## Average Day Range

This example uses a spreadsheet to show the daily average range for several currencies．Both the 5 day average range and the 365 day average range are shown．

| Spreadsheet |  | ADR | －㦴 可 可 |
| :---: | :---: | :---: | :---: |
|  | Pair | 5 day ave | 365 day ave |
| 1 |  |  |  |
| 2 | AUD／CAD | 0.0069 | 0.0094 |
| 3 | AUD／CHF | 0.0089 | 0.0131 |
| 4 | AUD／JPY | 0.7200 | 1.1449 |
| 5 | AUD／NZD | 0.0080 | 0.0107 |
| 6 | AUD／USD | 0.0105 | 0.0131 |
| 7 | CAD／CHF | 0.0088 | 0.0123 |
| 8 | CAD／JPY | 0.5808 | 1.0382 |
| 9 | EUR／CAD | 0.0115 | 0.0134 |
| 10 | EUR／CHF | 0.0042 | 0.0135 |
| 11 | EUR／GBP | 0.0069 | 0.0075 |
| 12 | EUR／JPY | 1.019 | 1.386 |
| 13 | EUR／USD | 0.01499 | 0.01566 |
| 14 | GBP／AUD | 0.0125 | 0.0171 |
| 15 | GBP／CAD | 0.0101 | 0.0151 |
| 16 | GBP／CHF | 0.0128 | 0.0178 |
| 17 | GBP／USD | 0.0124 | 0.0141 |
| 18 | NZD／CAD | 0.0068 | 0.0084 |
| 19 | USD／CAD | 0.0085 | 0.0099 |
| 20 | USD／CHF | 0.0111 | 0.0129 |
| 21 | USD／JPY | 0.3278 | 0.7957 |

The data is calculated on a set of daily charts organized in a stack．Each chart has a DYO that calculates the averages and posts the results on the spreadsheet．Here is an example：

| A | Expression | ［Row］：$=5$ | $\square$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B | Expression | ［Decimals］：＝Scale Factor | $\square$ |  |  |  |  |
| C | Expression | ［Week］：$=5$ | $\square$ |  |  |  |  |
| D | Expression | ［Year］：$=365$ | $\square$ |  |  |  |  |
| E | Function | $[0]:=$ Simple Average（ Range．［Week］） | $\square$ |  |  |  |  |
| F | Function | ［ 0$]$ ：＝Simple Average（ Range，［Year］） | $\square$ |  |  |  |  |
| G |  |  | $\square$ |  |  |  |  |
| H | Action | Find Spreadsheet（＇ADR＇） | $\square$ |  |  |  | ADR |
| I | Action | if True then Cell（ $1 .[$ Row ］）$=$＇$[\$$ S］＇ | $\square$ |  |  |  | ［\＄S］ |
| J | Action | Cell（ 2，［Row］）：Format（［E］．［Decimals］） | $\square$ |  |  |  |  |
| K | Action | Cell（ 3．［Row］）：Format（［F］．［Decimals］） | $\square$ |  |  |  |  |

A - Define a Row variable. Edit this value to change the row location on the spreadsheet.
$B$ - Define a variable with the number of decimals. This value is used to format the values.
$C, D$ - Define variables with the periods for the two averages.
E, F - Calculate simple averages using Range as the data point. The $2^{\text {nd }}$ parameter is the period.
H - Locate the Spreadsheet with the 'ADR' selection.
I - Post the chart's symbol to the $1^{\text {st }}$ column of the spreadsheet.
$J$ - Post the $1^{\text {st }}$ average from Row $E$ and format the displayed result for the number of decimals to show. The average posts in the $2^{\text {nd }}$ column.
K - Post the $2^{\text {nd }}$ average from Row F, formatted for decimal display, and show in column 3 .

Download the Template-AverageDayRange package using the Setup | Package feature. The package will install an example template to use, and the Average Range layout. Opening the layout will create the following stack, and show the spreadsheet with the average ranges.


