## STITHIANS WEATHER SUMMARY DECEMBER 2018

HIGHEST MAXIMUM TEMPERATURE HIGHEST MINIMUM TEMPERATURE LOWEST MAXIMUM TEMPERATURE LOWEST MINIMUM TEMPERATURE MEAN MAXIMUM TEMPERATURE MEAN MINIMUM TEMPERATURE MEAN TEMPERATURE FOR MONTH MAX. DAILY TEMPERATURE RANGE MEAN DAILY TEMPERATURE RANGE TOTAL RAINFALL

MAXIMUM RAINFALL IN 24 HOURS RAIN DAYS (0.2MM OR MORE) WET DAYS (1.0MM OR MORE) DAYS WITH RAIN INCLUDED DAYS WITH RAIN INCLUDED DAYS WITH HAIL DAYS WITH THUNDER DAYS WITH THUNDER DAYS WITH SLEET OR SNOW AIR FROSTS (-00.1C OR BELOW) MAXIMUM ATMOSPHERIC PRESSURE MINIMUM ATMOSPHERIC PRESSURE MEAN ATMOSPHERIC PRESSURE MEAN SOUTHWEST SEA TEMPERATURE 10YR RUNNING MEAN SW SEA TEMP

12.9C (15th) 11.1C (02nd) 06.8C (13<sup>th</sup> & 14th) -01.4C (28th) 10.3C (10YR) 08.8C (30YR) 08.7C 06.7C (10YR) 04.4C (30YR) 04.3C 08.5C (10YR) 06.6C (30YR) 06.5C 11.1C (28th) 03.6C 239.2MM (10YR) 171.7MM (30YR) 166.2MM 36.6MM (14th) 25 21 29 02 00 SLT 00 / SNW 00 02 1039.0 MB (30<sup>th</sup> & 31st) 997.0 MB (15th) 1016.6 MB (30YR MEAN) 1016.2 MB 11.6C (DEC 1986-2017 AVE) 11.4C (DEC 2008-2017) 11.6C

THE ATLANTIC JET STREAM WAS POSITIONED OVER THE BRITISH ISLES ON THE 1ST, 4TH, 6TH-10TH, 17TH-18TH, 20TH-24TH, & 29TH. IT WAS TO THE N ON 5TH, 25TH, 30TH & 31ST. IT WAS TO THE NW FROM 26TH-28TH, TO THE W ON 11TH-13TH, TO THE SW ON 14TH & 15TH AND TO THE S ON 2ND, 3RD, 16TH & 19TH.

SYNOPTICALLY IT WAS AGAIN MOBILE, EXCEPT FOR THE 4TH WEEK WHEN HIGH PRESSURE BECAME ESTABLISHED. ON 1ST & 2ND A FRONTAL SYSTEM AFFECTED ALL AREAS. THE 3RD SAW A SHOWERY SW/W AIRSTREAM & ON 4TH A RIDGE OF HIGH PRESSURE GAVE WAY AS A FRONTAL SYSTEM ARRIVED FROM THE SW DURING THE EVENING, THIS TRAVERSED OVERNIGHT AS A COLD FRONT CLEARED EASTWARDS DURING MID-AFTERNOON OF THE 5TH. DURING THE EARLY HOURS OF THE 6TH A NEW FRONTAL SYSTEM ARRIVED FROM THE SW. THE ASSOCIATED COLD FRONT CLEARED EARLY MORNING OF THE 7TH, BEING REPLACED BY A SHOWERY WESTERLY AIRSTREAM BEFORE A FRONTAL SYSTEM ARRIVED OVERNIGHT. ON THE 9TH A SHOWERY OCCLUSION PERSISTED BEFORE DYING OUT IN THE EVENING. ON THE 10TH A RIDGE (FROM A HIGH 1033MB BISCAY) INTENSIFIED AND ON THE 11TH PRESSURE FELL AS A WARM FRONT AND LATER, A WARM SECTOR, ARRIVED AND A COLD FRONT EDGED IN DURING THE EVENING. ON THE 12TH THIS COLD FRONT WEAKENED FURTHER BEFORE AN OCCLUSION GRADUALLY & SPORADICALLY MOVED UP FROM THE SW DURING THE EVENING. ON THE 13TH THIS OCCLUSION PERSISTED ALL DAY BEFORE FINALLY DYING OUT ON THE 14TH. OVERNIGHT ON THE 14TH & DURING THE 15TH AN ACTIVE FRONTAL SYSTEM (FROM STORM 'DIERDRE') CLEARED THROUGH. ON THE 16TH A SHOWERY WESTERLY AIRSTREAM COVERED THE REGION BEFORE A WEAK RIDGE ARRIVED ON THE 17TH. THIS COLLAPSED DURING THE EVENING AS A FRONTAL SYSTEM CAME UP FROM THE SW WHICH ADVANCED DURING THE EARLY HOURS OF THE 18TH & THE COLD FRONT CLEARED EASTWARDS BY 1400 GMT AS A SHOWERY SW AIRSTREAM ARRIVED AND CONTINUED ON THE 19TH. THIS PERSISTED ON THE 20TH BEFORE A FRONTAL SYSTEM ARRIVED DURING THE EVENING, CLEARING DURING THE EARLY HOURS OF THE 22ND AS A WEAK RIDGE MOVED IN FROM THE WEST. OVERNIGHT ON THE 22ND A FRONTAL SYSTEM ARRIVED WHICH PERSISTED ALL DAY ON THE 23RD. BY THE 24TH A WARM FRONT HAD BECOME SLOW MOVING OVER SW CORNWALL. BY THE 25TH THIS HAD MOVED AWAY AS A RIDGE (FROM A HIGH 1039MB N ITALY) INTENSIFIED. A VERY MOIST WARM SECTOR COVERED SW ENGLAND. ON THE 26TH A RIDGE PERSISTED (FROM THE N ITALIAN HIGH 1039MB) AS A WEAK COLD FRONT IN THE ENGLISH CHANNEL MOVED NORTHWARDS AND DIED OUT. THIS RIDGE CONTINUED TO AFFECT ALL AREAS ON THE 27TH & 28TH AS A NEW HIGH (1036MB) DEVELOPED WEST BISCAY. ON THE 29TH THE RIDGE FROM THIS HIGH INTENSIFIED AS A MOIST W/SW AIRSTREAM PERSISTED. BY THE 30TH THE HIGH 1037MB (BY NOW POSITIONED OVER W FRANCE),

MAINTAINED A RIDGE TO IRELAND AND THE UK AND HAD, BY NOW BECOME A BLOCKING FEATURE WHICH SITUATION PERSISTED ON THE 31ST AS THE HIGH (1040MB) MOVED TO WEST CORNWALL.

DECEMBER WAS CHANGEABLE AND AT TIMES, WINDY DURING THE FIRST THREE WEEKS. IT WAS VERY WET AND VERY MILD AND OFTEN CLOUDY OR OVERCAST, ESPECIALLY AT NIGHT.

SUNSHINE WAS IN SHORT SUPPLY. MANY OF THE DAYS SAW SUBSTANTIAL FALLS OF RAIN. THESE INCLUDED THE 1ST (10.0MM), 4TH (17.4MM), 5TH (12.6MM), 6TH (22.6MM), 11TH (13.4MM), 14TH (36.6MM), 18TH (20.1MM), 20TH (16.9MM), 22ND (13.9MM) & 23RD (15.9MM).

ON THE 7TH THERE WERE REPORTS OF FLOODING ON MANY OF THE ROADS ACROSS CORNWALL & HIGH WINDS BROUGHT DOWN POWER LINES ALONG THE A388 AT CALLINGTON.

HAIL WAS RECORDED ON 7TH AT 1003 GMT & ON 18TH AT 1540 GMT THE MAXIMUM (ESTIMATED) WIND GUST FOR THE MONTH WAS 42KT (48 M.P.H.) DURING THE EARLY HOURS OF THE 18TH.

THE PREDOMINANT WIND DIRECTIONS WERE EQUAL BETWEEN WESTERLY AND EASTERLY.

IT WAS THE WETTEST DECEMBER SINCE 2013 AND THE WARMEST SINCE 2015.

THE MEAN SW SEA TEMPERATURE WAS EQUAL TO THAT OF DECEMBER 2017.

2018 AS A WHOLE WAS THE WETTEST YEAR HERE SINCE 2012.

THE MEAN MAX. TEMPERATURE WAS THE HIGHEST SINCE 2014 AND THE MEAN MIN. TEMPERATURE WAS THE LOWEST SINCE 2013.

2018 SAW THE HIGHEST NUMBER OF AIR FROSTS SINCE 2013 AND THE MEAN SW SEA TEMPERATURE WAS ALSO THE LOWEST VALUE SINCE 2013.

ALL READINGS DONE BY PAUL RICHARDS AT 40 CRELLOW FIELDS, STITHIANS. MAIN OBSERVATIONS ARE CARRIED OUT AT 0900GMT & 2100GMT DAILY THROUGHOUT THE YEAR. WE ARE A MET.OFFICE REGISTERED RAINFALL STATION (379547) THROUGH THE ENVIRONMENT AGENCY IN BODMIN. (DAILY RAINFALL DATA IS RETURNED ON A MONTHLY BASIS). THE STATION HEIGHT IS 120M (396FT) ABOVE MSL. WE ALSO SUPPLY MONTHLY DATA TO THE WEATHER OBSERVERS NETWORK IN COLCHESTER, ESSEX AND WEEKLY DATA TO THE WEATHERNET ORGANISATION IN BOURNEMOUTH.

