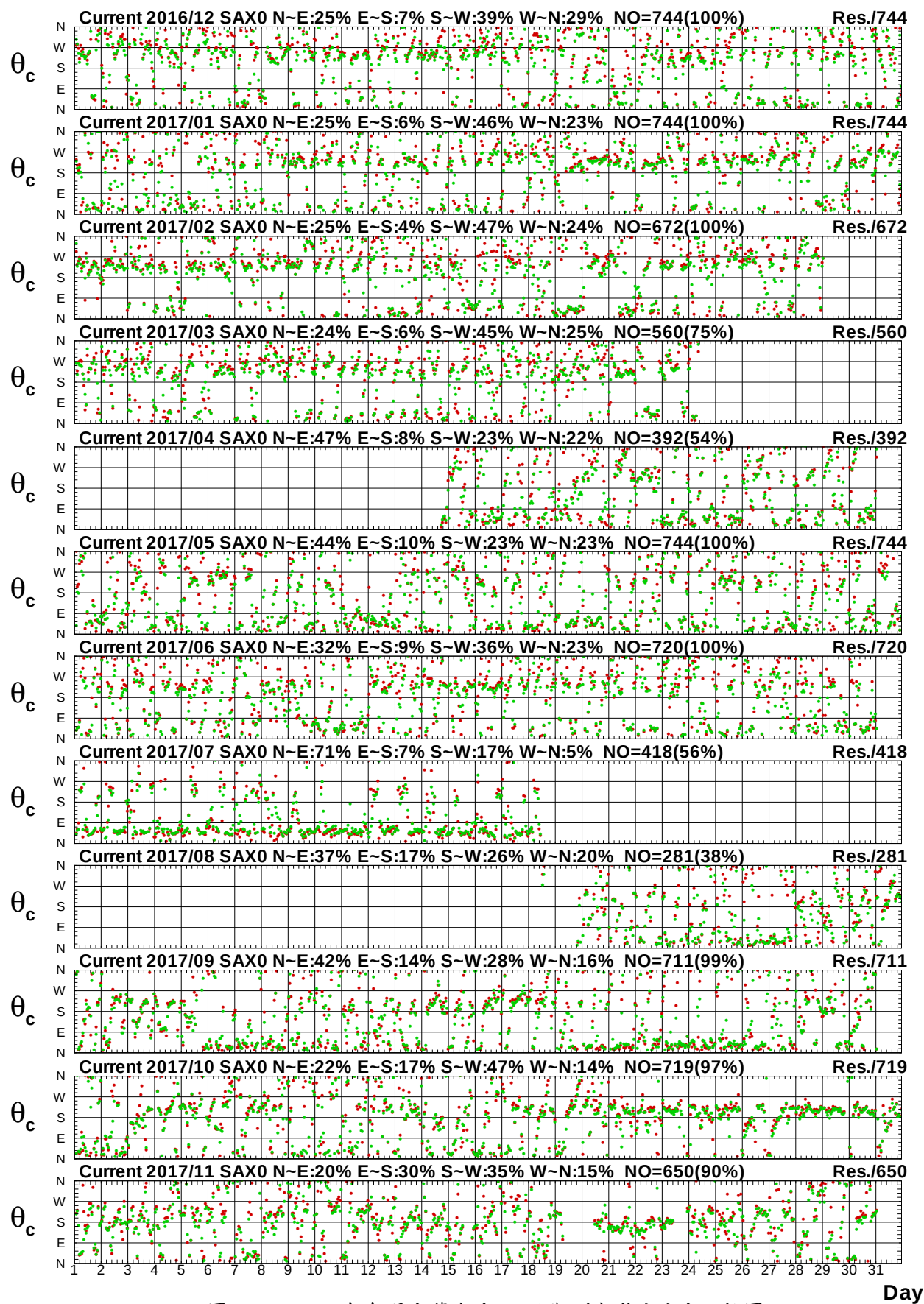


圖4.2b 2017年每月宜蘭海域 X 站觀測與殘流流向比較圖

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C173SAX0.1H0 C173SAX0.1HR C174SAX0.1H0 C174SAX0.1HR C175SAX0.1H0 C175SAX0.1HR

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Current Speed in Su-Ao Harbor of SAY0 at 2017

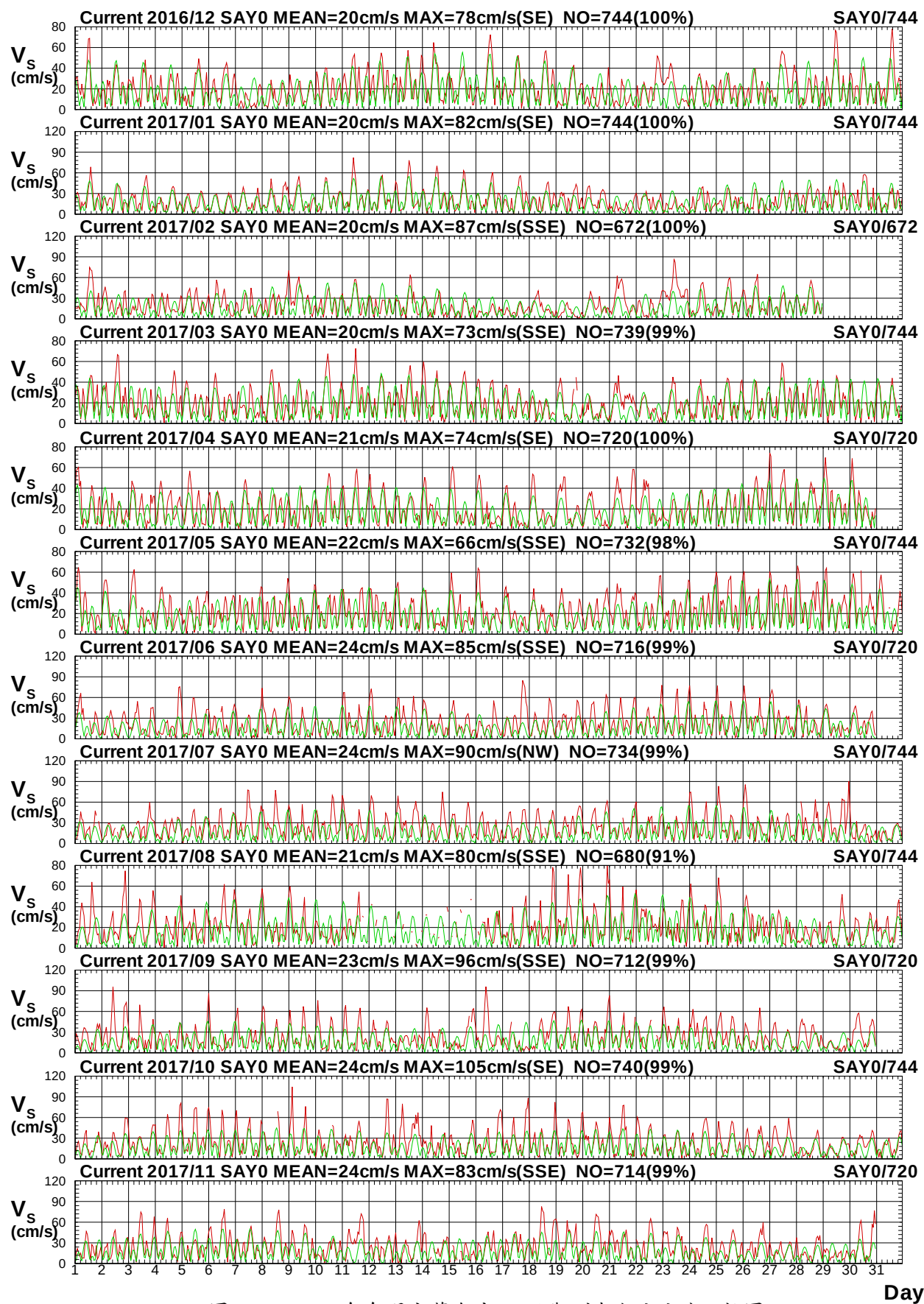


圖4.3a 2017年每月宜蘭海域 Y 站觀測與潮流流速比較圖

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C173SAY0.1H0 C173SAY0.1HD C174SAY0.1H0 C174SAY0.1HD C175SAY0.1H0 C175SAY0.1HD

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Current Direction in Su-Ao Harbor of SAY0 at 2017

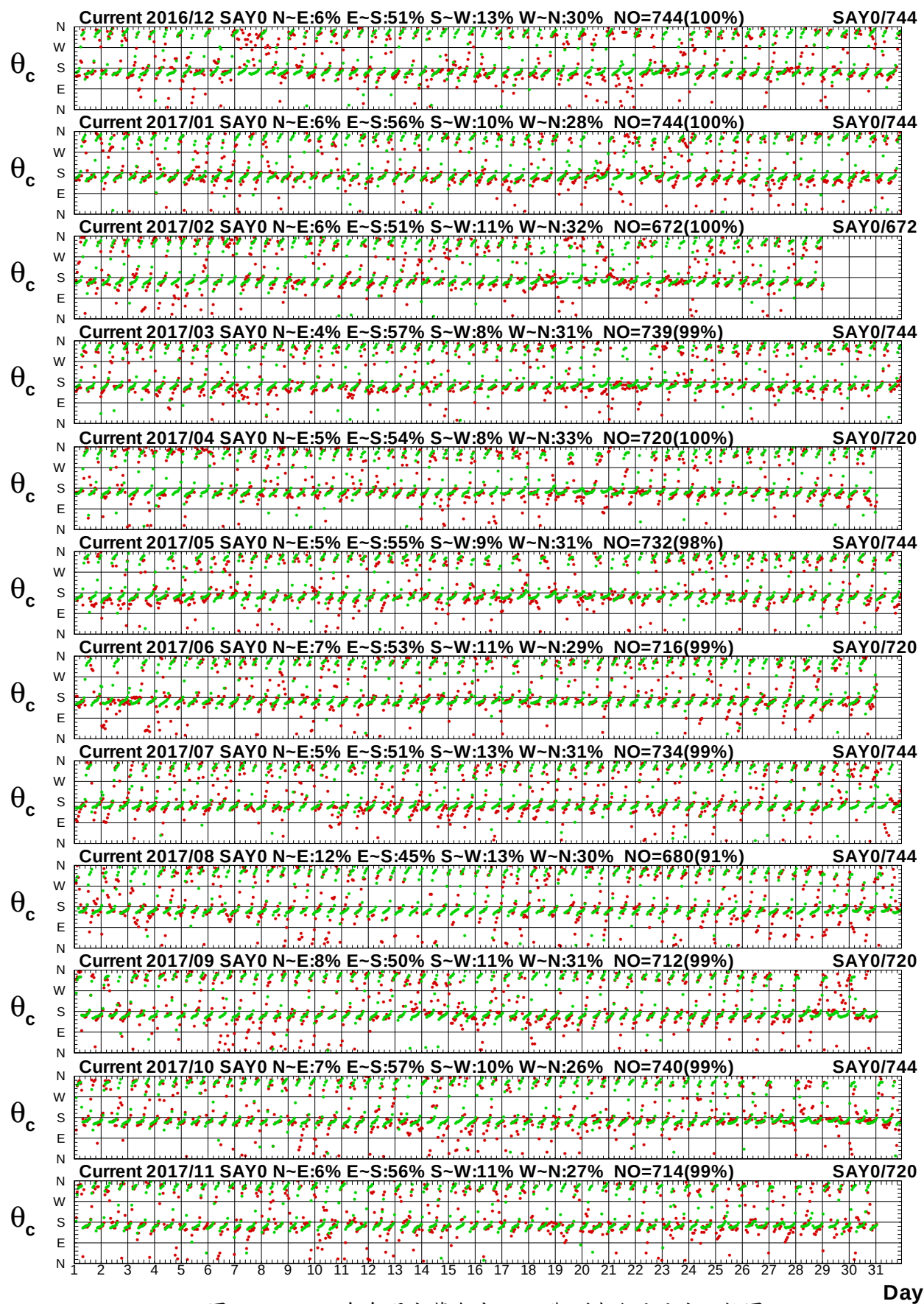


圖4.3b 2017年每月宜蘭海域 Y 站觀測與潮流流向比較圖

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C173SAY0.1H0 C173SAY0.1HD C174SAY0.1H0 C174SAY0.1HD C175SAY0.1H0 C175SAY0.1HD

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Current Speed in Su-Ao Harbor of SAY0 at 2017

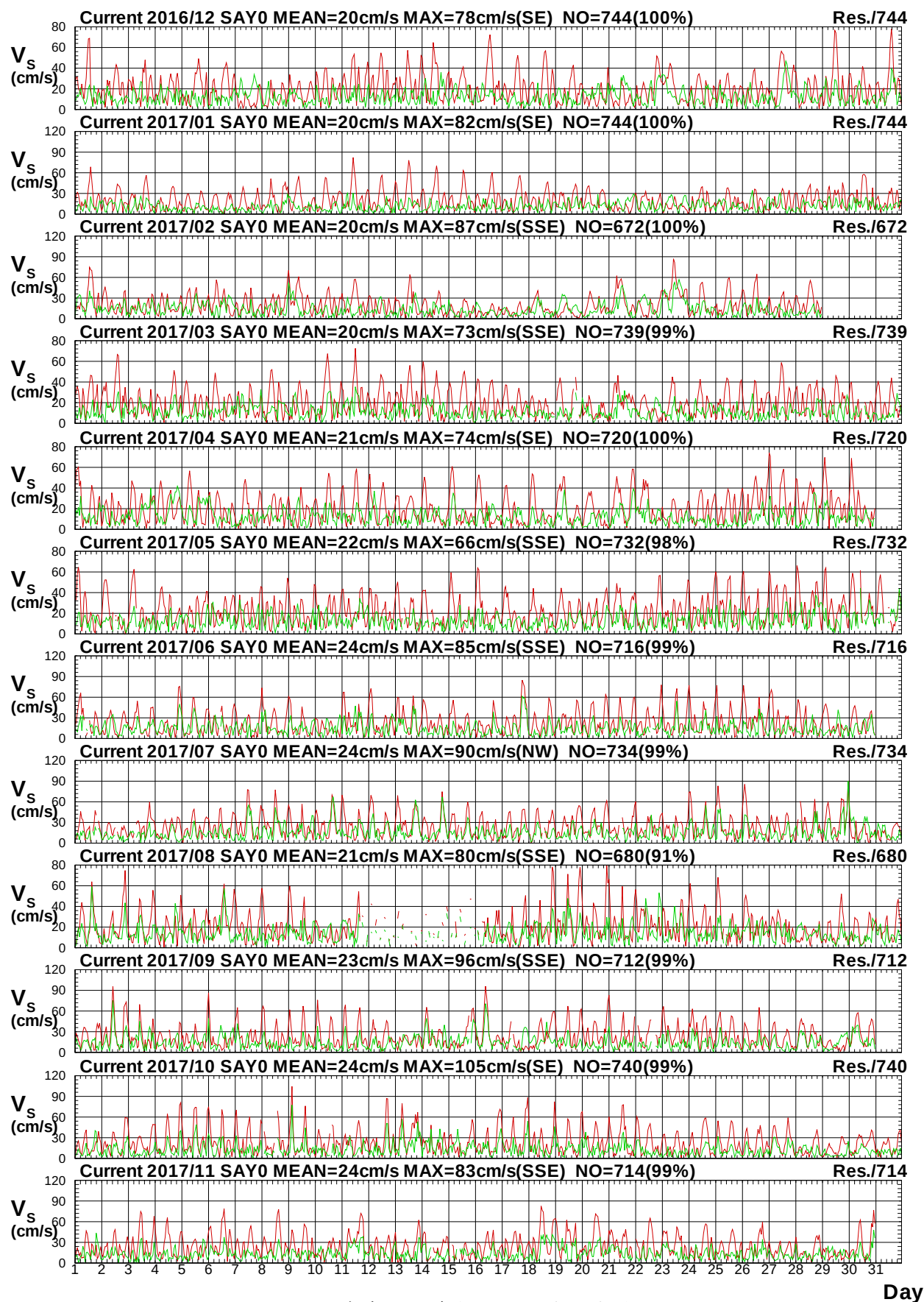


圖4.4a 2017年每月宜蘭海域 Y 站觀測與殘流流速比較圖

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C173SAY0.1H0 C173SAY0.1HR C174SAY0.1H0 C174SAY0.1HR C175SAY0.1H0 C175SAY0.1HR

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Current Direction in Su-Ao Harbor of SAY0 at 2017

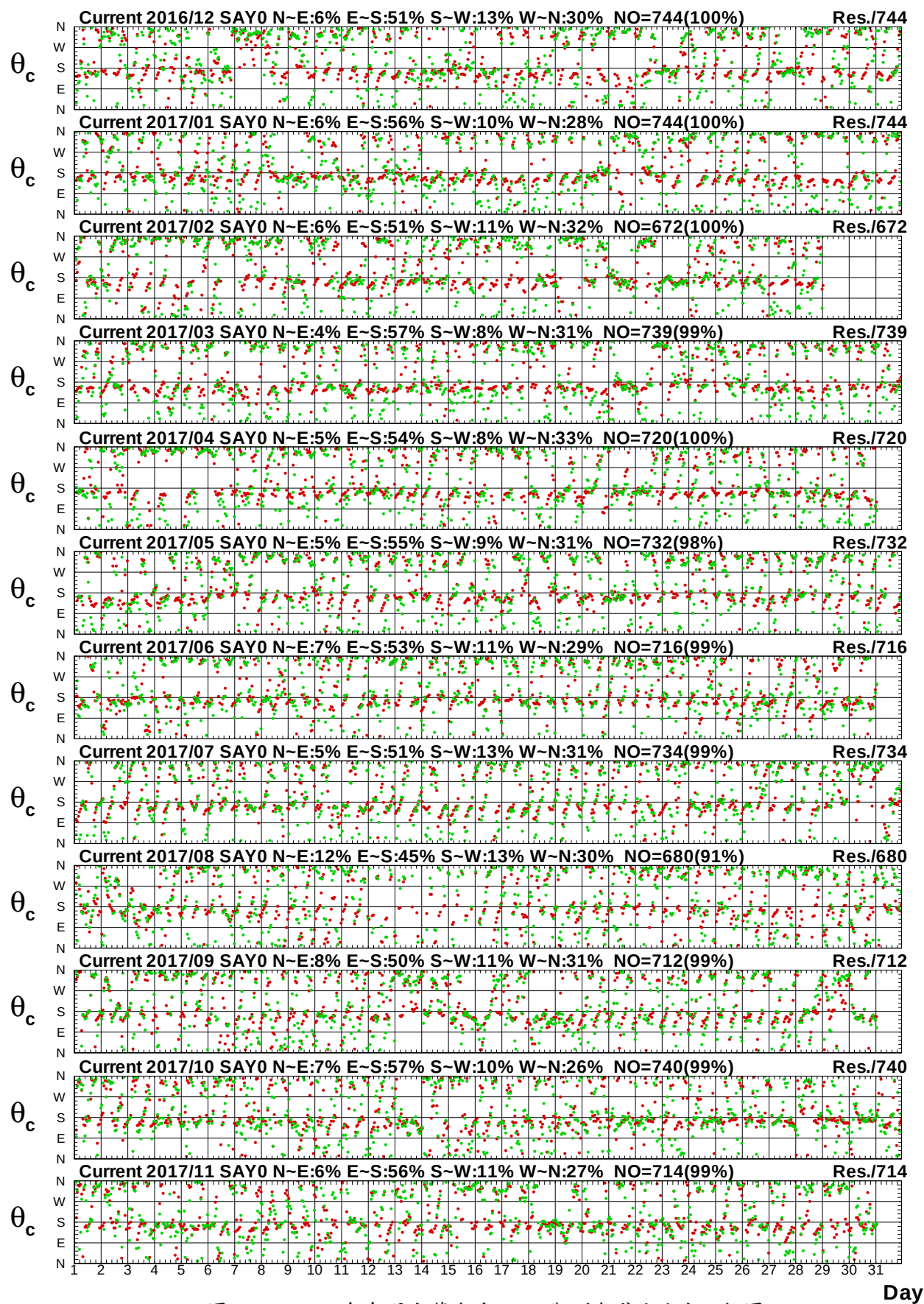


圖4.4b 2017年每月宜蘭海域 Y 站觀測與殘流流向比較圖

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C173SAY0.1H0 C173SAY0.1HR C174SAY0.1H0 C174SAY0.1HR C175SAY0.1H0 C175SAY0.1HR

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Distribution of Current Vectors

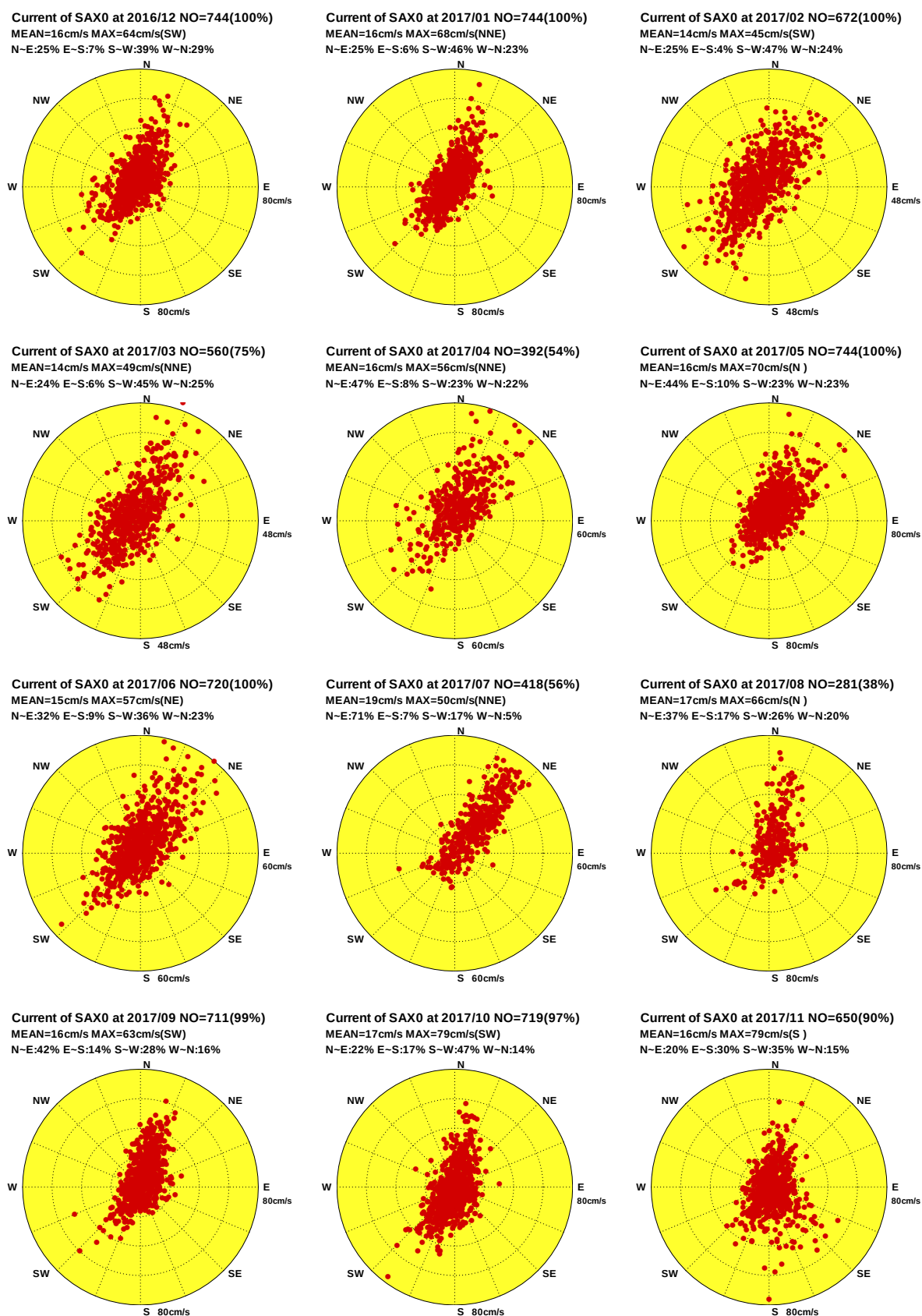


圖4.5a 2017年宜蘭海域每月測站 X 觀測海流向量分佈圖

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C176SAX0.1H0 C177SAX0.1H0 C178SAX0.1H0 C179SAX0.1H0 C17ASAX0.1H0 C17BSAX0.1H0

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Progressive Vector Diagram of Current

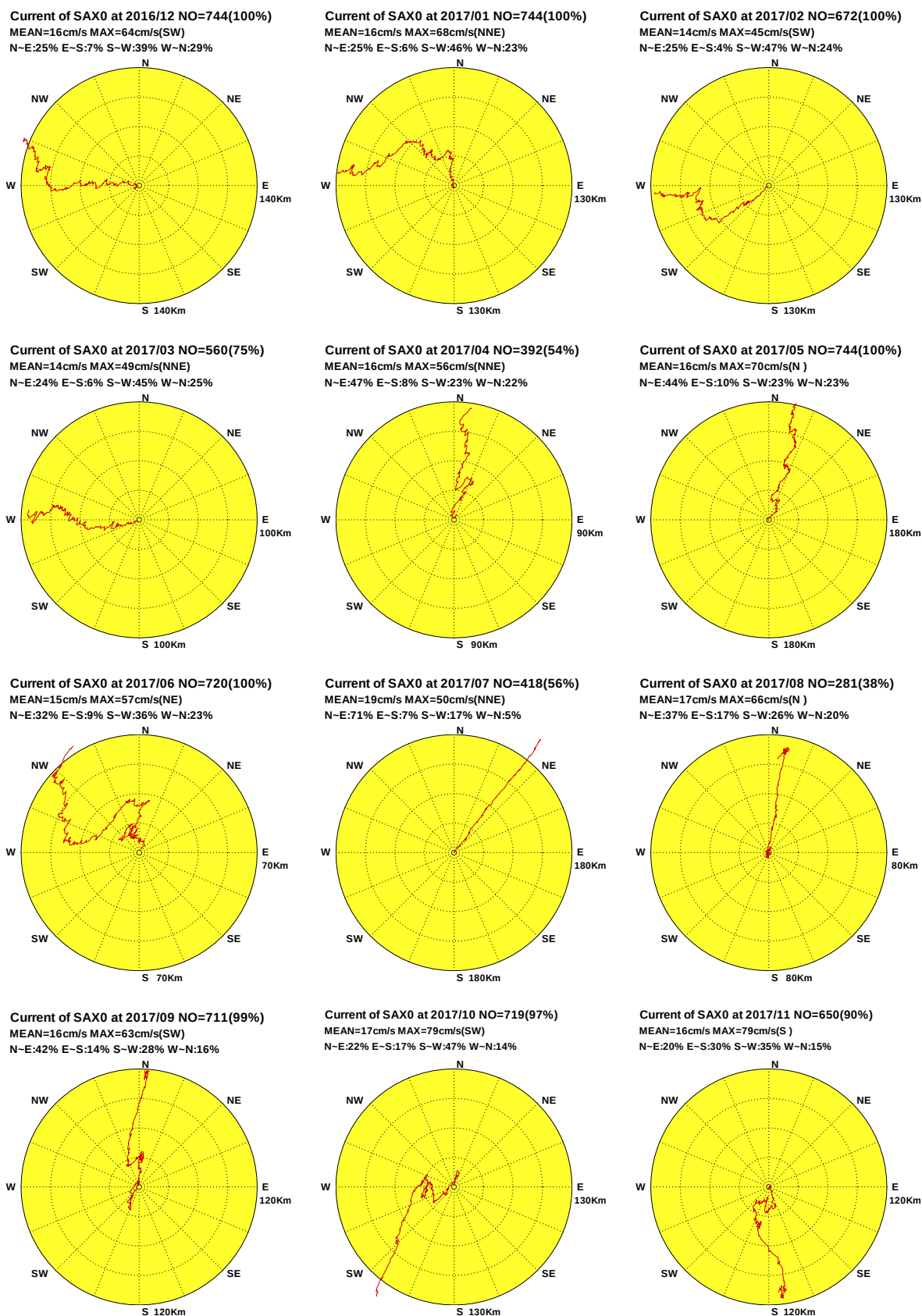


圖4.5b 2017年宜蘭海域每月測站 X 觀測海流向量行進圖

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C176SAX0.1H0 C177SAX0.1H0 C178SAX0.1H0 C179SAX0.1H0 C17ASAX0.1H0 C17BSAX0.1H0

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Distribution of Current Vectors

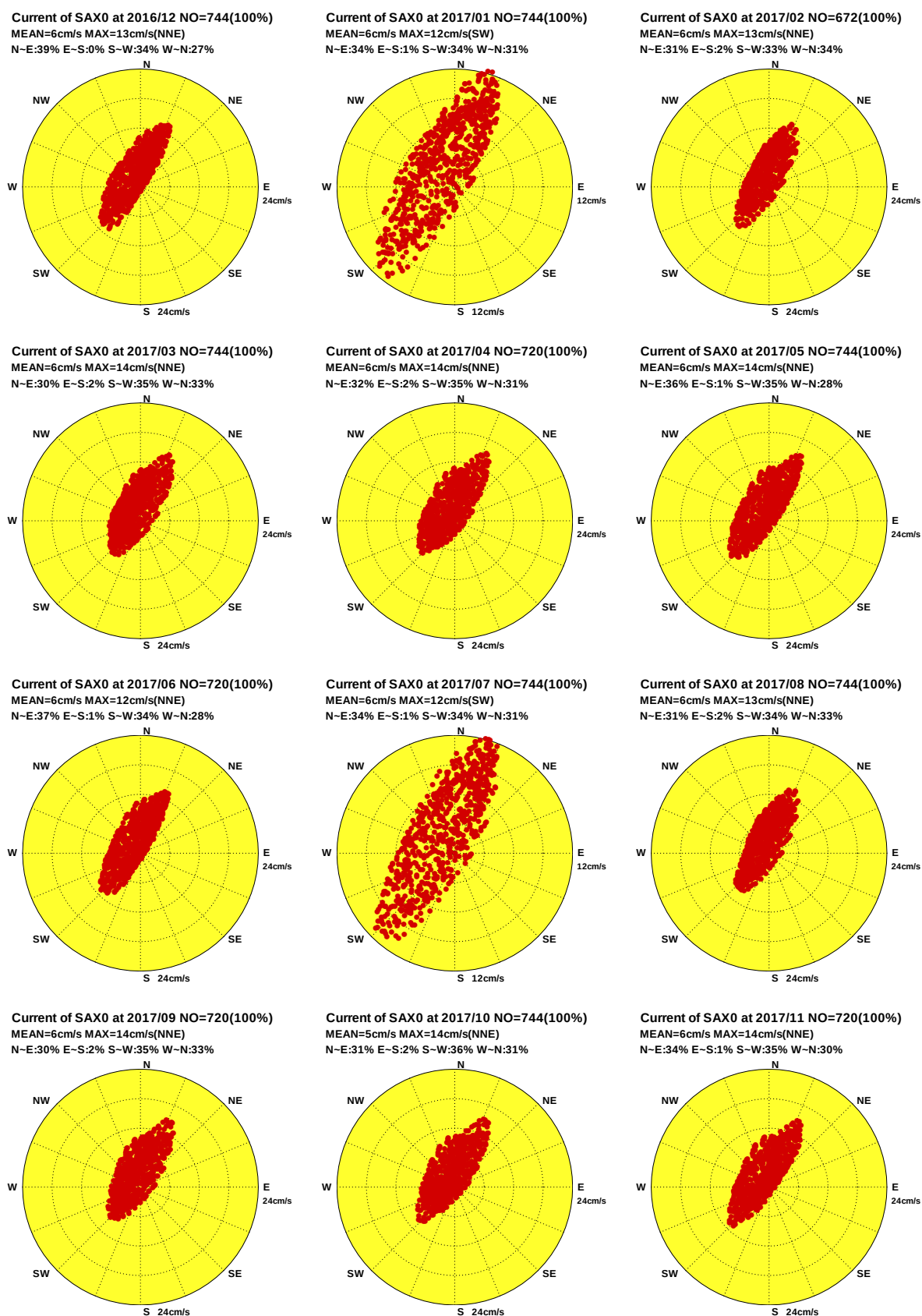


圖4.5c 2017年宜蘭海域每月測站 X 計算潮流向量分佈圖

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C176SAX0.1HD C177SAX0.1HD C178SAX0.1HD C179SAX0.1HD C17ASAX0.1HD C17BSAX0.1HD

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Progressive Vector Diagram of Current

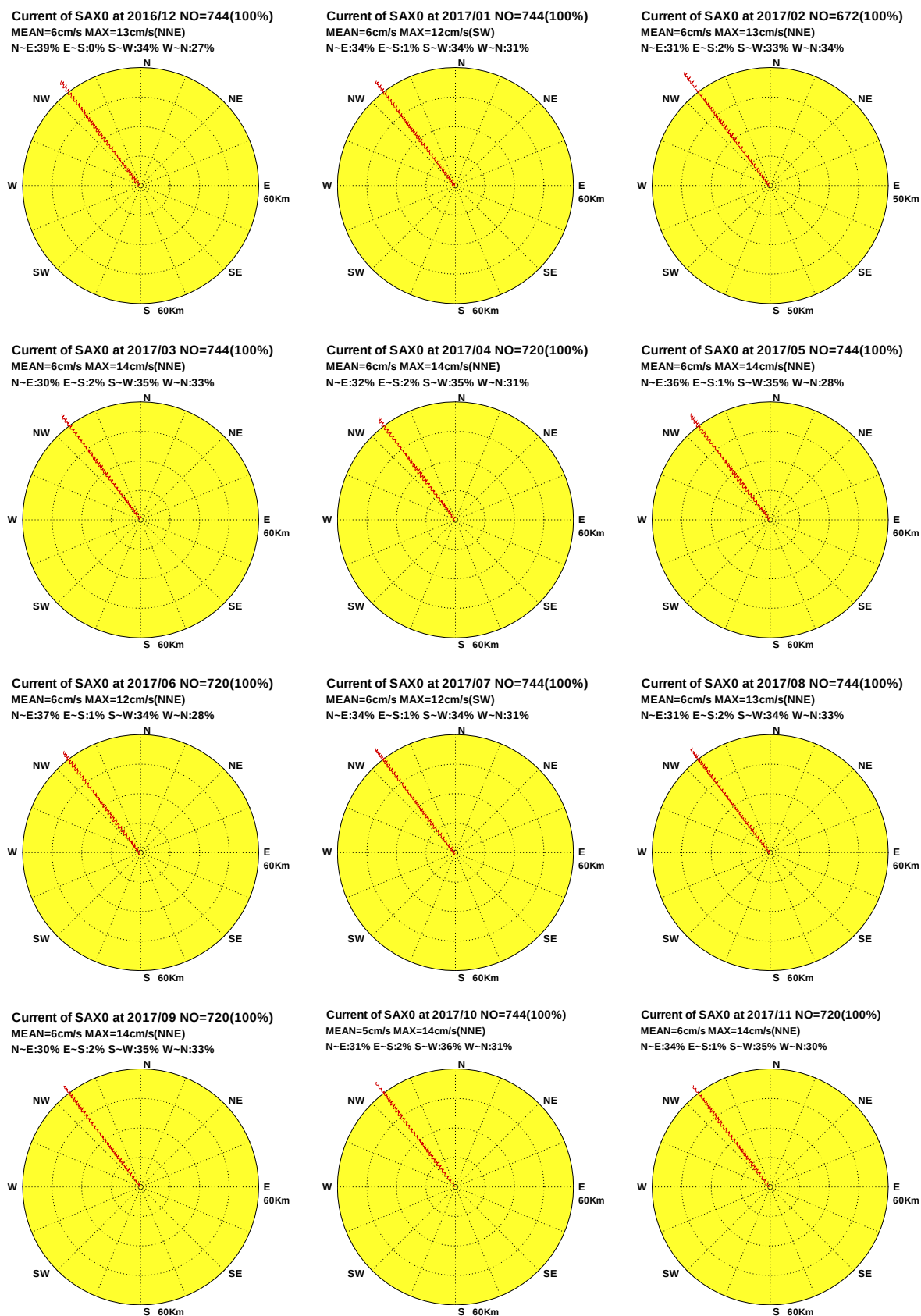


圖4.5d 2017年宜蘭海域每月測站 X 計算潮流向量行進圖

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C176SAX0.1HD C177SAX0.1HD C178SAX0.1HD C179SAX0.1HD C17ASAX0.1HD C17BSAX0.1HD

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Distribution of Current Vectors

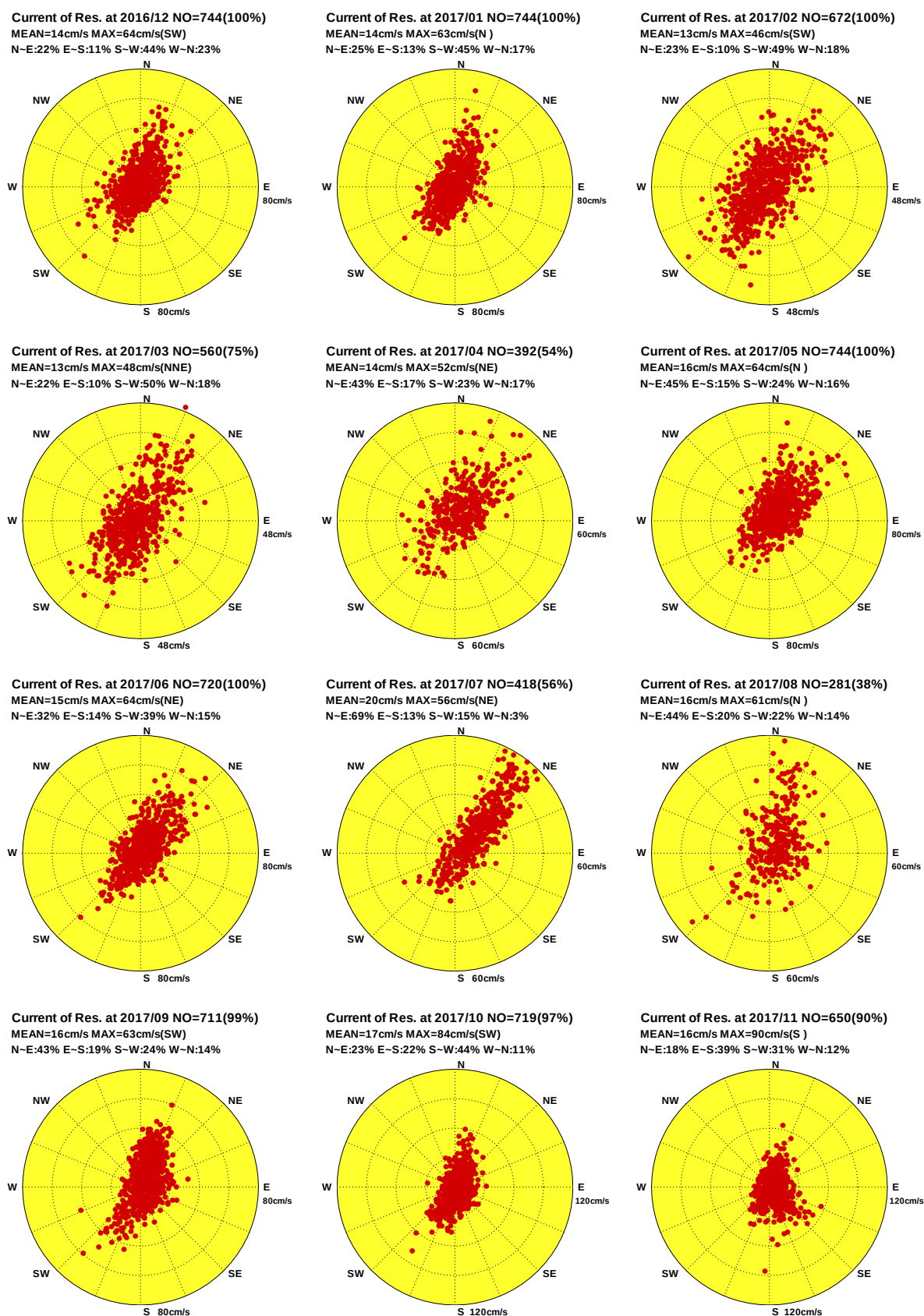


圖4.5e 2017年宜蘭海域每月測站 X 計算殘流向量分佈圖

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C176SAX0.1HR C177SAX0.1HR C178SAX0.1HR C179SAX0.1HR C17ASAX0.1HR C17BSAX0.1HR

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Progressive Vector Diagram of Current

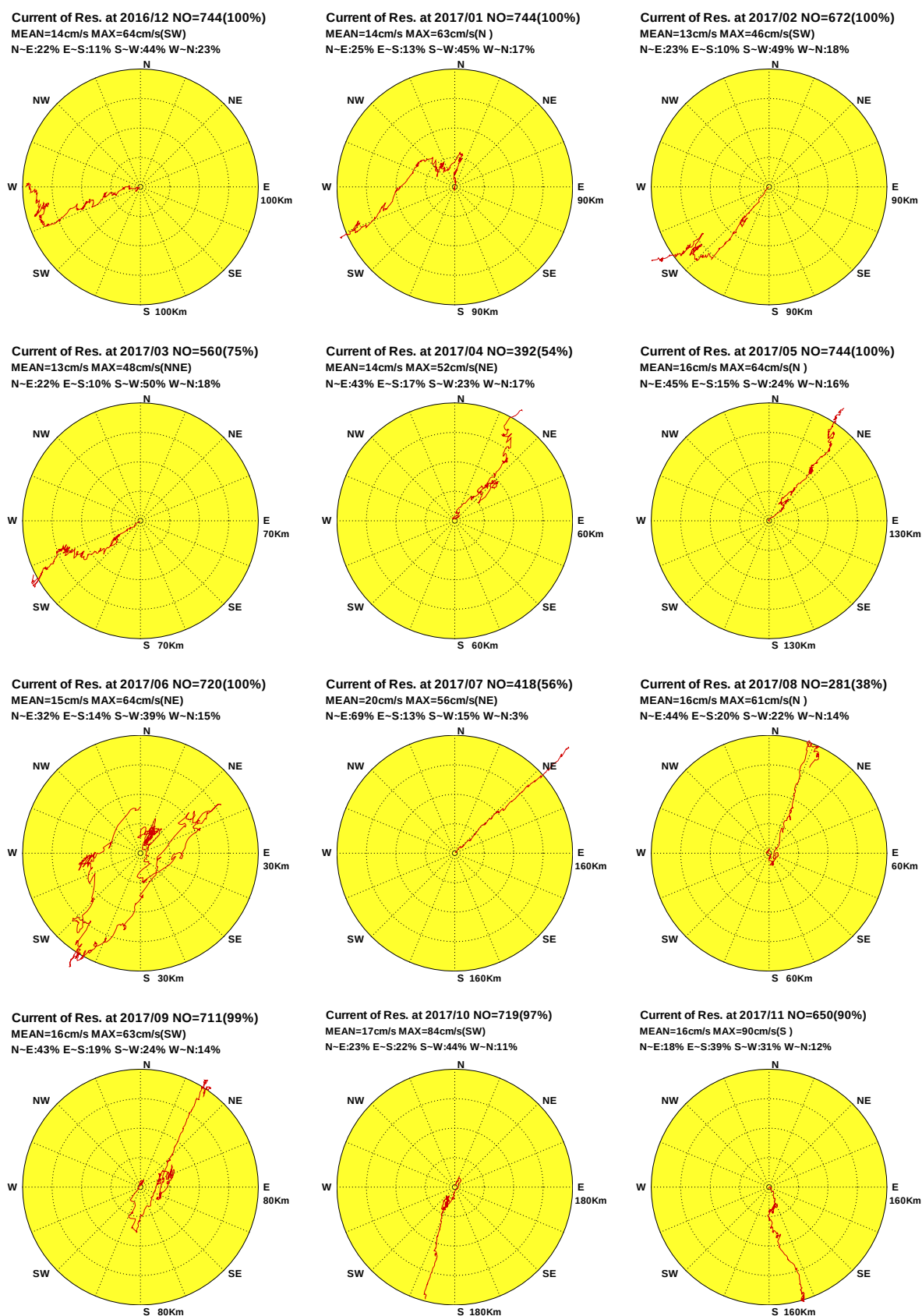


圖4.5f 2017年宜蘭海域每月測站 X 計算殘流向量行進圖

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C176SAX0.1HR C177SAX0.1HR C178SAX0.1HR C179SAX0.1HR C17ASAX0.1HR C17BSAX0.1HR

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Distribution of Current Vectors

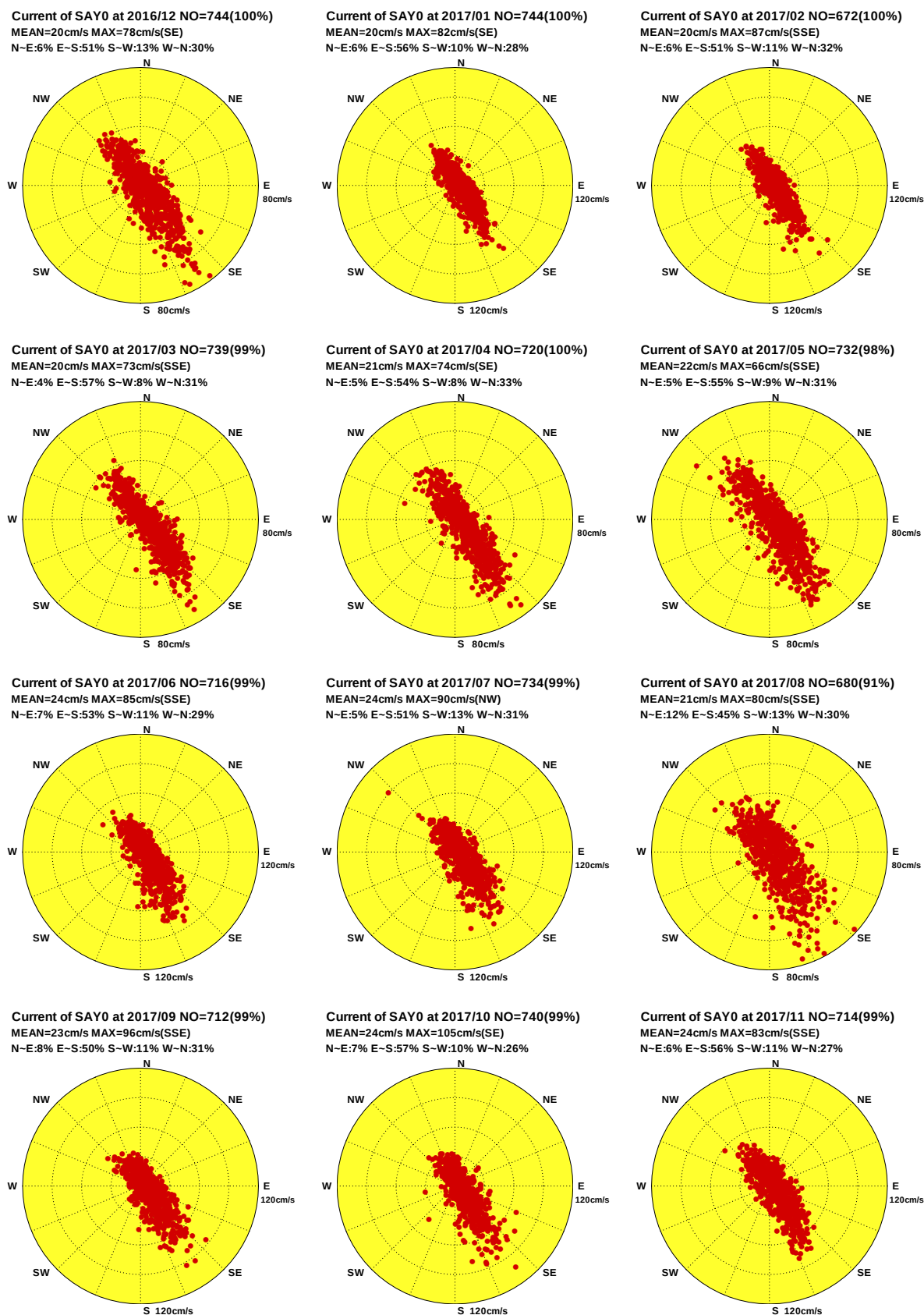


圖4.6a 2017年宜蘭海域每月測站 Y 觀測海流向量分佈圖

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 C176SAY0.1H0 C177SAY0.1H0 C178SAY0.1H0 C179SAY0.1H0 C17ASAY0.1H0 C17BSAY0.1H0

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Progressive Vector Diagram of Current

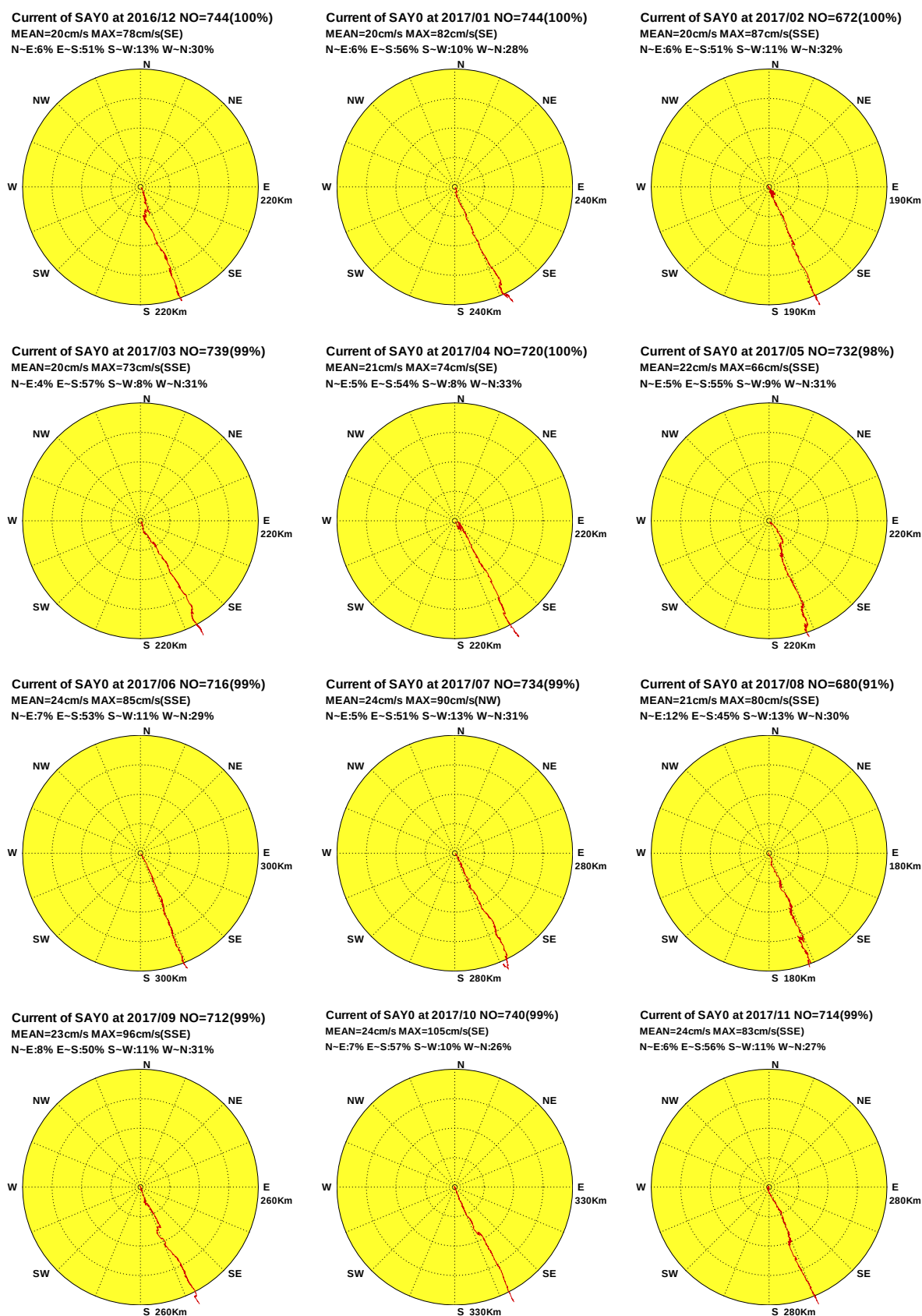


圖4.6b 2017年宜蘭海域每月測站 Y 觀測海流向量行進圖

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 C176SAY0.1H0 C177SAY0.1H0 C178SAY0.1H0 C179SAY0.1H0 C17ASAY0.1H0 C17BSAY0.1H0

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Distribution of Current Vectors

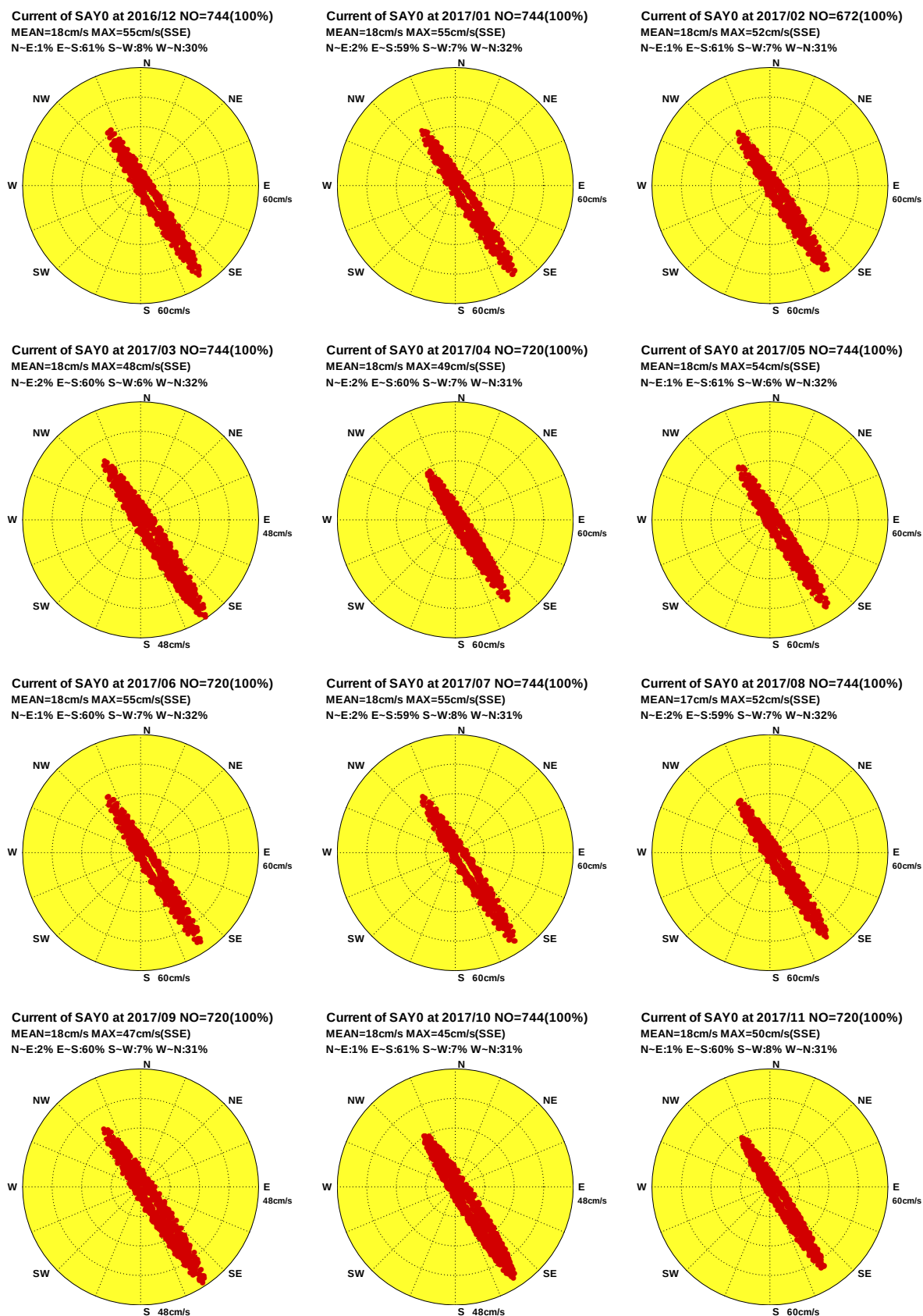


圖4.6c 2017年宜蘭海域每月測站 Y 計算潮流向量分佈圖

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 C176SAY0.1HD C177SAY0.1HD C178SAY0.1HD C179SAY0.1HD C17ASAY0.1HD C17BSAY0.1HD

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Progressive Vector Diagram of Current

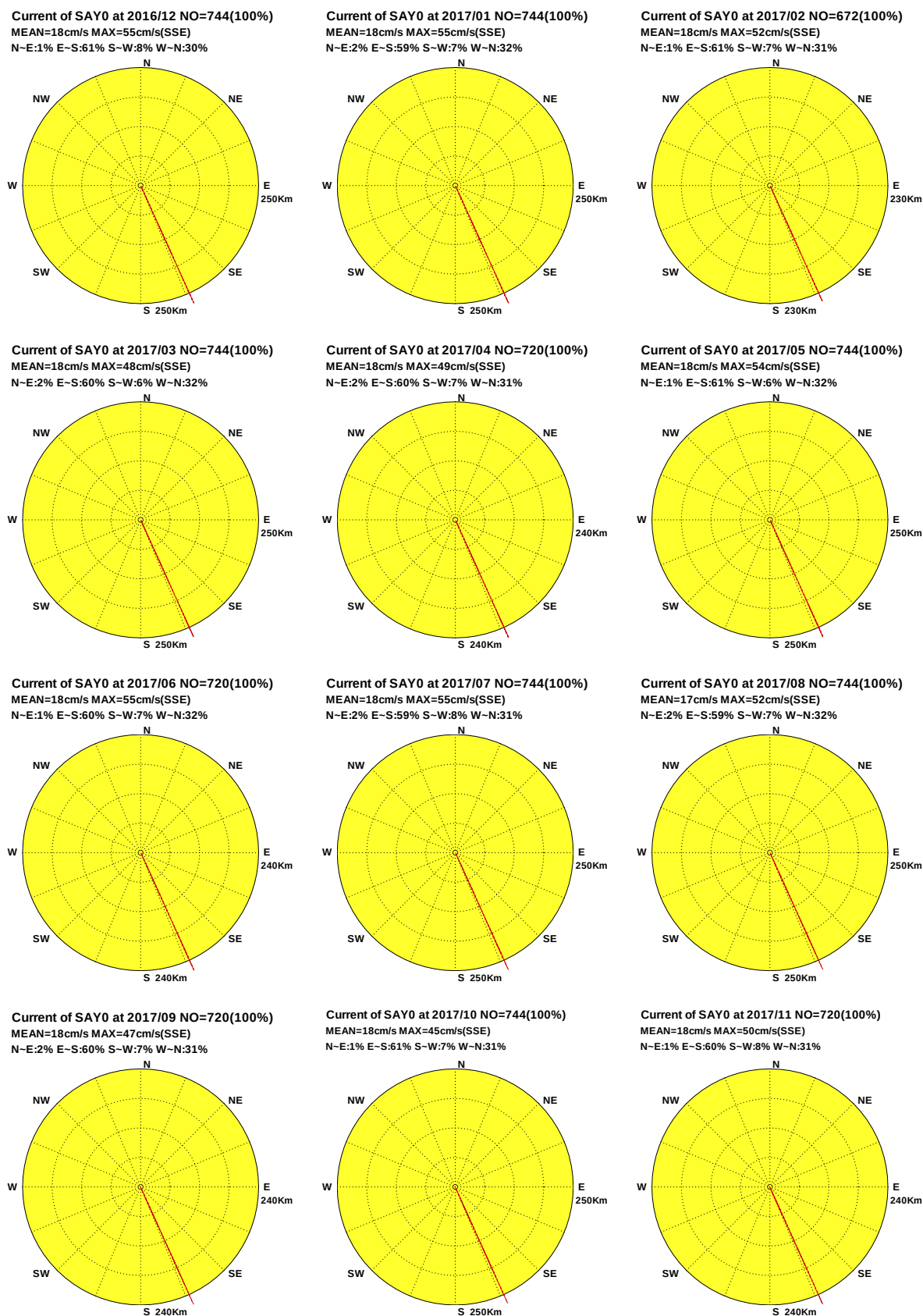


圖4.6d 2017年宜蘭海域每月測站 Y 計算潮流向量行進圖

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C176SAY0.1HD C177SAY0.1HD C178SAY0.1HD C179SAY0.1HD C17ASAY0.1HD C17BSAY0.1HD

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Distribution of Current Vectors

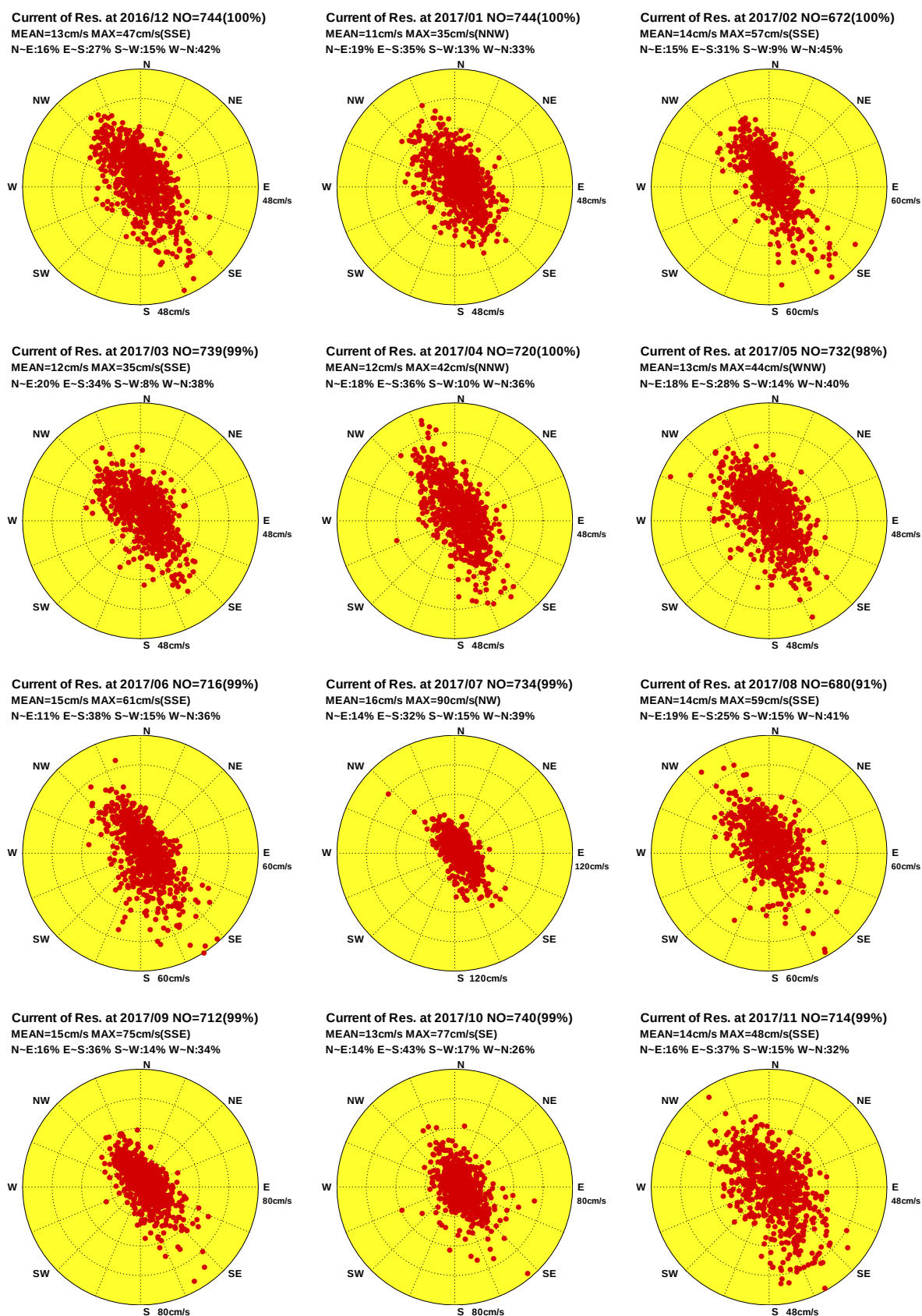


圖4.6e 2017年宜蘭海域每月測站 Y 計算殘流向量分佈圖

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C176SAY0.1HR C177SAY0.1HR C178SAY0.1HR C179SAY0.1HR C17ASAY0.1HR C17BSAY0.1HR

Institute of Harbor & Marine Technology

Progressive Vector Diagram of Current

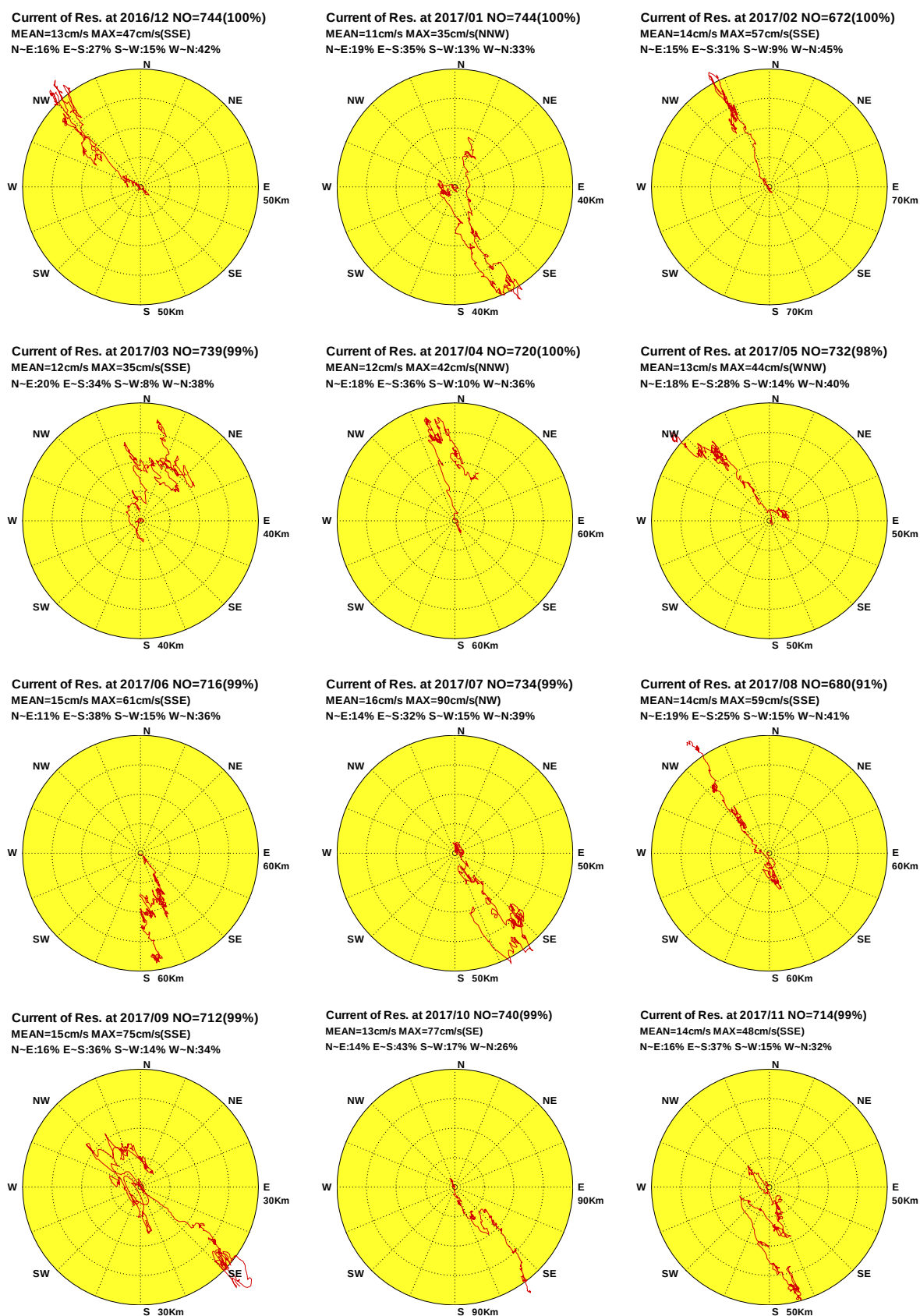


圖4.6f 2017年宜蘭海域每月測站 Y 計算殘流向量行進圖

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C176SAY0.1HR C177SAY0.1HR C178SAY0.1HR C179SAY0.1HR C17ASAY0.1HR C17BSAY0.1HR

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