# Metadata for Tidal Data Exchange

| Station Name | Vanuatu |
|---|---|
| Date of Supply | Tuesday, 7 December 2010 |

| Identification | | |
|---|---|---|
| **Station Number** | BoM=200857 ATT=5732 WMO=91559 | |
| **Name** | Vanuatu | |
| **Latitude and Estimated Positional Uncertainty** | -17.7569 | +/- 3m |
| **Longitude and Estimated Positional Uncertainty** | 168.3002 | +/- 3m |
| **Map Name** | | |
| **Map Number** | | |
| **Map Grid Northing** | | |
| **Map Grid Easting** | | |
| **Type of Readings** | | |
|     Heights<br>    Streams<br>    Streams<br>    Constituent constants<br>(Delete those not applicable) | Observations | |
| **Progress \*** | | |
| **Update Frequency \*** | Real Time | |
| **Available Format Type \*** | DIGITAL, text | |
| **Measurement Units** | | |
|     Tidal Heights<br>    Tidal Streams<br>(Delete those not applicable) | metres | |
| **Reference Frame** | | |
|     Time Zone<br>    Vertical Reference Frame<br>    TGBM Name/Number<br>    TGBM Elevation relative to the<br>       vertical reference<br>       Estimated Positional Uncertainty<br><br>    Horizontal Reference Frame<br>    Direction of Stream Readings<br>    Depth of Stream Readings (relative to<br>    Vertical Reference Frame)<br>       Estimated Positional Uncertainty | UTC<br>Tide Gauge Zero (TGZ - ORSTOM)<br>+/- 2mm<br>Geodetic Datum of Aust (GDA94)<br><br><br><br>+/- | |
| **Search Words \*** | Marine, Oceanography, Water, Vanuatu | |
| **Data Owner Details** | | |
|     Name | National Tidal Centre | |
|     Postal Address | PO Box 421, Kent Town, SA 5071 | |
|     Street Address | 25 College Road, SA 5071 | |
|     Telephone | 08 8366 2730 | |
|     Facsimile | 08 8366 2651 | |
|     Email | ntc@bom.gov.au | |
|     Internet | www.bom.gov.au/oceanography | |
|     Contact Officer Details | | |
|     Name | Paul Davill | |
|     Position | Data Manager | |
|     Telephone | 08 8366 2730 | |
|     Email | ntc@bom.gov.au | |
| **Data Custodian Details** | | |

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**Station Name** **Vanuatu**

Date of Supply          Tuesday, 7 December 2010

| | |
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| Name | National Tidal Centre |
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| Internet | www.bom.gov.au/oceanography |
| Contact Officer Details | |
| Name | Paul Davill |
| Position | Data Manager |
| Telephone | 08 8366 2730 |
| Email | ntc@bom.gov.au |
| **Details of the Readings Provided Herewith** | |
| Date of readings supplied | |
| From | Jan-93 |
| To | Current |
| The time interval between readings (If the readings are for high & low water then enter "Zero") | 1-minute (average of 60, 1-second samples)<br>6-minutes (weighted average of 4, 1-minute readings)<br>Hourly (filtered with a cut-off of 2 hours) |
| Are the readings averaged or filtered | See above. 1-minute samples are logged at the end of each minute, 6-minute centred on 0.1-hour increments |
| Are there any access constraints (such as commercial-in-confidence or constraint on the use or distribution to third parties). | No |
| **Objective Quality Assessment of Tidal Observations (Height or Stream)** | |
| **Instrument** | |
| Type<br>Make<br>Model | Sutron 9000 |
| **Sensor** | |
| Type<br>Make<br>Model<br>Mode of operation | Acoustic-in-air sensor<br>Aquatrak® Transducer<br>Aquatrak NG XCR<br>RS-232 |
| **Frequency of System Calibrations** | |
| Field calibration and<br>Laboratory calibration | every 18 months<br>every 18 months |
| **Frequency of Water Level Checks** | |
| **Estimate of the Precision of the Water Level Checks**<br>Time (Std Dev in Minutes)<br>Height (Std Dev in metres) | 1mm +/- |
| **System Resolution** | |
| **Estimated Local Uncertainty** | |
| **Status of the Readings** | |
| **Description of the validation process including a statement detailing how:-**<br>1.   The instrumental biases were treated<br>2.   Outliers were selected and dealt with<br>3.   Breaks in the record were dealt with | Standard deviations<br>Reported<br>Recovered where possible |
| **Date of Validation** | Checked each month, for previous month |
| **Name of Person certifying the validation** | NTC Data Analysis Department |

# Metadata for Tidal Data Exchange

**Station Name**    **Vanuatu**

Date of Supply    Tuesday, 7 December 2010

| Details required with the supply of tidal constituent constants | |
|---|---|
| All of the details required above | |
| The name and version of the software used to calculate the constants | TANS |
| The tidal constituent model used (particularly noting the treatment of the constituents Sa and Ssa) and specifying any related (inferred) constituent constants | Doodson's method |
| The date span used to prepare the constituent constants | 1993-2007 (for 2010) |
| The reference time zone for the constituents | Local (-1100) |
| The vertical datum to which the constituents apply | 3.569m below BC 1 |
| A precision estimate of predictions based on the constituent constants (for example, standard deviation of the analysis residuals) | Standard Deviation is 0.064 |
| **Additional details required with the supply of tidal predictions** | |
| All of the details required above | |
| A statement describing the tidal prediction process used | Doodson's method |
| The name and version of the software used to calculate the predictions | Tipp4 |
| A list of the constituent constants used or if the list is not provided, the donor agency's identifier of the list | Standard 112 Constituent list |

## Comments on data by Port Authority

- South Pacific Sea Level Climate Monitoring Program (SPSLCMP)