

STITHIANS WEATHER SUMMARY

DECEMBER 2019

HIGHEST MAXIMUM TEMPERATURE	12.2C (10th)
HIGHEST MINIMUM TEMPERATURE	09.7C (27th)
LOWEST MAXIMUM TEMPERATURE	05.8C (17th)
LOWEST MINIMUM TEMPERATURE	-04.3C (02nd)
MEAN MAXIMUM TEMPERATURE	09.4C (10YR) 09.1C (31YR) 08.7C
MEAN MINIMUM TEMPERATURE	04.4C (10YR) 04.7C (31YR) 04.4C
MEAN TEMPERATURE FOR MONTH	06.9C (10YR) 06.9C (31YR) 06.5C
MAX. DAILY TEMPERATURE RANGE	12.8C (18th)
MEAN DAILY TEMPERATURE RANGE	05.0C
TOTAL RAINFALL	180.1MM (10YR) 185.2MM (31YR) 168.5MM
MAXIMUM RAINFALL IN 24 HOURS	25.9MM (18th)
RAIN DAYS (0.2MM OR MORE)	22
WET DAYS (1.0MM OR MORE)	19
DAYS WITH RAIN INCLUDED	23
DAYS WITH HAIL	05
DAYS WITH THUNDER	02
DAYS WITH SLEET OR SNOW	SLT 00 / SNW 00
AIR FROSTS (-00.1C OR BELOW)	07
MAXIMUM ATMOSPHERIC PRESSURE	1033.0 MB (02 nd & 28th)
MINIMUM ATMOSPHERIC PRESSURE	967.0 MB (21st)
MEAN ATMOSPHERIC PRESSURE	1009.7 MB (31YR MEAN) 1016.2 MB
MEAN SOUTHWEST SEA TEMPERATURE	11.4C (DEC 1986-2018 AVE) 11.4C
10YR RUNNING MEAN SW SEA TEMP	(DEC 2009-2018) 11.7C

NOTES

GENERAL SYNOPTIC SITUATION: ON THE 1ST A HIGH (1034MB) AT 53N/16W WITH A RIDGE TO AND OVER THE UK SLOWLY DEVELOPED. BY THE 2ND THE HIGH (1035MB) WAS JUST SW OF KERRY WITH A RIDGE TO AND OVER THE UK. BY THE 3RD THIS HIGH (1032MB) HAD DECLINED AND MOVED TO NORTHERN ITALY, WHILST MAINTAINING IT'S RIDGE TO & OVER THE UK. ON THE 4TH THE RIDGE WEAKENED AS THE ANTICYCLONE MOVED AWAY EASTWARDS AND A WEAK COLD FRONT CLEARED OVERNIGHT.

BY THE 5TH A FRONTAL SYSTEM WEST OF IRELAND MOVED NORTHEASTWARDS TO AFFECT THE REGION INTO THE EVENING & OVERNIGHT. ON THE 6TH A COLD FRONT CLEARED DURING THE EARLY AFTERNOON AS A WEAK RIDGE ARRIVED WHICH PERSISTED ON THE 7TH BEFORE A FRONTAL SYSTEM EDGED IN OVERNIGHT. ON THE 8TH STORM 'AKIYAH' AFFECTED ALL AREAS OF THE BRITISH ISLES BRINGING SEVERE GALES, HEAVY RAIN, HAIL & THUNDER. BY THE 9TH THIS DEEP LOW (973MB) HAD MOVED TO SW NORWAY AS A STRONG TO GALE FORCE WESTERLY AIRSTREAM PREVAILED. ON THE 10TH A FRONTAL SYSTEM MOVED UP FROM THE SW AND THE COLD FRONT CLEARED IN THE EARLY EVENING INTRODUCING A SHOWERY W/SW AIRSTREAM ON 11TH.

ANOTHER FRONTAL SYSTEM SPREAD FROM THE SOUTHWEST ON 12TH WHICH CLEARED OVERNIGHT. ON THE 13TH A SHOWERY WESTERLY AIRSTREAM CONTINUED. ON THE 14TH AN OCCLUSION CLEARED DURING THE EARLY HOURS BEFORE ANOTHER OCCLUSION ARRIVED DURING THE EVENING. THIS CLEARED OVERNIGHT AS A STRONG, SHOWERY SW AIRSTREAM ARRIVED ON THE 15TH. OVERNIGHT THE PRESSURE GRADIENT RELAXED, BRINGING A SLACK AREA OF LOW PRESSURE ON THE 16TH WHICH CONTINUED ON THE 17TH. DURING THE 18TH AN ACTIVE FRONTAL SYSTEM MOVED UP FROM THE SOUTHWEST AS A SECONDARY DEPRESSION (966MB) JUST SW OF KERRY AT 1800 GMT MOVED NORTHEASTWARDS & QUICKLY FILLED. THIS CLEARED ON THE 19TH. THE 20TH SAW A SLIGHTLY SHOWERY W/SW AIRSTREAM WHICH CONTINUED ON THE 21ST BEFORE A FRONTAL SYSTEM ARRIVED IN THE AFTERNOON. THIS WAS ACCOMPANIED BY A DEEP LOW WHICH MOVED AWAY EASTWARDS OVERNIGHT. ON THE 22ND A SHOWERY WESTERLY AIRSTREAM PREVAILED. BY THE 23RD A RIDGE OF HIGH PRESSURE HAD DEVELOPED BEFORE AN OCCLUSION AND AN ISOBARIC TROUGH ARRIVED FROM THE WEST ON 24TH. ON THE 25TH THE RIDGE DECLINED AS A WARM FRONT APPROACHED THE ISLES OF SCILLY. BY THE 26TH THERE WAS A FRESH-STRONG SW AIRSTREAM AS A WARM SECTOR CAME IN WHICH CONTINUED ON THE 27TH AS PRESSURE ROSE. BY THE 28TH A HIGH (1043MB) OVER DENMARK WAS SPREADING A STRONG RIDGE TO AND OVER THE UK WHICH CONTINUED ON THE 29TH AS THE HIGH (1042MB) TRANSFERRED TO N. ITALY. BY 30TH THERE WAS A SLACK AREA OF HIGH PRESSURE WHICH SITUATION

PERSISTED ON THE 31ST AS AN OCCLUSION EDGED ACROSS THE REGION DURING THE EVENING.

THE MAIN ATLANTIC JET STREAM WAS TO THE N OF THE BRITISH ISLES ON THE 5TH, TO THE NW ON THE 3RD, 4TH, 7TH, 27TH, 29TH & 31ST. IT WAS TO THE W ON THE 6TH, 11TH & 28TH. IT WAS OVER THE UNITED KINGDOM ON THE 1ST, 2ND, 9TH, 10TH, 13TH, 14TH, 16TH, 18TH, 19TH, 23RD, 24TH, 26TH & 30TH. IT WAS TO THE SW ON THE 12TH, 17TH, 20TH & 25TH AND IT WAS TO THE SOUTH ON THE 8TH, 15TH, 21ST & 22ND.

DECEMBER WAS YET ANOTHER WET, CHANGEABLE AND OFTEN WINDY MONTH. IT WAS A LITTLE WETTER THAN THE LONG TERM AVERAGE. ALTHOUGH IT WAS A LITTLE WARMER THAN NORMAL, NEVERTHELESS, IT WAS THE COOLEST DECEMBER HERE SINCE 2014. MANY OF THE NIGHTS WERE CLOUDY OR OVERCAST, BUT IF SKIES DID CLEAR, AIR FROSTS SOON SET IN.

THERE WERE A LOT OF WET DAYS, WITH HEAVIER FALLS BEING 14.5MM ON THE 7TH, 10.0MM ON THE 9TH, 17.3MM ON THE 11TH, 11.3MM ON THE 14TH, 25.9MM ON THE 18TH, 16.7MM ON THE 19TH, 10.4MM ON THE 20TH AND 17.9MM ON THE 21ST.

HAIL WAS RECORDED ON THE 11TH, 13TH, 14TH, 15TH AND THE 21ST.

THUNDER OCCURRED ON THE 14TH AT 1712 GMT (ESTIMATED 4-5 MLS TO SW) AND ON THE 15TH AT 0419 GMT AND 0421 GMT (ESTIMATED 2 MLS TO NE).

THE MAXIMUM (ESTIMATED) WIND GUST FOR THE MONTH WAS 42KT (48 MPH) AT AROUND 0400 GMT ON THE 9TH.

THE PREDOMINANT WIND DIRECTION IN DECEMBER WAS SOUTHWESTERLY, FOLLOWED BY WESTERLY. THE MONTH SAW THE LOWEST ATMOSPHERIC PRESSURE IN ANY DECEMBER SINCE 2005 AND THE LOWEST PRESSURE FOR ANY MONTH SINCE NOVEMBER 2010.

IT WAS THE SECOND MONTH RUNNING WITH BELOW NORMAL MEAN ATMOSPHERIC PRESSURE AND IT HAD THE LOWEST MEAN SW SEA TEMPERATURE FOR ANY DECEMBER SINCE 2012.

THE YEAR AS A WHOLE WAS THE WETTEST EVER RECORDED HERE, WHILE MEAN TEMPERATURES WERE CLOSE TO NORMAL. THE ANNUAL MEAN TEMPERATURE (10.5C) WAS THE SAME AS IN 2018.

THE ANNUAL MEAN SW SEA TEMPERATURE WAS THE WARMEST SINCE 2014. THE YEAR ALSO HAD THE GREATEST NUMBER OF DAYS WITH HAIL SINCE 1999.

ALL READINGS DONE BY PAUL RICHARDS AT 40 CRELOW 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.