

草山的彩虹

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2021.10.06

Rainbow@Taiwan

草山的彩虹

- ⦿ 天空之龍
- ⦿ 龜神傳說
- ⦿ 金氏世界紀錄
- ⦿ 彩虹預報
- ⦿ 彩虹谷
- ⦿ 草山虹

Rainbow@Taiwan

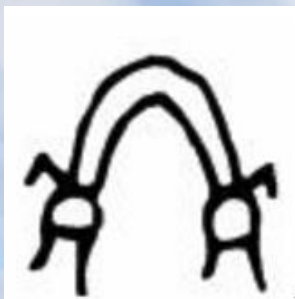
龍是什麼，天象？

可能天象：雲、虹、閃電、極光、龍捲風

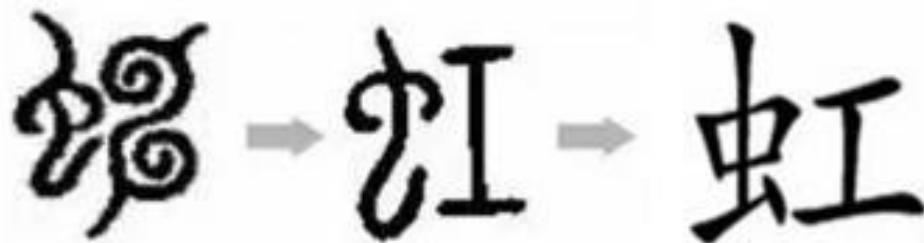


圖片來源：WMO 2019-2022 Calendar Competition

虹-字的起源



甲骨文



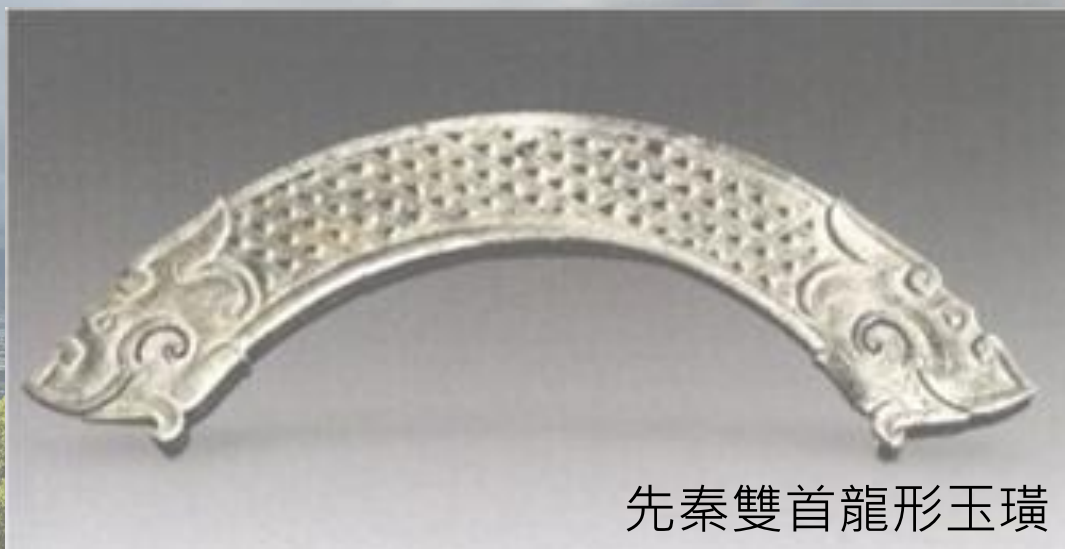
籀文

秦國石鼓文

楷書



龍：甲骨文



先秦雙首龍形玉璜

前人的認知

《甲骨文字》：西元前**1200**年

「有出虹自北，飲於河。」

《山海經·海外東經》：西元前**475**年

「虹虹在其北，各有兩首。一曰在君子國北。」

《說文解字》：西元**121**年

「虹，蜺蝥也。狀似蟲。」

唐代-孫彥先：西元~**800**年

「虹乃雨中日影也，日照雨則有之。」

《夢溪筆談》：西元**1095**年

「是時新雨霽，見虹下帳前澗中，余與同職扣澗觀之，虹兩頭皆垂澗中。」

唐詩宋詞中的彩虹

- 唐-李白：兩水夾明鏡，雙橋落彩虹。
- 唐-雍陶：晚虹斜日塞天昏，一半山川帶雨痕。
- 唐-錢起：雲棟彩虹宿，藥圃蝴蝶飛。
- 宋-柳永：對雌霓掛雨，雄風拂檻，微收煩暑。
- 宋-晏殊：直入白雲深處，浩氣展虹霓。
- 宋-歐陽修：小樓西角斷虹明。
- 宋-趙善括：雨霽彩虹臥，半夜水明樓。
- 宋-王之道：天際彩虹垂。風起痴雲快一吹。

【2017氣象戰】



Source: google images

【2020 秋】

最長壽的彩虹

As many as four rainbows could be seen at one time during the observations, which included 3,520 time-confirmed photographs.

at El Azizia in Libya – was invalid, owing to inaccurate

at Russia's Vostok research station in Antarctica plunged to -89.2°C (-128.6°F), some 54°C (97.2°F) colder than the seasonal average. This is the **lowest temperature ever recorded on Earth.**

Longest-lasting rainbow observation

On 30 Nov 2017, a rainbow over Yangmingshan in Chinese Taipei was continuously observed for 8 hr 58 min from the observation decks of the Chinese Culture University (TPE) by members of its Atmospheric Sciences department. It is thought that the phenomenon was caused by the arrival of a seasonal monsoon wind carrying water vapour from the sea.

GUINNESS
WORLD
RECORDS
2019

WIN
ATMOSPHERIC SCIENCES DEPARTMENT
CHINESE CULTURE UNIVERSITY

【2017-2021彩虹氣象戰顛讚】

時間	進展
D1 (2017/11/27)	Rainbow Clock Plot - WR > 6 h
D4 (2017/11/30)	Rainbow Clock Plot - WR 8h58m
D5 (2017/12/01)	9:00天險 10:00民視+台視 18:00英國郵報訪問
D6 (2017/12/02)	英國郵報確定報導 如何一口氣證明給大家看，每一秒都有!
D9 (2017/12/05)	TIME: Like a Gift From the Sky. CNN: Is this the world's longest-lasting rainbow?
D111(2018/03/17)	GWR record attempted at Chinese Culture University (Tips: 超過1萬張時間確認照片、20萬台幣申請費用、CWB第三方確認)
D131(2018/04/06)	GWR record online: Record confirmed for stunning Taipei rainbow that lasted for almost 9 hours
D351(2018/11/13)	彩虹監測上線
D700(2019/10/29)	彩虹天氣指數及彩虹機率預報上線
D1K+(2020/10/22)	陽明山連續13天(10/10-10/22)出現彩虹
D1K+(2020/10/22)	發現彩虹谷@紗帽山景觀台
D1K+(2021/01/08)	定量降雪預報
D1K+(2021/09/01)	雲海、霧虹預報

Longest lasting rainbow observation

觀測到持續最長彩虹



RECORDS

PRODUCTS

BUSINESS SOLUTIONS

NEWS

ABOUT US



Record confirmed for stunning Taipei rainbow that lasted for almost 9 hours

By Echo Zhan and Shane Murphy | Published 06 April 2018

Who

CHINESE CULTURE UNIVERSITY

What

8:58
HOUR(S):MINUTE(S):SECOND(S)

Where

CHINESE TAIPEI (TAIPEI)

When

30 NOVEMBER 2017

The longest lasting rainbow observation is 8 hours and 58 minutes and was achieved by Chinese Culture University (Chinese Taipei) at Yangmingshan, Taipei, Chinese Taipei, on 30 November 2017.



文化大學地理位置

Geographic location of Chinese Culture University in Taiwan



文大降雪 2016/01/24「霸王寒流」



攝影／華岡測候站

文大浪濤雲 2017/11/08



文大雲海 2019/12/17




文大彩虹 2017/11/08



主虹、副虹、複紅

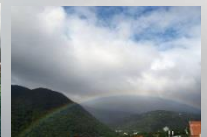
primary bow, secondary bow, supernumeraries





彩虹觀測與紀錄是如何開始的？

Reach the Record of the Longest Lasting Rainbow in the World



09:02

84 min Timelapse

9



2017.11.27@CCU

12

> 6 hours

3

15:08

Observe the Record of the Longest Lasting Rainbow in the World

Rainbow Clock Plot



Starting time: 06:57

Prof. C.-H. Liu

End time: 15:55

Prof. K.-H. Chou

2017.11.30@CCU

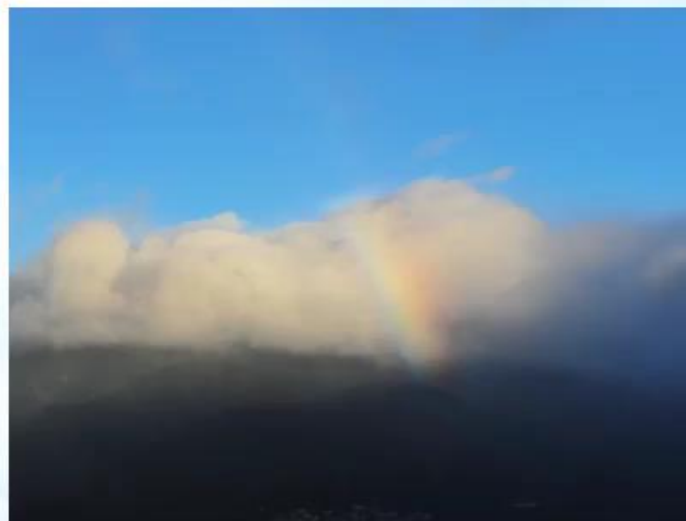
06:57

15:55

2017.11.30 九小時彩虹影像縮時

世界上觀測最久的彩虹

日期：2017/11/30 (共歷時8時58分)



中國文化大學 CCU @ Taiwan

金氏世界紀錄證書

Brazil) and July 1999 (in the Marshall Islands, central Pacific Ocean).

Longest-lasting rainbow

Rainbows appear when sunlight passes through a raindrop. The light is refracted at different angles, causing the spectrum of colours to be seen while the sunlight is behind the viewer and the rain is in front. A rainbow was continuously visible for six hours, from 9 am to 3 pm, over Wetherby in Yorkshire, UK, on 14 March 1994. Few rainbows last for an hour.



CCU's 9-hour rainbow on 2017/11/30



Taipei's rainbow on 2017/11/30 (萬分感謝提供照片的民眾)



最長延時彩虹金氏紀錄授證典禮舉會貴賓合影



John Garland 為臺灣地區專屬的金氏紀錄認證官，他表示在他擔任 5 年認證官、認證過 70 多個紀錄中，長時間彩虹觀測是他見證最特別的自然景觀世界紀錄。

GWR 2019: PLANET EARTH: Longest-lasting rainbow observation



PLANET EARTH

ROUND-UP



Largest natural gold reserve
The world's oceans contain around 20 million tonnes (22 million US tons) of gold. This is equivalent in value to around 10 times the world's gross domestic product (GDP), as of 2011. However, the concentration of gold in sea water is typically such that one litre of water contains only around 13 billionths of a gram of gold. There are no means of economically extracting gold from sea water, so it will remain in this natural gold reserve unless science can provide a solution.

Largest coral reef die-off
In 1998, a rise in ocean temperatures saw some 16% of all coral reefs bleach and die. Bleaching is a phenomenon in which damaged reefs shed their symbiotic algae, leaving just the stone-like forms of the coral itself. The 1998 El Niño phenomenon (in which parts of the Pacific Ocean warmed up considerably) probably triggered the event.

Warmest year on record
Overall, the year 2016 was the hottest recorded to date, at 0.83°C (1.49°F) higher than the baseline World Meteorological Organization's (WMO) 1961-90 reference period. This statistic was published by the WMO on 18 Jan 2017.

Highest temperature recorded on Earth
On 13 Sep 2012, the WMO announced that the existing record for the highest temperature - 58°C (136.4°F) at El Azizia in Libya - was invalid, owing to inaccurate readings. The declaration came exactly 90 years after it had been established. The official highest temperature is now 56.7°C (134°F), as measured on 10 Jul 1913 at Greenland Ranch in Death Valley, California, USA. During the Southern Hemisphere winter on 21 Jul 1983, temperatures at Russia's Vostok research station in Antarctica plunged to -89.2°C (-128.6°F), some 54°C (97.2°F) colder than the seasonal average. This is the lowest temperature ever recorded on Earth.

Longest cave system
Mammoth Cave (loop) in Kentucky, USA, is a network of linked limestone caves, of which around 640 km (397 mi) has been explored. It took some 25 million years to form, via the weathering action of the Green River and its tributaries. In Jan 2016, divers confirmed that the 264-km (164-mi) Sistema Sac Actun and the 84-km-long (52-mi) Dos Ojos system in Mexico's Yucatán Peninsula are linked by a previously unexplored channel. This underwater cave complex (above) is 347 km (215.6 mi) long overall, making it the longest underwater cave system explored. It is named after the larger of the two systems.

As many as four rainbows could be seen at one time during the observations, which included 3,520 time-confirmed photographs.

Longest-lasting rainbow observation
On 30 Nov 2017, a rainbow over Yangmingshan in Chinese Taipei was continuously observed for 8 hr 58 min from the observation decks of the Chinese Culture University (TCU) by members of its Atmospheric Sciences department. It is thought that the phenomenon was caused by the arrival of a seasonal monsoon wind carrying water vapour from the sea.

46

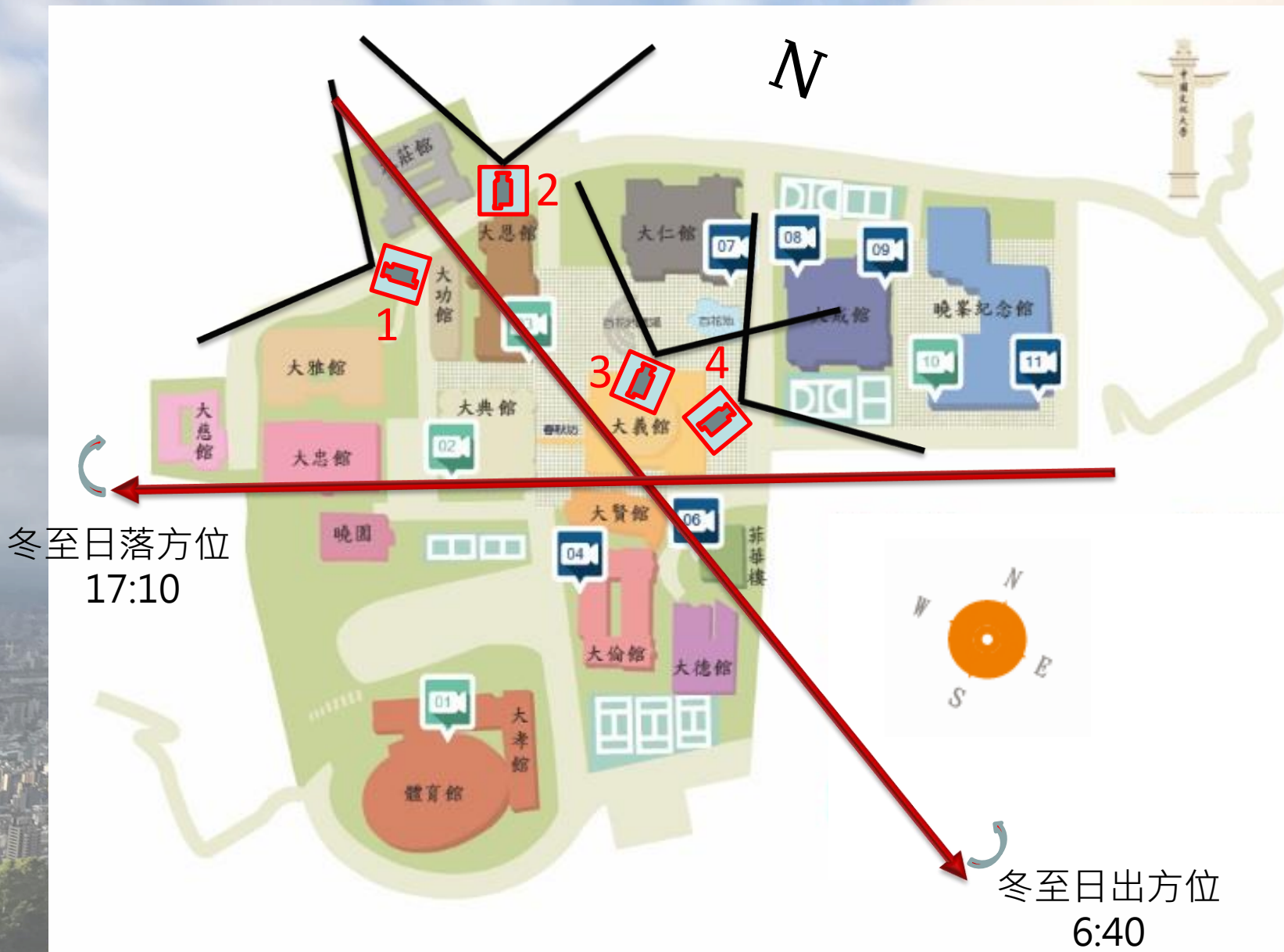
陽明山出現彩虹的頻率？

	10月	11月	12月	1月	總計
2017-18		8	5	7	20
2018-19	4	6	10	7	27
2019-20	5	16	8	2	31
2020-21	16	15	14	6	51
4年平均	8	11	9	6	36

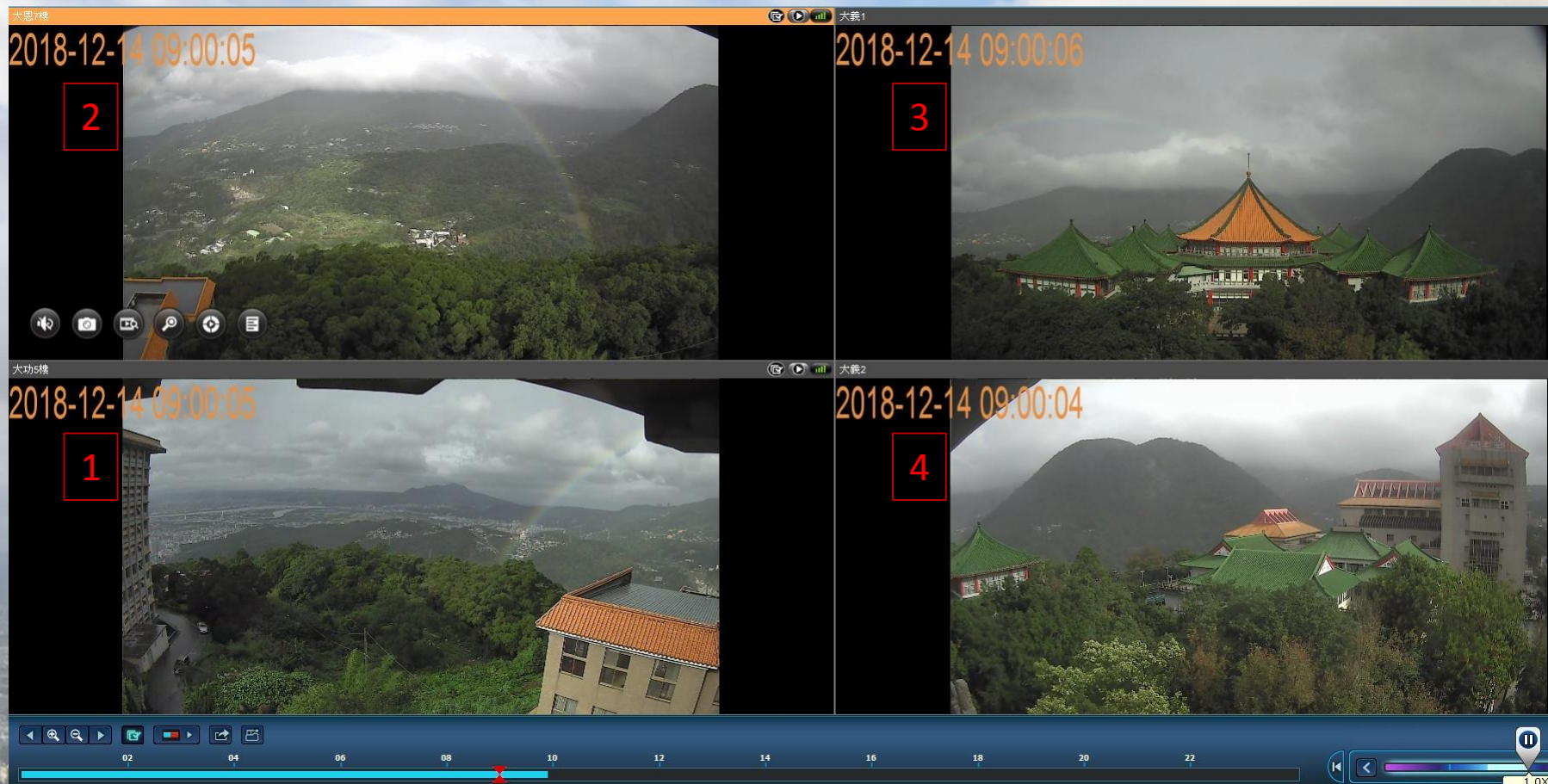
陽明山10天有3天彩虹！

3天彩虹可以預測2.2天！

2018/11/13 文大大氣系/地學所彩虹監測



文大大氣系彩虹觀測即時影像



2018/10/18 8-9 am 錄影畫面

文大大氣系彩虹觀測即時影像

大恩7樓

大義1



大功5樓

大義館全功能迴轉攝影機



2020/10/13 07:37 am 錄影畫面

2019-20文大大氣系彩虹觀測紀錄表

月 份	日期																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
9				✓	✓																										
10									✓																						
11	✓		✓		✓	✓	✓	✓				✓																			
12											✓																				
1	✓																														
2																															
3																															

日期

5

5

16

8

2

2020-21 文大大氣系彩虹觀測紀錄表

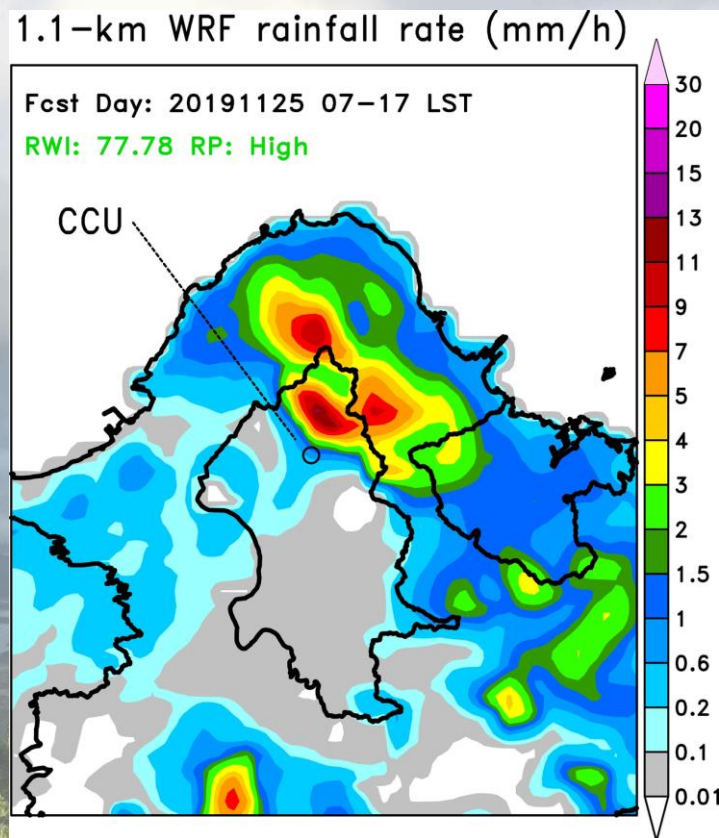
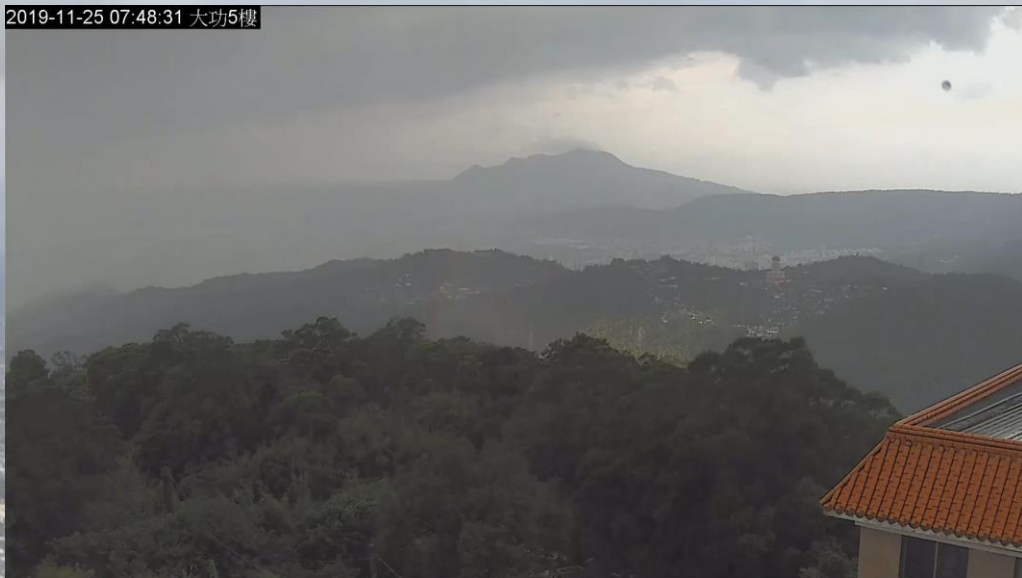
日期	日期																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
9																	✓	✓	✓	✓											
10					✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓					✓	
11	✓		✓			✓		✓	✓			✓	✓							✓		✓	✓	✓	✓		✓	✓	✓	✓	
12		✓		✓	✓	✓	✓	✓		✓		✓	✓		✓		✓	✓	✓	✓	✓										
1		✓		✓	✓			★							✓						✓							✓			
2																															
3																															

月
份

16
15
14
6

陽明山出現的彩虹能預報嗎？

2019-11-25 07:48:31 大功5樓



2019 兩岸青年大氣科學學術研討會 台北 2019/11/25

文大彩虹預報監測展示 <http://jade.atmos.pccu.edu.tw>

Wed Nov 11 2020 05:33:41 GMT+0800 (台北標準時間)

歡迎! 文大彩虹預報監測展示網頁 --- Wellcome! CCU RAINBOW Forecast, Mointor, & Display Page

This webpage is designed for demonstrating the rainbow information to public who are interested in the CCU rainbow.

On 2017/11/30, the nearly 9 hours longest-rainbow observation was observed and has been confirmed for one of natural GWR record.

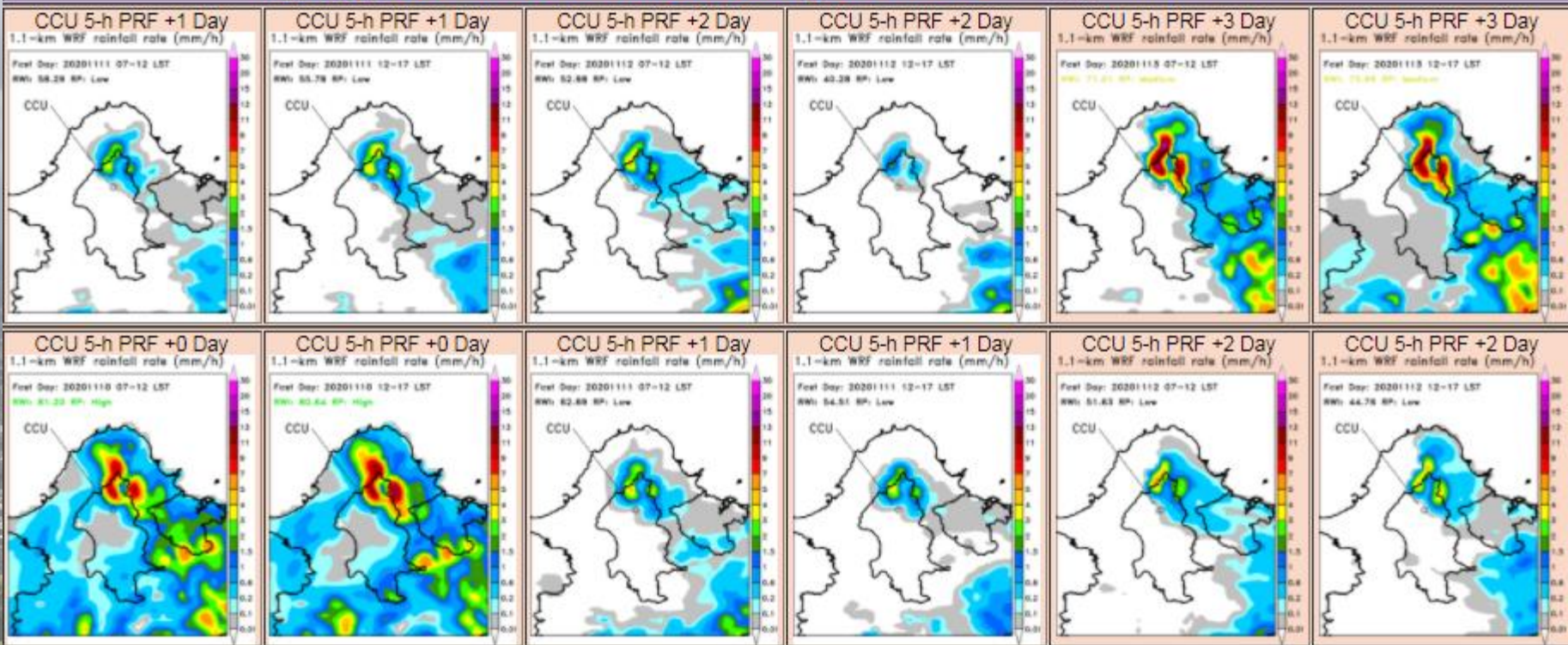
Web information include the realtime guidance of the rainbow forecasting and rainbow monitoring, as well as the archives of past long-lasting rainbow events.

Contact Prof. Kun-Hsuan Chou at zkx@faculty.pccu.edu.tw with any question you may have.

Note that detailed QPF and rainfall images could be queried from CWB, Radar, and NCDR!

Pageviews: 

彩虹預報 Realtime Rainbow Forecasting Guidances [介紹](#) [Ver1](#) [Ver2](#)



文大彩虹預報監測展示 <http://jade.atmos.pccu.edu.tw>

Fri Sep 17 2021 08:04:12 GMT+0800 (台北標準時間)

歡迎! 文大彩虹預報監測展示網頁 --- Wellcome! CCU RAINBOW Forecast, Mointor, & Display Page

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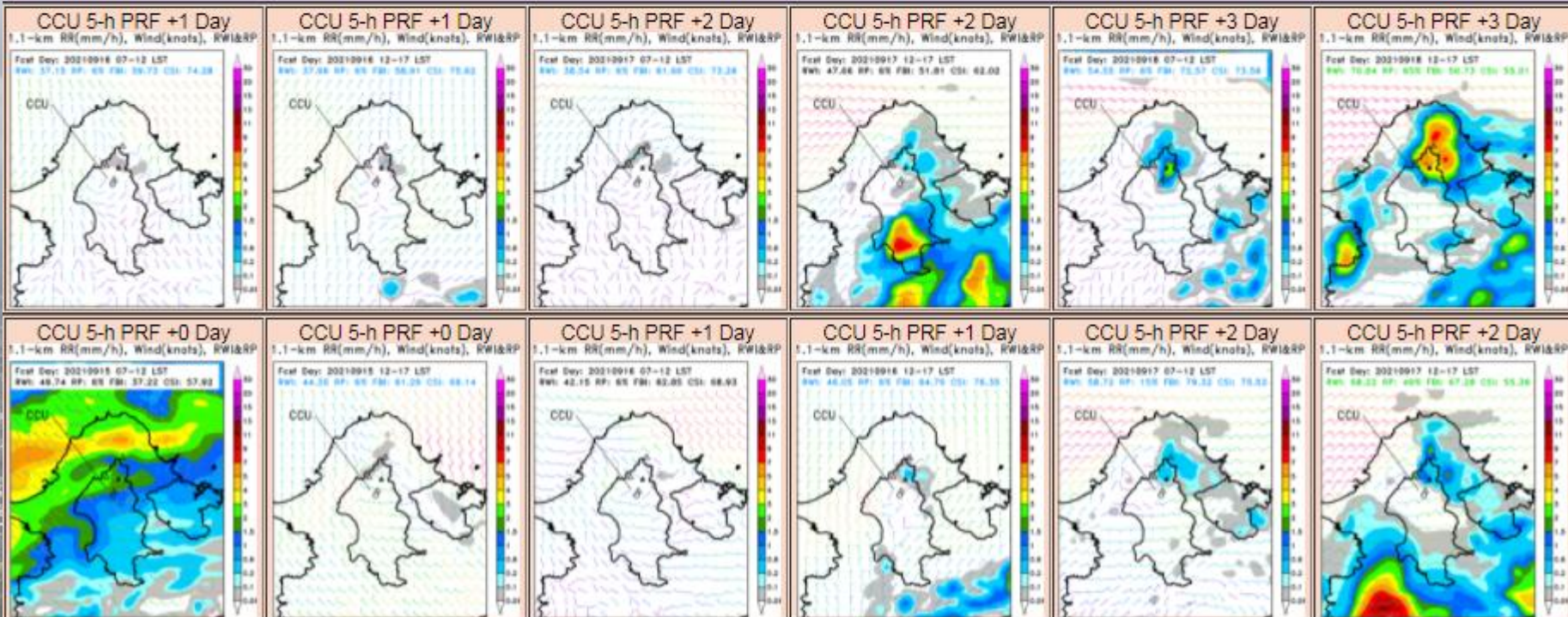
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Pageviews: 0007028

彩虹預報 Realtime Rainbow Forecasting Guidances [介紹](#) [Ver1](#) [Ver2](#)



彩虹縮時600X@YouTube


YouTube ^{TW}

ccu long-lasting rainbow blending

× 🔍 🎤

≡ 篩選器


2018-12-08 11:10-11:15 cx



1:12


CCU's long-lasting rainbows (blend with 3 major events)

觀看次數：14次 · 9 個月前

 Kun-Hsuan Chou

[600X](#)


2020-12-12 10:00-10:04 cx



1:12

2020.12.12 CCU's long-lasting rainbow

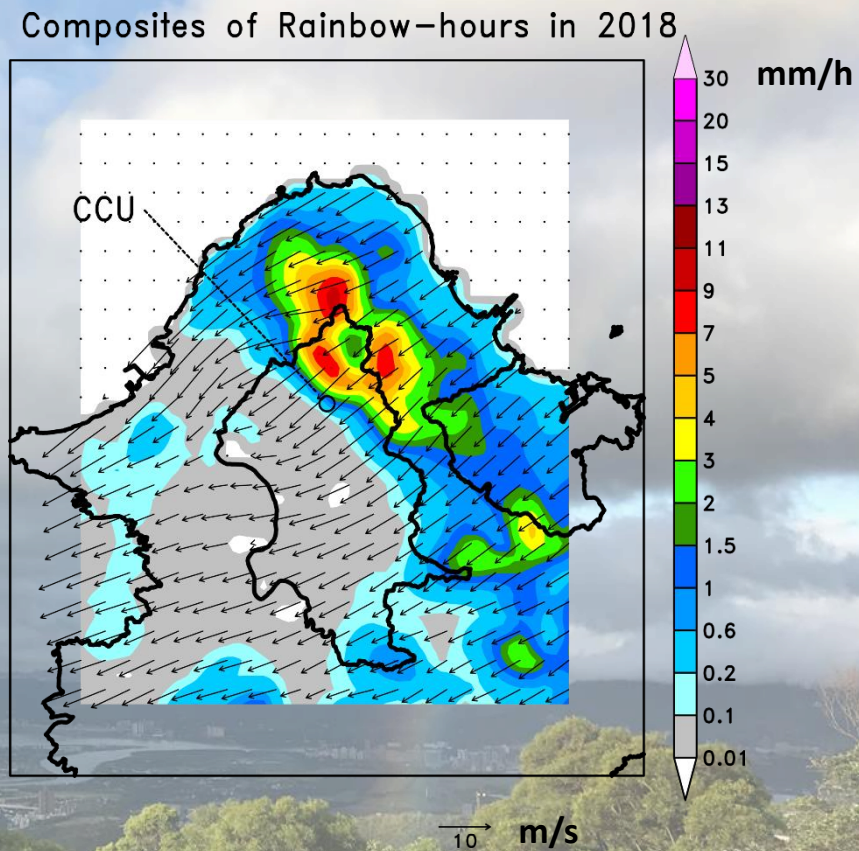
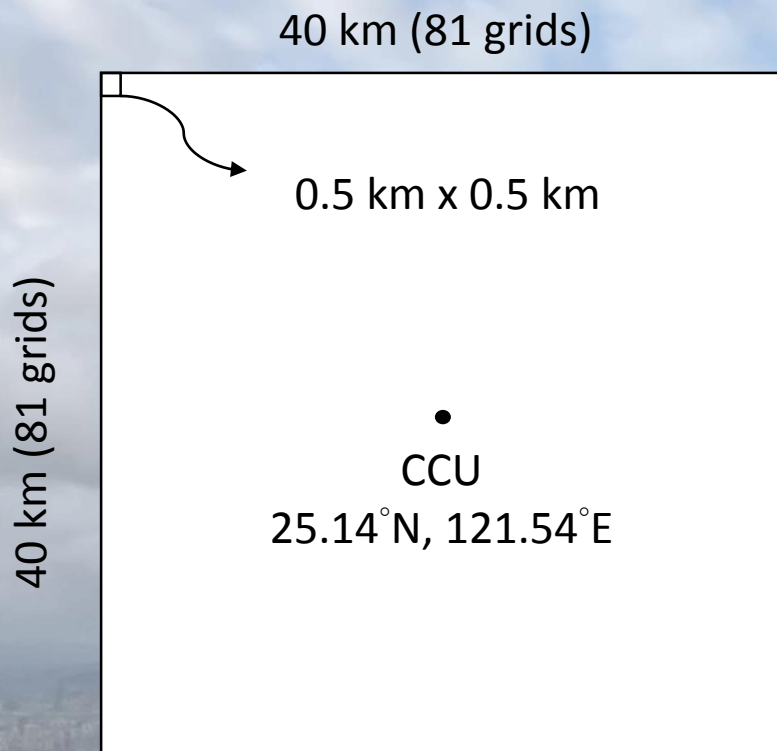
觀看次數：8次 · 9 個月前

 Kun-Hsuan Chou

Methodology

- Rainbow-day: database detected mainly from four webcams
- Rainbow-day predictors: U, V, RH, rainfall rate
- Observation data: CWB auto stations hourly surface U, V, RH, RR(rainfall rate)
- Forecast data: WRF hourly forecast by four nested 30/10/3.3/1.1-km
- Analyzed domain: Northern Taiwan (40 km x 40 km, Center at CCU)
- **Rainbow Weather Index (RWI)**: calculated by four predictors and scored in 0-100
- **Rainbow probability (RP)**: determined by value of RWI in 2018 season (Low: $RWI \leq 63$, Medium: $63 < RWI < 74$, High: $RWI \geq 74$)
- **Evaluation of forecast skill of rainbow-day**: POD, ACC, CSI, and ETS scores (WMO/TD 2000; Wilks 2001)

Analyzed domain



Definition of RWI and RP

$P \equiv$ Predictors from WRF forecasts of analyzed domain (10h-mean U, V, RH, RR)

$P_B \equiv$ Composites of 2018 rainbow-days from WRF hindcasts (78h-mean U, V, RH, RR)

$$mad = \iint |P - P_B| dx dy / \iint dx dy$$

$$mae = \frac{1}{m} \sum mad, m = 78 \text{ (78 h from 23 rainbow-day in 2018 season)}$$

(mae is 0.96 m/s, 1.10 m/s, 4.36 %, 0.46 mm/h for U, V, RH, RR, respectively)

$$S \equiv 100 \left(1 - \frac{1}{3} \frac{mad}{mae} \right), \text{ if } S < 0, S = 0$$

$$RWI \equiv 0.25 * \sum_{n=1}^4 S_n$$

	Low	$RWI \leq 63$
$RP \equiv$	Medium	$63 < RWI < 74$
	High	$RWI \geq 74$

陽明山彩虹天氣指數及彩虹機率預報

彩虹天氣指數(RWI)

0-63

63-74

74-100

彩虹機率(RP)

低 (Low)

中 (Medium)

高 (High)

彩虹持續性

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時間短

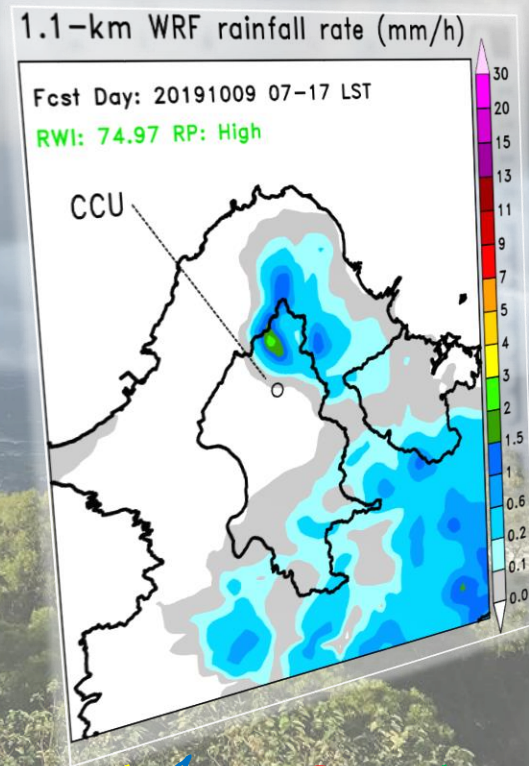
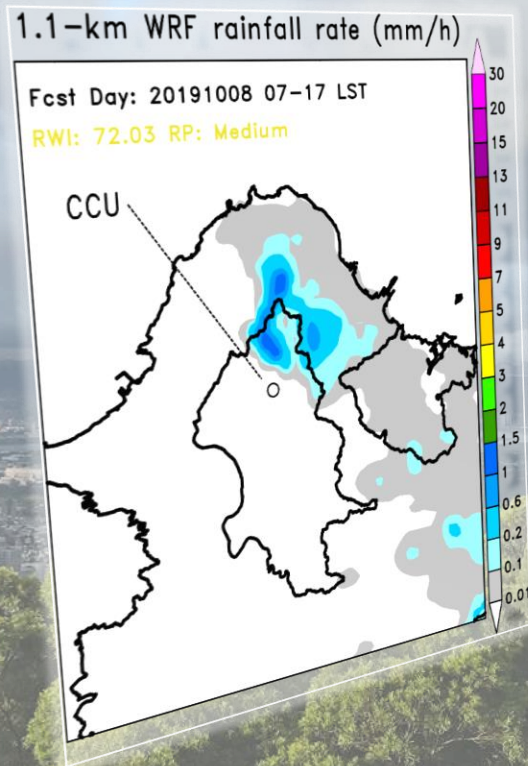
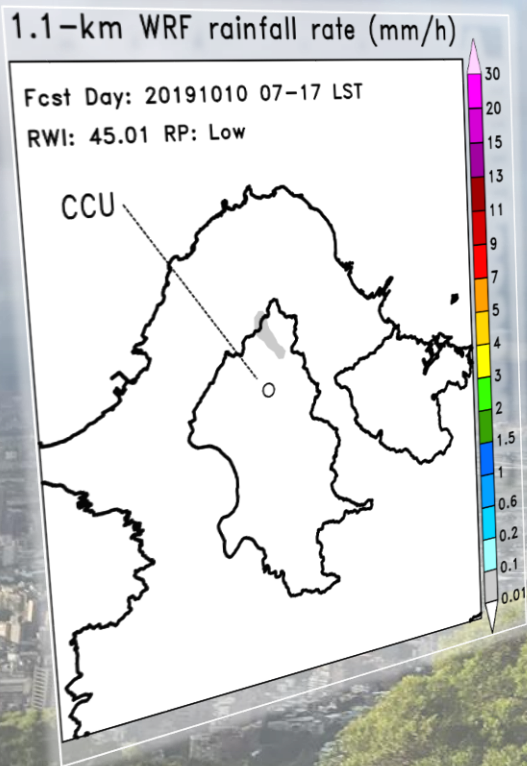
時間長

彩虹明亮度

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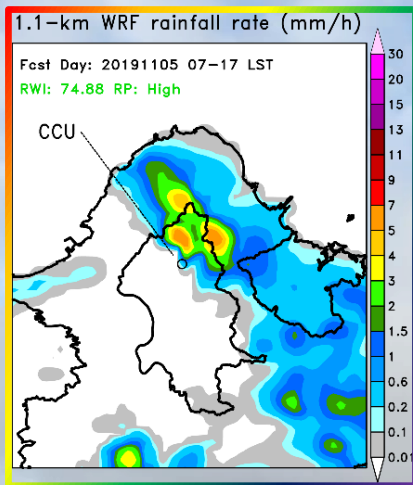
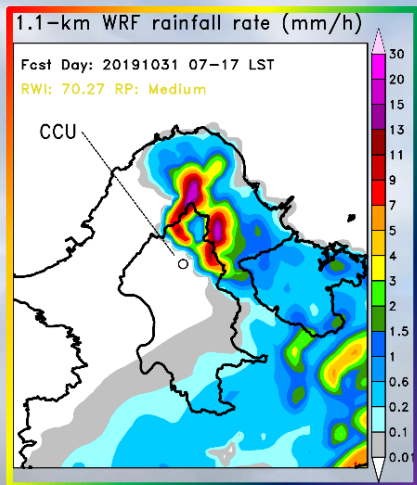
色澤暗淡

色澤明亮

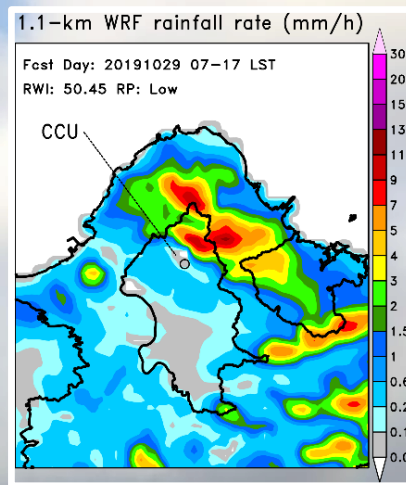


陽明山彩虹天氣指數及彩虹機率預報

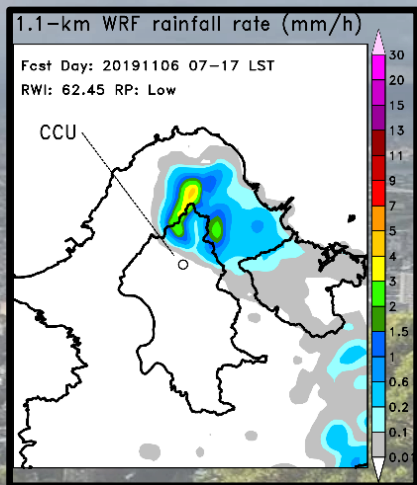
Hit



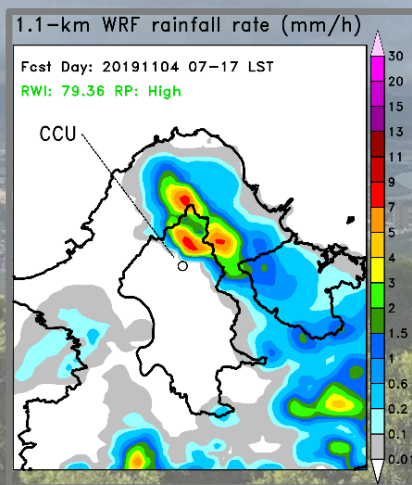
Correct Negative



Miss



False Alarm



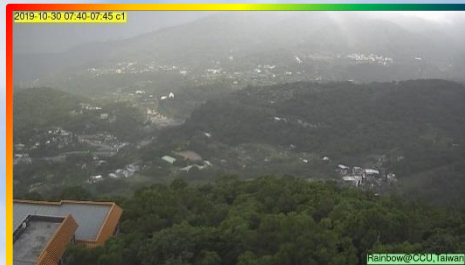
彩框 → 命中 Hit
白框 → 反中 Correct Negative
黑框 → 漏報 Miss
灰框 → 誤報 False Alarm

2019 Rainbow Season

2019-10-29



2019-10-30



2019-10-31



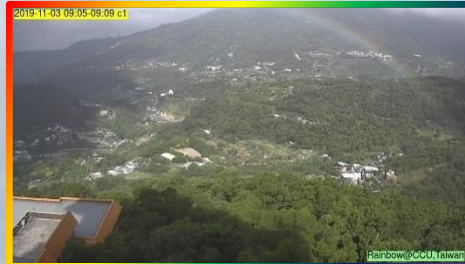
2019-11-01



2019-11-02



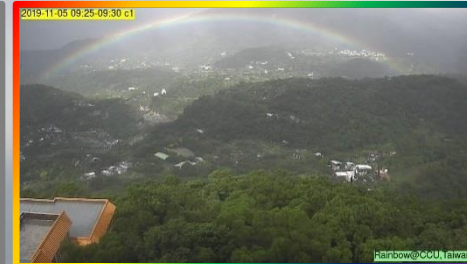
2019-11-03



2019-11-04



2019-11-05



2019-11-06



2019-11-07

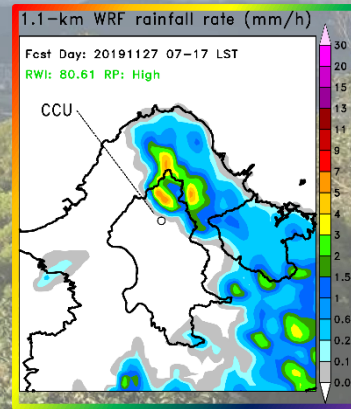
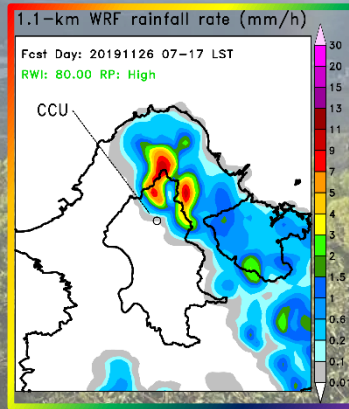
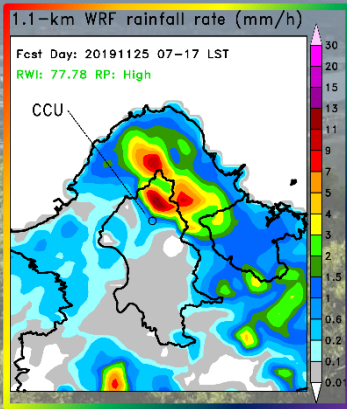
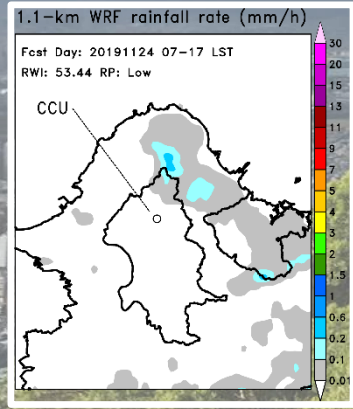
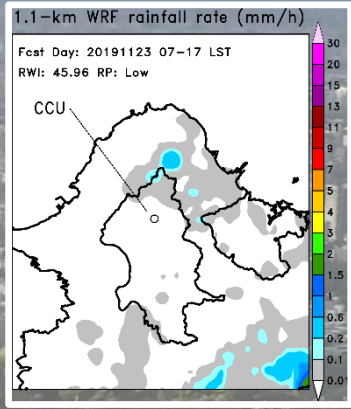
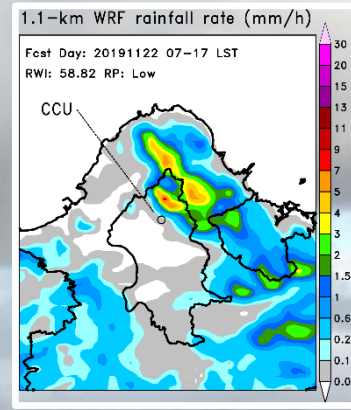
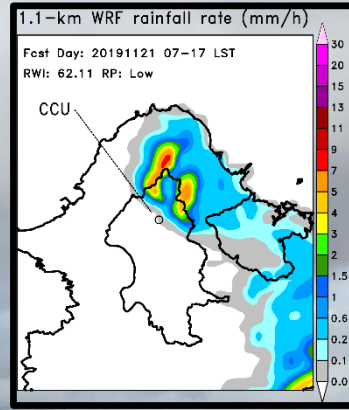
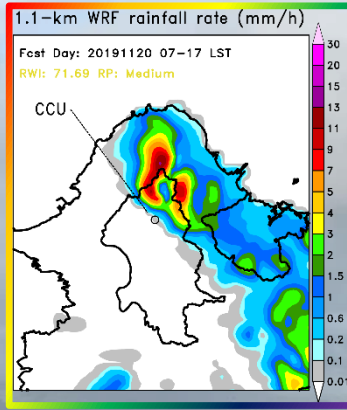
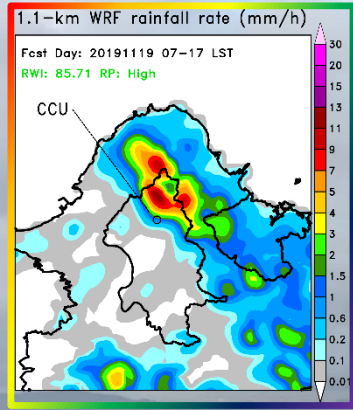
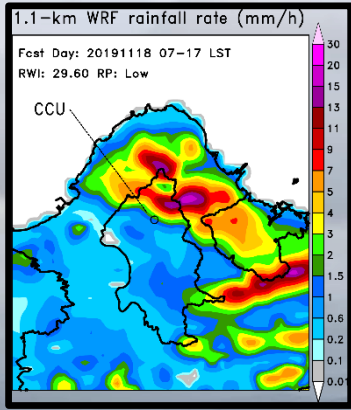
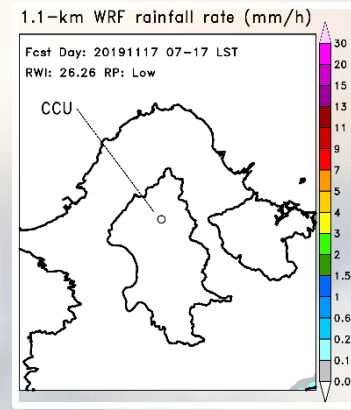
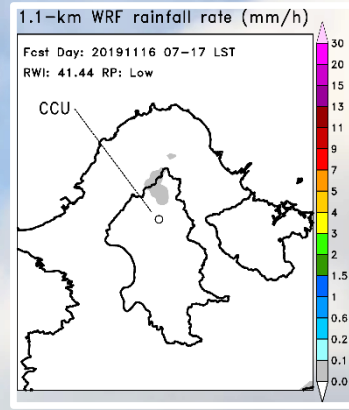
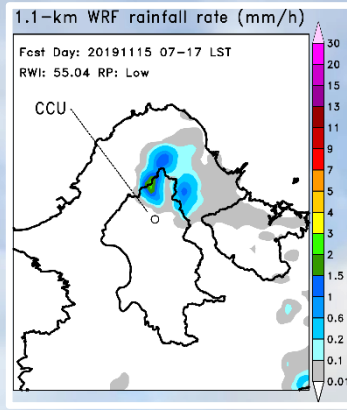
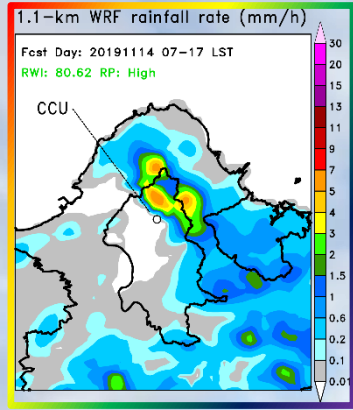
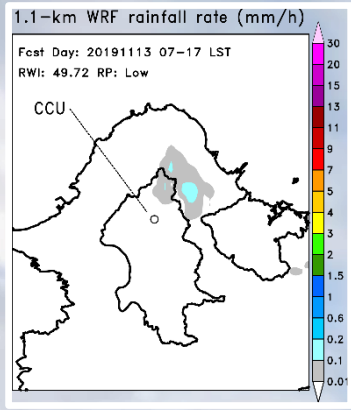


2019-11-08



彩框 → 命中
白框 → 反中
黑框 → 漏報
灰框 → 誤報

Daily RWI & RP - 2019/11/13-11/27

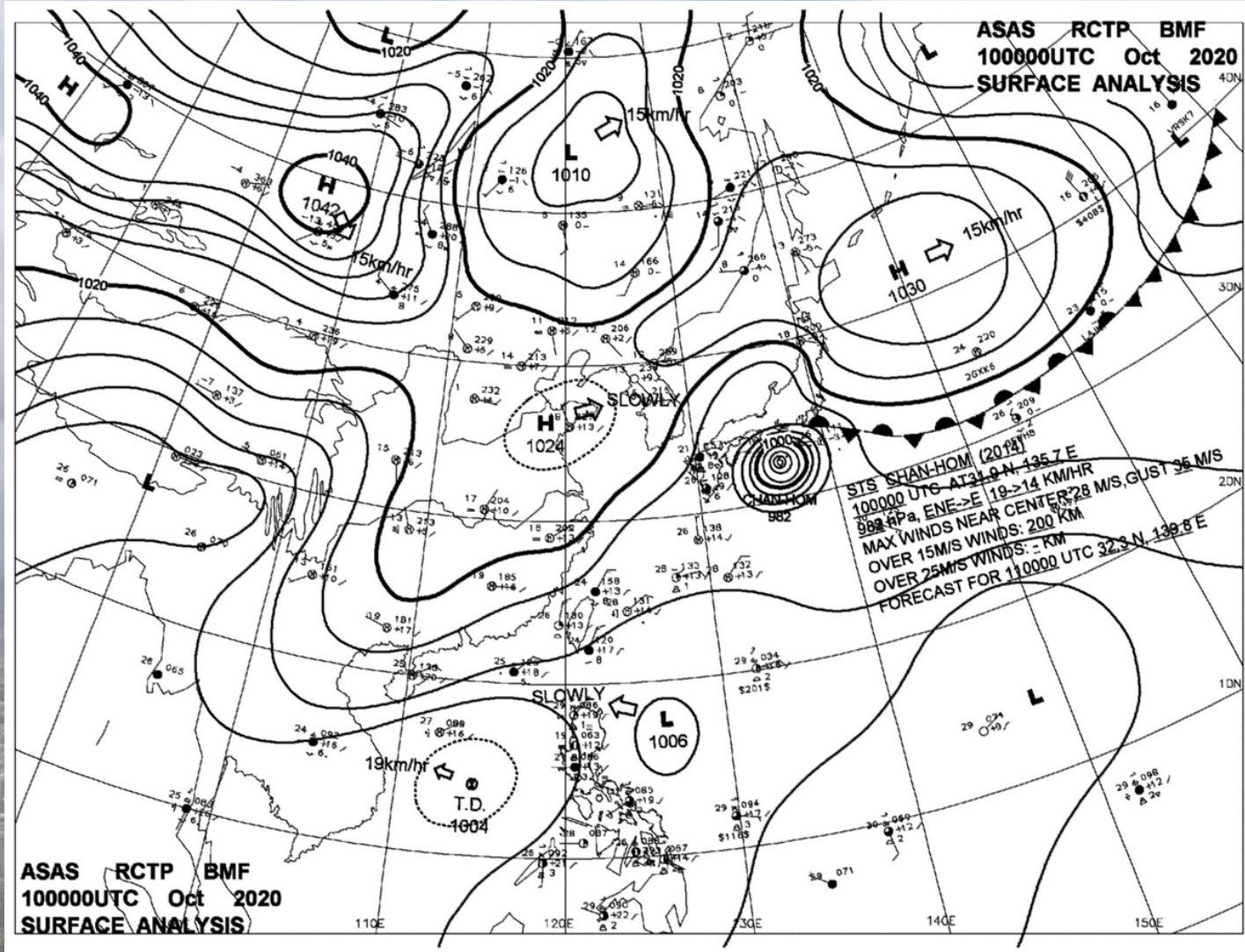


2020-21 彩虹季來臨前的10月!



2020年十月連續13天出現彩虹

地面天氣圖 (from CWB)

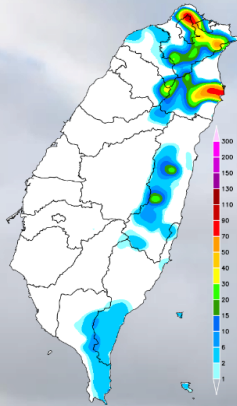


2020年十月連續13天出現彩虹

24-h 觀測累積降水 (from NCDR)

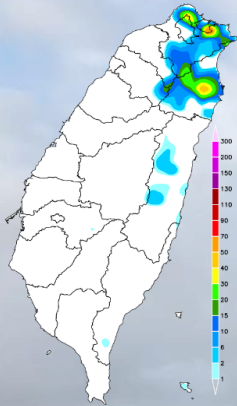
10/05

2020-10-06 00:00
24 Hours Accumulated Rainfall



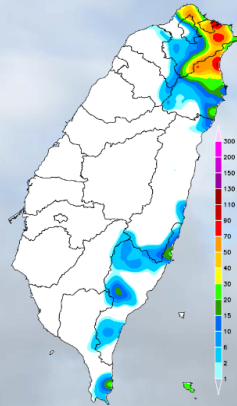
10/10

2020-10-11 00:00
24 Hours Accumulated Rainfall



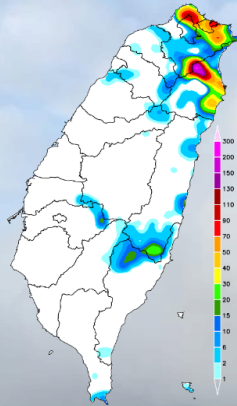
10/11

2020-10-12 00:00
24 Hours Accumulated Rainfall



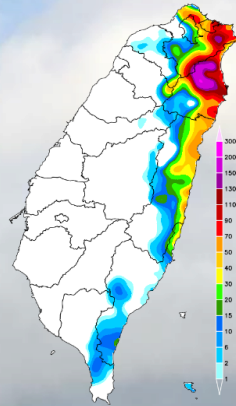
10/12

2020-10-13 00:00
24 Hours Accumulated Rainfall



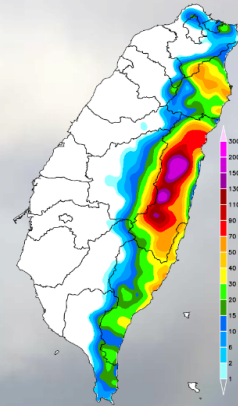
10/13

2020-10-14 00:00
24 Hours Accumulated Rainfall



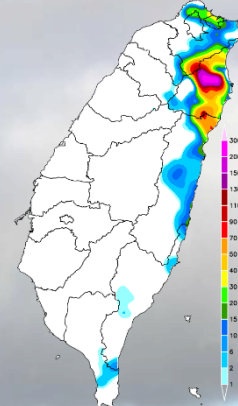
10/14

2020-10-15 00:00
24 Hours Accumulated Rainfall



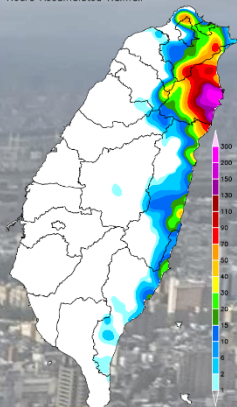
10/15

2020-10-16 00:00
24 Hours Accumulated Rainfall



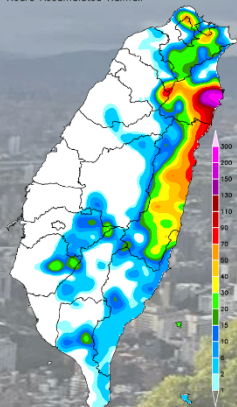
10/16

2020-10-17 00:00
24 Hours Accumulated Rainfall



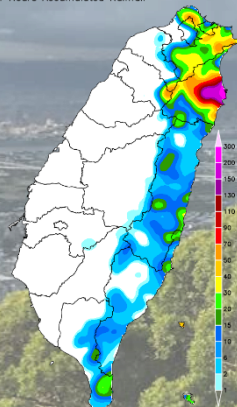
10/17

2020-10-18 00:00
24 Hours Accumulated Rainfall



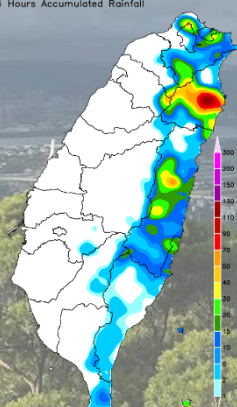
10/18

2020-10-19 00:00
24 Hours Accumulated Rainfall



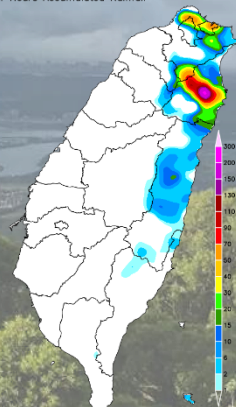
10/19

2020-10-20 00:00
24 Hours Accumulated Rainfall



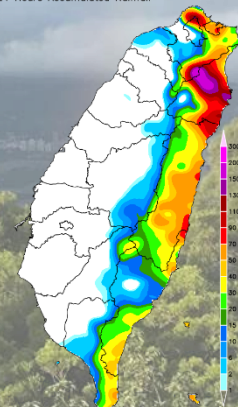
10/20

2020-10-21 00:00
24 Hours Accumulated Rainfall



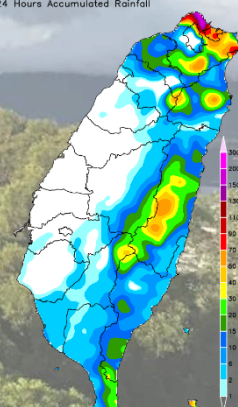
10/21

2020-10-22 00:00
24 Hours Accumulated Rainfall



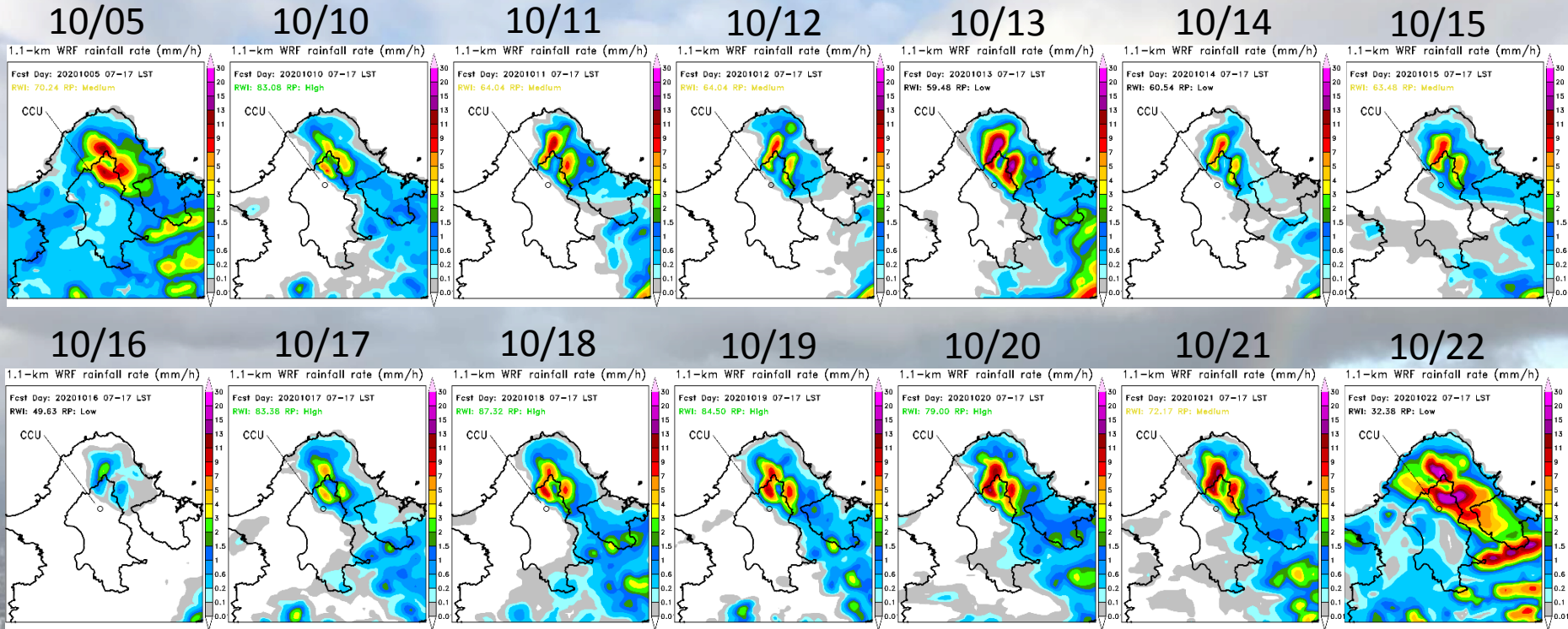
10/22

2020-10-23 00:00
24 Hours Accumulated Rainfall



Daily RWI & RP - 2020-21 Rainbow Season

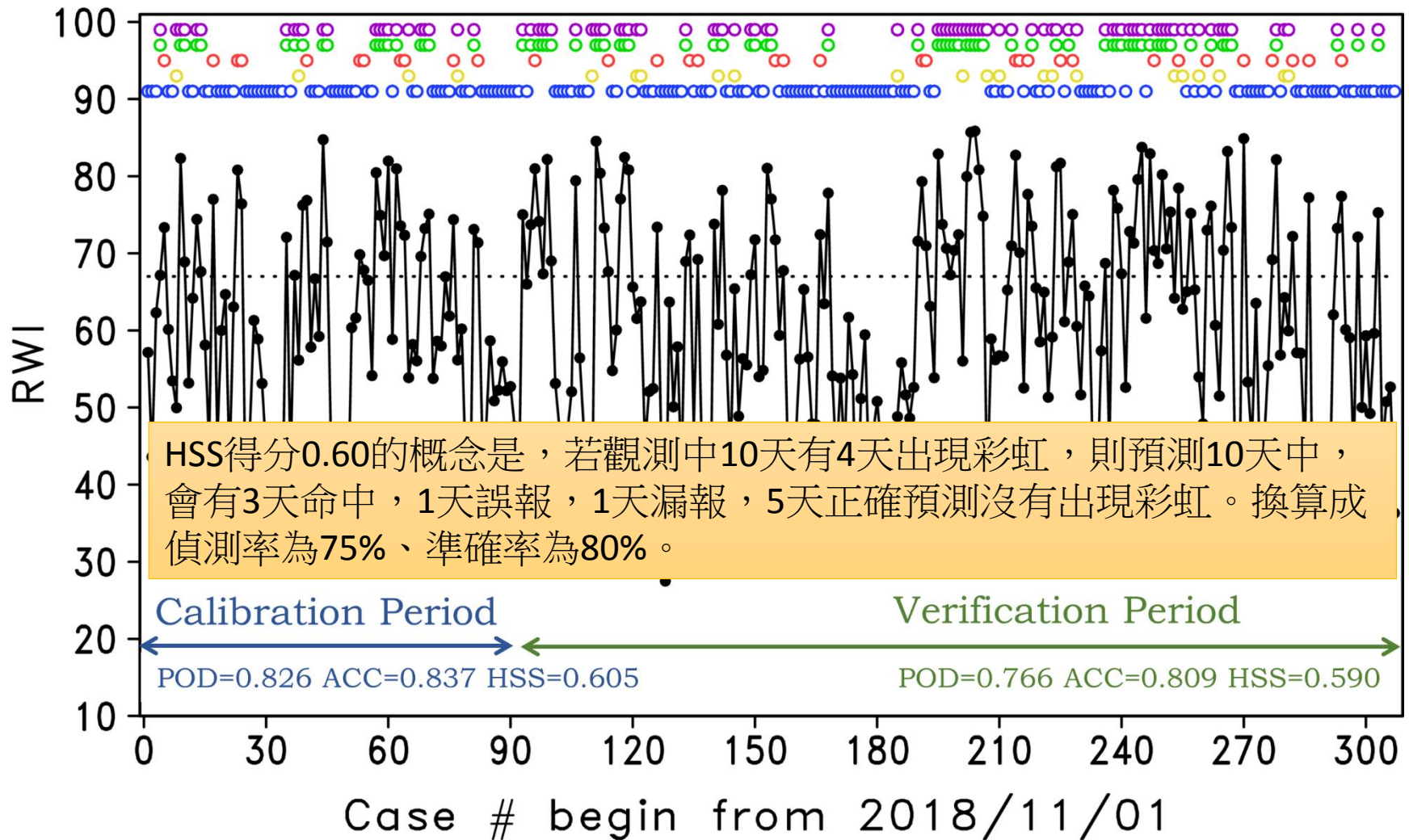
CCUWRF 1 km 白天平均時雨量 (D1: Fcst. 23-33 h)



偵測率 POD = 10/14 = 0.714

Forecast skill score

Time series of RWI and forecast performance



追虹花絮 2019/09/04

「巷子內」的阿嬤@湖山里



追虹花絮 2019/09/26

跟早起的大姐聊追虹@第二停車場觀景庭

上山追彩虹，追到了！



追虹花絮 2019/11/01

上『通識：生活氣象』～下課空檔拍彩虹去。我是黃雀！！

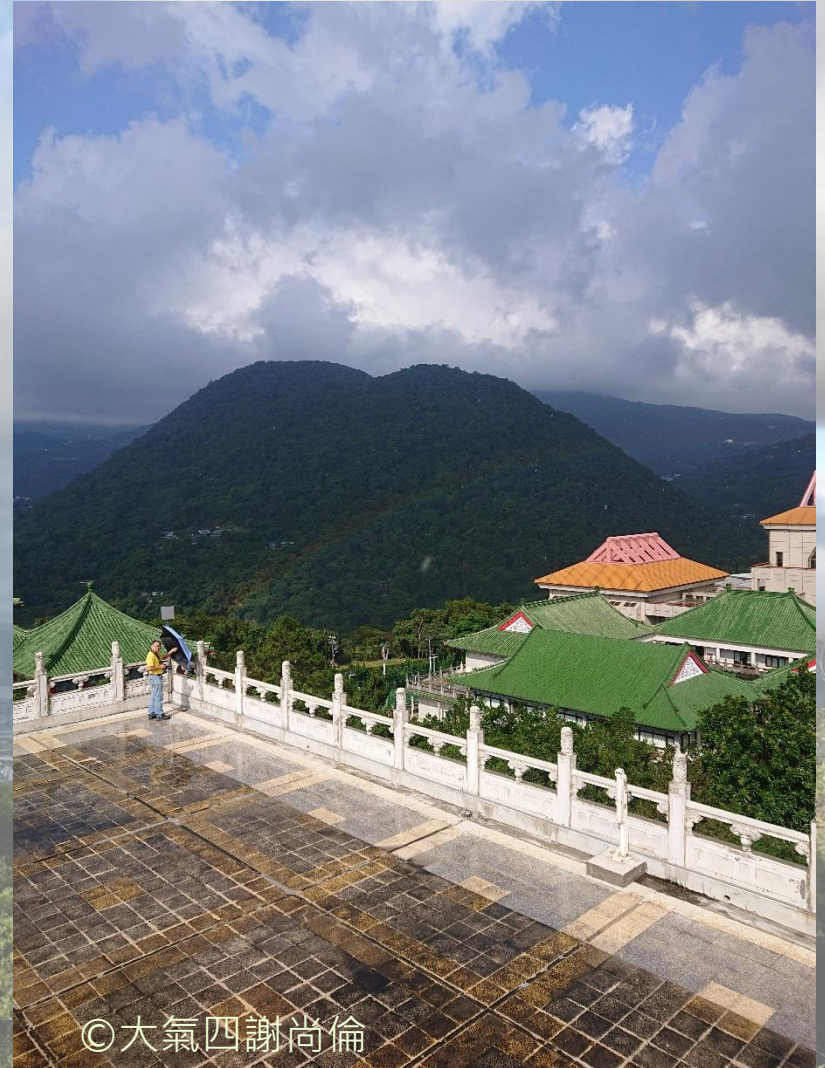


追虹花絮 2019.11.07

清晨一早東北風還沒增強，山上沒彩虹。
有點沮喪 (RP: Medium)!!



下午東北風增強，彩虹出現了！
氣象界攝影大師劉清煌老師也被偷拍了！！



©大氣四謝尚倫

追虹花絮 2019.12.15

通識課『生活氣象』，特別邀請林偉竣攝影師上山分享大氣雲海攝影心得分享給同學。演講後學校也出現彩虹，之後便一起上山探勘彩虹攝影點！



大氣科學系職涯經驗分享 淺談大氣光相 與雲海攝影

時間：108年12月20日（星期五）

9:10~10:00

地點：大成館107教室

講者：林偉竣 攝影師

你看過或拍過嗎？

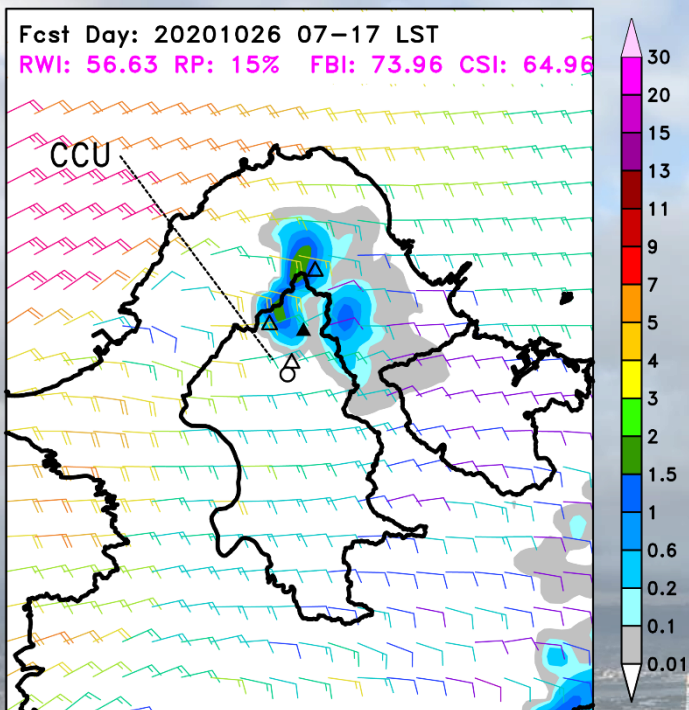
Fogbow 霧虹 白色彩虹

Gloary 光環 觀音圈 布洛肯光

歡迎大家踴躍參加！

霧虹預報

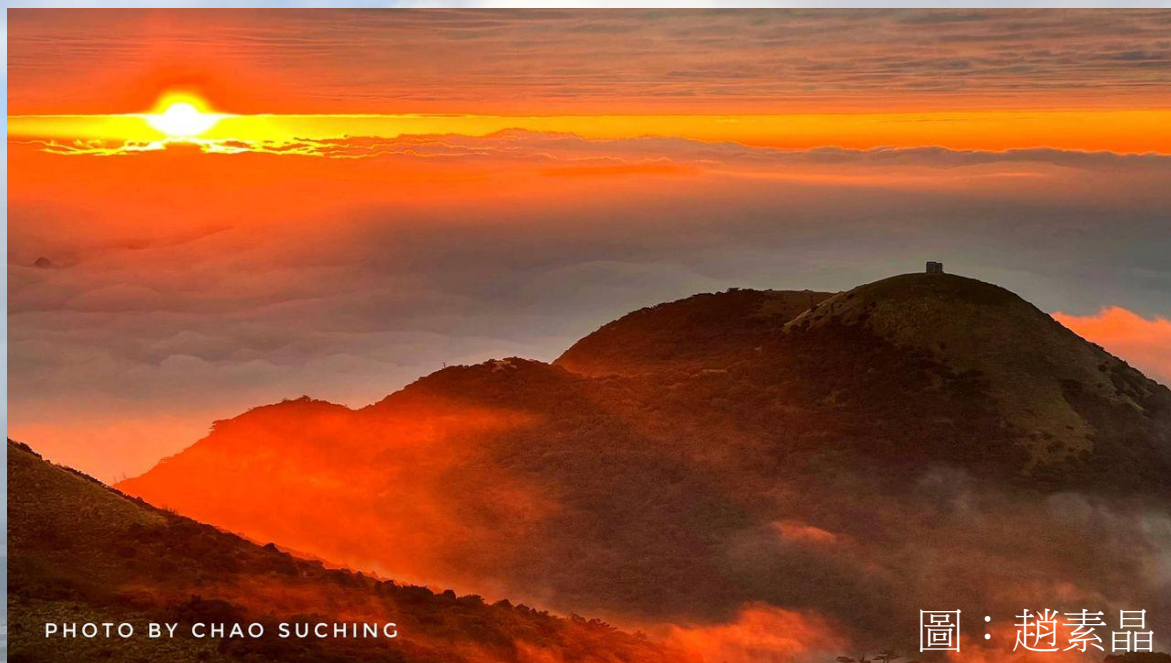
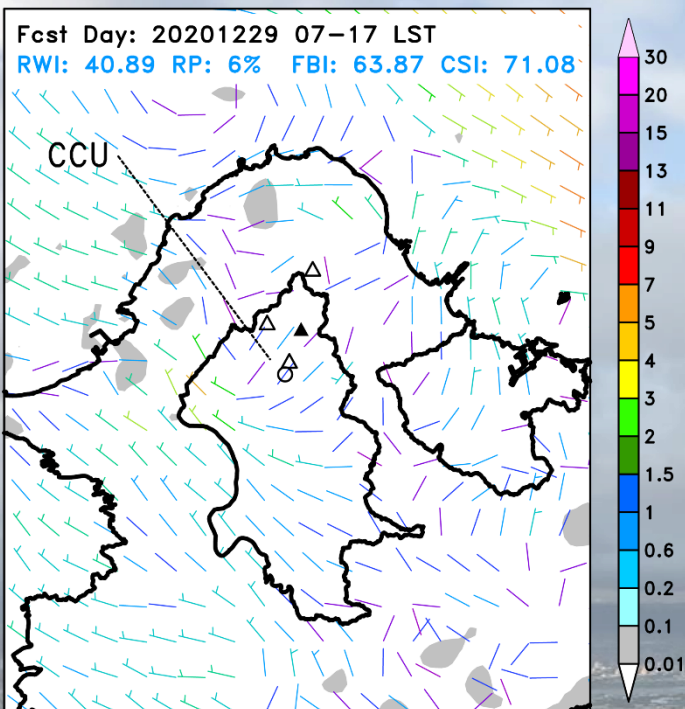
1.1-km RR(mm/h), Wind(knots), RWI&RP



偵測率: 50%

雲海預報

1.1-km RR(mm/h), Wind(knots), RWI&RP



偵測率: 50%

彩虹 & 霧虹 & 雲海 2021.09.28

1.1-km RR(mm/h), Wind(knots), RWI&RP

Fcs
RWI

周昆炫
2021.09.28 600x

2021-09-28 08:35-08:39 c1



讚 · 回覆 · 1天

2

劉武俊

劉武俊

霧虹 & 雲海 2021.09.29

趙素晶 ▶ 發現陽明山

1 小時 · 🌐

9/29 擎天崗的觀音圈 (布洛肯現象)



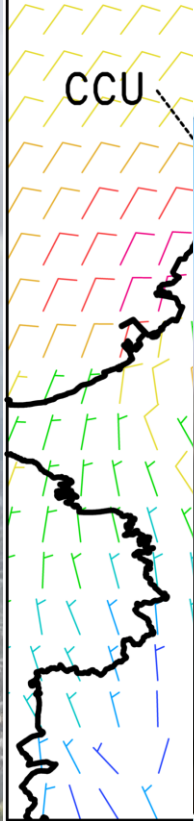
周昆炫

1 小時 · 🌐

草山賣光！今天“光”線是800公尺！

1.1-km

Fcst Day:
RWI: 40.6



圖：趙素晶

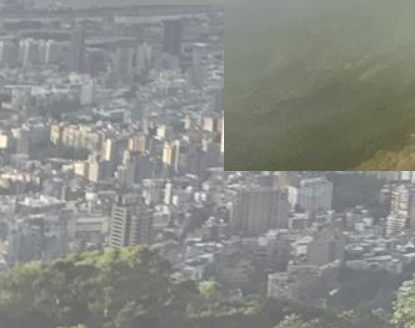
圖：趙素晶

霧虹 & 觀音圈 2021.10.01-03

10/1 圖：趙素晶

10/2 圖：趙素晶

10/3 圖：Vivian Tsai



追虹去之

發現彩虹谷~



©大氣系劉清煌教授

Rainbow@Taiwan

陽明山400-600公尺西北側天空-上午

陽明山前山公園、中正公園



陽明山400-600公尺西北側天空-上午

陽明山前山公園、中正公園



陽明山400-600公尺東北側天空-下午

陽明山美軍宿舍群、花卉試驗中心

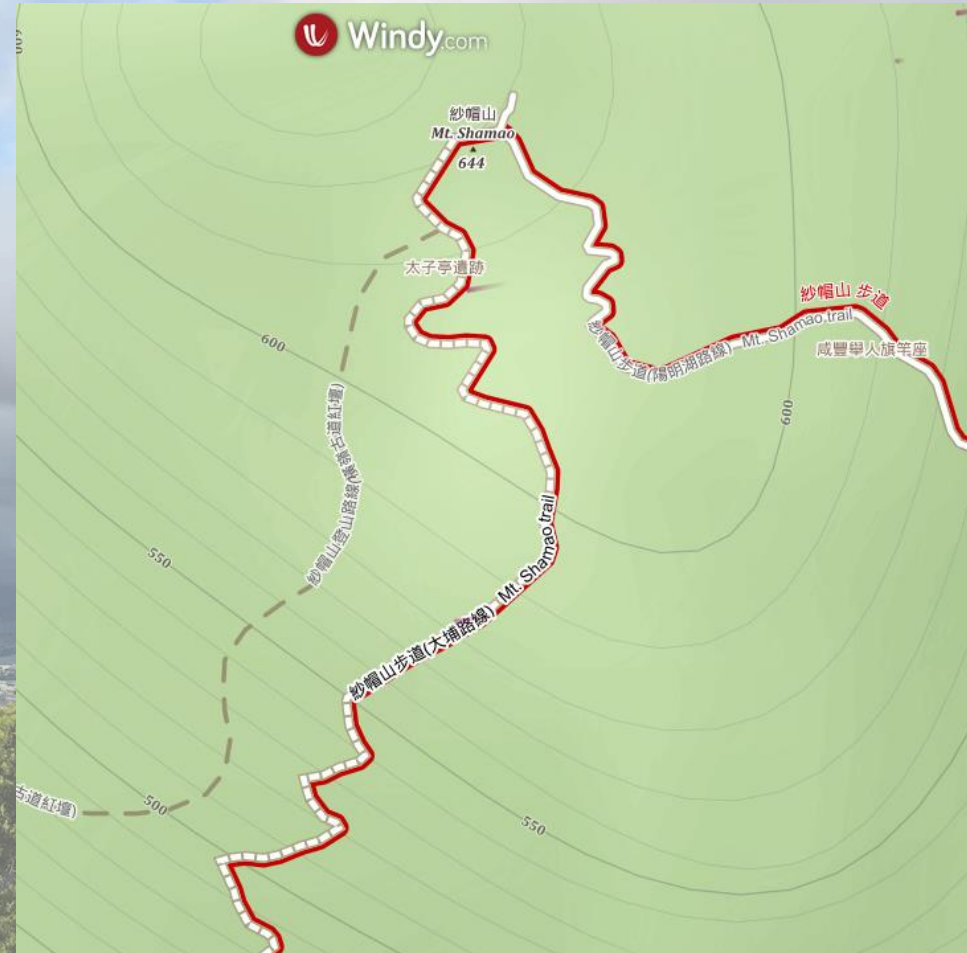
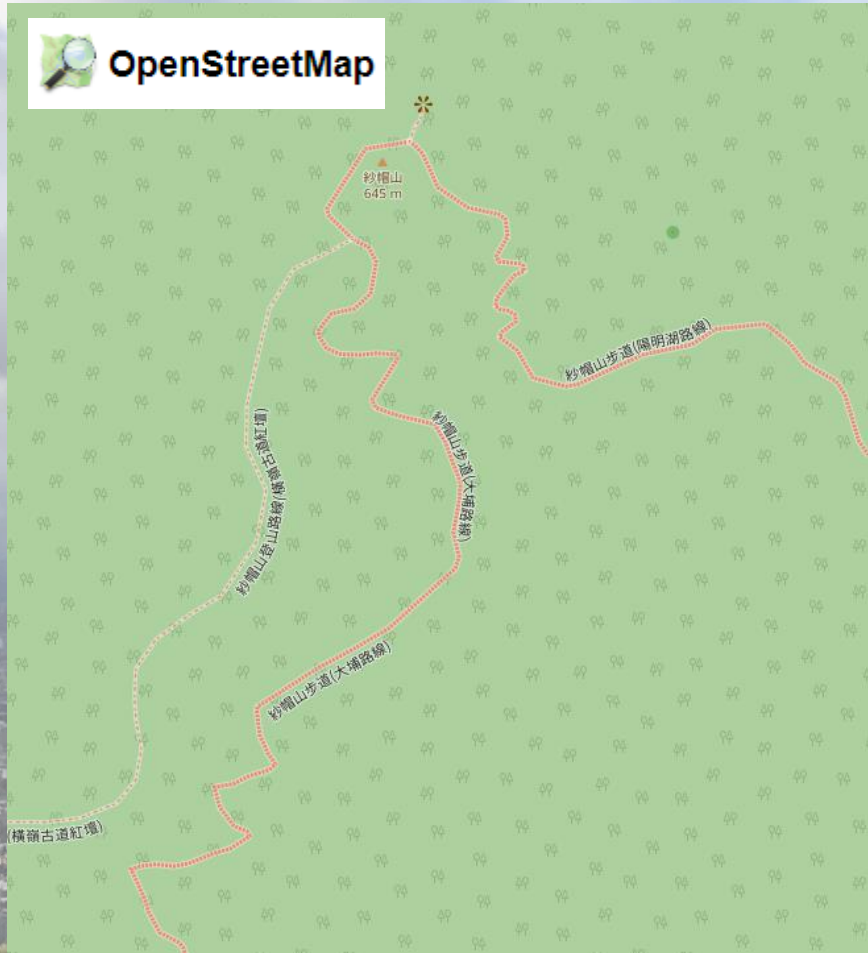


陽明山400-600公尺東北側天空-下午

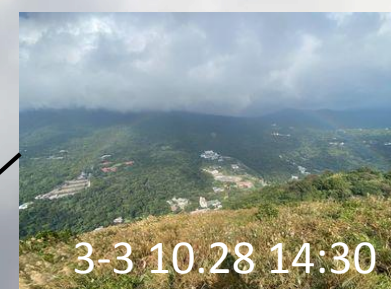
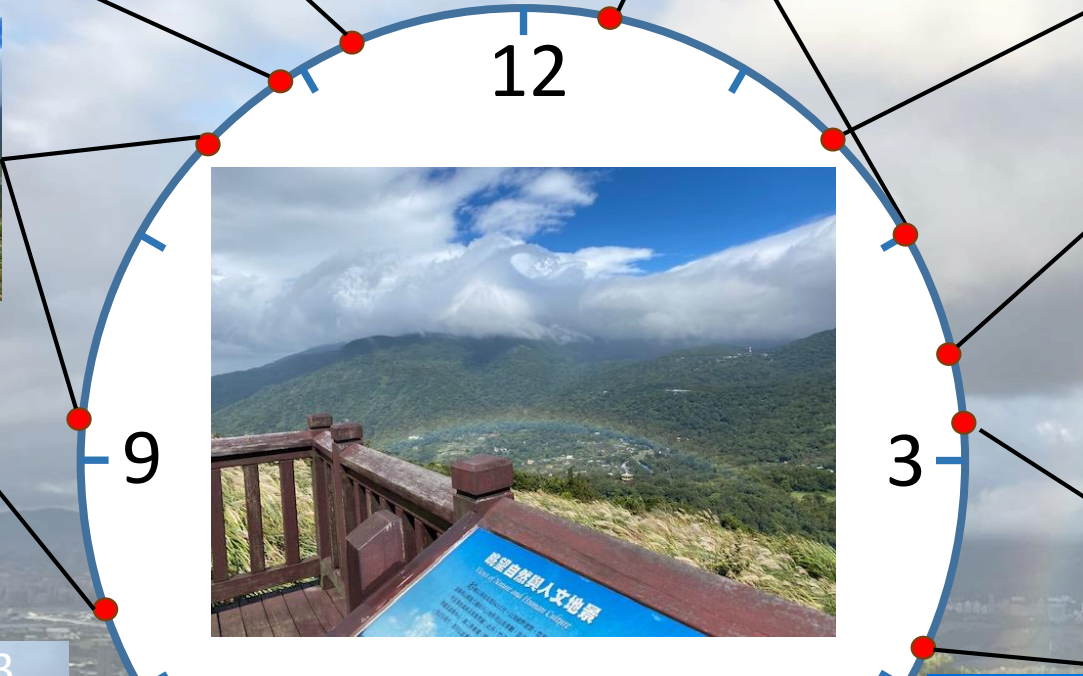
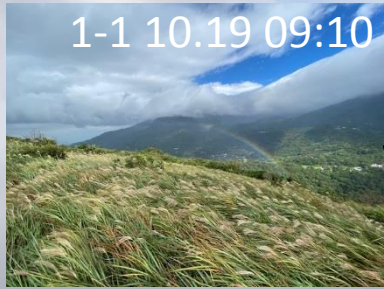
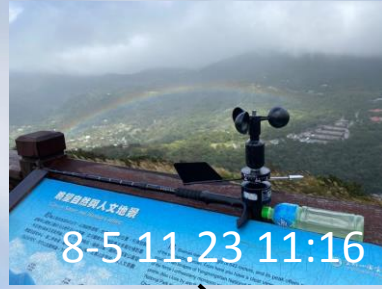
陽明山美軍宿舍群、花卉試驗中心



線上地圖比較@紗帽山

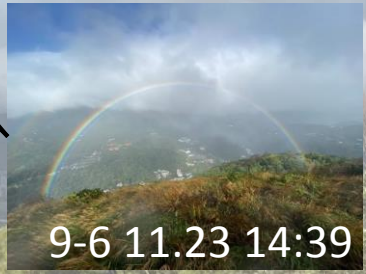
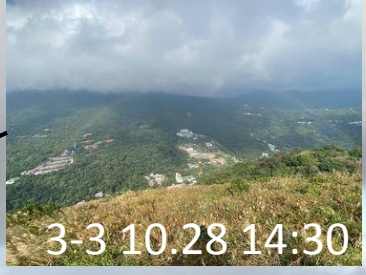
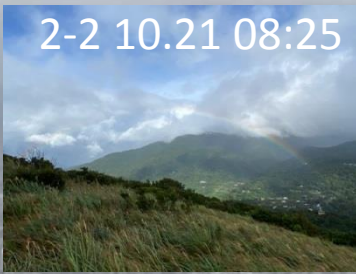
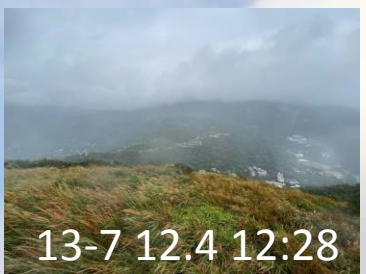
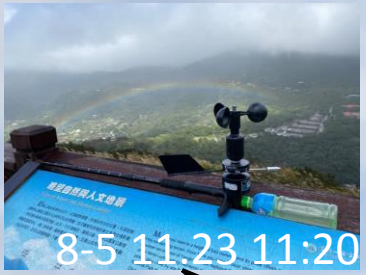


發現彩虹谷：同一地點可以觀察到整天出現的彩虹！

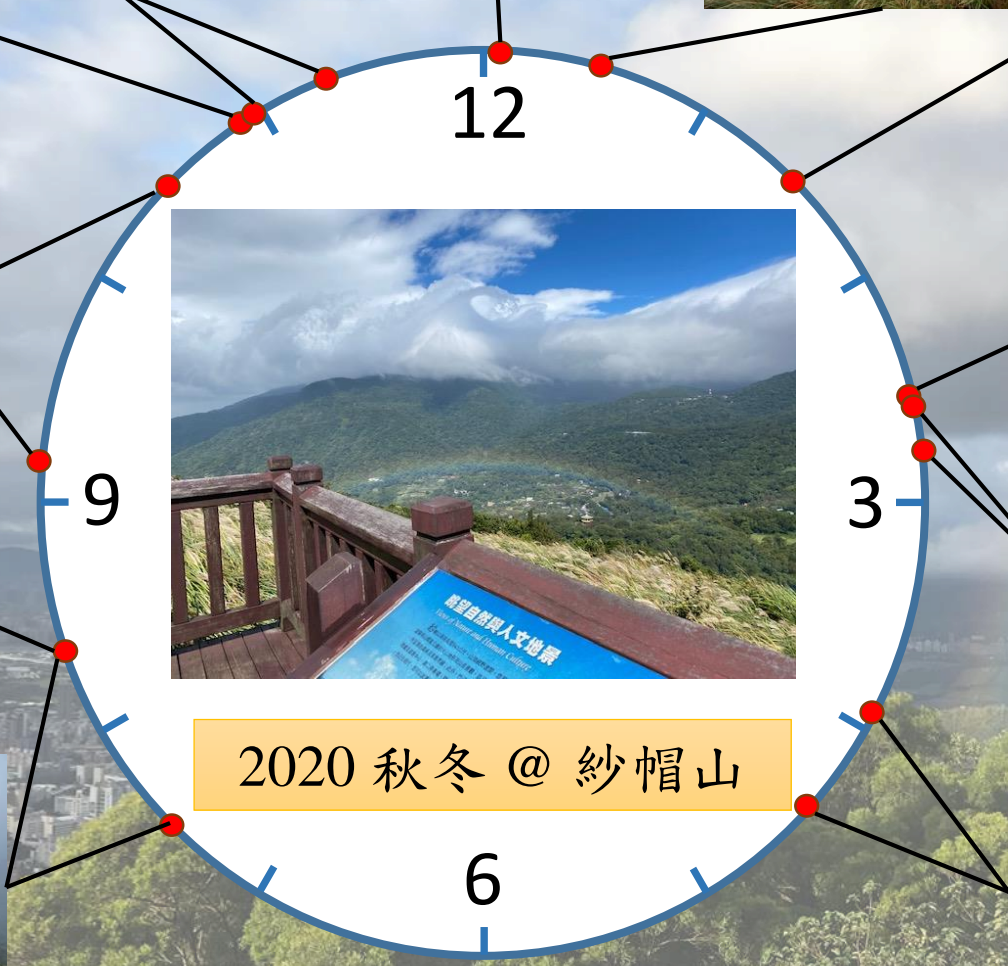


2020 秋 @ 紗帽山

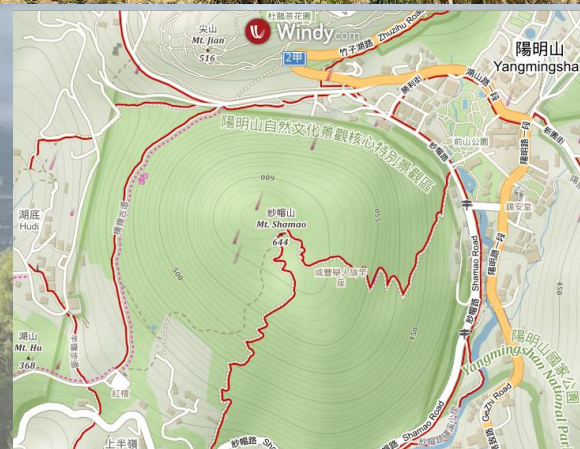
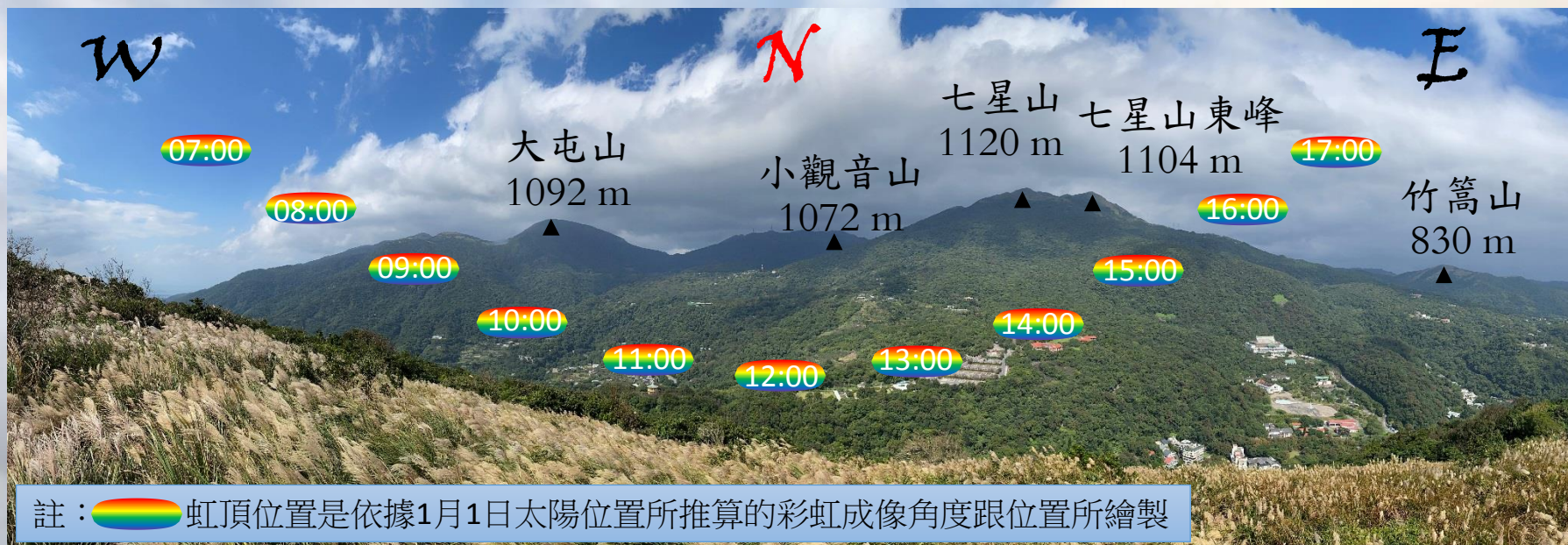
陽明山的彩虹谷：同一地點可以觀察到整天出現的彩虹！



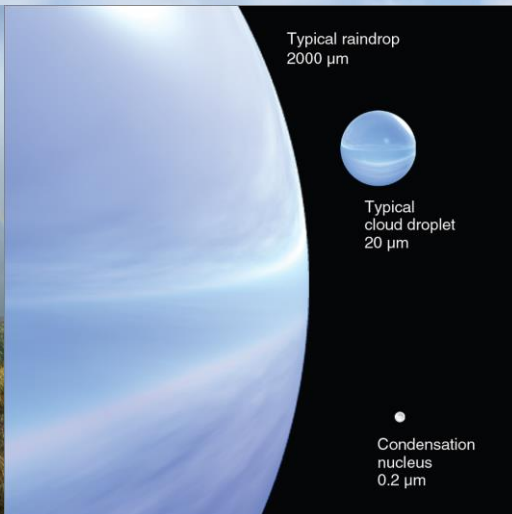
2020 秋冬 @ 紗帽山



陽明山的彩虹谷：同一地點能觀察到整天可以出現的彩虹！



草山虹



圖：趙素晶

- 彩虹(rainbow)
- 強東北季風
- 大屯火山群低海拔的山頭或山腰
- 光線經水滴(直徑2mm)折射反射形成

- 霧虹 (fog bow)
- 弱東北季風
- 大屯火山群的山脊
- 光線經霧滴(直徑0.02mm)折射反射形成

追雪去 定量降雪預報-QSF

影／陽明山下冰霰了！她睫毛掛著小冰珠拍下絕美畫面

2020-12-31 12:10 聯合報 / 記者胡瑞玲 / 台北即時報導

+ 天氣動態 ▾



有民眾今天在七星山拍攝冰霰美景。圖／趙姓民眾授權提供

一名趙姓民眾也PO照表示，今天(12/31)只有粗粗的冰霰不斷打在眼睛周圍，口中吐氣，睫毛上掛著一排小冰珠，眯著眼睛透過冰珠看出去的世界，有特別的光影，很有趣也十分迷戀這樣的感受。

定量降雪預報-QSF

2021第一場雪！太平山山毛櫸步道飄雪 遊客驚呼「難忘的新年禮物」



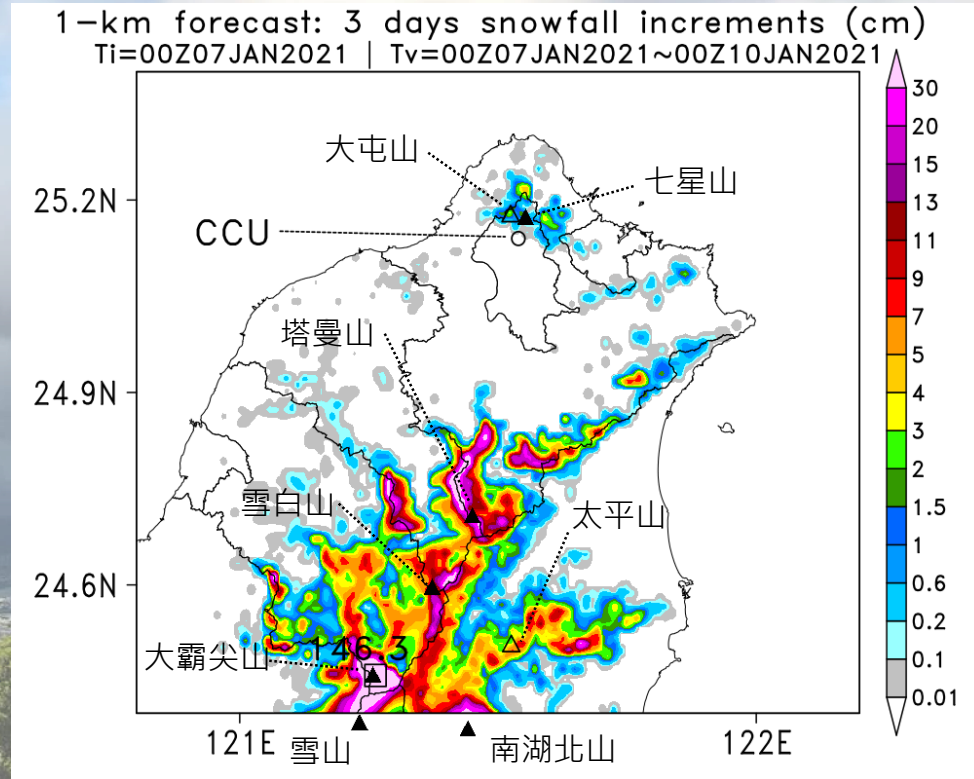
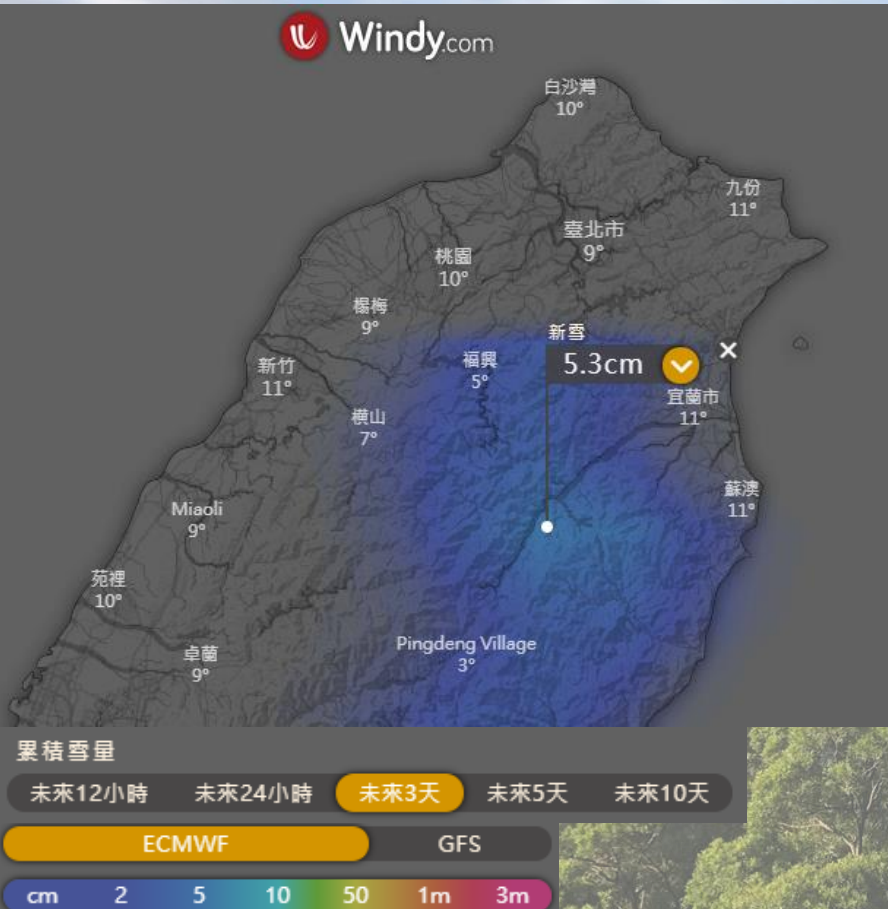
太平山山毛櫸步道今天上午飄雪，現場成了銀白世界。（記者江志雄翻攝）

寒流來襲，太平山連日來降到零下低溫，前幾天因濕度不足未能降雪，1/1上午7點多，山毛櫸步道後段飄下雪花，雖然只有半小時，仍讓遊客喜出望外。

定量降雪預報-QSF

ECMWF IFS 9-km forecast

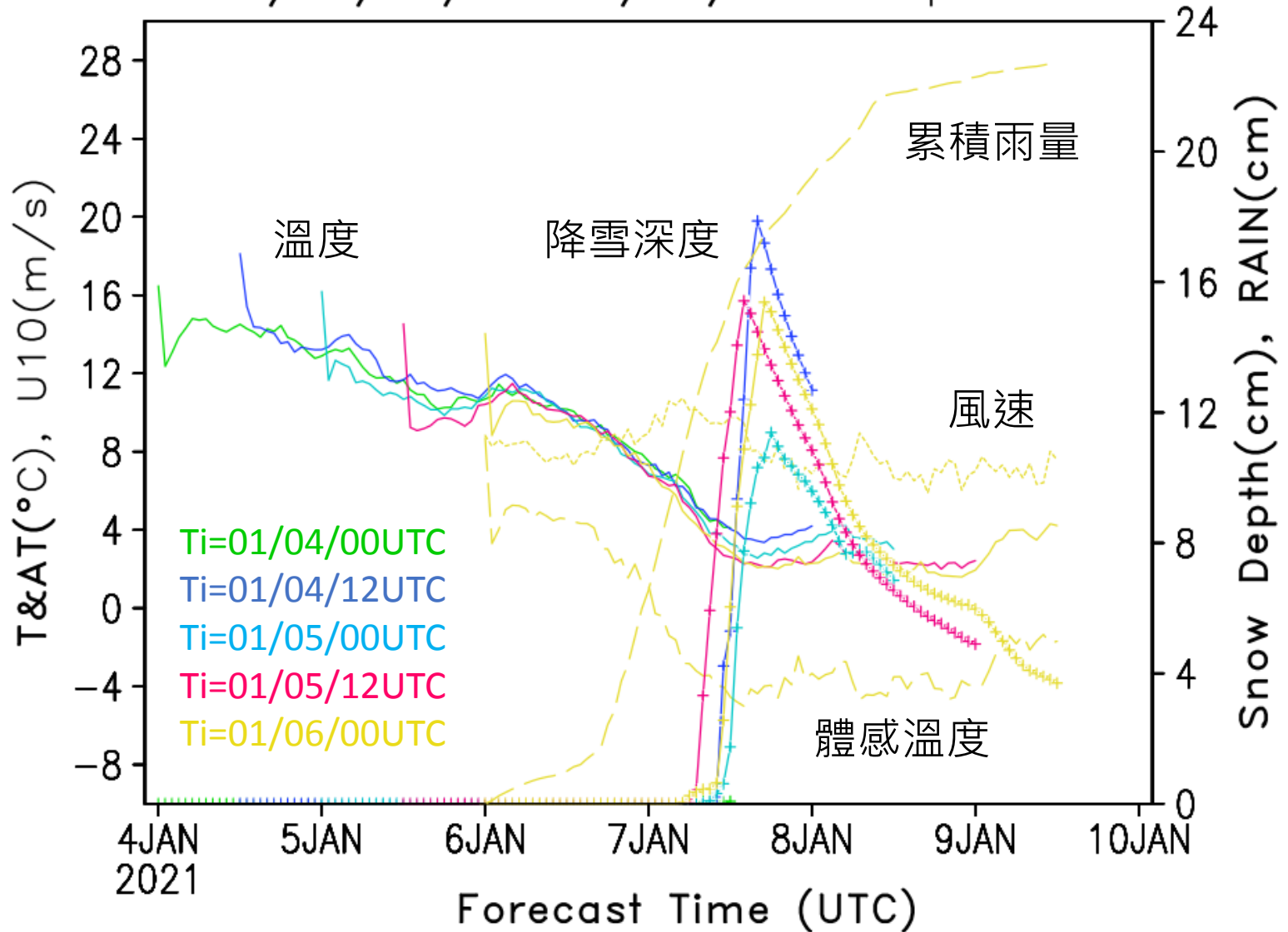
CCU WRF 1-km forecast



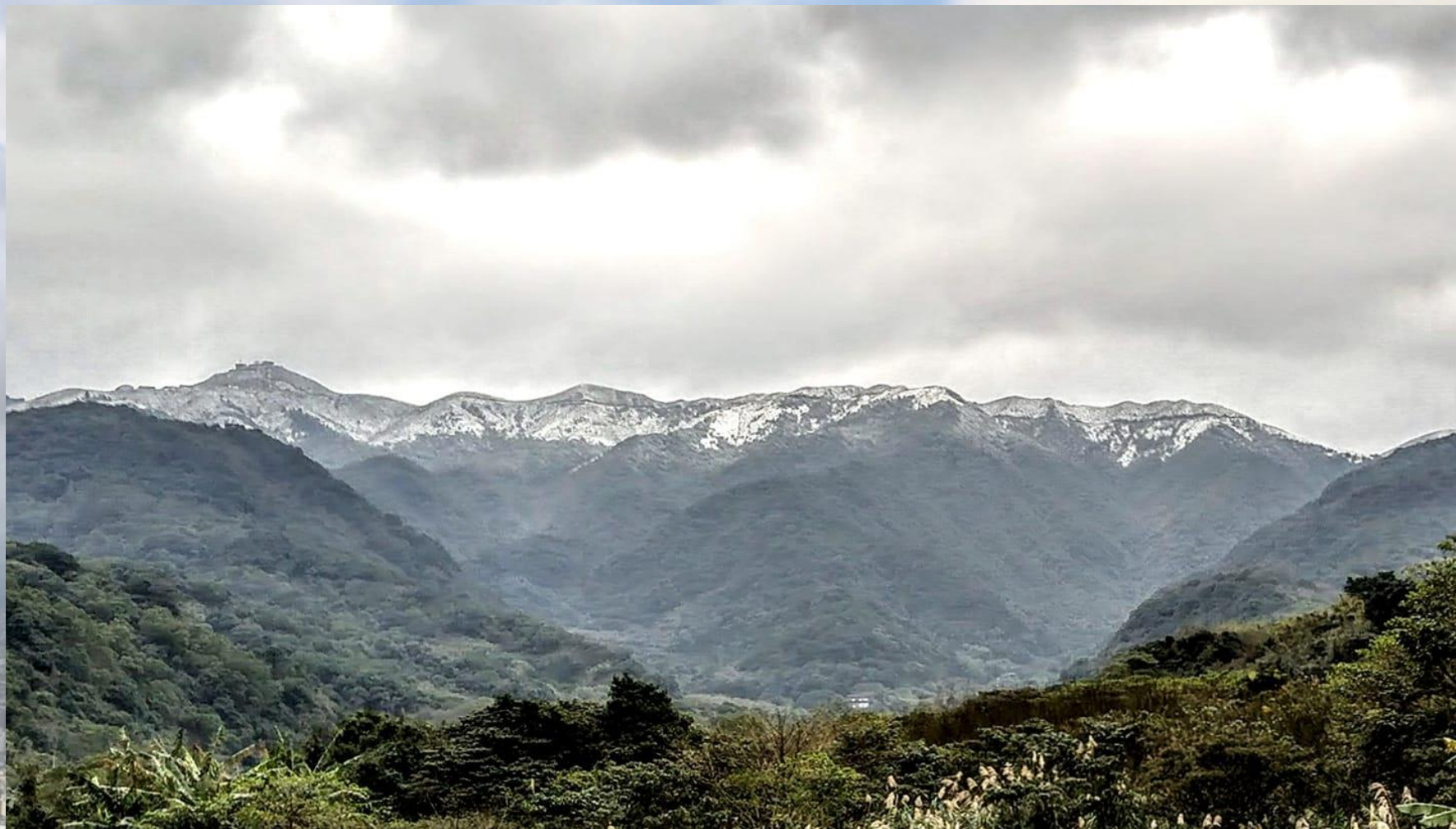
參考時間: 2021-01-07T00:00:00Z

Rainbow@Taiwan

T,AT,U10,RAIN,SNOWD @ Mt. Datun (MH=863.3m)
Ti= 2021/01/04/00-01/06/00 UTC | Tv= 0-84 h



2021.01.08 陽明山瑞雪



© 劉武俊

2021.01.08 陽明山瑞雪



2021.01.08 陽明山瑞雪



2021.01.08 陽明山瑞雪



© 蔡吉政

2021.01.08 陽明山瑞雪



2021.01.08 陽明山瑞雪

屯山積雪-淡北八景之一



© 賀豐峰

1967.12.31 陽明山瑞雪 歷史照片

陽明山瑞雪紛飛 氣溫零下三度 小型賞雪隊紛紛登山 七星山上積雪達尺許

賞雪隊伍的越來越多，計程車、遊覽車，甚至大卡車，為輸送這一批批賞雪者的主要交通工具，欣賞者的衣著皮衣、手套、圍巾、禦寒用品，五色繽紛，活動在白皚皚的雪景中，煞是好看。一座座白冬的雪花人，幾乎隨處可見，閃閃亮亮的瑞雪，到；及顯出亮晶晶地銀光，它們與層層雲交織成一片令人嚮往美景，故賞雪者均樂而忘返。

【陽明山訊】陽明山下雪了！陽明山下雪了！寒風驟降，冷雪紛飛，前一日陽明山公園路繼二八日陽明山附近的七號山降雪後，今天天氣更加嚴寒，陽明山森林公園附近已隨手可抓得片片瑞雪。車站連的觀摩社也看到今年早來的雪花，一批批賞雪的人，已組織小型的賞雪隊，前往摘取一雪片，今天的氣溫較昨天更冷，實地測量溫度為零下三度。

陽明山瑞雪紛飛，昨日繼續不停地下降，各處呈現一片吉祥的預兆，象徵著國運昌隆。

陽明山附近的大屯山、小屯山、七星山等經三天日夜不停的降雪，積雪度已逐漸加深，最高積度已高達一尺半寸，尤以七星山的積雪度最高。

氣溫方面陽明山昨日更加嚴寒，從陽明山玉山的後爺地區，已到處可見紛飛的雪花，陰風而陣，落地即逝。昨陽明山氣溫低地則更。雪花正不斷地飄



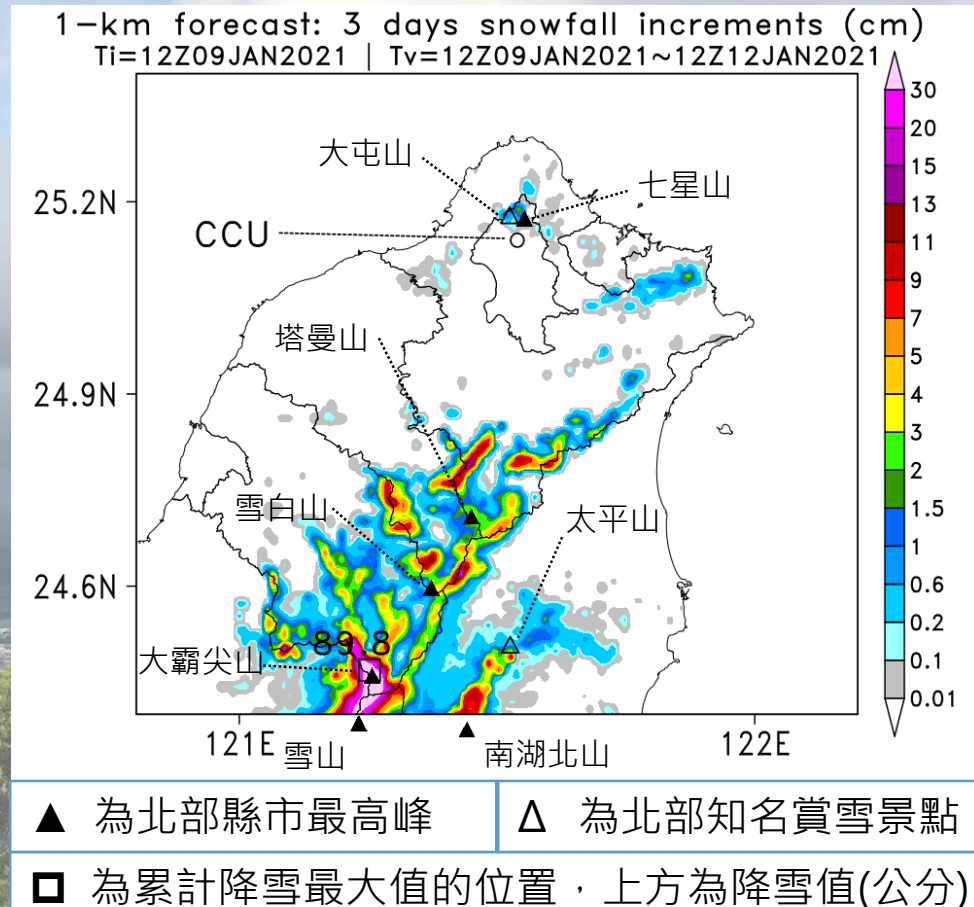
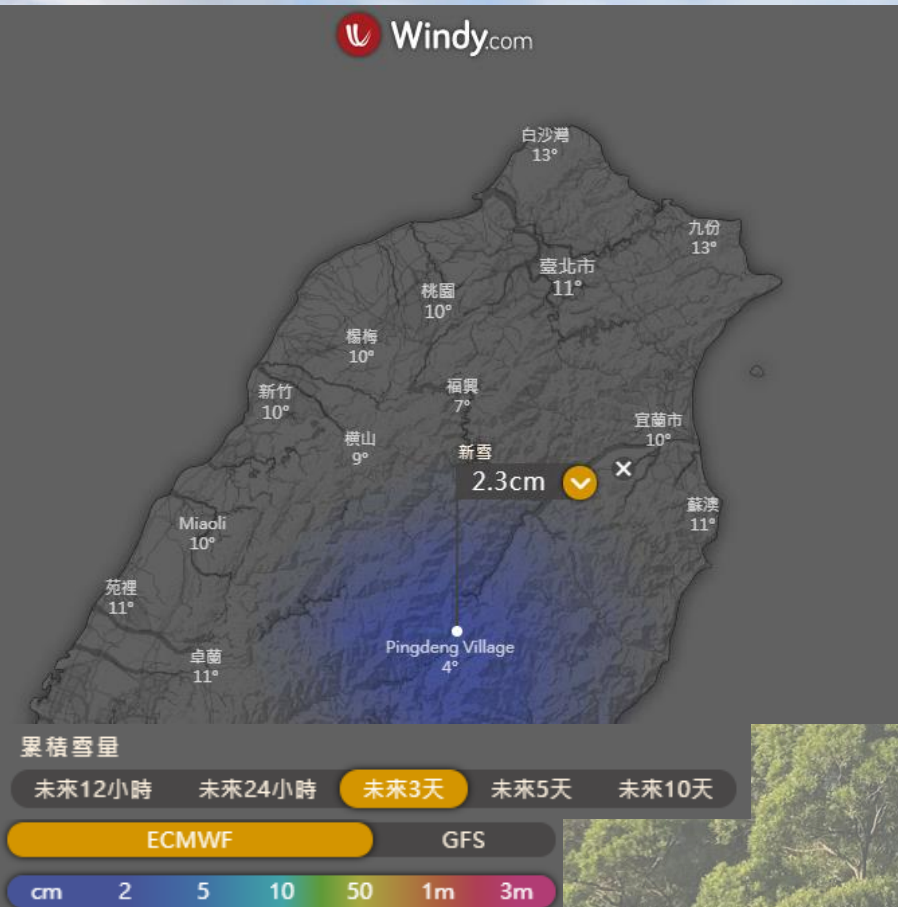
1967.12.31 晨前天晚上 七星山主峰 大雪紛飛 登山客未到前趕往

定量降雪預報-QSF

定量降雪預報為文大大氣系周昆炫教授研究團隊之近期研究發現，以上言論僅提供學術討論之用，氣象預報應以氣象局為準

歐洲模式9-km解析度預測未來3天累積新雪

文大大氣1-km解析度預測未來3天累積新雪



模式起始時間：2021-01-09-12Z

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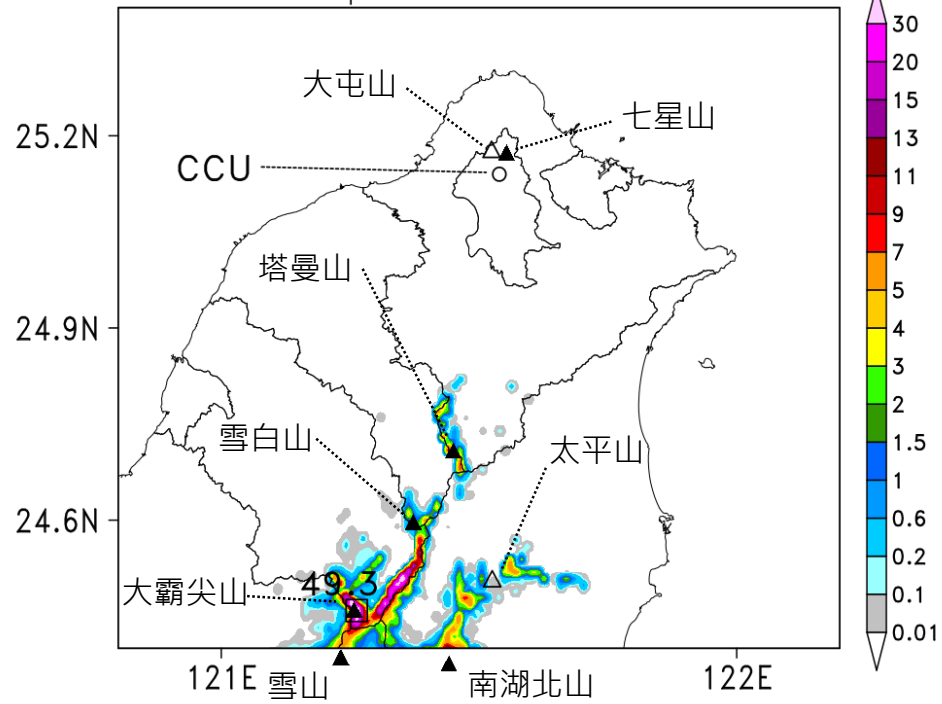
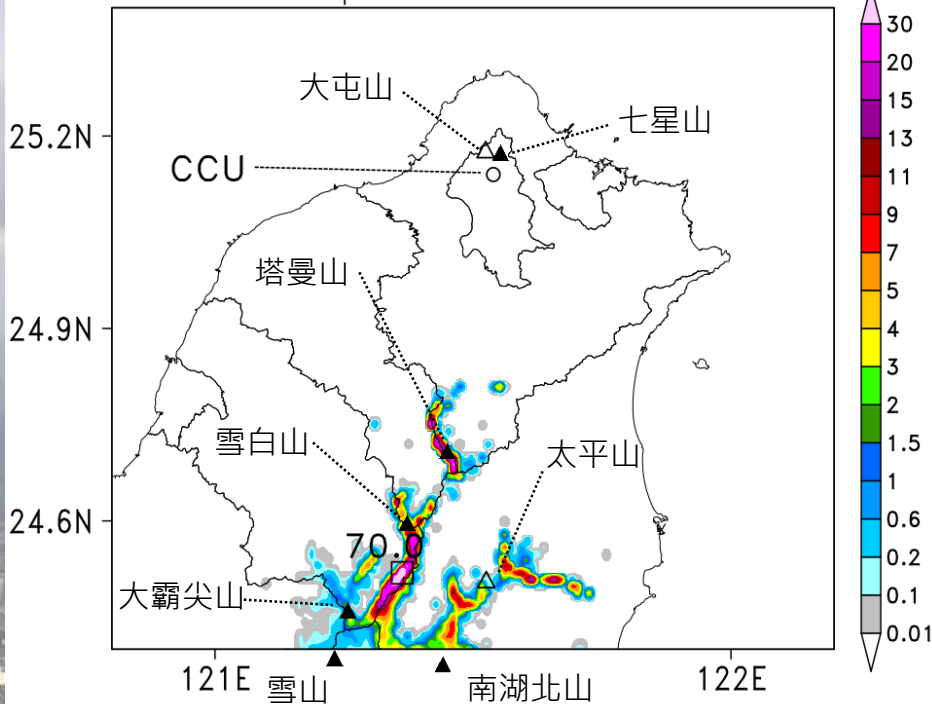
文大大氣系1-km解析度預測未來3天累積新雪

模式起始時間：2021-01-15-00Z

模式起始時間：2021-01-15-12Z

1-km forecast: 3 days snowfall increments (cm)
Ti=00Z15JAN2021 | Tv=00Z15JAN2021~00Z18JAN2021

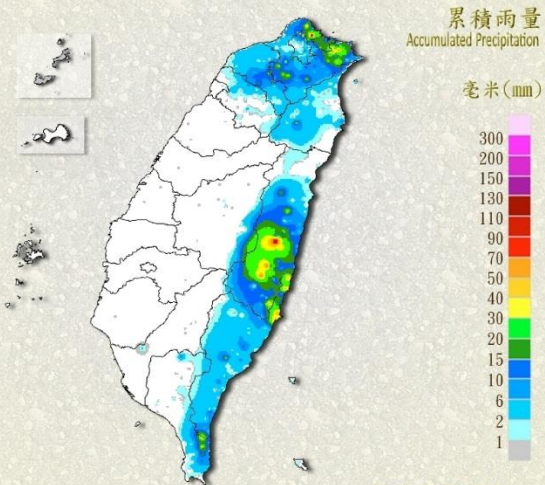
1-km forecast: 3 days snowfall increments (cm)
Ti=12Z15JAN2021 | Tv=12Z15JAN2021~12Z18JAN2021



- ▲ 為北部縣市最高峰
- △ 為北部知名賞雪景點
- 為累計降雪最大值的位置，上方為降雪值(公分)

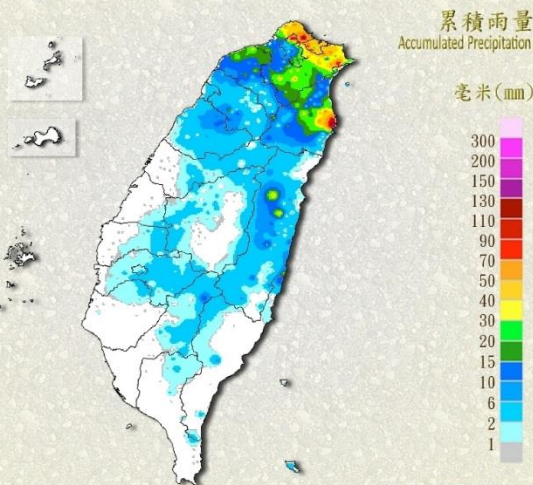
2020-21 三波寒流降雪？！

2020/12/30 00:00~2020/12/31 00:00



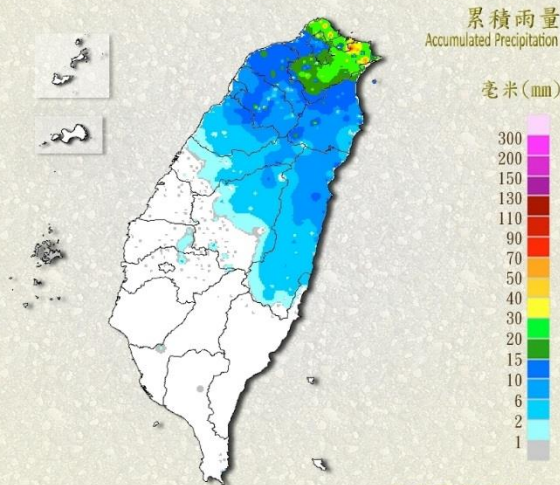
中央氣象局製
Central Weather Bureau

2021/01/07 00:00~2021/01/08 00:00



中央氣象局製
Central Weather Bureau

2021/01/11 00:00~2021/01/12 00:00



中央氣象局製
Central Weather Bureau



結霧凇、下雪粒



陽明山12公分降雪



陽明山沒有降雪

2021.01.08 雪深測量



2021.01.08 雪線估計

鞍部測站 H830M



七星公園 H850M



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中央尖山 3705

卡保山 1583

塔曼山 2130

拉拉山 2030

南插天山 1907

池有山 3303

雪山主峰 3886

2021.01.14 陽明山遠眺高山瑞雪

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