



教您辨識南十字星座 到墾丁 曬星星

墾丁夏日視可 / 陳俊榮攝
Kenting's summer Milky Way
/ Photo by Pei-kun Chen

Come to Kenting for a Starlight Shower How to Identity the Southern Cross

時序漸入夏，溪山風遠離了恆春半島，五月的墾丁在春雨滂淋下，大地重披翠綠青衫，天地一片明淨。入夜後的晴日，璀璨星空以透射人心的晶光，為大地與萬物編繪夢的起航。

夜觀星斗，最好尋找一處視野空間、無空氣污染也無光害的所在，氣候溫暖、海風涼拂的墾丁，正是體驗被星子包圍最理想的去處。倘若沒有體驗過墾丁以海濤與蟲聲為配樂的動人星空，那真可說你不算認識墾丁呢！為了引導國人體驗國家公園獨特的明淨天空、認識在墾丁升起的南十字座，以及提醒大眾珍惜少光害、無空氣污染的觀星環境，墾丁國家公園管理處今年5月24日舉辦一場「南十字星光幫」觀星活動，活動地點在貓鼻頭公園。

Summer is arriving, and mountain tempests have left Hengchun Peninsula. Cleansed by the spring shower, Kenting in May is covered in green and a bright sky. On a clear night, the dazzling stars shine upon us and mark the dreamy voyage for planet earth and all its residents.

The place for stargazing should be broad and free of air or light pollution. Having a warm climate and cool sea breezes, Kenting is the perfect place for you to be surrounded by starlight and the sound of the sea and insects. In order to ensure KTNP's unique sky remains clear for stargazing and viewing the Southern Cross constellation, and to remind the public to keep the sky free of light pollution, KTNP held the "Southern Cross Star Show" in Maobitou Park on May 24th.

貓鼻頭公園位於台灣西南端的岬角，這個岬角正好劈開台灣海峽與巴士海峽，呼上天風自在，星垂平野，候鳥去來，四季蟲鳴，是墾丁地區最佳觀星地點之一，墾丁國家公園管理處在此舉辦觀星活動已有多年，尤其貓鼻頭西、南方向皆為浩淼汪洋，觀看升空高度極低的南十字座，自然是絕妙位置。

台灣的緯度恰是觀看南十字的北限，巔嶺上能清楚欣賞這個星座的地方，只有高山和墾丁地區，4至6月是觀看南十字的最佳時節，但因南十字在天球上的位置非常偏南，自地平線升起至傾斜西沈的時間僅2個多小時，觀星者必須準確的把握時間(4月：晚間11時左右，5月：晚間9點左右，6月：天色暗後)，「南十字星光幫」活動除了讓民衆有緣認識、欣賞這個特別的星座，也讓大家一一辨識春夏之間的滿天星斗。

因為地球自轉與公轉的緣故，夜空星子有季節性的移轉，所以人們在不同季節裡見到的星星也不盡相同，每天晚上9時左右，我們頭頂正上方出現的那些星座，便是當季星座，但這並不表示每個夜晚我們只能看見當季星座，以夏季為例，日落後仍可在西方看見一些春季星座，近午夜時，秋季星座也會自東方逐漸升起，甚至在凌晨，可以在東方看見部分冬季星座。

Maotou Park is located in the cape in the southwestern tip of Taiwan. This cape separates Taiwan Strait and Bashi Strait, and it is a place with cool wind and wildlife, making it one of the perfect places for stargazing. KTNP has held stargazing activities here for many years, and the west and south ends of Maotou all face the sea, which are great for viewing the Southern Cross that hangs at a lower altitude.

Taiwan is located at the northmost latitude where the Southern Cross could still be seen in the northern hemisphere, and the only places on the island where this constellation can be seen are mountains and Kenting. The best season to see the constellation is from April to June, since the Southern Cross is at the southern end of the celestial sphere, it only stays above the horizon for 2 hours (April: 11 pm; May: 9 pm; June: after sunset). The Southern Cross Star Show is also an chance for the public to see the stars in the spring and summer seasons.

Due to earth's rotation and revolution, the stars shift seasonally, resulting in different stars to be seen in different seasons. The constellations we see at around 9pm are the seasonal ones, but it doesn't mean we can see them every single night. Take summer for example, some spring constellations could still be seen to the west after sunset, and autumn constellations may rise from the east around midnight. Certain winter constellations could even be seen to the east during early morning.



貓鼻頭公園位於台灣西南端岬角，呼上天風自在，星垂平野／經營處提供
Maotou Park is located at Taiwan's southwest cape that enjoys the clear sky and stars / Photo provided KTNP



「南十字星光幫」活動當天除了南十字座，還可欣賞到北斗七星、大熊、小熊、天龍、獅子、巨蟹、牧夫、室女、烏鴉、半人馬、武仙、蛇夫、天琴等星座，10點過後，美麗的夏日銀河也會升上天空。

星座均由閃爍的恆星組成，但在滿天星子中，有少數幾顆星是亮而不閃爍的，這幾顆星星以穩定的白光注視著大地，星座盤上找不到它們。亮而不閃爍、星座盤上無法查到，那就是行星了。今年5月下旬的夜空中，可以看見水星、火星及土星分別運行於金牛座、巨蟹座及獅子座。依照往例，墾丁國家公園管理處的解說人員在星空下架起天文望遠鏡，讓民眾觀看美麗神妙的土星光環。

Besides the Southern Cross, other constellations that can be seen during the event include the Big Dipper, Ursa Major, Ursa Minor, Draco, Leo, Cancer, Herdsman, Virgo, Corvus, Corax, Centaurus, Hercules, Ophiuchus, and Lyra, and summer Milky Way after 10 pm.

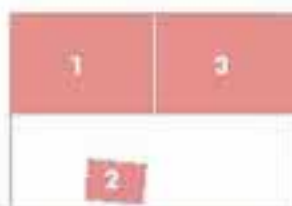
Constellations are comprised of glittering, fixed stars, but a few of them do not glitter and cannot be found on the constellation map, and they are known as "planets." In the starry night after mid-May, you will see Mercury, Mars, and Saturn moving near Taurus, Cancer, and Leo. As always, the guides in KTNP will set up telescopes for the public to gaze upon Saturn's beautiful and mysterious ring.

▼「南十字星光幫」活動除了讓民眾有種認識、欣賞南十字星座，也讓大家一一辨識夏季之間的某天星斗／謝桂旗提供
Southern Cross Star Show doesn't only help the public view the Southern Cross but also identify the stars in the spring and summer sky / Photo provided by Kuei-jen Hsieh



南十字，可說是璧丁的代表星座。這個星座主要由上下左右4顆星星組成，將上、下2顆星的連線延長5倍，可找到南極點。北半球以北極星確認方位，南半球則靠南十字導航。這個南半球的指極星座，在台灣平地只有璧丁地區可以清楚看見，當人們以接近平視的角度看見它垂掛海面時，都顯得極為興奮。如何找到這個星座呢？可以試試這2種方法：一種是先找到北極星，面對它即朝向正北，再向後轉180度，面朝正南，在近地平線或海平面處可以找到南十字；另一種方法是先找到南方地平線上半人馬座的2顆亮星——南門2和馬腹1（春夏的南方星空就這2顆星最亮），再將兩顆星相聯往南延伸找到南十字。當然，還有一種更直接的方法，就是到璧丁參加國家公園舉辦的觀星活動，讓解說人員引領你尋找。

The Southern Cross is the symbol of Kenting. This constellation is consisted of four stars at the top, bottom, left, and right. By extending the distance between the top and the bottom stars five times, you can find the South Pole. The North Star guides the direction in the northern hemisphere, and the southern counterpart is the Southern Cross, and Kenting is the only place in Taiwan's level grounds to see the constellation. Those who get to see it hanging above sea are very excited, but how do we find it? Try these two methods: 1. Find the North Star, which points out the true north. Turn 180 degrees so you face the true south, and look for the Southern Cross near the horizon or sea level. 2. Find the two bright stars in Centaurus above the southern horizon – alpha and beta Centauri (which are the two brightest stars in the southern sky in spring/summer), connect the two and extend southward to find the Southern Cross. Of course, there's always a simpler way: go to Kenting and let the guides help you out.



1. 烏鴉座(右上角)、南十字(右下)與天蠍座(左側橫紅色亮星是天蠍心隱心二) / 陳煥榮攝
Corvus (upper right), Southern Cross (lower right), and the Scorpio (the bright orange star on the left is at the heart of the Scorpio) / Photo provided by KTNP; taken by Pei-lun Chen
2. 民眾透過天文望遠鏡觀賞奇妙的土星光環 / 謝柱祥提供
Looking at Saturn's mysterious ring through the telescope / Photo provided by Kuei-chen Hsieh
3. 南十字星座主要由上下左右4顆星星組成，將上、下兩顆星的連線延長5倍，可找到南極點 / 陳煥榮攝
The Southern Cross is consisted of four stars at the top, bottom, left, and right. By extending the distance between the top and the bottom stars five times, you can find the South Pole / by Pei-lun Chen



龍鑾公園一帶最適宜欣賞星垂平野、月湧海流的景色／龍鑾處提供
Longpan Park is also great for enjoying the views of the starry sky and the beautiful moon hanging above the grand ocean / Photo provided by KTNP



觀星重在情境，在國家公園看星，有天籟與潔淨空氣相伴；在溫暖墾丁看星，可以不被低溫干擾，靜享如水的天階夜色，沈澱人生……墾丁國家公園內除了貓鼻頭公園，東側海岸龍鑾公園一帶也極適合欣賞星垂平野、月湧海流的景色，遊人不可錯過。

墾丁星空的晶瑩並非5月的偶爾，因為地形地理因素（海天空闊）及特殊氣候條件（長年落山風吹襲），四季星空均顯得特別明亮。無疑的，這片無高山與高樓遮擋，又無空氣污染的開闊土地，是臥觀星移最佳的所在。雖然，觀星並不一定非窺得星座不可，收羅一圓明燦星光在記憶已是美事，但在識得滿天星斗之後，除了有助於辨識方位，也彷彿能拉近與星星的距離，那如晶瑩般閃耀的光芒，將因你對它的辨識而不再渺茫冷涼遙不可知，認識星座，特別是在墾丁夜晚的潮音與蟲鳴中認識星座，實在是件極美麗的事。○

Atmosphere is an important part of stargazing; imagine looking at the stars while being surrounded by the clean air and warm climate in Kenting. Besides Maobitou, Longpan Park in the east side is also great for enjoying the views of the starry sky and the beautiful moon hanging above the grand ocean.

The starry sky in Kenting in May is possible thanks to the terrain (flat ground) and climate (year-round mountain tempests), making the sky extremely clear throughout the year. Undeniably, this piece of land that has no mountains, high-rises, and air pollution is the perfect place for stargazing. Although you are not forced to identify the constellations during this activity, it sure would help you identify the directions and bring you closer to them. After being known to you, the celestial diamonds that shine brightly in the sky will no longer be strangers. Learning about the constellations is certainly a wonderful thing, especially in Kenting where you are accompanied by the sound of the waves and the insects. ○