

| Question | Scheme | Marks | AOs |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|
| 3(a) | Pressure outliers are <1004.75 and >1018.75 Rainfall outliers are (<-3.05) and >82.95 | M1 | 2.1 |
| | $p = 1019$ and 1022 are outliers $w = 102.0$ is an outlier | A1cso | 1.1b |
| | | (2) | |
| (b) | e.g. was a negative correlation, now no (zero) correlation | B1 | 2.2b |
| | | (1) | |
| (c) | e.g. there are a lot of zeros for rainfall in Perth and there are none in the sample. or e.g. these are the highest figures and you are unlikely to get these if the sample was random. | B1 | 2.4 |
| | | (1) | |
| (d) | On average, an increase of 1 hPa in daily mean pressure results in a decrease of 0.223 mm in daily rainfall. | B1 | 3.4 |
| | | (1) | |
| (e) | Unreliable, as the large data set does not cover December. | B1 | 2.4 |
| | | (1) | |
| (6 marks) | | | |
| Notes: | | | |
| (a) M1: At least one correct boundary point A1: both upper boundary points and correct conclusions | | | |
| (b) B1ft: A suitable description of correlation before and after. | | | |
| (c) B1: For a comment that supports the idea that the sample is unlikely to be random. | | | |
| (d) B1: For a suitable description of the rate : rainfall per number of hPa with reference to figures | | | |
| (e) B1: For correct conclusion with a reason explaining why it would be extrapolation. NB: B0 For out of range, extrapolation o.e. on their own without a reason. | | | |