
**GEOLOGICAL SURVEY OF CANADA**

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# A Summary of the 2002 Sable Island Bank Hydrodynamic and Bedform Data

C. Smyth, M.Z. Li and D.E. Heffler

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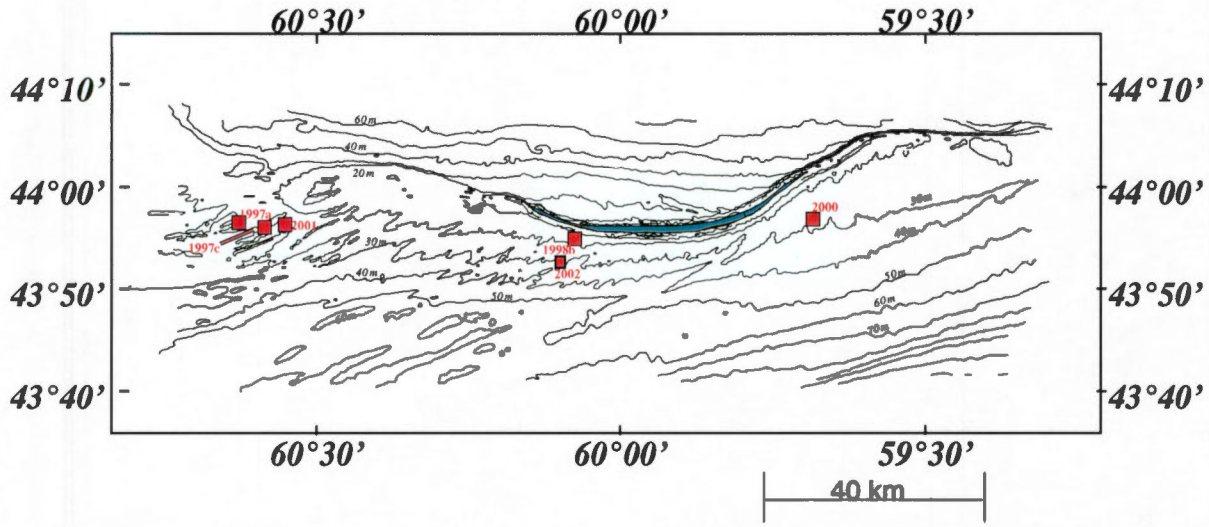


Figure 1: Bathymetry around Sable Island and the location of recent deployments. The 2002 site is just south of Sable Island on the western side.

# 1 Introduction

A joint project between the Geological Survey of Canada and Exxon-Mobil Canada (formerly Sable Offshore Energy Project) was initiated in 1999 to study sand ridge morphodynamics on Sable Island Bank. One of the goals of this project is to investigate the interaction between bottom boundary layer dynamics and sediment transport. In order to reach this goal, detailed measurements of flow dynamics and sediment transport modes have been collected.

This report summarizes the 2002 experiment which deployed instrumented frames approximately 10 km south of Sable Island about 5 km east of the Thebaud hydrocarbon production platform. Measurements include wave and current velocities, seafloor videos, and suspended sediment profiles. These measurements are analyzed to determine the magnitude and direction of sediment transport during storm conditions. Detailed scientific interpretations of these data will be presented in subsequent scientific publications.

# 2 Experiment Summary

## 2.1 Instrument Location

Three frames were deployed along a sand-ridge transect on February 24, 2002, including two S4 current meter frames, and an autonomous quad frame called Ralph. Ralph was positioned on the slope of a O(10 m) high sand ridge in 31 m water depth (Figure 1). Two S4 frames were placed to the east of Ralph along a transect of the sand ridge with Ralph in the western trough, an S4 on the crest (S4C) and a second S4 in the eastern trough (S4T). Frame locations are given in Table 1. Surficial sediment samples from a van Veen grab sample at the Ralph location had a median grain diameter of 440 $\mu m$.

## 2.2 Instrumentation

Instruments on Ralph estimate water depth, wave velocity, current velocity, suspended sediment levels, and bedform dimensions. Table 2 briefly summarizes the instrumentation on Ralph, but a more thorough

Table 1: Instrument frame locations for the 2002 deployment. The instruments are abbreviated as follows: EMCM, Electro-magnetic Current Meter; OBS, Optical Backscatter Sensor; ABS, Acoustic Backscatter Sensor; and DV Camera, Digital Video Camera. The Imagenex are rotary sonars.

| Frame | Instruments | Latitude | Longitude |
|---|---|---|---|
| S4T | S4 (S/N 1590) | 43° 52.839' N | 60° 5.606' W |
| S4C | S4, OBS (S/N 2195) | 43° 52.880' N | 60° 5.737' W |
| Ralph | 6 OBS, Pressure, Tilt, Temperature, 4 EMCM, 2 ABS, 2 ADV, Compass DV Camera, 2 Imagenex | 43° 52.881' N | 60° 6.122' W |

Table 2: Instrument descriptions and positions on the Ralph frame

| Sensor | Resolution | Brand | Serial Number | Position (X,Y,Z) [cm] | Computer and Drive |
|---|---|---|---|---|---|
| Pressure Sensor | 500 psi,8.2 cm/bit | Data Inst. Model AB | | 0,0,162 | TT7 120 Mb |
| Compass/Tilt | 0.3 deg | Precision Nav. TCM2 | | | |
| 4 EMCM's | 10 ft/s | Marsh McBirney | 33 | 75,-53,26 | TT5F |
| | | | 66 | 7,-49,49 | |
| | | | S758 | 95,-52,66 | |
| | | | T54 | 111,-53,97 | |
| 6 OBS | 20X gain | SeaPoint Inst. | brown | 6,-130,10 | |
| | | | red | 6,-130,30 | |
| | | | orange | 6,-130,49 | |
| | | | yellow | 6,-130,66 | |
| | | | green | 6,-130,96 | |
| | | | blue | 6,-130,119 | |
| 2 ABS | 1 cm bins, 1 MHz | Mesotech | B2184 | -31,64,133 | TT7 540 Mb |
| | | | B2180 | -132,32,128 | |
| 2 ADV | 5 cm/s, 25 MHz | Sontek | B214 | -28,3,71 | CF1, 1Gb |
| | | | B216 | -133,-24,58 | |
| Pencil beam | 1 cm bin, 0.675 MHz | Imagenex 881P | 0609 | -32,89,131 | TT7 840 Mb |
| Fan beam | 4 cm bin, 0.675 MHz | Imagenex 881I | 0608 | -158,88,158 | |
| DV Camera | 680 000 pixels, 5 lux | Sony TRV 15 | | -35,42,133 | pic chip 60 min |

description is given by *Heffler* [1996]. Six computers were used to control instruments, including a Tattletale 5F, 3 Tattletale 7's and 1 Compact Flash 1. Data were stored on 3 hard drives (a total of 2.6 Gb), and an additional 22 Gb camera tape. Instrument positions on the frame in Table 2 are given with respect to a reference origin, Figure 2, which indicates $x$ and $y$ directions for the current meters. The compass is aligned with the $+y$ axis.

Two InterOcean S4 current meters were deployed to measure pressure, wave and current velocity, compass direction and optical backscatter amplitude. Each S4 sensor was mounted on an aluminum tubular frame 50 cm above the bed with an additional OBS sensor adjacent to the S4 at a height of 70 cm. S4C failed to record any data. The attempt to recover S4T was unsuccessful.

On the Ralph frame, the Imagenex pencil-beam had mechanical problems and did not rotate properly. Measured data has not yet been corrected for this problem. The Imagenex fan beam did not record any data.

Figure 2: Plan view of the Ralph frame showing instrument locations. Origin at pressure sensor location.

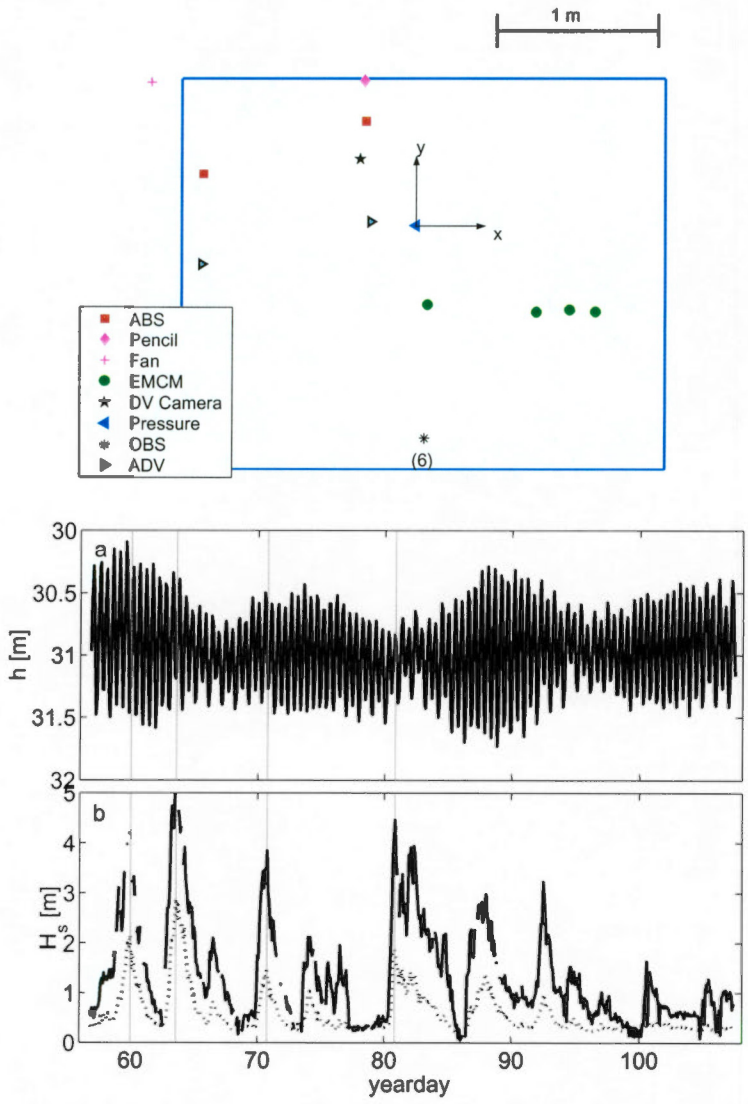


Figure 3: Time series of: (a) average water depth $h$, measured by the pressure sensor on Ralph and (b) the significant wave height, $H_s$, measured at depth (dashed) and corrected for attenuation.

## 2.3 Hydrodynamic Observations

Ralph was deployed on the slope of a sand ridge at the South Sable site. Burst-averaged water depth time series and significant wave height time series recorded by Ralph are shown in Figure 3. Four spring tides occurred during the deployment with a tidal range of approximately 1.3 m. Three neap tides had a tidal range of approximately 0.8 m.

Seven storm events were recorded during the deployment, with four storms having corrected significant wave heights greater than 3m, Figure 3b. Significant wave heights were corrected for depth attenuation of higher frequency wave energy. An energy threshold was applied at high frequencies to prevent noise

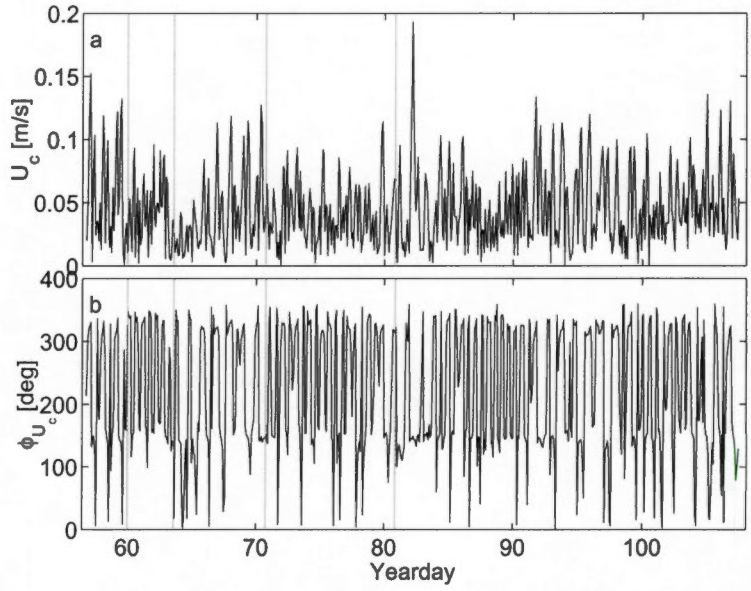


Figure 4: Time series of: (a) average current speed measured by the ADV, and (b) average current direction (0 is magnetic North). Dotted lines indicate the position of storm peaks.

attenuation. The noise threshold was set to 2 bits, as identified in the data during calm conditions. This value is higher than the precision of the pressure data, identified as ± 0.15% of the full scale depth (70 m).

Tidal-peak mean current velocities were approximately 0.1 m/s, oriented generally south-east/north-west, Figure 4. The mean current was measured by the ADV at approximately 30 cm above the bed. Mean current speed, $U_c$ is defined as $U_c = \sqrt{U^2 + V^2}$ where $U$ is the $x$ component of the current and $V$ is the $y$ component. The direction of the average current, $\phi_{U_c}$ is defined as $\phi_{U_c} = -\tan_2^{-1}(V/U) + \phi_M - 90°$ where $\phi_M$ is the compass heading and $\tan_2^{-1}$ is the four quadrant arctangent. The 90° correction is applied as the compass is aligned with the $+y$ axis. In agreement with *Li et al.* [1999], this data set shows that the mean currents were suppressed at the peaks of storms (e.g. yeardays 60 and 64.).

Storm-peak significant wave velocities ranged from 0.2 to 0.6 m/s, and were generally in the north/northwest direction, Figure 5. The significant wave velocity, $U_{wo}$ is defined as $U_{wo} = 2\sqrt{\sigma_u^2 + \sigma_v^2)}$, where $\sigma_u^2$ is the 2nd order moment of the x component of the velocity.

## 2.4 Mobile Layer Depth

One of the objectives of this analysis was to determine the maximum depth of the mobile layer for the experiment and compare the present observations to predictions by *Li et al.* [1999]. The maximum depth of the mobile layer is estimated from the greater of the bedform amplitude or the seafloor elevation change.

Seafloor elevation changes were estimated from the vertically oriented ABS's and the ADV's. The seafloor was identified as the position of the maximum backscatter amplitude. A time series of the distance from the acoustic transducers to the seafloor, $d_b$, indicates that changes in elevation of approximately 15 and 12 cm occurred on yeardays 58 and 62 respectively, Figure 6. Bedform heights may be inferred from the difference in elevation for the two ADV's. Maximum differences approach 10 cm, indicating a bedform amplitude of 5 cm.

Frame movement may cause an apparent change in the distance to the bed. Estimates of the pitch and roll of the instrument frame were measured by a tilt sensor which was located in the main pressure case.

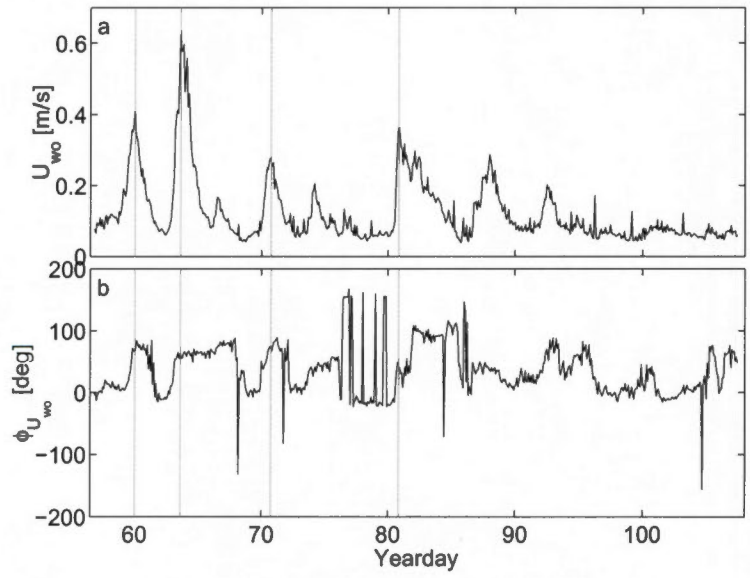


Figure 5: Time series of: (a) average significant wave velocity, and (b) average wave direction.

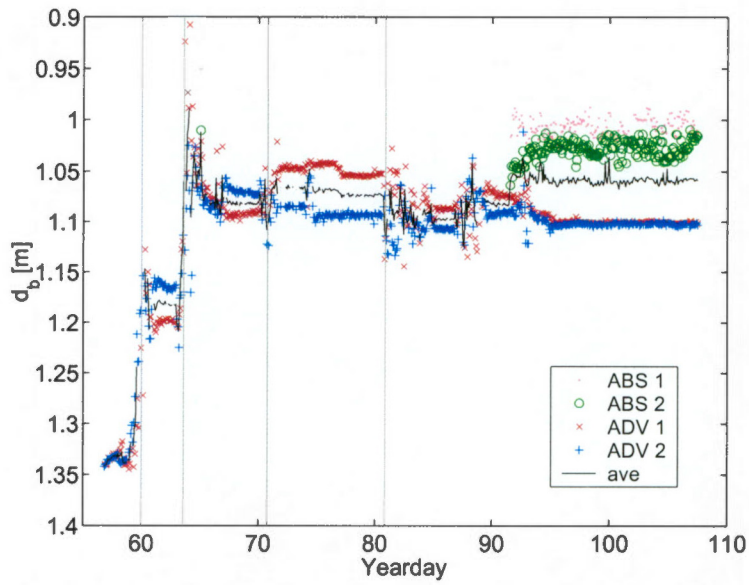


Figure 6: Time series of distance from the acoustic transducers to the seafloor. The average of all 4 time series is indicated by the solid line.

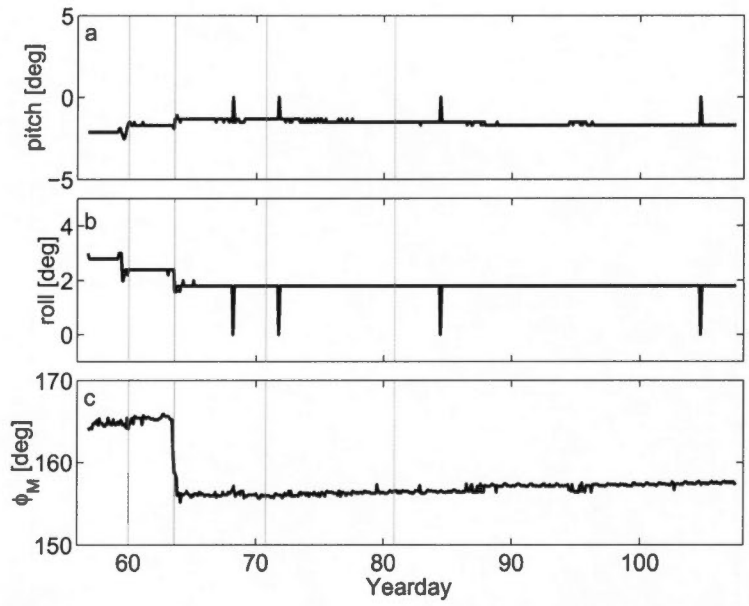


Figure 7: Time series of the instrument frame pitch, roll and compass heading.

Time series of pitch, roll and compass reading show modest changes (<1 deg) in the pitch and roll during the deployment, Figure 7. However, during the storm on yearday 64 the compass heading changed by approximately 10 degrees.

A least-squares fit by *Li et al.* [1999] of the data collected during previous deployments in 1996 and 1997 predicted the mobile layer depth, $d_m$ as

$$d_m = 0.061 H_s \tag{1}$$

where $H_s$ is the significant wave height. This empirical result predicts a mobile layer depth of 13 and 18 cm respectively for a significant wave heights of 2.2 and 2.9 m respectively. The present observations of 15 and 12 cm are within 30% of the predictions.

## 2.5 Bedforms

Small bedforms were observed using the digital video camera data, an example of which is shown in Figure 8. Two short clips of video data were collected during each burst: a 1 second clip at the beginning of the burst and a 7 second clip at the end. The field of view was approximately 0.5 x 0.7 m. Approximate estimates of bedform wavelength were determined from video images by counting the number of ripple crests and dividing by the width, 0.7 m. Figure 9a shows that at times there was only 1 ripple present in the field of view of the camera, indicating large-wave ripples with a minimum wavelength of 0.7 m.

## 2.6 Sediment Transport Mode

Longer video clips were visually analyzed to determine if bedload or suspended load transport was evident, Figure 9. Bedload transport was observed during all storms, even lower energy storms. Suspended load transport was only visible during some of these times, mainly during higher wave energy conditions.

Large numbers of flocs suspended in the water column were visible in the video data. During low wave energies between the storms on yeardays 65 and 71, the concentration of flocs was dense enough to at times

Figure 8: Frame capture of a digital video clip showing small bedforms on yearday 61, at 2:54 am.

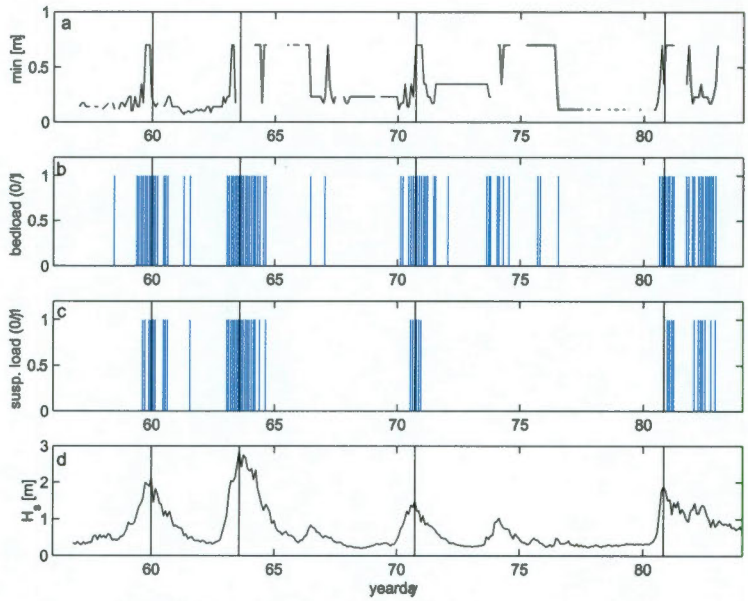


Figure 9: Time series of: (a) estimated ripple wavelength; (b) bedload transport mode; (c) suspended transport mode and (d) significant wave height.

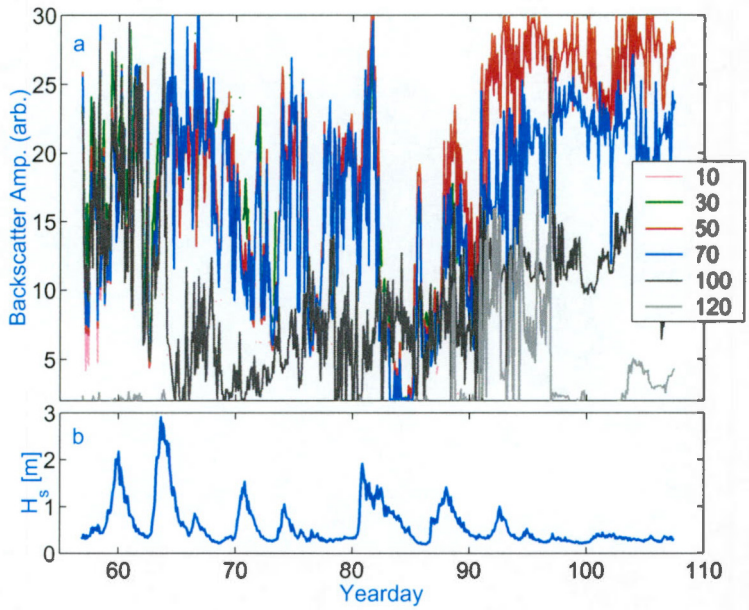


Figure 10: Time series of: (a) backscatter amplitude from the OBS's and (b) significant wave height. The height (in cm) of the OBS relative to a reference level close to the seafloor are shown in the legend.

obscure the seafloor. On yearday 68 the flocs settled out of the water column and formed matts in the ripple troughs. Increasing wave energy broke up the matts and dispersed the flocs.

### 2.7 Sediment Suspension

Suspended sediment levels were measured by OBS's during most of the deployment and by ABS's for 15 days near the end of the experiment. Figure 10 shows that OBS sensors had elevated levels during storm conditions. Higher levels of the OBS during calmer conditions suggest that the OBS is sensitive to flocs. Near the end of the experiment during relatively calmer wave conditions, the OBS levels are uniformly high, which may have been related to the presence of water in the pressure case. The current meter electronics were in the same pressure case as the OBS and did not record any data after yearday 90. The ABS sensors recorded data near the end of the experiment, Figure 11. There were higher suspended sediment levels on yearday 93 when the significant wave height approached 1 m. However the ABS response was generally weak, consistent with lower energy conditions.

## 3 Predictions by SEDTRANS96

SEDTRANS96 is a combined wave-current bottom boundary layer model that predicts bed shear stresses, suspended sediment transport rates, bedload sediment transport rates and bedload transport direction [*Li and Amos*, 2001]. Measurements of depth, current velocity, current direction, wave direction, wave period and grain diameter were input into the model (Appendix A). Additional input parameters were a sediment grain density of 2.65 g/cm$^3$, fluid density of 1.025 g/cm$^3$, bed slope of zero, and initial flat bed. Predicted sediment transport rates from SEDTRANS96 are shown in Table A-1 and predicted bottom boundary layer parameters are in Table A-2. Maximum predicted sediment transport rates were 4.7 g/m/s for bedload in a direction of 122 degrees and 0.9 g/m/s for suspended load on yeardays 82 and 63 respectively.

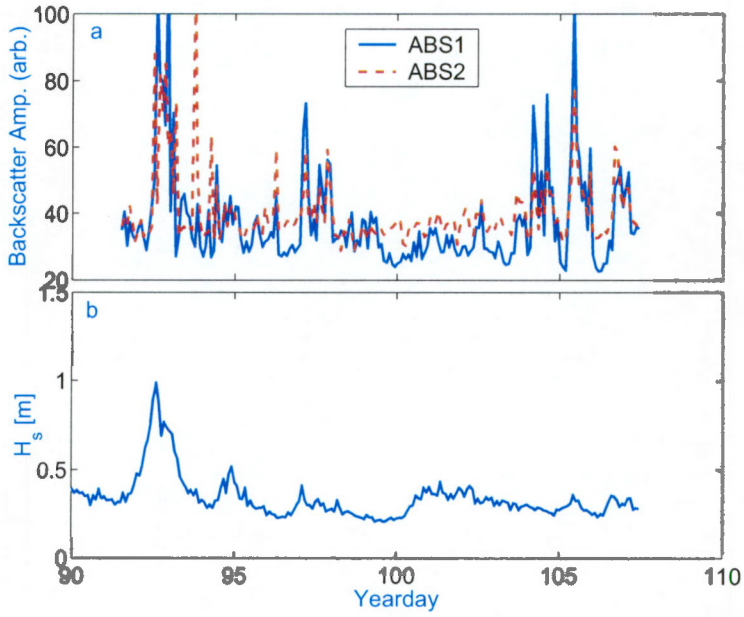


Figure 11: Time series of: (a) backscatter amplitude from ABS1 and ABS2 at approximately 50 cm above the bed and (b) significant wave height.

## 4 Acknowledgments

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## References

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## A SEDTRANS96 inputs and predictions

Table A-1 lists average wave and current parameters for each burst. These parameters were input into a sediment transport model SEDTRANS96. Predictions of sediment transport rates and boundary layer parameters are given in Tables A-1 and A-2. The following list describes the column headings.

$\delta_{cw}$ thickness of the wave-current boundary layer [cm]
$\eta_p$ predicted ripple height [cm]

$\lambda_p$ predicted ripple wavelength [cm]
$\phi_{\tilde{u}}$ wave direction [deg]
$\phi_U$ current direction [deg]
$A_{ABS}$, suspended sediment levels from the $ABS_1$ [arb]
$A_{OBS}$ suspended sediment levels from $OBS_4$ [arb]
$A_b$ near-bed wave orbital amplitude [m]
$H_s$ significant wave height [m]
$Q_b$ Einstein-Brown estimate of mean sediment transport rate [g $m^{-1}$ $s^{-1}$]
$Q_{b,dir}$ direction of mean sediment transport rate [deg]
$Q_s$ mean suspended load sediment transport rate [g $m^{-1}$ $s^{-1}$]
$T_w$ energy weighted wave period [s]
$U$ mean current speed [cm/s]
$f_{cw}$ combined wave-current friction factor
$u_{*cs}$ skin friction current shear vel [cm/s]
$u_{*c}$ total current shear vel [cm/s]
$u_{*cw}$ total combined wave-current shear vel [cm/s]
$u_{*cws}$ skin friction combined wave-current shear vel [cm/s]
$u_{*w}$ total wave shear vel [cm/s]
$u_{*ws}$ skin friction wave shear vel [cm/s]
$u_b$ near-bed maximum wave orbital velocity [m/s]
$z_0$ inner layer bottom roughness [cm]
$z_{0c}$ apparent bottom roughness above the wave boundary layer [cm]

Table A-1: Average wave and current parameters from Ralph, and SEDTRANS96 predicted outputs of ripple dimensions and sediment transport rates

| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_\delta$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 56.83 | 32.4 | 0.34 | 25.6 | 2.0 | 214 | 7.7 | 356 | | 0 | 0 | 0 | 0 | 0 |
| 2 | 56.92 | 32.0 | 0.32 | 21.2 | 5.2 | 306 | 7.8 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 3 | 57.00 | 31.7 | 0.39 | 14.5 | 11.4 | 320 | 7.2 | 347 | | 0 | 0 | 0 | 0 | 0 |
| 4 | 57.08 | 31.9 | 0.33 | 11.2 | 15.2 | 326 | 7.2 | 355 | | 0 | 0 | 0 | 0 | 0 |
| 5 | 57.17 | 32.5 | 0.31 | 7.5 | 9.2 | 331 | 7.6 | 1 | | 0 | 0 | 0 | 0 | 0 |
| 6 | 57.25 | 32.9 | 0.37 | 10.7 | 0.3 | 132 | 6.9 | 2 | | 0 | 0 | 0 | 0 | 0 |
| 7 | 57.33 | 32.7 | 0.32 | 8.0 | 8.0 | 149 | 6.9 | 3 | | 0 | 0 | 0 | 0 | 0 |
| 8 | 57.42 | 32.2 | 0.35 | 7.3 | 10.4 | 148 | 6.9 | 359 | | 0 | 0 | 0 | 0 | 0 |
| 9 | 57.50 | 31.7 | 0.37 | 12.6 | 2.4 | 116 | 7.8 | 9 | | 0 | 0 | 0 | 0 | 0 |
| 10 | 57.58 | 31.7 | 0.37 | 18.6 | 3.4 | 6 | 8.7 | 6 | | 0 | 0 | 0 | 0 | 0 |
| 11 | 57.67 | 32.2 | 0.53 | 15.3 | 3.6 | 336 | 8.8 | 20 | | 0 | 0 | 0 | 0 | 0 |
| 12 | 57.75 | 32.7 | 0.55 | 13.7 | 2.0 | 198 | 8.8 | 18 | | 0 | 0 | 0 | 0 | 0 |
| 13 | 57.83 | 32.7 | 0.43 | 21.9 | 5.0 | 176 | 8.9 | 14 | | 0 | 0 | 0 | 0 | 0 |
| 14 | 57.92 | 32.3 | 0.56 | 18.9 | 1.3 | 286 | 9.1 | 14 | | 0 | 0 | 0 | 0 | 0 |
| 15 | 58.00 | 31.8 | 0.50 | 15.1 | 6.7 | 309 | 8.9 | 13 | | 0 | 0 | 0 | 0 | 0 |
| 16 | 58.08 | 31.7 | 0.54 | 15.6 | 11.9 | 319 | 8.2 | 10 | | 0 | 0 | 0 | 0 | 0 |
| 17 | 58.17 | 32.2 | 0.48 | 7.8 | 10.2 | 333 | 8.7 | 7 | | 0 | 0 | 0 | 0 | 0 |
| 18 | 58.25 | 32.8 | 0.59 | 18.8 | 1.8 | 274 | 9.2 | 18 | | 0 | 0 | 0 | 0 | 0 |
| 19 | 58.33 | 32.9 | 0.56 | 29.3 | 5.2 | 162 | 9.1 | 13 | | 2.3 | 15.2 | 0.18 | 0 | 178 |
| 20 | 58.42 | 32.5 | 0.42 | 10.2 | 9.9 | 146 | 7.8 | 6 | | 0 | 0 | 0 | 0 | 0 |
| 21 | 58.50 | 31.8 | 0.44 | 12.7 | 5.0 | 137 | 7.8 | 10 | | 0 | 0 | 0 | 0 | 0 |
| 22 | 58.58 | 31.6 | 0.43 | 13.4 | 1.5 | 13 | 8.4 | 5 | | 0 | 0 | 0 | 0 | 0 |
| 23 | 58.67 | 31.9 | 0.44 | 19.7 | 3.1 | 329 | 8.3 | 10 | | 0 | 0 | 0 | 0 | 0 |
| 24 | 58.75 | 32.6 | 0.51 | 9.0 | 1.0 | 94 | 7.9 | 13 | | 0 | 0 | 0 | 0 | 0 |
| 25 | 58.83 | 31.4 | 0.54 | 10.8 | 6.2 | 153 | 8.5 | 3 | | 2.5 | 16.8 | 0.40 | 0 | 169 |
| 26 | 58.92 | 32.5 | 0.60 | 14.0 | 2.8 | 164 | 8.5 | 3 | | 2.6 | 17.5 | 0.17 | 0 | 175 |
| 27 | 59.00 | 31.9 | 0.70 | 10.7 | 5.0 | 304 | 8.2 | 6 | | 2.6 | 23.3 | 0.14 | 0 | 331 |
| 28 | 59.08 | 31.6 | 0.91 | 13.1 | 10.9 | 313 | 8.0 | 7 | | 1.4 | 23.3 | 0.45 | 0.27 | 340 |
| 29 | 59.17 | 30.4 | 0.85 | 12.1 | 12.2 | 319 | 7.8 | 4 | | 2.5 | 23.3 | 0.61 | 0 | 343 |
| 30 | 59.25 | 32.5 | 0.86 | 10.7 | 4.1 | 338 | 8.8 | 6 | | 1.8 | 23.3 | 0.15 | 0.09 | 355 |
| 31 | 59.33 | 32.8 | 0.92 | 22.2 | 5.5 | 149 | 9.2 | 9 | | 2.8 | 23.3 | 0.24 | 0 | 172 |
| 32 | 59.42 | 32.5 | 1.13 | 20.8 | 11.8 | 142 | 9.3 | 15 | | 1.0 | 23.3 | 0.57 | 0.22 | 170 |
| 33 | 59.50 | 31.9 | 1.32 | 20.4 | 13.2 | 141 | 9.1 | 18 | | 0 | 0 | 1.61 | 0.05 | 170 |
| 34 | 59.58 | 31.4 | 1.42 | 18.5 | 3.5 | 123 | 9.3 | 28 | | 0 | 0 | 0.15 | 0.01 | 133 |
| 35 | 59.67 | 30.3 | 1.57 | 26.7 | 0.9 | 9 | 9.7 | 33 | | 0 | 0 | 0.07 | 0 | 24 |
| 36 | 59.75 | 32.3 | 1.99 | 13.5 | 0.1 | 287 | 10.1 | 51 | | 0 | 0 | 0 | 0 | 257 |
| 37 | 59.83 | 31.5 | 1.95 | 15.4 | 2.8 | 160 | 10.1 | 71 | | 0 | 0 | 0.30 | 0.03 | 157 |
| 38 | 59.92 | 32.6 | 1.89 | 14.9 | 3.4 | 159 | 10.0 | 68 | | 0 | 0 | 0.47 | 0.05 | 159 |
| 39 | 60 | 30.8 | 2.16 | 17.8 | 0.7 | 349 | 10.3 | 65 | | 0 | 0 | 0.03 | 0 | 13 |
| 40 | 60.08 | 31.6 | 1.46 | 19.2 | 3.8 | 343 | 10.0 | 73 | | 0 | 0 | 0.23 | 0.01 | 343 |
| 41 | 60.17 | 30.3 | 1.82 | 25.9 | 5.3 | 337 | 10.2 | 84 | | 0 | 0 | 0.60 | 0.03 | 312 |
| 42 | 60.25 | 32.1 | 1.71 | 16.9 | 2.6 | 340 | 10.3 | 77 | | 0 | 0 | 0.17 | 0.01 | 328 |
| 43 | 60.33 | 32.8 | 1.42 | 20.8 | 1.1 | 116 | 10.2 | 72 | | 0 | 0 | 0.04 | 0 | 90 |
| 44 | 60.42 | 31.5 | 1.40 | 21.7 | 8.3 | 150 | 9.9 | 77 | | 0.4 | 23.3 | 0.31 | 0.12 | 125 |

cont'd

| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_\delta$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | 60.50 | 32.2 | 1.08 | 10.7 | 9.3 | 155 | 9.7 | 69 | | 2.1 | 23.3 | 0.27 | 0.71 | 149 |
| 46 | 60.58 | 31.7 | 1.22 | 13.4 | 0.7 | 347 | 10.3 | 70 | | 0.9 | 23.3 | 0 | 0 | 360 |
| 47 | 60.67 | 31.6 | 1.07 | 14.5 | 3.7 | 331 | 10.1 | 78 | | 2.3 | 23.3 | 0.09 | 0 | 309 |
| 48 | 60.75 | 32.1 | 1.21 | 11.5 | 6.2 | 338 | 10.3 | 68 | | 0.9 | 23.3 | 0.15 | 0.09 | 338 |
| 49 | 60.83 | 31.4 | 1.02 | 28.9 | 0.2 | 276 | 9.7 | 70 | | 1.7 | 23.3 | 0 | 0 | 260 |
| 50 | 60.92 | 31.6 | 0.80 | 23.9 | 5.2 | 165 | 9.5 | 60 | | 2.7 | 18.1 | 0.32 | 0 | 184 |
| 51 | 61.00 | 32.4 | 0.82 | 17.0 | 1.7 | 157 | 10.0 | 76 | | 2.5 | 16.7 | 0.03 | 0 | 144 |
| 52 | 61.08 | 31.8 | 0.78 | 8.8 | 2.3 | 324 | 9.7 | 39 | | 2.5 | 16.8 | 0.06 | 0 | 343 |
| 53 | 61.17 | 31.6 | 0.76 | 8.9 | 6.4 | 331 | 9.7 | 61 | | 2.5 | 16.8 | 0.24 | 0 | 331 |
| 54 | 61.25 | 31.9 | 0.73 | 20.8 | 7.3 | 333 | 9.4 | 35 | | 2.5 | 16.6 | 0.37 | 0 | 356 |
| 55 | 61.33 | 32.6 | 0.55 | 26.3 | 3.1 | 339 | 9.2 | 84 | | 0 | 0 | 0 | 0 | 0 |
| 56 | 61.42 | 32.8 | 0.59 | 26.4 | 3.8 | 165 | 9.2 | 13 | | 0 | 0 | 0 | 0 | 0 |
| 57 | 61.50 | 32.5 | 0.46 | 26.3 | 6.0 | 160 | 9.0 | 48 | | 0 | 0 | 0 | 0 | 0 |
| 58 | 61.58 | 31.9 | 0.50 | 21.2 | 0.7 | 99 | 9.2 | 352 | | 0 | 0 | 0 | 0 | 0 |
| 59 | 61.67 | 31.6 | 0.51 | 26.3 | 4.0 | 349 | 9.2 | 14 | | 0 | 0 | 0 | 0 | 0 |
| 60 | 61.75 | 31.8 | 0.41 | 26.3 | 5.9 | 346 | 8.7 | 348 | | 0 | 0 | 0 | 0 | 0 |
| 61 | 61.83 | 32.4 | 0.42 | 19.5 | 1.7 | 336 | 8.8 | 345 | | 0 | 0 | 0 | 0 | 0 |
| 62 | 61.92 | 32.9 | 0.41 | 23.3 | 3.8 | 155 | 8.7 | 358 | | 0 | 0 | 0 | 0 | 0 |
| 63 | 62.00 | 32.6 | 0.39 | 12.7 | 9.6 | 160 | 7.9 | 349 | | 0 | 0 | 0 | 0 | 0 |
| 64 | 62.08 | 32.0 | 0.41 | 7.0 | 3.8 | 153 | 8.2 | 348 | | 0 | 0 | 0 | 0 | 0 |
| 65 | 62.17 | 30.4 | 0.40 | 7.3 | 3.1 | 345 | 8.3 | 349 | | 0 | 0 | 0 | 0 | 0 |
| 66 | 62.25 | 31.7 | 0.34 | 8.1 | 5.0 | 334 | 8.0 | 349 | | 0 | 0 | 0 | 0 | 0 |
| 67 | 62.33 | 32.2 | 0.34 | 12.9 | 4.9 | 342 | 8.4 | 349 | | 0 | 0 | 0 | 0 | 0 |
| 68 | 62.42 | 32.7 | 0.36 | 24.5 | 4.2 | 174 | 8.2 | 352 | | 0 | 0 | 0 | 0 | 0 |
| 69 | 62.50 | 32.6 | 0.32 | 7.8 | 9.1 | 169 | 7.8 | 349 | | 0 | 0 | 0 | 0 | 0 |
| 70 | 62.58 | 32.1 | 0.36 | 5.1 | 4.7 | 171 | 7.5 | 353 | | 0 | 0 | 0 | 0 | 0 |
| 71 | 62.67 | 30.4 | 0.38 | 5.5 | 4.7 | 322 | 7.1 | 3 | | 0 | 0 | 0 | 0 | 0 |
| 72 | 62.75 | 31.7 | 0.41 | 7.3 | 8.4 | 333 | 7.2 | 357 | | 0 | 0 | 0 | 0 | 0 |
| 73 | 62.83 | 32.2 | 0.47 | 12.3 | 8.7 | 333 | 7.7 | 11 | | 2.3 | 15.2 | 0.36 | 0 | 352 |
| 74 | 62.92 | 32.7 | 0.70 | 13.0 | 0.6 | 162 | 7.9 | 11 | | 2.6 | 17.6 | 0.01 | 0 | 178 |
| 75 | 63.00 | 32.7 | 0.89 | 14.3 | 7.1 | 147 | 8.5 | 17 | | 2.1 | 23.3 | 0.30 | 0.38 | 173 |
| 76 | 63.08 | 32.3 | 1.11 | 10.3 | 6.6 | 146 | 8.9 | 38 | | 0 | 0 | 0.24 | 0 | 172 |
| 77 | 63.17 | 31.9 | 1.76 | 13.0 | 2.3 | 137 | 9.3 | 54 | | 0 | 0 | 0.23 | 0.02 | 124 |
| 78 | 63.25 | 31.6 | 2.04 | 17.0 | 0.6 | 291 | 9.7 | 54 | | 0 | 0 | 0.08 | 0 | 261 |
| 79 | 63.33 | 31.8 | 2.03 | 15.3 | 0.4 | 264 | 10.1 | 58 | | 0 | 0 | 0.07 | 0 | 247 |
| 80 | 63.42 | 32.4 | 2.14 | 16.6 | 1.1 | 125 | 10.3 | 64 | | 0 | 0 | 0.20 | 0.02 | 95 |
| 81 | 63.50 | 32.4 | 2.54 | 22.2 | 3.6 | 141 | 10.5 | 55 | | 0 | 0 | 2.04 | 0.54 | 133 |
| 82 | 63.58 | 32.1 | 2.90 | 20.9 | 2.9 | 133 | 11.1 | 65 | | 0 | 0 | 3.08 | 0.95 | 105 |
| 83 | 63.67 | 30.6 | 2.43 | 23.9 | 1.1 | 18 | 10.6 | 56 | | 0 | 0 | 0.83 | 0.11 | 41 |
| 84 | 63.75 | 31.6 | 2.76 | 22.7 | 1.7 | 350 | 11.0 | 56 | | 0 | 0 | 1.03 | 0.23 | 19 |
| 85 | 63.83 | 31.8 | 2.67 | 23.4 | 2.1 | 332 | 11.2 | 63 | | 0 | 0 | 1.06 | 0.41 | 330 |
| 86 | 63.92 | 32.3 | 2.38 | 15.9 | 0.8 | 333 | 10.8 | 65 | | 0 | 0 | 0.13 | 0.04 | 329 |
| 87 | 64.00 | 32.5 | 2.32 | 23.1 | 0.9 | 143 | 11.0 | 63 | | 0 | 0 | 0.24 | 0.09 | 125 |
| 88 | 64.08 | 31.2 | 2.39 | 25.2 | 4.3 | 140 | 11.0 | 58 | | 0 | 0 | 1.28 | 0.21 | 125 |
| 89 | 64.17 | 31.9 | 2.08 | 19.7 | 3.8 | 137 | 11.0 | 64 | | 0 | 0 | 0.79 | 0.07 | 111 |
| 90 | 64.25 | 31.7 | 2.34 | 25.5 | 0.6 | 42 | 11.2 | 67 | | 0 | 0 | 0.17 | 0.01 | 58 |
| 91 | 64.33 | 31.8 | 1.83 | 23.7 | 0.9 | 3 | 10.7 | 62 | | 0 | 0 | 0.08 | 0 | 33 |
| 92 | 64.42 | 32.1 | 1.65 | 24.2 | 0.8 | 17 | 10.6 | 59 | | 0 | 0 | 0.06 | 0 | 43 |

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| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_\delta$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93 | 64.50 | 32.4 | 1.39 | 30 | 2.2 | 118 | 10.4 | 63 | | 0 | 0 | 0.14 | 0 | 89 |
| 94 | 64.58 | 32.3 | 1.23 | 15.2 | 3.2 | 143 | 9.9 | 50 | | 0.2 | 23.3 | 0.08 | 0.04 | 148 |
| 95 | 64.67 | 32.0 | 1.40 | 11.6 | 1.1 | 17 | 10.0 | 69 | | 0 | 0 | 0.04 | 0 | 46 |
| 96 | 64.75 | 31.8 | 1.31 | 25.6 | 3.1 | 350 | 10.3 | 65 | | 0 | 0 | 0.13 | 0 | 14 |
| 97 | 64.83 | 31.8 | 1.17 | 23.3 | 3.2 | 339 | 9.9 | 60 | | 0 | 0 | 0.10 | 0 | 356 |
| 98 | 64.92 | 32.2 | 0.89 | 23.3 | 2.8 | 334 | 9.7 | 67 | 0.9 | 2.6 | 23.3 | 0.06 | 0 | 329 |
| 99 | 65.00 | 32.5 | 0.97 | 20.9 | 0.3 | 106 | 9.9 | 63 | 0.9 | 1.5 | 23.3 | 0 | 0 | 82 |
| 100 | 65.08 | 32.5 | 0.77 | 18.4 | 5.2 | 145 | 9.3 | 64 | 0.9 | 3.0 | 23.3 | 0.16 | 0 | 130 |
| 101 | 65.17 | 32.2 | 0.66 | 18.4 | 4.6 | 122 | 9.5 | 65 | | 2.5 | 16.8 | 0.25 | 0 | 98 |
| 102 | 65.25 | 31.9 | 0.66 | 22.6 | 3.8 | 117 | 9.3 | 65 | | 2.5 | 16.3 | 0.17 | 0 | 94 |
| 103 | 65.33 | 31.8 | 0.58 | 19.0 | 2.9 | 64 | 9.5 | 60 | | 2.3 | 15.4 | 0.12 | 0 | 62 |
| 104 | 65.42 | 32.0 | 0.63 | 17.5 | 1.6 | 24 | 9.6 | 63 | | 2.3 | 15.2 | 0.04 | 0 | 44 |
| 105 | 65.50 | 32.3 | 0.66 | 22.0 | 1.4 | 171 | 9.6 | 64 | | 2.3 | 15.3 | 0.02 | 0 | 189 |
| 106 | 65.58 | 32.4 | 0.56 | 20.2 | 2.0 | 157 | 9.4 | 55 | | 0 | 0 | 0 | 0 | 0 |
| 107 | 65.67 | 31.1 | 0.56 | 20 | 1.7 | 316 | 9.4 | 61 | | 0 | 0 | 0 | 0 | 0 |
| 108 | 65.75 | 32.0 | 0.54 | 29.1 | 4.0 | 325 | 9.3 | 66 | | 0 | 0 | 0 | 0 | 0 |
| 109 | 65.83 | 31.9 | 0.49 | 23.6 | 6.4 | 320 | 9.0 | 66 | | 0 | 0 | 0 | 0 | 0 |
| 110 | 65.92 | 32.1 | 0.40 | 22.0 | 8.4 | 321 | 8.8 | 55 | | 0 | 0 | 0 | 0 | 0 |
| 111 | 66.00 | 32.5 | 0.37 | 22.2 | 4.4 | 312 | 8.7 | 70 | | 0 | 0 | 0 | 0 | 0 |
| 112 | 66.08 | 32.6 | 0.43 | 20.8 | 1.2 | 201 | 8.7 | 67 | | 0 | 0 | 0 | 0 | 0 |
| 113 | 66.17 | 32.5 | 0.42 | 21.5[5] | 3.8 | 150 | 8.6 | 65 | | 0 | 0 | 0 | 0 | 0 |
| 114 | 66.25 | 32.2 | 0.52 | 14.5 | 6.9 | 146 | 8.4 | 63 | | 2.4 | 15.7 | 0.20 | 0 | 137 |
| 115 | 66.33 | 31.8 | 0.56 | 17.5 | 2.5 | 137 | 8.8 | 62 | | 2.4 | 15.9 | 0.05 | 0 | 120 |
| 116 | 66.42 | 31.9 | 0.72 | 26.0 | 2.3 | 5 | 8.9 | 71 | | 2.5 | 16.9 | 0.08 | 0 | 29 |
| 117 | 66.50 | 32.2 | 0.83 | 24.6 | 1.9 | 355 | 9.1 | 72 | | 3.3 | 23.3 | 0.04 | 0 | 13 |
| 118 | 66.58 | 32.4 | 0.77 | 21.8 | 0.9 | 161 | 9.1 | 76 | | 2.6 | 17.4 | 0.02 | 0 | 154 |
| 119 | 66.67 | 32.4 | 0.75 | 32.8 | 0.7 | 342 | 9.1 | 75 | | 2.5 | 16.9 | 0.01 | 0 | 338 |
| 120 | 66.75 | 32.2 | 0.65 | 29.4 | 2.7 | 311 | 8.9 | 82 | | 2.5 | 16.3 | 0.10 | 0 | 288 |
| 121 | 66.83 | 32.0 | 0.63 | 19.9 | 6.0 | 321 | 9.0 | 79 | | 2.4 | 15.7 | 0.23 | 0 | 298 |
| 122 | 66.92 | 32.0 | 0.55 | 21.3 | 11.3 | 321 | 8.9 | 75 | | 2.3 | 15.4 | 0.43 | 0 | 302 |
| 123 | 67.00 | 32.3 | 0.49 | 25.8 | 8.5 | 324 | 8.6 | 84 | | 2.1 | 14.1 | 0.24 | 0 | 302 |
| 124 | 67.08 | 31.4 | 0.55 | 23.3 | 2.1 | 309 | 8.8 | 76 | | 0 | 0 | 0 | 0 | 0 |
| 125 | 67.17 | 32.6 | 0.52 | 20.2 | 3.1 | 166 | 9.0 | 78 | | 0 | 0 | 0 | 0 | 0 |
| 126 | 67.25 | 32.4 | 0.49 | 19.8 | 5.4 | 151 | 8.8 | 80 | | 0 | 0 | 0 | 0 | 0 |
| 127 | 67.33 | 32.0 | 0.51 | 20.8 | 5.9 | 142 | 8.9 | 80 | | 0 | 0 | 0 | 0 | 0 |
| 128 | 67.42 | 31.9 | 0.43 | 20.1 | 2.9 | 130 | 8.8 | 80 | | 0 | 0 | 0 | 0 | 0 |
| 129 | 67.50 | 32.0 | 0.38 | 21.0 | 1.2 | 29 | 8.8 | 74 | | 0 | 0 | 0 | 0 | 0 |
| 130 | 67.58 | 32.3 | 0.36 | 25.6 | 0.2 | 48 | 8.5 | 84 | | 0 | 0 | 0 | 0 | 0 |
| 131 | 67.67 | 32.5 | 0.38 | 21.1 | 0.4 | 358 | 8.7 | 66 | | 0 | 0 | 0 | 0 | 0 |
| 132 | 67.75 | 32.4 | 0.36 | 22.2 | 2.6 | 311 | 8.6 | 78 | | 0 | 0 | 0 | 0 | 0 |
| 133 | 67.83 | 32.1 | 0.30 | 21.8 | 5.7 | 318 | 8.7 | 86 | | 0 | 0 | 0 | 0 | 0 |
| 134 | 67.92 | 32.0 | 0.29 | 13.9 | 9.4 | 327 | 8.1 | 88 | | 0 | 0 | 0 | 0 | 0 |
| 135 | 68.00 | 32.1 | 0.25 | 25.5 | 11.8 | 331 | 8.0 | 52 | | 0 | 0 | 0 | 0 | 0 |
| 136 | 68.08 | 32.4 | 0.27 | 17.1 | 7.6 | 334 | 8.2 | 56 | | 0 | 0 | 0 | 0 | 0 |
| 137 | 68.17 | 32.6 | 0.26 | 14.8 | 1.0 | 322 | 7.3 | 229 | | 0 | 0 | 0 | 0 | 0 |
| 138 | 68.25 | 31.4 | 0.23 | 15.5 | 6.2 | 151 | 7.8 | 23 | | 0 | 0 | 0 | 0 | 0 |
| 139 | 68.33 | 32.2 | 0.23 | 14.7 | 6.4 | 155 | 7.8 | 20 | | 0 | 0 | 0 | 0 | 0 |
| 140 | 68.42 | 31.9 | 0.23 | 12.1 | 2.1 | 161 | 7.9 | 36 | | 0 | 0 | 0 | 0 | 0 |

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| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_\delta$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 141 | 68.50 | 31.9 | 0.22 | 10.2 | 4.1 | 319 | 8.1 | 31 | | 0 | 0 | 0 | 0 | 0 |
| 142 | 68.58 | 32.2 | 0.21 | 12.9 | 4.8 | 320 | 7.6 | 35 | | 0 | 0 | 0 | 0 | 0 |
| 143 | 68.67 | 31.3 | 0.22 | 12.9 | 1.9 | 282 | 8.2 | 22 | | 0 | 0 | 0 | 0 | 0 |
| 144 | 68.75 | 32.5 | 0.22 | 16.4 | 3.1 | 263 | 8.0 | 8 | | 0 | 0 | 0 | 0 | 0 |
| 145 | 68.83 | 32.2 | 0.25 | 21.6 | 4.9 | 302 | 8.2 | 360 | | 0 | 0 | 0 | 0 | 0 |
| 146 | 68.92 | 31.9 | 0.26 | 21.0 | 4.9 | 302 | 8.2 | 360 | | 0 | 0 | 0 | 0 | 0 |
| 147 | 69.00 | 31.9 | 0.27 | 22.5 | 10.3 | 325 | 7.4 | 354 | | 0 | 0 | 0 | 0 | 0 |
| 148 | 69.08 | 32.2 | 0.29 | 22.4 | 6.9 | 328 | 8.3 | 1 | | 0 | 0 | 0 | 0 | 0 |
| 149 | 69.17 | 32.5 | 0.32 | 19.1 | 0.8 | 166 | 8.9 | 4 | | 0 | 0 | 0 | 0 | 0 |
| 150 | 69.25 | 32.6 | 0.33 | 19.8 | 7.2 | 152 | 8.9 | 1 | | 0 | 0 | 0 | 0 | 0 |
| 151 | 69.33 | 32.3 | 0.31 | 22.5 | 11.5 | 149 | 7.6 | 353 | | 0 | 0 | 0 | 0 | 0 |
| 152 | 69.42 | 31.9 | 0.34 | 13.9 | 10.1 | 145 | 8.6 | 6 | | 0 | 0 | 0 | 0 | 0 |
| 153 | 69.50 | 31.7 | 0.35 | 15.9 | 3.3 | 131 | 9.1 | 4 | | 0 | 0 | 0 | 0 | 0 |
| 154 | 69.58 | 31.9 | 0.36 | 17.9 | 1.4 | 88 | 8.9 | 359 | | 0 | 0 | 0 | 0 | 0 |
| 155 | 69.67 | 32.3 | 0.33 | 9.8 | 1.5 | 150 | 8.6 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 156 | 69.75 | 32.5 | 0.28 | 19.1 | 3.3 | 163 | 8.8 | 3 | | 0 | 0 | 0 | 0 | 0 |
| 157 | 69.83 | 32.3 | 0.32 | 9.2 | 2.4 | 176 | 6.8 | 1 | | 0 | 0 | 0 | 0 | 0 |
| 158 | 69.92 | 31.9 | 0.32 | 11.9 | 4.7 | 304 | 7.7 | 8 | | 0 | 0 | 0 | 0 | 0 |
| 159 | 70 | 31.8 | 0.43 | 15.6 | 7.0 | 326 | 7.8 | 50 | | 0 | 0 | 0 | 0 | 0 |
| 160 | 70.08 | 32.0 | 0.54 | 18.5 | 7.2 | 330 | 8.4 | 39 | | 2.3 | 15.4 | 0.23 | 0 | 351 |
| 161 | 70.17 | 32.4 | 0.72 | 15.1 | 1.2 | 357 | 8.6 | 39 | | 2.8 | 23.3 | 0.03 | 0 | 20 |
| 162 | 70.25 | 32.6 | 0.83 | 16.8 | 5.9 | 142 | 8.4 | 45 | | 1.9 | 23.3 | 0.14 | 0.27 | 155 |
| 163 | 70.33 | 32.4 | 0.97 | 13.0 | 12.7 | 142 | 8.8 | 48 | | 0 | 0 | 0.52 | 0.01 | 150 |
| 164 | 70.42 | 32.0 | 1.22 | 10.8 | 11.3 | 148 | 9.1 | 54 | | 0 | 0 | 0.85 | 0.04 | 157 |
| 165 | 70.50 | 31.7 | 1.14 | 11.5 | 4.3 | 140 | 9.3 | 65 | | 0 | 0 | 0.21 | 0.01 | 116 |
| 166 | 70.58 | 31.8 | 1.38 | 10.1 | 2.7 | 144 | 9.3 | 70 | | 0 | 0 | 0.15 | 0.01 | 120 |
| 167 | 70.67 | 32.2 | 1.33 | 9.6 | 3.2 | 145 | 9.4 | 74 | | 0 | 0 | 0.19 | 0.01 | 118 |
| 168 | 70.75 | 32.5 | 1.52 | 11.4 | 3.2 | 145 | 9.4 | 74 | | 0 | 0 | 0.33 | 0.02 | 118 |
| 169 | 70.83 | 32.4 | 1.21 | 10 | 6.4 | 151 | 9.4 | 67 | | 0 | 0 | 0.26 | 0.01 | 140 |
| 170 | 70.92 | 32.0 | 1.22 | 8.6 | 3.6 | 138 | 9.4 | 78 | | 0 | 0 | 0.15 | 0 | 108 |
| 171 | 71.00 | 31.8 | 0.93 | 11.9 | 1.3 | 327 | 9.4 | 82 | | 2.0 | 23.3 | 0.02 | 0.03 | 300 |
| 172 | 71.08 | 31.8 | 1.09 | 13.6 | 3.5 | 355 | 9.3 | 83 | | 1.3 | 23.3 | 0.07 | 0.07 | 359 |
| 173 | 71.17 | 32.3 | 0.85 | 11.3 | 3.5 | 355 | 9.3 | 83 | | 3.2 | 23.3 | 0.09 | 0 | 359 |
| 174 | 71.25 | 32.6 | 0.90 | 7.8 | 2.6 | 151 | 9.0 | 89 | | 2.3 | 23.3 | 0.07 | 0 | 123 |
| 175 | 71.33 | 32.6 | 0.82 | 12.4 | 6.1 | 148 | 9.3 | 76 | | 3.2 | 23.3 | 0.24 | 0 | 126 |
| 176 | 71.42 | 32.2 | 0.81 | 8.0 | 6.1 | 148 | 9.3 | 76 | | 2.6 | 17.6 | 0.40 | 0 | 128 |
| 177 | 71.50 | 31.8 | 0.75 | 7.9 | 3.9 | 146 | 9.4 | 66 | | 2.6 | 17.3 | 0.17 | 0 | 133 |
| 178 | 71.58 | 31.8 | 0.70 | 13.4 | 0.7 | 354 | 9.2 | 71 | | 2.5 | 16.9 | 0.01 | 0 | 9 |
| 179 | 71.67 | 30.9 | 0.61 | 16.8 | 1.9 | 340 | 9.3 | 62 | | 2.5 | 17.0 | 0.05 | 0 | 352 |
| 180 | 71.75 | 31.4 | 0.57 | 17.9 | 0.5 | 8 | 9.2 | 278 | | 2.3 | 15.0 | 0 | 0 | 7 |
| 181 | 71.83 | 32.6 | 0.49 | 22.1 | 2.7 | 166 | 9.1 | 71 | | 0 | 0 | 0 | 0 | 0 |
| 182 | 71.92 | 31.1 | 0.48 | 16.0 | 0.1 | 288 | 8.8 | 51 | | 0 | 0 | 0 | 0 | 0 |
| 183 | 72.00 | 30.7 | 0.47 | 18.2 | 4.4 | 330 | 8.9 | 54 | | 0 | 0 | 0 | 0 | 0 |
| 184 | 72.08 | 30.6 | 0.40 | 9.3 | 7.9 | 328 | 8.6 | 86 | | 0 | 0 | 0 | 0 | 0 |
| 185 | 72.17 | 30.9 | 0.35 | 8.0 | 7.6 | 330 | 7.8 | 20 | | 0 | 0 | 0 | 0 | 0 |
| 186 | 72.25 | 32.5 | 0.35 | 9.1 | 1.0 | 321 | 7.2 | 12 | | 0 | 0 | 0 | 0 | 0 |
| 187 | 72.33 | 32.6 | 0.36 | 12.5 | 7.0 | 158 | 7.8 | 359 | | 0 | 0 | 0 | 0 | 0 |
| 188 | 72.42 | 32.3 | 0.31 | 8.2 | 9.1 | 153 | 8.1 | 7 | | 0 | 0 | 0 | 0 | 0 |

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| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_{\vec{u}}$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 189 | 72.50 | 31.8 | 0.31 | 10.9 | 2.0 | 119 | 7.0 | 4 | | 0 | 0 | 0 | 0 | 0 |
| 190 | 72.58 | 31.7 | 0.29 | 19.2 | 4.1 | 347 | 8.6 | 6 | | 0 | 0 | 0 | 0 | 0 |
| 191 | 72.67 | 32.0 | 0.27 | 13.9 | 6.1 | 330 | 8.0 | 13 | | 0 | 0 | 0 | 0 | 0 |
| 192 | 72.75 | 31.3 | 0.27 | 9.9 | 5.6 | 315 | 7.8 | 14 | | 0 | 0 | 0 | 0 | 0 |
| 193 | 72.83 | 32.6 | 0.26 | 12.0 | 3.7 | 222 | 7.0 | 360 | | 0 | 0 | 0 | 0 | 0 |
| 194 | 72.92 | 32.3 | 0.27 | 9.8 | 2.7 | 243 | 7.8 | 8 | | 0 | 0 | 0 | 0 | 0 |
| 195 | 73.00 | 30.7 | 0.26 | 6.6 | 3.9 | 305 | 8.2 | 4 | | 0 | 0 | 0 | 0 | 0 |
| 196 | 73.08 | 30.5 | 0.25 | 6.0 | 7.9 | 323 | 7.4 | 8 | | 0 | 0 | 0 | 0 | 0 |
| 197 | 73.17 | 31.9 | 0.26 | 6.6 | 9.4 | 328 | 7.6 | 357 | | 0 | 0 | 0 | 0 | 0 |
| 198 | 73.25 | 31.2 | 0.26 | 6.9 | 5.2 | 336 | 7.4 | 7 | | 0 | 0 | 0 | 0 | 0 |
| 199 | 73.33 | 31.4 | 0.28 | 9.6 | 3.0 | 170 | 6.0 | 7 | | 0 | 0 | 0 | 0 | 0 |
| 200 | 73.42 | 32.3 | 0.28 | 10.3 | 7.5 | 162 | 7.3 | 4 | | 0 | 0 | 0 | 0 | 0 |
| 201 | 73.50 | 31.8 | 0.29 | 7.8 | 2.7 | 121 | 7.5 | 18 | | 0 | 0 | 0 | 0 | 0 |
| 202 | 73.58 | 31.6 | 0.31 | 13.0 | 3.6 | 7 | 7.6 | 12 | | 0 | 0 | 0 | 0 | 0 |
| 203 | 73.67 | 31.8 | 0.52 | 15.3 | 5.6 | 357 | 8.3 | 27 | | 2.2 | 14.9 | 0.22 | 0 | 13 |
| 204 | 73.75 | 32.3 | 0.45 | 15.4 | 2.4 | 355 | 8.4 | 34 | | 0 | 0 | 0 | 0 | 0 |
| 205 | 73.83 | 32.6 | 0.55 | 20.6 | 2.1 | 153 | 8.6 | 37 | | 0 | 0 | 0 | 0 | 0 |
| 206 | 73.92 | 32.4 | 0.56 | 23.9 | 1.4 | 153 | 8.7 | 41 | | 2.2 | 14.5 | 0.02 | 0 | 174 |
| 207 | 74.00 | 31.9 | 0.92 | 23.6 | 2.9 | 349 | 9.4 | 37 | | 2.7 | 23.3 | 0.11 | 0 | 14 |
| 208 | 74.08 | 31.7 | 0.93 | 15.1 | 4.9 | 326 | 9.7 | 26 | | 3.1 | 23.3 | 0.22 | 0 | 353 |
| 209 | 74.17 | 31.8 | 1.03 | 20 | 6.1 | 330 | 9.7 | 37 | | 2.2 | 23.3 | 0.22 | 0 | 356 |
| 210 | 74.25 | 32.2 | 0.88 | 11.0 | 4.8 | 334 | 9.5 | 41 | | 2.7 | 17.9 | 0.35 | 0 | 358 |
| 211 | 74.33 | 32.6 | 0.79 | 19.4 | 1.2 | 135 | 9.5 | 34 | | 2.6 | 17.2 | 0.03 | 0 | 150 |
| 212 | 74.42 | 32.4 | 0.74 | 18.1 | 4.6 | 144 | 9.4 | 44 | | 2.7 | 17.9 | 0.27 | 0 | 158 |
| 213 | 74.50 | 30.8 | 0.73 | 21.9 | 4.2 | 138 | 9.2 | 48 | | 2.5 | 17.0 | 0.16 | 0 | 137 |
| 214 | 74.58 | 31.7 | 0.71 | 12.9 | 0.2 | 105 | 9.2 | 43 | | 2.5 | 16.4 | 0 | 0 | 81 |
| 215 | 74.67 | 31.7 | 0.56 | 26.9 | 1.6 | 351 | 9.4 | 42 | | 0 | 0 | 0 | 0 | 0 |
| 216 | 74.75 | 32.2 | 0.47 | 23.1 | 2.0 | 359 | 9.1 | 44 | | 0 | 0 | 0 | 0 | 0 |
| 217 | 74.83 | 32.6 | 0.60 | 22.7 | 2.3 | 165 | 9.3 | 34 | | 0 | 0 | 0 | 0 | 0 |
| 218 | 74.92 | 32.5 | 0.52 | 22.1 | 4.7 | 159 | 9.2 | 46 | | 0 | 0 | 0 | 0 | 0 |
| 219 | 75.00 | 32.1 | 0.46 | 24.0 | 0.9 | 296 | 9.1 | 47 | | 0 | 0 | 0 | 0 | 0 |
| 220 | 75.08 | 31.8 | 0.38 | 24.2 | 5.2 | 314 | 8.9 | 48 | | 0 | 0 | 0 | 0 | 0 |
| 221 | 75.17 | 31.8 | 0.37 | 21.9 | 9.2 | 318 | 8.6 | 39 | | 0 | 0 | 0 | 0 | 0 |
| 222 | 75.25 | 32.2 | 0.35 | 8.6 | 8.9 | 315 | 8.4 | 49 | | 0 | 0 | 0 | 0 | 0 |
| 223 | 75.33 | 31.4 | 0.31 | 8.4 | 2.7 | 299 | 8.6 | 39 | | 0 | 0 | 0 | 0 | 0 |
| 224 | 75.42 | 32.5 | 0.35 | 8.4 | 4.8 | 167 | 7.8 | 34 | | 0 | 0 | 0 | 0 | 0 |
| 225 | 75.50 | 32.1 | 0.43 | 16.6 | 4.6 | 156 | 8.1 | 55 | | 0 | 0 | 0 | 0 | 0 |
| 226 | 75.58 | 31.8 | 0.49 | 19.8 | 0.8 | 348 | 8.2 | 58 | | 0 | 0 | 0 | 0 | 0 |
| 227 | 75.67 | 31.8 | 0.44 | 25.3 | 3.8 | 328 | 8.4 | 56 | | 0 | 0 | 0 | 0 | 0 |
| 228 | 75.75 | 32.0 | 0.44 | 16.8 | 4.9 | 327 | 8.3 | 56 | | 0 | 0 | 0 | 0 | 0 |
| 229 | 75.83 | 32.5 | 0.36 | 9.8 | 1.6 | 319 | 8.3 | 51 | | 0 | 0 | 0 | 0 | 0 |
| 230 | 75.92 | 32.6 | 0.35 | 22.5 | 3.4 | 144 | 8.3 | 56 | | 0 | 0 | 0 | 0 | 0 |
| 231 | 76.00 | 32.3 | 0.30 | 16.3 | 3.8 | 142 | 8.2 | 51 | | 0 | 0 | 0 | 0 | 0 |
| 232 | 76.08 | 31.8 | 0.25 | 12.1 | 1.0 | 7 | 8.1 | 58 | | 0 | 0 | 0 | 0 | 0 |
| 233 | 76.17 | 31.7 | 0.26 | 7.3 | 3.2 | 334 | 7.7 | 21 | | 0 | 0 | 0 | 0 | 0 |
| 234 | 76.25 | 32.0 | 0.31 | 6.2 | 3.2 | 350 | 8.4 | 348 | | 0 | 0 | 0 | 0 | 0 |
| 235 | 76.33 | 32.4 | 0.26 | 5.2 | 2.2 | 106 | 7.7 | 349 | | 0 | 0 | 0 | 0 | 0 |
| 236 | 76.42 | 32.5 | 0.31 | 6.5 | 8.6 | 146 | 7.1 | 148 | | 0 | 0 | 0 | 0 | 0 |

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| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_{\vec{u}}$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 237 | 76.50 | 32.2 | 0.49 | 7.8 | 7.2 | 154 | 7.2 | 156 | | 0 | 0 | 0 | 0 | 0 |
| 238 | 76.58 | 31.8 | 0.44 | 6.0 | 2.0 | 16 | 7.5 | 154 | | 0 | 0 | 0 | 0 | 0 |
| 239 | 76.67 | 31.8 | 0.34 | 10.3 | 2.0 | 16 | 7.5 | 154 | | 0 | 0 | 0 | 0 | 0 |
| 240 | 76.75 | 32.0 | 0.34 | 7.6 | 4.6 | 336 | 7.9 | 154 | | 0 | 0 | 0 | 0 | 0 |
| 241 | 76.83 | 32.5 | 0.34 | 7.2 | 2.6 | 351 | 7.3 | 156 | | 0 | 0 | 0 | 0 | 0 |
| 242 | 76.92 | 32.7 | 0.37 | 9.4 | 4.3 | 152 | 6.6 | 167 | | 0 | 0 | 0 | 0 | 0 |
| 243 | 77.00 | 32.4 | 0.42 | 8.2 | 5.6 | 152 | 7.0 | 340 | | 0 | 0 | 0 | 0 | 0 |
| 244 | 77.08 | 32.0 | 0.31 | 6.3 | 1.6 | 341 | 7.6 | 156 | | 0 | 0 | 0 | 0 | 0 |
| 245 | 77.17 | 31.8 | 0.32 | 8.5 | 5.8 | 323 | 7.8 | 151 | | 0 | 0 | 0 | 0 | 0 |
| 246 | 77.25 | 32.0 | 0.27 | 10.6 | 7.8 | 320 | 7.8 | 337 | | 0 | 0 | 0 | 0 | 0 |
| 247 | 77.33 | 32.4 | 0.33 | 12.3 | 6.5 | 319 | 6.6 | 346 | | 0 | 0 | 0 | 0 | 0 |
| 248 | 77.42 | 31.4 | 0.26 | 12.0 | 2.2 | 265 | 8.2 | 346 | | 0 | 0 | 0 | 0 | 0 |
| 249 | 77.50 | 32.4 | 0.30 | 21.3 | 2.6 | 180 | 6.0 | 354 | | 0 | 0 | 0 | 0 | 0 |
| 250 | 77.58 | 32.0 | 0.26 | 14.1 | 1.4 | 270 | 8.3 | 350 | | 0 | 0 | 0 | 0 | 0 |
| 251 | 77.67 | 31.8 | 0.28 | 20.8 | 5.4 | 322 | 7.6 | 347 | | 0 | 0 | 0 | 0 | 0 |
| 252 | 77.75 | 32.0 | 0.24 | 16.9 | 6.4 | 329 | 7.9 | 342 | | 0 | 0 | 0 | 0 | 0 |
| 253 | 77.83 | 32.4 | 0.24 | 21.5 | 4.8 | 4 | 8.2 | 346 | | 0 | 0 | 0 | 0 | 0 |
| 254 | 77.92 | 32.7 | 0.26 | 22.2 | 2.0 | 92 | 9.3 | 342 | | 0 | 0 | 0 | 0 | 0 |
| 255 | 78.00 | 32.5 | 0.26 | 23.8 | 6.4 | 128 | 6.9 | 161 | | 0 | 0 | 0 | 0 | 0 |
| 256 | 78.08 | 32.1 | 0.30 | 15.9 | 5.8 | 141 | 7.4 | 341 | | 0 | 0 | 0 | 0 | 0 |
| 257 | 78.17 | 30.7 | 0.29 | 8.7 | 1.1 | 124 | 6.7 | 343 | | 0 | 0 | 0 | 0 | 0 |
| 258 | 78.25 | 31.9 | 0.26 | 7.9 | 1.8 | 355 | 7.6 | 342 | | 0 | 0 | 0 | 0 | 0 |
| 259 | 78.33 | 32.2 | 0.24 | 21.8 | 2.5 | 24 | 8.8 | 338 | | 0 | 0 | 0 | 0 | 0 |
| 260 | 78.42 | 32.5 | 0.27 | 21.1 | 4.3 | 105 | 7.7 | 345 | | 0 | 0 | 0 | 0 | 0 |
| 261 | 78.50 | 32.5 | 0.28 | 20.4 | 6.3 | 131 | 7.3 | 342 | | 0 | 0 | 0 | 0 | 0 |
| 262 | 78.58 | 32.1 | 0.30 | 10.3 | 2.6 | 160 | 7.8 | 344 | | 0 | 0 | 0 | 0 | 0 |
| 263 | 78.67 | 31.9 | 0.30 | 11.4 | 3.2 | 330 | 5.0 | 352 | | 0 | 0 | 0 | 0 | 0 |
| 264 | 78.75 | 31.9 | 0.28 | 21.0 | 6.5 | 340 | 8.0 | 342 | | 0 | 0 | 0 | 0 | 0 |
| 265 | 78.83 | 32.3 | 0.29 | 17.8 | 5.1 | 344 | 8.7 | 347 | | 0 | 0 | 0 | 0 | 0 |
| 266 | 78.92 | 31.5 | 0.30 | 18.2 | 1.9 | 341 | 9.3 | 343 | | 0 | 0 | 0 | 0 | 0 |
| 267 | 79.00 | 32.7 | 0.28 | 14.1 | 2.8 | 151 | 8.3 | 159 | | 0 | 0 | 0 | 0 | 0 |
| 268 | 79.08 | 32.3 | 0.29 | 18.6 | 4.0 | 161 | 8.0 | 339 | | 0 | 0 | 0 | 0 | 0 |
| 269 | 79.17 | 32.0 | 0.31 | 12.9 | 1.2 | 218 | 8.0 | 338 | | 0 | 0 | 0 | 0 | 0 |
| 270 | 79.25 | 31.9 | 0.30 | 17.4 | 3.5 | 327 | 7.8 | 340 | | 0 | 0 | 0 | 0 | 0 |
| 271 | 79.33 | 32.2 | 0.34 | 20.4 | 4.3 | 329 | 7.2 | 344 | | 0 | 0 | 0 | 0 | 0 |
| 272 | 79.42 | 32.4 | 0.32 | 18.3 | 0.9 | 314 | 9.2 | 342 | | 0 | 0 | 0 | 0 | 0 |
| 273 | 79.50 | 32.5 | 0.33 | 21.3 | 0.9 | 314 | 9.2 | 342 | | 0 | 0 | 0 | 0 | 0 |
| 274 | 79.58 | 32.3 | 0.32 | 22.1 | 1.6 | 229 | 8.3 | 339 | | 0 | 0 | 0 | 0 | 0 |
| 275 | 79.67 | 32.0 | 0.32 | 19.0 | 5.4 | 311 | 8.3 | 155 | | 0 | 0 | 0 | 0 | 0 |
| 276 | 79.75 | 32.0 | 0.33 | 21.6 | 10.4 | 319 | 7.6 | 151 | | 0 | 0 | 0 | 0 | 0 |
| 277 | 79.83 | 32.2 | 0.32 | 20.7 | 11.4 | 323 | 7.6 | 155 | | 0 | 0 | 0 | 0 | 0 |
| 278 | 79.92 | 32.6 | 0.32 | 17.0 | 7.2 | 327 | 8.0 | 337 | | 0 | 0 | 0 | 0 | 0 |
| 279 | 80 | 32.7 | 0.31 | 13.6 | 0.8 | 146 | 9.0 | 340 | | 0 | 0 | 0 | 0 | 0 |
| 280 | 80.08 | 32.5 | 0.33 | 19.2 | 0.8 | 146 | 9.0 | 340 | | 0 | 0 | 0 | 0 | 0 |
| 281 | 80.17 | 32.2 | 0.33 | 21.4 | 4.8 | 154 | 8.7 | 339 | | 0 | 0 | 0 | 0 | 0 |
| 282 | 80.25 | 32.0 | 0.32 | 14.2 | 2.9 | 145 | 7.3 | 342 | | 0 | 0 | 0 | 0 | 0 |
| 283 | 80.33 | 32.0 | 0.36 | 13.1 | 1.1 | 75 | 9.1 | 345 | | 0 | 0 | 0 | 0 | 0 |
| 284 | 80.42 | 32.3 | 0.39 | 9.2 | 2.3 | 130 | 8.0 | 349 | | 0 | 0 | 0 | 0 | 0 |

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| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_{\vec{u}}$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 285 | 80.50 | 32.5 | 0.49 | 17.8 | 3.1 | 159 | 7.7 | 345 | | 0 | 0 | 0 | 0 | 0 |
| 286 | 80.58 | 32.3 | 0.65 | 10.3 | 3.1 | 159 | 7.7 | 345 | | 2.5 | 16.9 | 0.20 | 0 | 162 |
| 287 | 80.67 | 32.2 | 1.28 | 14.3 | 5.7 | 319 | 9.0 | 32 | | 0 | 0 | 0.52 | 0.02 | 344 |
| 288 | 80.75 | 32.0 | 1.79 | 18.9 | 6.9 | 314 | 9.9 | 50 | | 0 | 0 | 1.55 | 0.19 | 304 |
| 289 | 80.83 | 32.1 | 1.90 | 16.4 | 6.7 | 319 | 9.8 | 42 | | 0 | 0 | 1.88 | 0.26 | 332 |
| 290 | 80.92 | 32.4 | 1.76 | 20.2 | 2.2 | 322 | 9.9 | 40 | | 0 | 0 | 0.18 | 0.01 | 343 |
| 291 | 81.00 | 32.6 | 1.52 | 26.0 | 0.3 | 100 | 9.8 | 31 | | 0 | 0 | 0 | 0 | 72 |
| 292 | 81.08 | 31.3 | 1.54 | 15.1 | 5.9 | 124 | 9.7 | 32 | | 0 | 0 | 0.25 | 0.01 | 128 |
| 293 | 81.17 | 32.2 | 1.14 | 14.7 | 9.5 | 135 | 9.7 | 8 | | 0.2 | 23.3 | 0.61 | 0.17 | 164 |
| 294 | 81.25 | 32.0 | 1.45 | 24.8 | 5.1 | 126 | 9.6 | 28 | | 0 | 0 | 0.30 | 0.01 | 141 |
| 295 | 81.33 | 31.9 | 1.33 | 11.8 | 1.8 | 115 | 9.4 | 41 | | 0 | 0 | 0.05 | 0 | 90 |
| 296 | 81.42 | 32.1 | 1.49 | 25.7 | 1.3 | 110 | 9.5 | 27 | | 0 | 0 | 0.04 | 0 | 96 |
| 297 | 81.50 | 32.3 | 1.15 | 27.3 | 1.9 | 124 | 9.6 | 55 | | 0.7 | 23.3 | 0.04 | 0.01 | 97 |
| 298 | 81.58 | 32.4 | 1.27 | 28.6 | 0.7 | 131 | 9.6 | 30 | | 0 | 0 | 0.01 | 0 | 151 |
| 299 | 81.67 | 32.3 | 1.17 | 29.6 | 1.5 | 329 | 9.6 | 42 | | 0.8 | 23.3 | 0.02 | 0.01 | 354 |
| 300 | 81.75 | 32.1 | 1.00 | 18.8 | 3.6 | 308 | 9.6 | 32 | | 2.4 | 23.3 | 0.08 | 0 | 318 |
| 301 | 81.83 | 32.0 | 0.94 | 25.2 | 2.4 | 300 | 8.8 | 64 | | 0.7 | 23.3 | 0.07 | 0.02 | 271 |
| 302 | 81.92 | 32.1 | 1.23 | 19.6 | 1.0 | 359 | 9.1 | 80 | | 0 | 0 | 0.03 | 0 | 15 |
| 303 | 82.00 | 32.4 | 1.27 | 10.2 | 6.6 | 141 | 9.0 | 108 | | 0 | 0 | 0.91 | 0.02 | 120 |
| 304 | 82.08 | 32.5 | 1.43 | 13.8 | 13.3 | 146 | 9.1 | 100 | | 0 | 0 | 4.11 | 0.21 | 119 |
| 305 | 82.17 | 32.4 | 1.16 | 18.2 | 19.3 | 144 | 8.9 | 108 | | 0 | 0 | 4.71 | 0.18 | 122 |
| 306 | 82.25 | 32.1 | 1.16 | 6.3 | 13.8 | 149 | 9.1 | 99 | | 0 | 0 | 1.96 | 0.05 | 121 |
| 307 | 82.33 | 31.8 | 1.35 | 9.2 | 7.3 | 143 | 9.1 | 103 | | 0 | 0 | 2.03 | 0.08 | 119 |
| 308 | 82.42 | 31.9 | 1.39 | 7.2 | 4.3 | 142 | 9.2 | 98 | | 0 | 0 | 0.68 | 0.02 | 116 |
| 309 | 82.50 | 32.1 | 1.29 | 6.6 | 5.7 | 133 | 9.1 | 100 | | 0 | 0 | 0.71 | 0.01 | 112 |
| 310 | 82.58 | 32.3 | 1.08 | 6.1 | 8.6 | 148 | 9.0 | 98 | | 0.1 | 23.3 | 0.54 | 0.14 | 120 |
| 311 | 82.67 | 32.3 | 0.98 | 8.2 | 5.1 | 151 | 9.2 | 94 | | 1.2 | 23.3 | 0.20 | 0.10 | 123 |
| 312 | 82.75 | 32.1 | 0.80 | 6.2 | 1.2 | 140 | 9.0 | 98 | | 1.9 | 23.3 | 0.02 | 0.02 | 116 |
| 313 | 82.83 | 32.0 | 1.00 | 5.5 | 1.3 | 185 | 9.3 | 80 | | 1.3 | 23.3 | 0.02 | 0.01 | 206 |
| 314 | 82.92 | 32.0 | 0.80 | 6.5 | 1.3 | 185 | 9.3 | 80 | | 2.9 | 23.3 | 0.02 | 0 | 204 |
| 315 | 83.00 | 32.3 | 0.88 | 7.2 | 1.2 | 347 | 9.1 | 99 | | 2.3 | 23.3 | 0.02 | 0 | 322 |
| 316 | 83.08 | 32.6 | 0.97 | 6.8 | 3.8 | 140 | 8.9 | 90 | | 1.6 | 23.3 | 0.14 | 0.09 | 113 |
| 317 | 83.17 | 32.6 | 0.88 | 2.1 | 7.3 | 151 | 8.9 | 102 | | 2.6 | 23.3 | 0.36 | 0 | 126 |
| 318 | 83.25 | 32.4 | 0.85 | 2.1 | 6.7 | 149 | 9.1 | 85 | | 2.6 | 23.3 | 0.26 | 0 | 123 |
| 319 | 83.33 | 32.1 | 0.88 | 2.0 | 5.8 | 155 | 9.2 | 94 | | 2.7 | 23.3 | 0.23 | 0 | 128 |
| 320 | 83.42 | 31.9 | 0.83 | 2.1 | 2.3 | 143 | 9.1 | 81 | | 2.5 | 23.3 | 0.05 | 0 | 116 |
| 321 | 83.50 | 32.1 | 0.89 | 2.1 | 0.4 | 167 | 9.0 | 90 | | 2.9 | 23.3 | 0 | 0 | 149 |
| 322 | 83.58 | 32.4 | 0.76 | 4.1 | 2.0 | 147 | 9.3 | 93 | | 2.6 | 17.3 | 0.09 | 0 | 122 |
| 323 | 83.67 | 31.3 | 0.77 | 2.0 | 1.6 | 151 | 9.1 | 82 | | 2.5 | 17.0 | 0.04 | 0 | 129 |
| 324 | 83.75 | 32.4 | 0.71 | 3.7 | 0.2 | 254 | 8.8 | 92 | | 2.5 | 16.7 | 0 | 0 | 264 |
| 325 | 83.83 | 32.1 | 0.74 | 1.9 | 2.9 | 340 | 8.9 | 90 | | 2.7 | 18.1 | 0.15 | 0 | 318 |
| 326 | 83.92 | 30.7 | 0.80 | 2.0 | 4.1 | 339 | 9.0 | 92 | | 3.0 | 23.3 | 0.13 | 0 | 314 |
| 327 | 84.00 | 32.1 | 0.68 | 5.0 | 5.2 | 342 | 8.8 | 92 | | 3.2 | 23.3 | 0.19 | 0 | 318 |
| 328 | 84.08 | 32.4 | 0.73 | 2.8 | 1.8 | 60 | 8.8 | 92 | | 2.7 | 17.9 | 0.12 | 0 | 78 |
| 329 | 84.17 | 32.7 | 0.67 | 2.0 | 5.4 | 142 | 8.7 | 93 | | 2.5 | 16.8 | 0.33 | 0 | 118 |
| 330 | 84.25 | 32.6 | 0.56 | 2.1 | 8.0 | 147 | 8.7 | 93 | | 2.3 | 15.2 | 0.30 | 0 | 124 |
| 331 | 84.33 | 32.2 | 0.53 | 2.2 | 10.3 | 152 | 8.4 | 91 | | 2.2 | 14.8 | 0.33 | 0 | 131 |
| 332 | 84.42 | 31.8 | 0.54 | 2.0 | 7.3 | 348 | 8.5 | 289 | | 2.3 | 15.2 | 0.25 | 0 | 325 |

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| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_{\vec{u}}$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 333 | 84.50 | 31.8 | 0.44 | 2.1 | 2.6 | 128 | 8.5 | 83 | | 0 | 0 | 0 | 0 | 0 |
| 334 | 84.58 | 32.1 | 0.45 | 2.1 | 2.0 | 130 | 8.4 | 94 | | 2.3 | 15.3 | 0.05 | 0 | 111 |
| 335 | 84.67 | 32.5 | 0.49 | 2.0 | 6.1 | 145 | 8.1 | 106 | | 2.5 | 16.8 | 0.42 | 0 | 125 |
| 336 | 84.75 | 32.5 | 0.54 | 2.4 | 4.8 | 151 | 8.1 | 116 | | 2.4 | 16.2 | 0.25 | 0 | 133 |
| 337 | 84.83 | 32.3 | 0.55 | 1.9 | 1.2 | 325 | 8.2 | 112 | | 2.5 | 16.7 | 0.03 | 0 | 307 |
| 338 | 84.92 | 31.9 | 0.41 | 2.0 | 6.4 | 334 | 8.4 | 107 | | 2.1 | 14.3 | 0.20 | 0 | 313 |
| 339 | 85.00 | 31.9 | 0.37 | 2.0 | 9.8 | 336 | 7.9 | 108 | | 0 | 0 | 0 | 0 | 0 |
| 340 | 85.08 | 32.2 | 0.36 | 2.0 | 7.7 | 345 | 8.3 | 94 | | 0 | 0 | 0 | 0 | 0 |
| 341 | 85.17 | 32.7 | 0.35 | 2.7 | 2.0 | 12 | 7.0 | 104 | | 0 | 0 | 0 | 0 | 0 |
| 342 | 85.25 | 32.8 | 0.31 | 6.9 | 3.4 | 150 | 7.9 | 108 | | 0 | 0 | 0 | 0 | 0 |
| 343 | 85.33 | 32.4 | 0.27 | 6.3 | 8.1 | 157 | 7.6 | 112 | | 0 | 0 | 0 | 0 | 0 |
| 344 | 85.42 | 31.9 | 0.26 | 7.3 | 4.0 | 151 | 7.6 | 110 | | 0 | 0 | 0 | 0 | 0 |
| 345 | 85.50 | 31.7 | 0.24 | 15.2 | 3.9 | 351 | 7.9 | 98 | | 0 | 0 | 0 | 0 | 0 |
| 346 | 85.58 | 32.0 | 0.22 | 17.5 | 3.9 | 350 | 8.0 | 43 | | 0 | 0 | 0 | 0 | 0 |
| 347 | 85.67 | 32.5 | 0.21 | 15.8 | 1.6 | 281 | 8.2 | 44 | | 0 | 0 | 0 | 0 | 0 |
| 348 | 85.75 | 32.8 | 0.22 | 16.3 | 3.4 | 227 | 8.2 | 21 | | 0 | 0 | 0 | 0 | 0 |
| 349 | 85.83 | 32.5 | 0.22 | 8.0 | 4.1 | 241 | 7.3 | 20 | | 0 | 0 | 0 | 0 | 0 |
| 350 | 85.92 | 32.0 | 0.20 | 5.1 | 5.2 | 294 | 5.9 | 8 | | 0 | 0 | 0 | 0 | 0 |
| 351 | 86.00 | 31.8 | 0.19 | 5.1 | 9.8 | 326 | 6.9 | 146 | | 0 | 0 | 0 | 0 | 0 |
| 352 | 86.08 | 32.0 | 0.20 | 7.2 | 10.2 | 328 | 7.0 | 132 | | 0 | 0 | 0 | 0 | 0 |
| 353 | 86.17 | 32.5 | 0.20 | 6.6 | 5.7 | 336 | 6.2 | 17 | | 0 | 0 | 0 | 0 | 0 |
| 354 | 86.25 | 31.7 | 0.19 | 4.7 | 0.9 | 84 | 7.5 | 114 | | 0 | 0 | 0 | 0 | 0 |
| 355 | 86.33 | 32.7 | 0.20 | 6.7 | 7.0 | 156 | 7.6 | 355 | | 0 | 0 | 0 | 0 | 0 |
| 356 | 86.42 | 32.1 | 0.20 | 5.9 | 6.1 | 161 | 6.1 | 10 | | 0 | 0 | 0 | 0 | 0 |
| 357 | 86.50 | 31.7 | 0.23 | 5.0 | 1.0 | 319 | 7.0 | 3 | | 0 | 0 | 0 | 0 | 0 |
| 358 | 86.58 | 31.7 | 0.23 | 5.7 | 5.2 | 341 | 7.4 | 357 | | 0 | 0 | 0 | 0 | 0 |
| 359 | 86.67 | 32.3 | 0.37 | 4.5 | 2.8 | 5 | 8.1 | 48 | | 0 | 0 | 0 | 0 | 0 |
| 360 | 86.75 | 32.8 | 0.74 | 4.8 | 4.5 | 147 | 8.7 | 44 | | 2.6 | 17.6 | 0.22 | 0 | 164 |
| 361 | 86.83 | 32.7 | 0.72 | 6.1 | 7.5 | 146 | 8.5 | 35 | | 2.7 | 17.9 | 0.57 | 0 | 168 |
| 362 | 86.92 | 32.2 | 0.73 | 7.3 | 3.1 | 156 | 8.7 | 30 | | 3.4 | 23.3 | 0.12 | 0 | 182 |
| 363 | 87.00 | 31.7 | 0.62 | 8.3 | 3.0 | 319 | 8.6 | 35 | | 2.4 | 15.9 | 0.07 | 0 | 336 |
| 364 | 87.08 | 31.7 | 0.71 | 5.9 | 6.5 | 327 | 8.5 | 36 | | 3.4 | 23.3 | 0.27 | 0 | 351 |
| 365 | 87.17 | 31.0 | 0.65 | 5.3 | 5.1 | 337 | 8.5 | 43 | | 2.7 | 18.1 | 0.37 | 0 | 0 |
| 366 | 87.25 | 31.5 | 0.65 | 7.2 | 0.9 | 101 | 8.7 | 49 | | 3.2 | 23.3 | 0.02 | 0 | 75 |
| 367 | 87.33 | 32.8 | 0.85 | 7.5 | 6.2 | 148 | 8.9 | 43 | | 2.4 | 23.3 | 0.19 | 0 | 168 |
| 368 | 87.42 | 32.3 | 1.03 | 6.1 | 6.1 | 146 | 8.9 | 36 | | 1.1 | 23.3 | 0.19 | 0.12 | 172 |
| 369 | 87.50 | 31.7 | 1.01 | 7.6 | 0.3 | 41 | 9.0 | 30 | | 1.3 | 23.3 | 0 | 0 | 34 |
| 370 | 87.58 | 31.5 | 1.02 | 9.7 | 2.8 | 343 | 9.0 | 45 | | 1.2 | 23.3 | 0.07 | 0.03 | 11 |
| 371 | 87.67 | 32.0 | 1.15 | 10.1 | 2.8 | 340 | 9.3 | 48 | | 0.1 | 23.3 | 0.08 | 0.03 | 9 |
| 372 | 87.75 | 32.6 | 1.05 | 16.8 | 1.0 | 120 | 9.2 | 41 | | 2.1 | 23.3 | 0.01 | 0.02 | 103 |
| 373 | 87.83 | 32.8 | 1.12 | 12.4 | 4.5 | 143 | 9.6 | 42 | | 0.9 | 23.3 | 0.11 | 0.07 | 161 |
| 374 | 87.92 | 32.3 | 1.32 | 10.8 | 2.1 | 127 | 9.7 | 40 | | 0.1 | 23.3 | 0.04 | 0.02 | 122 |
| 375 | 88.00 | 31.7 | 1.40 | 12.7 | 1.4 | 340 | 9.8 | 37 | | 0 | 0 | 0.06 | 0 | 10 |
| 376 | 88.08 | 31.5 | 1.32 | 17.0 | 3.9 | 329 | 10.1 | 34 | | 0 | 0 | 0.18 | 0 | 359 |
| 377 | 88.17 | 31.8 | 1.23 | 11.6 | 5.2 | 331 | 9.8 | 40 | | 0.6 | 23.3 | 0.19 | 0.07 | 358 |
| 378 | 88.25 | 32.5 | 1.02 | 11.6 | 1.2 | 331 | 9.9 | 35 | | 2.5 | 23.3 | 0.02 | 0 | 357 |
| 379 | 88.33 | 32.8 | 1.09 | 17.4 | 2.4 | 137 | 9.6 | 37 | | 2.1 | 23.3 | 0.04 | 0.10 | 153 |
| 380 | 88.42 | 32.5 | 1.19 | 14.9 | 3.9 | 139 | 9.9 | 40 | | 1.0 | 23.3 | 0.09 | 0.06 | 154 |

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| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_{ti}$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir.}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 381 | 88.50 | 31.9 | 0.88 | 15.7 | 1.5 | 116 | 9.6 | 30 | | 3.5 | 23.3 | 0.03 | 0 | 108 |
| 382 | 88.58 | 31.5 | 0.98 | 14.5 | 2.2 | 341 | 9.5 | 36 | | 2.7 | 23.3 | 0.06 | 0 | 8 |
| 383 | 88.67 | 31.8 | 0.87 | 15.5 | 4.2 | 334 | 9.7 | 34 | | 2.7 | 17.8 | 0.30 | 0 | 359 |
| 384 | 88.75 | 31.3 | 0.87 | 16.1 | 1.2 | 359 | 9.6 | 36 | | 2.5 | 17.0 | 0.04 | 0 | 19 |
| 385 | 88.83 | 32.9 | 0.77 | 12.4 | 4.7 | 145 | 9.4 | 22 | | 2.5 | 16.5 | 0.22 | 0 | 169 |
| 386 | 88.92 | 31.4 | 0.73 | 16.0 | 6.7 | 141 | 9.3 | 17 | | 2.5 | 16.6 | 0.39 | 0 | 165 |
| 387 | 89.00 | 30.8 | 0.64 | 16.1 | 2.6 | 123 | 9.2 | 16 | | 2.3 | 15.3 | 0.05 | 0 | 141 |
| 388 | 89.08 | 31.5 | 0.62 | 11.8 | 2.3 | 341 | 9.4 | 22 | | 2.2 | 14.8 | 0.06 | 0 | 2 |
| 389 | 89.17 | 30.4 | 0.75 | 17.7 | 3.6 | 342 | 9.3 | 18 | | 2.2 | 14.7 | 0.11 | 0 | 1 |
| 390 | 89.25 | 32.2 | 0.59 | 16.0 | 2.2 | 336 | 9.2 | 21 | | 0 | 0 | 0 | 0 | 0 |
| 391 | 89.33 | 32.7 | 0.55 | 13.2 | 2.8 | 147 | 9.5 | 14 | | 0 | 0 | 0 | 0 | 0 |
| 392 | 89.42 | 32.7 | 0.58 | 13.6 | 7.5 | 144 | 9.0 | 10 | | 0 | 0 | 0 | 0 | 0 |
| 393 | 89.50 | 32.1 | 0.64 | 11.8 | 3.6 | 146 | 9.3 | 8 | | 2.2 | 14.9 | 0.11 | 0 | 167 |
| 394 | 89.58 | 31.6 | 0.47 | 14.2 | 2.5 | 328 | 9.0 | 15 | | 0 | 0 | 0 | 0 | 0 |
| 395 | 89.67 | 31.6 | 0.51 | 14.8 | 5.6 | 319 | 9.0 | 12 | | 0 | 0 | 0 | 0 | 0 |
| 396 | 89.75 | 32.1 | 0.45 | 8.8 | 5.5 | 324 | 8.9 | 8 | | 0 | 0 | 0 | 0 | 0 |
| 397 | 89.83 | 32.8 | 0.47 | 9.5 | 2.5 | 153 | 9.0 | 10 | | 0 | 0 | 0 | 0 | 0 |
| 398 | 89.92 | 32.8 | 0.46 | 8.3 | 8.1 | 145 | 8.6 | 4 | | 0 | 0 | 0 | 0 | 0 |
| 399 | 90 | 32.3 | 0.39 | 7.0 | 6.5 | 145 | 8.4 | 11 | | 0 | 0 | 0 | 0 | 0 |
| 400 | 90.08 | 31.7 | 0.37 | 10.9 | 0.9 | 316 | 8.7 | 13 | | 0 | 0 | 0 | 0 | 0 |
| 401 | 90.17 | 31.5 | 0.38 | 10.3 | 4.5 | 316 | 8.6 | 23 | | 0 | 0 | 0 | 0 | 0 |
| 402 | 90.25 | 31.9 | 0.37 | 6.2 | 7.1 | 325 | 8.2 | 9 | | 0 | 0 | 0 | 0 | 0 |
| 403 | 90.33 | 32.5 | 0.37 | 5.7 | 0.8 | 8 | 8.2 | 18 | | 0 | 0 | 0 | 0 | 0 |
| 404 | 90.42 | 32.7 | 0.35 | 7.7 | 7.4 | 150 | 7.9 | 28 | | 0 | 0 | 0 | 0 | 0 |
| 405 | 90.50 | 32.2 | 0.36 | 5.2 | 3.6 | 145 | 8.4 | 39 | | 0 | 0 | 0 | 0 | 0 |
| 406 | 90.58 | 31.7 | 0.30 | 8.4 | 2.2 | 324 | 8.4 | 32 | | 0 | 0 | 0 | 0 | 0 |
| 407 | 90.67 | 31.6 | 0.35 | 7.8 | 6.3 | 327 | 8.4 | 17 | | 0 | 0 | 0 | 0 | 0 |
| 408 | 90.75 | 30.7 | 0.33 | 5.9 | 8.5 | 324 | 8.2 | 16 | | 0 | 0 | 0 | 0 | 0 |
| 409 | 90.83 | 32.6 | 0.39 | 4.9 | 2.4 | 325 | 8.6 | 35 | | 0 | 0 | 0 | 0 | 0 |
| 410 | 90.92 | 32.8 | 0.33 | 24.5 | 5.5 | 148 | 8.5 | 18 | | 0 | 0 | 0 | 0 | 0 |
| 411 | 91.00 | 32.5 | 0.35 | 16.7 | 8.3 | 144 | 8.1 | 17 | | 0 | 0 | 0 | 0 | 0 |
| 412 | 91.08 | 31.9 | 0.33 | 5.5 | 4.6 | 138 | 8.2 | 31 | | 0 | 0 | 0 | 0 | 0 |
| 413 | 91.17 | 31.6 | 0.33 | 16.9 | 1.5 | 39 | 7.5 | 17 | | 0 | 0 | 0 | 0 | 0 |
| 414 | 91.25 | 31.7 | 0.33 | 17.7 | 3.6 | 335 | 8.6 | 27 | | 0 | 0 | 0 | 0 | 0 |
| 415 | 91.33 | 32.3 | 0.30 | 16.0 | 2.3 | 329 | 8.2 | 16 | | 0 | 0 | 0 | 0 | 0 |
| 416 | 91.42 | 32.6 | 0.32 | 4.1 | 2.4 | 203 | 8.4 | 29 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 417 | 91.50 | 32.4 | 0.32 | 15.4 | 2.0 | 217 | 7.6 | 15 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 418 | 91.58 | 31.9 | 0.37 | 20.2 | 5.6 | 296 | 8.4 | 20 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 419 | 91.67 | 31.7 | 0.32 | 15.6 | 11.3 | 313 | 8.2 | 14 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 420 | 91.75 | 31.8 | 0.36 | 16.5 | 13.4 | 319 | 8.0 | 29 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 421 | 91.83 | 32.2 | 0.37 | 15.1 | 7.8 | 332 | 8.7 | 22 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 422 | 91.92 | 32.7 | 0.41 | 15.6 | 2.5 | 138 | 8.9 | 28 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 423 | 92.00 | 32.5 | 0.47 | 16.0 | 8.4 | 147 | 8.7 | 36 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 424 | 92.08 | 32.1 | 0.46 | 15.6 | 11.1 | 145 | 8.5 | 33 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 425 | 92.17 | 31.7 | 0.52 | 15.6 | 6.1 | 141 | 8.4 | 32 | 0.0 | 2.3 | 15.1 | 0.17 | 0 | 160 |
| 426 | 92.25 | 31.6 | 0.62 | 21.2 | 2.7 | 135 | 8.7 | 47 | 0.0 | 2.6 | 17.4 | 0.10 | 0 | 132 |
| 427 | 92.33 | 31.9 | 0.66 | 22.0 | 2.4 | 131 | 8.2 | 47 | 0.0 | 2.7 | 17.7 | 0.09 | 0 | 122 |
| 428 | 92.42 | 32.3 | 0.76 | 15.3 | 5.6 | 143 | 8.4 | 63 | 0.0 | 3.5 | 23.3 | 0.21 | 0 | 128 |

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| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_{ti}$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir.}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 429 | 92.50 | 32.4 | 0.90 | 15.0 | 7.6 | 149 | 8.5 | 69 | 0.0 | 0.6 | 23.3 | 0.24 | 0.12 | 132 |
| 430 | 92.58 | 32.0 | 0.99 | 14.8 | 2.4 | 153 | 8.9 | 63 | 0.2 | 0.8 | 23.3 | 0.04 | 0.03 | 152 |
| 431 | 92.67 | 31.7 | 0.88 | 17.8 | 3.1 | 336 | 8.7 | 52 | 0.1 | 2.6 | 23.3 | 0.07 | 0 | 355 |
| 432 | 92.75 | 31.7 | 0.69 | 14.1 | 5.9 | 329 | 8.6 | 85 | 0.1 | 2.6 | 17.3 | 0.38 | 0 | 305 |
| 433 | 92.83 | 32.1 | 0.77 | 23.0 | 5.8 | 335 | 8.6 | 70 | 0.1 | 2.7 | 17.7 | 0.32 | 0 | 328 |
| 434 | 92.92 | 32.5 | 0.74 | 21.2 | 0.2 | 88 | 8.7 | 75 | 0.1 | 2.7 | 17.8 | 0 | 0 | 80 |
| 435 | 93.00 | 32.6 | 0.71 | 14.4 | 8.0 | 146 | 8.6 | 88 | 0.0 | 2.6 | 17.6 | 0.70 | 0 | 121 |
| 436 | 93.08 | 32.3 | 0.70 | 18.6 | 11.2 | 150 | 8.7 | 63 | 0.1 | 2.5 | 16.3 | 0.49 | 0 | 145 |
| 437 | 93.17 | 31.8 | 0.60 | 2.9 | 6.7 | 146 | 8.5 | 67 | 0.0 | 2.2 | 14.4 | 0.15 | 0 | 134 |
| 438 | 93.25 | 31.6 | 0.55 | 21.7 | 1.7 | 116 | 8.6 | 87 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 439 | 93.33 | 31.8 | 0.46 | 23.2 | 2.8 | 2 | 8.6 | 71 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 440 | 93.42 | 32.2 | 0.43 | 19.1 | 2.6 | 342 | 8.5 | 78 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 441 | 93.50 | 32.4 | 0.40 | 22.7 | 1.4 | 254 | 8.2 | 39 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 442 | 93.58 | 32.3 | 0.36 | 22.8 | 3.1 | 297 | 8.0 | 28 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 443 | 93.67 | 32.0 | 0.38 | 18.6 | 8.5 | 315 | 8.3 | 36 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 444 | 93.75 | 31.8 | 0.35 | 3.6 | 11.3 | 319 | 7.9 | 45 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 445 | 93.83 | 31.9 | 0.39 | 20.2 | 10.6 | 320 | 7.9 | 51 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 446 | 93.92 | 32.3 | 0.31 | 21.0 | 8.9 | 334 | 8.0 | 20 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 447 | 94.00 | 32.6 | 0.33 | 13.3 | 0.1 | 260 | 7.5 | 32 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 448 | 94.08 | 32.4 | 0.32 | 14.8 | 5.7 | 154 | 7.6 | 25 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 449 | 94.17 | 32.1 | 0.28 | 22.0 | 6.2 | 158 | 7.4 | 37 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 450 | 94.25 | 31.8 | 0.30 | 2.7 | 4.4 | 157 | 7.4 | 42 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 451 | 94.33 | 31.7 | 0.28 | 18.4 | 1.7 | 141 | 7.5 | 43 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 452 | 94.42 | 32.0 | 0.32 | 25.3 | 0.4 | 299 | 6.9 | 28 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 453 | 94.50 | 32.2 | 0.33 | 15.6 | 0.9 | 163 | 7.8 | 42 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 454 | 94.58 | 32.2 | 0.39 | 24.2 | 1.0 | 147 | 7.9 | 52 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 455 | 94.67 | 32.1 | 0.44 | 22.8 | 3.7 | 335 | 8.1 | 60 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 456 | 94.75 | 31.9 | 0.37 | 18.8 | 6.3 | 327 | 8.2 | 57 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 457 | 94.83 | 31.8 | 0.48 | 18.3 | 7.5 | 326 | 8.7 | 60 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 458 | 94.92 | 32.1 | 0.52 | 23.1 | 7.7 | 332 | 8.7 | 62 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 459 | 95.00 | 32.4 | 0.43 | 23.1 | 1.7 | 23 | 8.5 | 59 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 460 | 95.08 | 32.4 | 0.41 | 20.3 | 5.0 | 136 | 8.4 | 52 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 461 | 95.17 | 32.3 | 0.34 | 20.8 | 10.3 | 141 | 7.8 | 61 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 462 | 95.25 | 31.9 | 0.33 | 19.8 | 10.9 | 144 | 7.7 | 43 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 463 | 95.33 | 31.7 | 0.40 | 19.9 | 6.7 | 139 | 7.9 | 82 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 464 | 95.42 | 31.8 | 0.29 | 22.0 | 1.8 | 99 | 8.1 | 66 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 465 | 95.50 | 32.1 | 0.32 | 22.5 | 1.3 | 50 | 8.2 | 72 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 466 | 95.58 | 32.3 | 0.29 | 22.3 | 1.1 | 315 | 8.2 | 77 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 467 | 95.67 | 32.3 | 0.28 | 21.2 | 4.0 | 308 | 8.3 | 54 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 468 | 95.75 | 32.1 | 0.28 | 21.3 | 8.2 | 312 | 8.0 | 62 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 469 | 95.83 | 31.9 | 0.28 | 22.1 | 10.4 | 311 | 7.6 | 77 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 470 | 95.92 | 32.0 | 0.29 | 20.9 | 12.0 | 318 | 7.5 | 44 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 471 | 96.00 | 32.2 | 0.24 | 17.4 | 8.2 | 324 | 7.8 | 54 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 472 | 96.08 | 32.5 | 0.26 | 21.3 | 1.3 | 297 | 8.1 | 35 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 473 | 96.17 | 32.4 | 0.25 | 15.3 | 2.7 | 163 | 8.0 | 21 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 474 | 96.25 | 32.2 | 0.25 | 15.5 | 3.3 | 167 | 4.5 | 25 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 475 | 96.33 | 31.9 | 0.23 | 21.8 | 2.7 | 168 | 7.4 | 21 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 476 | 96.42 | 31.8 | 0.23 | 14.9 | 2.0 | 335 | 8.2 | 9 | 0.0 | 0 | 0 | 0 | 0 | 0 |

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| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_{ti}$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir.}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 477 | 96.50 | 32.0 | 0.23 | 17.1 | 5.8 | 329 | 7.8 | 357 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 478 | 96.58 | 32.3 | 0.23 | 18.2 | 5.1 | 325 | 8.3 | 16 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 479 | 96.67 | 32.4 | 0.26 | 15.5 | 4.4 | 312 | 7.6 | 4 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 480 | 96.75 | 32.2 | 0.24 | 22.5 | 6.8 | 314 | 7.0 | 358 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 481 | 96.83 | 32.0 | 0.27 | 19.1 | 8.7 | 319 | 8.3 | 354 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 482 | 96.92 | 31.9 | 0.30 | 21.9 | 9.4 | 333 | 8.2 | 357 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 483 | 97.00 | 32.0 | 0.32 | 22.7 | 6.8 | 332 | 8.7 | 5 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 484 | 97.08 | 32.4 | 0.41 | 22.8 | 2.6 | 11 | 9.1 | 8 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 485 | 97.17 | 32.4 | 0.33 | 14.3 | 4.8 | 127 | 8.6 | 11 | 0.2 | 0 | 0 | 0 | 0 | 0 |
| 486 | 97.25 | 32.3 | 0.30 | 25.4 | 8.2 | 130 | 7.7 | 1 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 487 | 97.33 | 32.0 | 0.30 | 22.2 | 9.3 | 142 | 7.6 | 356 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 488 | 97.42 | 31.7 | 0.28 | 22.8 | 4.7 | 130 | 8.2 | 359 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 489 | 97.50 | 31.8 | 0.32 | 22.6 | 2.0 | 15 | 7.2 | 359 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 490 | 97.58 | 32.1 | 0.33 | 24.7 | 2.6 | 6 | 8.9 | 354 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 491 | 97.67 | 32.4 | 0.30 | 22.8 | 1.0 | 328 | 8.4 | 354 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 492 | 97.75 | 32.3 | 0.31 | 21.3 | 1.7 | 306 | 9.2 | 357 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 493 | 97.83 | 32.1 | 0.26 | 22.9 | 3.1 | 316 | 8.5 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 494 | 97.92 | 31.8 | 0.27 | 23.7 | 6.7 | 320 | 8.7 | 357 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 495 | 98.00 | 31.9 | 0.28 | 24.8 | 10.0 | 325 | 8.3 | 346 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 496 | 98.08 | 32.2 | 0.26 | 22.6 | 7.2 | 325 | 8.4 | 346 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 497 | 98.17 | 32.5 | 0.33 | 22.8 | 2.6 | 306 | 8.7 | 355 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 498 | 98.25 | 32.5 | 0.29 | 22.9 | 1.6 | 199 | 8.6 | 359 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 499 | 98.33 | 32.2 | 0.25 | 23.7 | 3.6 | 159 | 8.8 | 6 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 500 | 98.42 | 31.9 | 0.26 | 25.1 | 1.0 | 120 | 8.7 | 8 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 501 | 98.50 | 31.8 | 0.27 | 24.6 | 3.2 | 358 | 8.5 | 2 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 502 | 98.58 | 32.1 | 0.26 | 23.8 | 3.1 | 359 | 7.7 | 5 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 503 | 98.67 | 32.4 | 0.25 | 24.5 | 0.6 | 81 | 8.4 | 15 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 504 | 98.75 | 32.5 | 0.24 | 25.5 | 2.3 | 171 | 8.5 | 2 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 505 | 98.83 | 32.3 | 0.23 | 23.4 | 0.5 | 300 | 8.7 | 3 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 506 | 98.92 | 32.0 | 0.23 | 24.1 | 5.1 | 325 | 8.3 | 11 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 507 | 99.00 | 31.8 | 0.22 | 23.6 | 9.0 | 324 | 7.8 | 351 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 508 | 99.08 | 32.1 | 0.24 | 23.3 | 9.4 | 329 | 8.2 | 358 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 509 | 99.17 | 32.4 | 0.23 | 23.0 | 2.2 | 347 | 5.3 | 8 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 510 | 99.25 | 32.6 | 0.23 | 24.5 | 3.8 | 133 | 8.1 | 1 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 511 | 99.33 | 32.3 | 0.21 | 24.1 | 9.4 | 148 | 7.6 | 349 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 512 | 99.42 | 31.9 | 0.21 | 23.0 | 8.1 | 147 | 7.2 | 4 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 513 | 99.50 | 31.7 | 0.22 | 21.9 | 2.6 | 126 | 7.1 | 6 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 514 | 99.58 | 31.8 | 0.21 | 22.5 | 2.0 | 16 | 7.9 | 6 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 515 | 99.67 | 32.3 | 0.21 | 23.4 | 0.2 | 359 | 8.1 | 21 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 516 | 99.75 | 32.5 | 0.22 | 22.9 | 4.0 | 158 | 6.9 | 10 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 517 | 99.83 | 32.3 | 0.23 | 21.8 | 4.5 | 160 | 7.8 | 9 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 518 | 99.92 | 31.9 | 0.22 | 22.5 | 1.2 | 180 | 8.1 | 45 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 519 | 100 | 31.7 | 0.23 | 19.7 | 4.4 | 338 | 7.0 | 12 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 520 | 100.08 | 31.9 | 0.23 | 19.5 | 6.8 | 343 | 7.0 | 12 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 521 | 100.17 | 32.3 | 0.23 | 22.0 | 2.1 | 28 | 8.0 | 2 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 522 | 100.25 | 32.5 | 0.24 | 22.4 | 4.1 | 141 | 7.1 | 8 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 523 | 100.33 | 32.4 | 0.27 | 23.1 | 10.5 | 150 | 7.1 | 44 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 524 | 100.42 | 32.0 | 0.29 | 21.3 | 8.4 | 154 | 7.2 | 18 | 0.0 | 0 | 0 | 0 | 0 | 0 |

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| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_{ti}$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$] | $Q_s$ [g (ms)$^{-1}$] | $Q_{b_{dir.}}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 525 | 100.50 | 31.7 | 0.30 | 23.5 | 0.1 | 322 | 7.5 | 38 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 526 | 100.58 | 31.8 | 0.35 | 21.2 | 4.0 | 337 | 7.3 | 40 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 527 | 100.67 | 32.2 | 0.34 | 22.0 | 3.2 | 341 | 7.1 | 30 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 528 | 100.75 | 32.5 | 0.33 | 21.2 | 2.2 | 147 | 7.9 | 41 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 529 | 100.83 | 32.4 | 0.40 | 21.1 | 4.8 | 141 | 8.1 | 27 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 530 | 100.92 | 32.1 | 0.37 | 18.1 | 2.1 | 103 | 8.0 | 32 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 531 | 101.00 | 31.7 | 0.40 | 25.1 | 4.1 | 18 | 8.5 | 13 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 532 | 101.08 | 31.8 | 0.36 | 21.6 | 5.0 | 354 | 8.3 | 354 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 533 | 101.17 | 32.1 | 0.36 | 21.2 | 2.5 | 343 | 7.6 | 2 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 534 | 101.25 | 32.5 | 0.35 | 21.8 | 2.1 | 156 | 8.6 | 5 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 535 | 101.33 | 32.5 | 0.43 | 23.6 | 7.4 | 160 | 8.9 | 356 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 536 | 101.42 | 32.1 | 0.37 | 21.1 | 5.2 | 138 | 8.5 | 351 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 537 | 101.50 | 31.7 | 0.36 | 20.5 | 2.0 | 34 | 7.7 | 350 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 538 | 101.58 | 31.7 | 0.33 | 23.2 | 4.8 | 3 | 8.2 | 344 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 539 | 101.67 | 32.1 | 0.36 | 21.5 | 2.8 | 331 | 8.0 | 351 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 540 | 101.75 | 32.5 | 0.34 | 22.9 | 1.7 | 211 | 7.9 | 349 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 541 | 101.83 | 32.6 | 0.37 | 21.8 | 3.4 | 191 | 8.5 | 346 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 542 | 101.92 | 32.2 | 0.40 | 20.1 | 3.4 | 197 | 7.8 | 348 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 543 | 102.00 | 31.8 | 0.38 | 11.9 | 3.4 | 308 | 8.2 | 350 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 544 | 102.08 | 31.7 | 0.35 | 19.0 | 8.1 | 317 | 8.2 | 348 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 545 | 102.17 | 32.0 | 0.39 | 20.8 | 9.4 | 328 | 8.5 | 348 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 546 | 102.25 | 32.4 | 0.41 | 21.9 | 4.4 | 328 | 9.1 | 349 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 547 | 102.33 | 32.5 | 0.39 | 21.6 | 3.8 | 155 | 9.5 | 352 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 548 | 102.42 | 32.2 | 0.31 | 24.4 | 3.8 | 155 | 9.5 | 352 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 549 | 102.50 | 31.7 | 0.34 | 21.0 | 1.2 | 26 | 8.1 | 350 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 550 | 102.58 | 31.6 | 0.31 | 25.3 | 6.3 | 338 | 9.0 | 352 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 551 | 102.67 | 31.9 | 0.32 | 21.9 | 8.4 | 327 | 8.9 | 350 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 552 | 102.75 | 32.4 | 0.34 | 22.4 | 8.4 | 327 | 8.9 | 350 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 553 | 102.83 | 32.6 | 0.33 | 24.2 | 3.7 | 179 | 8.8 | 356 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 554 | 102.92 | 32.3 | 0.34 | 21.7 | 3.7 | 179 | 8.8 | 356 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 555 | 103.00 | 31.8 | 0.30 | 22.0 | 3.2 | 154 | 9.1 | 358 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 556 | 103.08 | 31.6 | 0.32 | 22.2 | 4.7 | 334 | 8.9 | 2 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 557 | 103.17 | 31.8 | 0.30 | 22.3 | 6.6 | 337 | 6.3 | 5 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 558 | 103.25 | 32.2 | 0.33 | 19.9 | 3.5 | 343 | 8.7 | 11 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 559 | 103.33 | 32.5 | 0.32 | 23.2 | 3.4 | 159 | 8.7 | 357 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 560 | 103.42 | 32.3 | 0.31 | 23.0 | 5.3 | 170 | 8.7 | 6 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 561 | 103.50 | 31.8 | 0.27 | 22.5 | 1.3 | 303 | 8.6 | 12 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 562 | 103.58 | 31.6 | 0.31 | 24.2 | 8.4 | 329 | 8.5 | 6 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 563 | 103.67 | 31.8 | 0.31 | 25.4 | 10.1 | 331 | 8.4 | 4 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 564 | 103.75 | 32.3 | 0.27 | 26.6 | 10.1 | 331 | 8.4 | 4 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 565 | 103.83 | 32.6 | 0.29 | 27.1 | 3.8 | 153 | 8.5 | 4 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 566 | 103.92 | 32.4 | 0.30 | 24.6 | 8.0 | 151 | 8.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 567 | 104.00 | 31.9 | 0.30 | 23.9 | 7.1 | 144 | 8.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 568 | 104.08 | 31.6 | 0.29 | 22.6 | 2.5 | 24 | 8.6 | 10 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 569 | 104.17 | 31.7 | 0.29 | 13.0 | 6.0 | 7 | 8.5 | 4 | 0.2 | 0 | 0 | 0 | 0 | 0 |
| 570 | 104.25 | 32.2 | 0.27 | 19.0 | 3.7 | 354 | 8.9 | 9 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 571 | 104.33 | 32.5 | 0.29 | 21.1 | 3.0 | 174 | 8.5 | 12 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 572 | 104.42 | 32.4 | 0.28 | 19.7 | 4.8 | 175 | 8.2 | 10 | 0.1 | 0 | 0 | 0 | 0 | 0 |

cont'd

| Burst | Day | Depth [m] | $H_s$ [m] | $A_{OBS}$ [arb] | $U$ [cm/s] | $\phi_U$ [deg] | $T_w$ [s] | $\phi_\delta$ [deg] | $A_{ABS}$ [arb] | $\eta_b$ [cm] | $\lambda_b$ [cm] | $Q_b$ [g (ms)$^{-1}$ ] | $Q_s$ [g (ms)$^{-1}$ ] | $Q_{bst}$ [deg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 573 | 104.50 | 32.0 | 0.27 | 25.2 | 2.6 | 250 | 8.1 | 17 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 574 | 104.58 | 31.7 | 0.27 | 13.2 | 5.8 | 307 | 8.1 | 9 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 575 | 104.67 | 31.8 | 0.26 | 20.5 | 7.6 | 171 | 8.2 | 204 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 576 | 104.75 | 32.2 | 0.26 | 15.9 | 4.9 | 334 | 8.2 | 11 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 577 | 104.83 | 32.6 | 0.24 | 16.5 | 3.1 | 164 | 8.0 | 26 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 578 | 104.92 | 32.5 | 0.28 | 23.2 | 10.7 | 150 | 7.5 | 20 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 579 | 105.00 | 32.0 | 0.27 | 19.4 | 13.5 | 149 | 7.3 | 350 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 580 | 105.08 | 31.6 | 0.28 | 20.1 | 4.3 | 119 | 7.4 | 47 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 581 | 105.17 | 31.6 | 0.29 | 20.3 | 2.4 | 20 | 7.2 | 24 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 582 | 105.25 | 31.9 | 0.30 | 15.6 | 5.0 | 16 | 7.6 | 74 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 583 | 105.33 | 32.4 | 0.31 | 13.1 | 4.5 | 79 | 7.8 | 65 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 584 | 105.42 | 32.4 | 0.36 | 15.8 | 7.1 | 138 | 8.0 | 74 | 0.2 | 0 | 0 | 0 | 0 | 0 |
| 585 | 105.50 | 32.0 | 0.32 | 13.2 | 2.3 | 105 | 8.0 | 76 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 586 | 105.58 | 31.7 | 0.33 | 19.7 | 3.6 | 359 | 8.2 | 61 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 587 | 105.67 | 31.7 | 0.29 | 19.4 | 4.9 | 333 | 8.1 | 58 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 588 | 105.75 | 32.1 | 0.27 | 25.1 | 3.9 | 310 | 7.7 | 42 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 589 | 105.83 | 32.5 | 0.27 | 22.5 | 2.6 | 228 | 7.9 | 32 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 590 | 105.92 | 32.6 | 0.26 | 11.3 | 8.3 | 168 | 8.1 | 25 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 591 | 106.00 | 32.1 | 0.25 | 14.3 | 12.3 | 151 | 7.5 | 358 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 592 | 106.08 | 31.7 | 0.26 | 21.8 | 7.0 | 149 | 7.5 | 4 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 593 | 106.17 | 31.6 | 0.23 | 20.5 | 2.5 | 55 | 8.0 | 6 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 594 | 106.25 | 31.8 | 0.25 | 21.2 | 5.3 | 355 | 7.5 | 23 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 595 | 106.33 | 32.2 | 0.24 | 21.3 | 2.9 | 12 | 8.2 | 24 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 596 | 106.42 | 32.4 | 0.28 | 21.5 | 1.3 | 172 | 8.0 | 64 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 597 | 106.50 | 32.2 | 0.32 | 22.1 | 1.9 | 272 | 8.1 | 61 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 598 | 106.58 | 31.9 | 0.35 | 22.9 | 1.9 | 272 | 8.1 | 61 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 599 | 106.67 | 31.8 | 0.35 | 21.0 | 13.0 | 321 | 7.9 | 66 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 600 | 106.75 | 32.0 | 0.33 | 22.2 | 13.0 | 321 | 7.9 | 66 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 601 | 106.83 | 32.4 | 0.29 | 21.1 | 7.3 | 325 | 8.1 | 76 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 602 | 106.92 | 32.6 | 0.31 | 23.0 | 2.2 | 172 | 7.8 | 40 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 603 | 107.00 | 32.3 | 0.30 | 18.2 | 8.8 | 155 | 8.1 | 69 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 604 | 107.08 | 31.8 | 0.34 | 20.3 | 6.6 | 144 | 7.9 | 64 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 605 | 107.17 | 31.6 | 0.34 | 24.4 | 4.2 | 128 | 8.0 | 66 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 606 | 107.25 | 31.7 | 0.27 | 23.1 | 3.0 | 80 | 8.1 | 51 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 607 | 107.33 | 32.1 | 0.28 | 23.8 | 2.1 | 104 | 8.0 | 56 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 608 | 107.42 | 32.3 | 0.28 | 23.6 | 5.4 | 129 | 8.1 | 48 | 0.0 | 0 | 0 | 0 | 0 | 0 |

Table A-2: Boundary layer parameters output from SEDTRANS96 for Ralph input

| Day | $u_b$ [cm/s] | $A_b$ [cm] | $f_{cws}$ (x 100) | $u_{*cs}$ [cm/s] | $u_{*ws}$ [cm/s] | $u_{*cws}$ [cm/s] | $u_{*c}$ [cm/s] | $u_{*w}$ [cm/s] | $u_{*cw}$ [cm/s] | $\delta_{cw}$ [cm] | $z_0$ [cm] | $z_{0c}$ [cm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 56.83 | 5.8 | 7.1 | 2.44 | 0.1 | 0.7 | 0.7 | 0.1 | 0.7 | 0.7 | 0.7 | 0 | 0.2 |
| 56.92 | 5.2 | 6.5 | 2.42 | 0.3 | 0.6 | 0.7 | 0.3 | 0.6 | 0.7 | 0.7 | 0 | 0.1 |
| 57.00 | 5.2 | 6.0 | 2.17 | 0.6 | 0.7 | 0.9 | 0.6 | 0.7 | 0.9 | 0.8 | 0 | 0.0 |
| 57.08 | 4.1 | 4.8 | 2.12 | 0.7 | 0.6 | 0.9 | 0.7 | 0.6 | 0.9 | 0.9 | 0 | 0.0 |
| 57.17 | 4.2 | 5.0 | 2.34 | 0.5 | 0.6 | 0.7 | 0.5 | 0.6 | 0.7 | 0.7 | 0 | 0.0 |
| 57.25 | 3.9 | 4.3 | 3.04 | 0 | 0.5 | 0.5 | 0 | 0.5 | 0.5 | 0.4 | 0 | 0.3 |
| 57.33 | 3.9 | 4.3 | 2.56 | 0.4 | 0.5 | 0.7 | 0.4 | 0.5 | 0.7 | 0.6 | 0 | 0.0 |
| 57.42 | 4.0 | 4.4 | 2.41 | 0.5 | 0.6 | 0.8 | 0.5 | 0.6 | 0.8 | 0.7 | 0 | 0.0 |

cont'd

| Day | $u_b$ [cm/s] | $A_b$ [cm] | $f_{cws}$ (x 100) | $u_{*cs}$ [cm/s] | $u_{*ws}$ [cm/s] | $u_{*cws}$ [cm/s] | $u_{*c}$ [cm/s] | $u_{*w}$ [cm/s] | $u_{*cw}$ [cm/s] | $\delta_{cw}$ [cm] | $z_0$ [cm] | $z_{0c}$ [cm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57.50 | 7.0 | 8.8 | 2.27 | 0.2 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 0.8 | 0 | 0.2 |
| 57.58 | 10.6 | 14.7 | 1.84 | 0.3 | 1.1 | 1.1 | 0.3 | 1.1 | 1.1 | 1.2 | 0 | 0.3 |
| 57.67 | 14.7 | 20.6 | 1.65 | 0.3 | 1.4 | 1.4 | 0.3 | 1.4 | 1.4 | 1.6 | 0 | 0.4 |
| 57.75 | 16.0 | 22.4 | 1.61 | 0.2 | 1.4 | 1.5 | 0.2 | 1.4 | 1.5 | 1.6 | 0 | 0.8 |
| 57.83 | 14.8 | 20.8 | 1.62 | 0.4 | 1.4 | 1.4 | 0.4 | 1.4 | 1.4 | 1.6 | 0 | 0.3 |
| 57.92 | 18.7 | 27.0 | 1.52 | 0.1 | 1.6 | 1.6 | 0.1 | 1.6 | 1.6 | 1.9 | 0 | 1.1 |
| 58.00 | 16.5 | 23.3 | 1.57 | 0.5 | 1.5 | 1.5 | 0.5 | 1.5 | 1.5 | 1.7 | 0 | 0.2 |
| 58.08 | 14.6 | 19.2 | 1.61 | 0.7 | 1.4 | 1.6 | 0.7 | 1.4 | 1.6 | 1.6 | 0 | 0.1 |
| 58.17 | 15.3 | 21.1 | 1.56 | 0.7 | 1.5 | 1.6 | 0.7 | 1.5 | 1.6 | 1.8 | 0 | 0.1 |
| 58.25 | 18.1 | 26.6 | 1.53 | 0.2 | 1.6 | 1.6 | 0.2 | 1.6 | 1.6 | 1.9 | 0 | 0.9 |
| 58.33 | 19.1 | 27.5 | 1.48 | 0.4 | 1.7 | 1.7 | 0.8 | 4.6 | 4.7 | 5.4 | 0.3 | 3.4 |
| 58.42 | 11.7 | 14.5 | 1.76 | 0.6 | 1.2 | 1.3 | 0.6 | 1.2 | 1.3 | 1.3 | 0 | 0.1 |
| 58.50 | 13.9 | 17.2 | 1.74 | 0.4 | 1.3 | 1.4 | 0.4 | 1.3 | 1.4 | 1.4 | 0 | 0.3 |
| 58.58 | 15.4 | 20.6 | 1.66 | 0.1 | 1.4 | 1.4 | 0.1 | 1.4 | 1.4 | 1.5 | 0 | 0.8 |
| 58.67 | 15.4 | 20.2 | 1.66 | 0.3 | 1.4 | 1.4 | 0.3 | 1.4 | 1.4 | 1.5 | 0 | 0.5 |
| 58.75 | 17.4 | 22.0 | 1.63 | 0.1 | 1.6 | 1.6 | 0.1 | 1.6 | 1.6 | 1.6 | 0 | 1.1 |
| 58.83 | 22.4 | 30.1 | 1.44 | 0.5 | 1.9 | 2.0 | 0.9 | 5.6 | 5.6 | 6.1 | 0.4 | 3.8 |
| 58.92 | 25.1 | 33.9 | 1.40 | 0.3 | 2.1 | 2.1 | 0.5 | 6.1 | 6.1 | 6.6 | 0.4 | 5.3 |
| 59.00 | 29.6 | 38.7 | 1.34 | 0.5 | 2.5 | 2.5 | 0.8 | 6.6 | 6.6 | 6.9 | 0.4 | 4.7 |
| 59.08 | 32.1 | 40.8 | 1.30 | 0.9 | 2.7 | 2.8 | 1.5 | 6.0 | 6.1 | 6.2 | 0.2 | 2.7 |
| 59.17 | 27.6 | 34.4 | 1.36 | 0.9 | 2.4 | 2.5 | 1.7 | 6.3 | 6.5 | 6.5 | 0.3 | 3.0 |
| 59.25 | 32.7 | 45.8 | 1.27 | 0.4 | 2.6 | 2.7 | 0.7 | 6.2 | 6.2 | 7.0 | 0.2 | 4.8 |
| 59.33 | 29.4 | 42.9 | 1.29 | 0.5 | 2.4 | 2.5 | 0.9 | 6.6 | 6.6 | 7.7 | 0.4 | 5.0 |
| 59.42 | 34.4 | 50.7 | 1.21 | 0.9 | 2.8 | 2.9 | 1.6 | 5.9 | 6.0 | 7.1 | 0.2 | 2.6 |
| 59.50 | 45.9 | 66.5 | 1.12 | 1.1 | 3.5 | 3.6 | 2.0 | 7.6 | 7.7 | 9.0 | 0.2 | 3.4 |
| 59.58 | 48.8 | 71.9 | 1.11 | 0.4 | 3.6 | 3.6 | 0.7 | 7.8 | 7.9 | 9.3 | 0.2 | 6.5 |
| 59.67 | 56.1 | 86.2 | 1.05 | 0.1 | 4.1 | 4.1 | 0.2 | 9.1 | 9.1 | 11.2 | 0.2 | 10.1 |
| 59.75 | 62.7 | 100.5 | 1.01 | 0 | 4.5 | 4.5 | 0.1 | 10.1 | 10.1 | 13.0 | 0.3 | 12.7 |
| 59.83 | 63.2 | 101.2 | 1.01 | 0.4 | 4.5 | 4.5 | 0.8 | 10.2 | 10.2 | 13.1 | 0.3 | 9.9 |
| 59.92 | 64.4 | 102.3 | 1.00 | 0.5 | 4.6 | 4.6 | 0.9 | 10.5 | 10.5 | 13.3 | 0.3 | 9.5 |
| 60 | 61.1 | 100.4 | 1.01 | 0.1 | 4.3 | 4.3 | 0.2 | 9.8 | 9.8 | 12.8 | 0.3 | 11.8 |
| 60.08 | 52.2 | 83.5 | 1.07 | 0.5 | 3.8 | 3.8 | 0.9 | 8.2 | 8.2 | 10.6 | 0.2 | 7.0 |
| 60.17 | 54.4 | 88.5 | 1.04 | 0.7 | 4.0 | 4.0 | 1.2 | 8.6 | 8.7 | 11.3 | 0.2 | 6.5 |
| 60.25 | 54.4 | 88.9 | 1.05 | 0.4 | 3.9 | 3.9 | 0.7 | 8.6 | 8.6 | 11.2 | 0.2 | 8.1 |
| 60.33 | 46.3 | 75.2 | 1.10 | 0.2 | 3.4 | 3.4 | 0.3 | 7.2 | 7.2 | 9.3 | 0.2 | 8.0 |
| 60.42 | 38.7 | 60.8 | 1.16 | 0.8 | 3.0 | 3.0 | 1.4 | 6.0 | 6.1 | 7.6 | 0.1 | 3.1 |
| 60.50 | 32.6 | 50.1 | 1.24 | 0.8 | 2.6 | 2.6 | 1.6 | 6.3 | 6.3 | 7.8 | 0.3 | 3.4 |
| 60.58 | 38.1 | 62.4 | 1.16 | 0.1 | 2.9 | 2.9 | 0.2 | 6.0 | 6.0 | 7.8 | 0.1 | 7.0 |
| 60.67 | 32.4 | 52.1 | 1.23 | 0.4 | 2.5 | 2.5 | 0.8 | 6.4 | 6.4 | 8.2 | 0.3 | 5.6 |
| 60.75 | 38.1 | 62.2 | 1.16 | 0.6 | 2.9 | 2.9 | 1.1 | 6.0 | 6.0 | 7.8 | 0.1 | 3.9 |
| 60.83 | 34.4 | 53.3 | 1.22 | 0 | 2.7 | 2.7 | 0.1 | 6.2 | 6.2 | 7.7 | 0.2 | 7.4 |
| 60.92 | 27.6 | 41.8 | 1.31 | 0.5 | 2.2 | 2.3 | 1.0 | 6.4 | 6.4 | 7.8 | 0.4 | 5.0 |

cont'd

| Day | $u_b$ [cm/s] | $A_b$ [cm] | $f_{cws}$ (x 100) | $u_{*cs}$ [cm/s] | $u_{*ws}$ [cm/s] | $u_{*cws}$ [cm/s] | $u_{*c}$ [cm/s] | $u_{*w}$ [cm/s] | $u_{*cw}$ [cm/s] | $\delta_{cw}$ [cm] | $z_0$ [cm] | $z_{0c}$ [cm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 61.00 | 24.0 | 38.0 | 1.36 | 0.2 | 2.0 | 2.0 | 0.4 | 5.5 | 5.5 | 7.0 | 0.4 | 5.8 |
| 61.08 | 24.3 | 37.5 | 1.36 | 0.3 | 2.0 | 2.0 | 0.5 | 5.6 | 5.6 | 7.0 | 0.4 | 5.5 |
| 61.17 | 24.2 | 37.6 | 1.36 | 0.6 | 2.0 | 2.0 | 1.1 | 5.6 | 5.6 | 7.0 | 0.4 | 3.9 |
| 61.25 | 22.7 | 34.1 | 1.38 | 0.6 | 1.9 | 2.0 | 1.2 | 5.4 | 5.5 | 6.6 | 0.4 | 3.5 |
| 61.33 | 16.6 | 24.3 | 1.57 | 0.3 | 1.5 | 1.5 | 0.3 | 1.5 | 1.5 | 1.7 | 0 | 0.5 |
| 61.42 | 16.3 | 23.8 | 1.56 | 0.3 | 1.5 | 1.5 | 0.3 | 1.5 | 1.5 | 1.8 | 0 | 0.4 |
| 61.50 | 14.0 | 20 | 1.65 | 0.5 | 1.3 | 1.3 | 0.5 | 1.3 | 1.3 | 1.5 | 0 | 0.2 |
| 61.58 | 14.2 | 20.7 | 1.66 | 0.1 | 1.3 | 1.3 | 0.1 | 1.3 | 1.3 | 1.5 | 0 | 1.1 |
| 61.67 | 14.0 | 20.4 | 1.64 | 0.3 | 1.3 | 1.4 | 0.3 | 1.3 | 1.4 | 1.6 | 0 | 0.3 |
| 61.75 | 9.7 | 13.4 | 1.84 | 0.4 | 1.0 | 1.1 | 0.4 | 1.0 | 1.1 | 1.2 | 0 | 0.1 |
| 61.83 | 9.6 | 13.6 | 1.92 | 0.1 | 0.9 | 1.0 | 0.1 | 0.9 | 1.0 | 1.1 | 0 | 0.4 |
| 61.92 | 10 | 13.8 | 1.87 | 0.3 | 1.0 | 1.0 | 0.3 | 1.0 | 1.0 | 1.1 | 0 | 0.2 |
| 62.00 | 5.7 | 7.1 | 2.08 | 0.5 | 0.7 | 0.9 | 0.5 | 0.7 | 0.9 | 0.9 | 0 | 0.0 |
| 62.08 | 7.6 | 9.9 | 2.09 | 0.3 | 0.8 | 0.9 | 0.3 | 0.8 | 0.9 | 0.9 | 0 | 0.1 |
| 62.17 | 7.6 | 10.1 | 2.10 | 0.2 | 0.8 | 0.9 | 0.2 | 0.8 | 0.9 | 0.9 | 0 | 0.2 |
| 62.25 | 6.6 | 8.5 | 2.16 | 0.3 | 0.8 | 0.8 | 0.3 | 0.8 | 0.8 | 0.8 | 0 | 0.1 |
| 62.33 | 6.5 | 8.7 | 2.14 | 0.3 | 0.7 | 0.8 | 0.3 | 0.7 | 0.8 | 0.9 | 0 | 0.1 |
| 62.42 | 6.7 | 8.8 | 2.16 | 0.3 | 0.8 | 0.8 | 0.3 | 0.8 | 0.8 | 0.8 | 0 | 0.1 |
| 62.50 | 3.0 | 3.7 | 2.43 | 0.5 | 0.5 | 0.7 | 0.5 | 0.5 | 0.7 | 0.7 | 0 | 0.0 |
| 62.58 | 3.0 | 3.6 | 2.86 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.5 | 0.5 | 0 | 0.0 |
| 62.67 | 6.5 | 7.4 | 2.32 | 0.3 | 0.8 | 0.8 | 0.3 | 0.8 | 0.8 | 0.7 | 0 | 0.1 |
| 62.75 | 10.8 | 12.4 | 1.86 | 0.6 | 1.1 | 1.3 | 0.6 | 1.1 | 1.3 | 1.2 | 0 | 0.1 |
| 62.83 | 17.4 | 21.1 | 1.59 | 0.7 | 1.6 | 1.7 | 1.2 | 4.6 | 4.7 | 4.6 | 0.3 | 2.3 |
| 62.92 | 25.1 | 31.6 | 1.44 | 0.1 | 2.1 | 2.1 | 0.1 | 6.2 | 6.2 | 6.3 | 0.4 | 5.9 |
| 63.00 | 30.9 | 42.0 | 1.30 | 0.7 | 2.5 | 2.6 | 1.2 | 6.3 | 6.3 | 6.9 | 0.3 | 3.8 |
| 63.08 | 39.9 | 56.8 | 1.19 | 0.7 | 3.1 | 3.1 | 1.1 | 6.3 | 6.4 | 7.2 | 0.1 | 3.7 |
| 63.17 | 62.1 | 91.9 | 1.04 | 0.4 | 4.5 | 4.5 | 0.6 | 10.3 | 10.3 | 12.2 | 0.3 | 9.6 |
| 63.25 | 72.7 | 112.5 | 0.98 | 0.1 | 5.1 | 5.1 | 0.2 | 12.1 | 12.1 | 14.9 | 0.3 | 13.9 |
| 63.33 | 69.4 | 111.4 | 0.98 | 0.1 | 4.9 | 4.9 | 0.2 | 11.3 | 11.3 | 14.6 | 0.3 | 13.6 |
| 63.42 | 69.5 | 113.8 | 0.97 | 0.2 | 4.9 | 4.9 | 0.4 | 11.3 | 11.3 | 14.8 | 0.3 | 12.7 |
| 63.50 | 85.9 | 143.9 | 0.91 | 0.6 | 5.8 | 5.8 | 1.5 | 14.2 | 14.2 | 19.0 | 0.4 | 12.6 |
| 63.58 | 89.5 | 158.1 | 0.89 | 0.6 | 6.0 | 6.0 | 1.8 | 14.6 | 14.7 | 20.7 | 0.4 | 13.0 |
| 63.67 | 83.3 | 141.0 | 0.92 | 0.3 | 5.6 | 5.7 | 0.8 | 13.7 | 13.7 | 18.5 | 0.4 | 14.8 |
| 63.75 | 84.0 | 147.5 | 0.91 | 0.4 | 5.7 | 5.7 | 1.1 | 13.7 | 13.7 | 19.2 | 0.4 | 14.2 |
| 63.83 | 81.8 | 146.0 | 0.91 | 0.5 | 5.5 | 5.5 | 1.5 | 13.2 | 13.2 | 18.8 | 0.4 | 12.0 |
| 63.92 | 72.1 | 123.4 | 0.95 | 0.2 | 5.0 | 5.0 | 0.7 | 11.6 | 11.6 | 15.9 | 0.3 | 12.8 |
| 64.00 | 75.3 | 131.3 | 0.94 | 0.3 | 5.1 | 5.1 | 0.9 | 12.1 | 12.1 | 16.9 | 0.4 | 12.7 |
| 64.08 | 69.2 | 121.3 | 0.96 | 0.7 | 4.8 | 4.8 | 1.7 | 11.0 | 11.1 | 15.5 | 0.3 | 8.6 |
| 64.17 | 63.3 | 111.2 | 0.98 | 0.6 | 4.4 | 4.5 | 1.2 | 10 | 10 | 14.1 | 0.3 | 8.7 |
| 64.25 | 72.0 | 128.9 | 0.94 | 0.1 | 4.9 | 4.9 | 0.4 | 11.4 | 11.4 | 16.4 | 0.3 | 14.4 |
| 64.33 | 56.6 | 96.2 | 1.02 | 0.2 | 4.0 | 4.0 | 0.4 | 8.9 | 8.9 | 12.1 | 0.2 | 10.1 |
| 64.42 | 51.4 | 86.9 | 1.05 | 0.2 | 3.7 | 3.7 | 0.3 | 8.0 | 8.0 | 10.8 | 0.2 | 9.1 |

cont'd

| Day | $u_b$ [cm/s] | $A_b$ [cm] | $f_{cws}$ (x 100) | $u_{*cs}$ [cm/s] | $u_{*ws}$ [cm/s] | $u_{*cws}$ [cm/s] | $u_{*c}$ [cm/s] | $u_{*w}$ [cm/s] | $u_{*cw}$ [cm/s] | $\delta_{cw}$ [cm] | $z_0$ [cm] | $z_{0c}$ [cm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64.50 | 45.0 | 74.6 | 1.10 | 0.4 | 3.3 | 3.4 | 0.7 | 6.9 | 6.9 | 9.2 | 0.2 | 6.3 |
| 64.58 | 40.1 | 63.3 | 1.16 | 0.4 | 3.0 | 3.0 | 0.8 | 6.1 | 6.1 | 7.8 | 0.1 | 4.7 |
| 64.67 | 44.4 | 70.9 | 1.12 | 0.2 | 3.3 | 3.3 | 0.3 | 6.9 | 6.9 | 8.8 | 0.2 | 7.2 |
| 64.75 | 44.3 | 72.7 | 1.11 | 0.5 | 3.3 | 3.3 | 0.8 | 6.8 | 6.8 | 8.9 | 0.2 | 5.5 |
| 64.83 | 42.1 | 66.1 | 1.14 | 0.4 | 3.2 | 3.2 | 0.8 | 6.5 | 6.5 | 8.2 | 0.1 | 5.0 |
| 64.92 | 31.0 | 47.8 | 1.26 | 0.4 | 2.5 | 2.5 | 0.8 | 6.6 | 6.6 | 8.1 | 0.4 | 5.7 |
| 65.00 | 35.3 | 55.6 | 1.20 | 0.1 | 2.7 | 2.7 | 0.1 | 6.1 | 6.1 | 7.7 | 0.2 | 7.2 |
| 65.08 | 29.2 | 43.3 | 1.30 | 0.6 | 2.4 | 2.4 | 1.2 | 6.7 | 6.7 | 8.0 | 0.4 | 4.7 |
| 65.17 | 23.5 | 35.4 | 1.37 | 0.5 | 2.0 | 2.0 | 1.0 | 5.5 | 5.6 | 6.8 | 0.4 | 4.1 |
| 65.25 | 22.2 | 33.0 | 1.41 | 0.4 | 1.9 | 1.9 | 0.8 | 5.3 | 5.3 | 6.3 | 0.4 | 4.2 |
| 65.33 | 20.1 | 30.5 | 1.44 | 0.3 | 1.7 | 1.8 | 0.6 | 4.8 | 4.8 | 5.8 | 0.3 | 4.1 |
| 65.42 | 20.1 | 30.7 | 1.45 | 0.2 | 1.7 | 1.7 | 0.4 | 4.7 | 4.7 | 5.8 | 0.3 | 4.6 |
| 65.50 | 20.5 | 31.3 | 1.45 | 0.2 | 1.7 | 1.8 | 0.3 | 4.8 | 4.8 | 5.9 | 0.3 | 4.8 |
| 65.58 | 18.1 | 27.2 | 1.51 | 0.2 | 1.6 | 1.6 | 0.2 | 1.6 | 1.6 | 1.9 | 0 | 0.8 |
| 65.67 | 17.7 | 26.4 | 1.53 | 0.2 | 1.6 | 1.6 | 0.2 | 1.6 | 1.6 | 1.8 | 0 | 0.9 |
| 65.75 | 17.1 | 25.4 | 1.54 | 0.4 | 1.5 | 1.5 | 0.4 | 1.5 | 1.5 | 1.8 | 0 | 0.4 |
| 65.83 | 14.7 | 21.0 | 1.63 | 0.5 | 1.4 | 1.4 | 0.5 | 1.4 | 1.4 | 1.6 | 0 | 0.2 |
| 65.92 | 11.4 | 16.0 | 1.79 | 0.6 | 1.1 | 1.1 | 0.6 | 1.1 | 1.1 | 1.3 | 0 | 0.1 |
| 66.00 | 11.0 | 15.2 | 1.82 | 0.4 | 1.1 | 1.1 | 0.4 | 1.1 | 1.1 | 1.2 | 0 | 0.2 |
| 66.08 | 13.0 | 17.9 | 1.75 | 0.1 | 1.2 | 1.2 | 0.1 | 1.2 | 1.2 | 1.4 | 0 | 0.7 |
| 66.17 | 12.8 | 17.5 | 1.76 | 0.3 | 1.2 | 1.2 | 0.3 | 1.2 | 1.2 | 1.3 | 0 | 0.3 |
| 66.25 | 20.3 | 27.0 | 1.51 | 0.6 | 1.8 | 1.8 | 1.2 | 5.0 | 5.0 | 5.4 | 0.4 | 2.8 |
| 66.33 | 21.2 | 29.7 | 1.47 | 0.3 | 1.8 | 1.8 | 0.6 | 5.1 | 5.1 | 5.8 | 0.4 | 4.3 |
| 66.42 | 23.9 | 33.9 | 1.41 | 0.3 | 2.0 | 2.0 | 0.5 | 5.7 | 5.7 | 6.5 | 0.4 | 5.0 |
| 66.50 | 28.1 | 40.7 | 1.33 | 0.2 | 2.3 | 2.3 | 0.5 | 6.9 | 6.9 | 8.0 | 0.5 | 6.5 |
| 66.58 | 25.5 | 36.8 | 1.37 | 0.1 | 2.1 | 2.1 | 0.2 | 6.0 | 6.0 | 7.0 | 0.4 | 6.2 |
| 66.67 | 24.0 | 34.8 | 1.40 | 0.1 | 2.0 | 2.0 | 0.2 | 5.7 | 5.7 | 6.6 | 0.4 | 6.0 |
| 66.75 | 22.2 | 31.5 | 1.44 | 0.3 | 1.9 | 1.9 | 0.6 | 5.4 | 5.4 | 6.1 | 0.4 | 4.5 |
| 66.83 | 20.2 | 29.1 | 1.46 | 0.5 | 1.8 | 1.8 | 1.1 | 4.9 | 5.0 | 5.7 | 0.4 | 3.0 |
| 66.92 | 18.4 | 25.9 | 1.48 | 0.8 | 1.7 | 1.8 | 1.7 | 4.6 | 4.8 | 5.4 | 0.3 | 2.0 |
| 67.00 | 16.9 | 23.2 | 1.55 | 0.7 | 1.6 | 1.6 | 1.3 | 4.2 | 4.3 | 4.7 | 0.3 | 2.1 |
| 67.08 | 16.4 | 23.0 | 1.60 | 0.2 | 1.5 | 1.5 | 0.2 | 1.5 | 1.5 | 1.7 | 0 | 0.7 |
| 67.17 | 16.6 | 23.8 | 1.59 | 0.3 | 1.5 | 1.5 | 0.3 | 1.5 | 1.5 | 1.7 | 0 | 0.5 |
| 67.25 | 16.6 | 23.1 | 1.58 | 0.5 | 1.5 | 1.5 | 0.5 | 1.5 | 1.5 | 1.7 | 0 | 0.3 |
| 67.33 | 16.6 | 23.5 | 1.56 | 0.5 | 1.5 | 1.6 | 0.5 | 1.5 | 1.6 | 1.8 | 0 | 0.2 |
| 67.42 | 13.4 | 18.7 | 1.71 | 0.3 | 1.3 | 1.3 | 0.3 | 1.3 | 1.3 | 1.4 | 0 | 0.4 |
| 67.50 | 10.8 | 15.1 | 1.85 | 0.1 | 1.1 | 1.1 | 0.1 | 1.1 | 1.1 | 1.2 | 0 | 0.6 |
| 67.58 | 11.3 | 15.2 | 1.86 | 0 | 1.1 | 1.1 | 0 | 1.1 | 1.1 | 1.2 | 0 | 1.0 |
| 67.67 | 12.0 | 16.6 | 1.80 | 0 | 1.1 | 1.1 | 0 | 1.1 | 1.1 | 1.3 | 0 | 1.0 |
| 67.75 | 11.2 | 15.4 | 1.83 | 0.2 | 1.1 | 1.1 | 0.2 | 1.1 | 1.1 | 1.2 | 0 | 0.4 |
| 67.83 | 9.3 | 12.8 | 1.89 | 0.4 | 1.0 | 1.0 | 0.4 | 1.0 | 1.0 | 1.1 | 0 | 0.1 |
| 67.92 | 8.0 | 10.3 | 1.96 | 0.6 | 0.9 | 1.0 | 0.6 | 0.9 | 1.0 | 1.0 | 0 | 0.0 |

cont'd

| Day | $u_b$ | $A_b$ | $f_{cws}$ | $u_{*cs}$ | $u_{*ws}$ | $u_{*cws}$ | $u_{*c}$ | $u_{*w}$ | $u_{*cw}$ | $\delta_{cw}$ | $z_0$ | $z_{0c}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [cm/s] | [cm] | (x 100) | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm] | [cm] | [cm] |
| 68.00 | 5.9 | 7.5 | 2.16 | 0.6 | 0.7 | 0.8 | 0.6 | 0.7 | 0.8 | 0.8 | 0 | 0.0 |
| 68.08 | 7.0 | 9.1 | 2.16 | 0.5 | 0.8 | 0.8 | 0.5 | 0.8 | 0.8 | 0.8 | 0 | 0.0 |
| 68.17 | 4.4 | 5.1 | 2.84 | 0.1 | 0.5 | 0.5 | 0.1 | 0.5 | 0.5 | 0.5 | 0 | 0.2 |
| 68.25 | 4.2 | 5.2 | 2.50 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 0 | 0.0 |
| 68.33 | 3.0 | 3.7 | 2.71 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0 | 0.0 |
| 68.42 | 4.8 | 6.0 | 2.61 | 0.2 | 0.6 | 0.6 | 0.2 | 0.6 | 0.6 | 0.6 | 0 | 0.1 |
| 68.50 | 1.7 | 2.2 | 3.58 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0 | 0.0 |
| 68.58 | 3.9 | 4.8 | 2.77 | 0.3 | 0.5 | 0.5 | 0.3 | 0.5 | 0.5 | 0.5 | 0 | 0.0 |
| 68.67 | 3.5 | 4.6 | 2.95 | 0.1 | 0.4 | 0.4 | 0.1 | 0.4 | 0.4 | 0.4 | 0 | 0.1 |
| 68.75 | 2.3 | 2.9 | 3.44 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0 | 0.0 |
| 68.83 | 2.6 | 3.4 | 2.94 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0 | 0.0 |
| 68.92 | 4.5 | 5.9 | 2.49 | 0.3 | 0.5 | 0.6 | 0.3 | 0.5 | 0.6 | 0.6 | 0 | 0.0 |
| 69.00 | 4.4 | 5.3 | 2.23 | 0.6 | 0.6 | 0.8 | 0.6 | 0.6 | 0.8 | 0.8 | 0 | 0.0 |
| 69.08 | 5.9 | 7.7 | 2.15 | 0.4 | 0.7 | 0.8 | 0.4 | 0.7 | 0.8 | 0.9 | 0 | 0.0 |
| 69.17 | 6.9 | 9.7 | 2.18 | 0.1 | 0.7 | 0.7 | 0.1 | 0.7 | 0.7 | 0.8 | 0 | 0.5 |
| 69.25 | 6.9 | 9.7 | 1.98 | 0.5 | 0.8 | 0.9 | 0.5 | 0.8 | 0.9 | 1.0 | 0 | 0.1 |
| 69.33 | 3.7 | 4.4 | 2.22 | 0.6 | 0.6 | 0.8 | 0.6 | 0.6 | 0.8 | 0.8 | 0 | 0.0 |
| 69.42 | 6.8 | 9.3 | 1.93 | 0.6 | 0.8 | 1.0 | 0.6 | 0.8 | 1.0 | 1.1 | 0 | 0.0 |
| 69.50 | 8.1 | 11.7 | 2.00 | 0.3 | 0.8 | 0.9 | 0.3 | 0.8 | 0.9 | 1.0 | 0 | 0.2 |
| 69.58 | 8.3 | 11.8 | 2.03 | 0.1 | 0.8 | 0.8 | 0.1 | 0.8 | 0.8 | 1.0 | 0 | 0.4 |
| 69.67 | 6.2 | 8.5 | 2.28 | 0.1 | 0.7 | 0.7 | 0.1 | 0.7 | 0.7 | 0.8 | 0 | 0.3 |
| 69.75 | 7.1 | 9.8 | 2.10 | 0.2 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 0.9 | 0 | 0.2 |
| 69.83 | 2.8 | 3.0 | 3.34 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0 | 0.1 |
| 69.92 | 7.9 | 9.7 | 2.13 | 0.3 | 0.9 | 0.9 | 0.3 | 0.9 | 0.9 | 0.9 | 0 | 0.1 |
| 70 | 16.4 | 20.2 | 1.67 | 0.5 | 1.5 | 1.5 | 0.5 | 1.5 | 1.5 | 1.5 | 0 | 0.2 |
| 70.08 | 19.3 | 25.7 | 1.52 | 0.6 | 1.7 | 1.8 | 1.2 | 4.8 | 4.9 | 5.2 | 0.3 | 2.6 |
| 70.17 | 29.5 | 40.2 | 1.33 | 0.2 | 2.4 | 2.4 | 0.3 | 6.7 | 6.7 | 7.3 | 0.4 | 6.3 |
| 70.25 | 32.4 | 43.5 | 1.30 | 0.6 | 2.6 | 2.6 | 1.1 | 6.3 | 6.3 | 6.8 | 0.2 | 3.7 |
| 70.33 | 39.5 | 55.7 | 1.20 | 1.1 | 3.1 | 3.1 | 2.0 | 6.3 | 6.3 | 7.1 | 0.1 | 2.1 |
| 70.42 | 46.6 | 67.7 | 1.13 | 1.1 | 3.5 | 3.5 | 2.1 | 7.5 | 7.6 | 8.8 | 0.2 | 3.1 |
| 70.50 | 43.8 | 64.6 | 1.15 | 0.6 | 3.3 | 3.3 | 1.0 | 7.0 | 7.0 | 8.2 | 0.2 | 4.7 |
| 70.58 | 48.8 | 71.9 | 1.11 | 0.4 | 3.6 | 3.6 | 0.7 | 7.9 | 7.9 | 9.3 | 0.2 | 6.5 |
| 70.67 | 47.7 | 71.6 | 1.11 | 0.4 | 3.6 | 3.6 | 0.8 | 7.6 | 7.6 | 9.2 | 0.2 | 6.1 |
| 70.75 | 54.1 | 81.2 | 1.07 | 0.5 | 4.0 | 4.0 | 0.9 | 8.8 | 8.8 | 10.6 | 0.2 | 7.2 |
| 70.83 | 42.8 | 64.3 | 1.15 | 0.7 | 3.2 | 3.3 | 1.3 | 6.7 | 6.7 | 8.1 | 0.2 | 3.9 |
| 70.92 | 40.1 | 60.3 | 1.17 | 0.5 | 3.1 | 3.1 | 0.8 | 6.3 | 6.3 | 7.6 | 0.1 | 4.6 |
| 71.00 | 33.1 | 49.5 | 1.25 | 0.2 | 2.6 | 2.6 | 0.3 | 6.3 | 6.3 | 7.5 | 0.2 | 6.3 |
| 71.08 | 35.6 | 52.9 | 1.22 | 0.4 | 2.8 | 2.8 | 0.8 | 6.1 | 6.1 | 7.2 | 0.2 | 4.5 |
| 71.17 | 28.8 | 42.8 | 1.31 | 0.4 | 2.3 | 2.3 | 0.9 | 6.8 | 6.8 | 8.1 | 0.5 | 5.6 |
| 71.25 | 31.6 | 45.4 | 1.28 | 0.3 | 2.5 | 2.5 | 0.7 | 6.4 | 6.5 | 7.4 | 0.3 | 5.4 |
| 71.33 | 28.1 | 41.6 | 1.31 | 0.6 | 2.3 | 2.3 | 1.4 | 6.8 | 6.8 | 8.1 | 0.5 | 4.6 |
| 71.42 | 25.8 | 38.2 | 1.34 | 0.6 | 2.1 | 2.2 | 1.3 | 6.1 | 6.2 | 7.3 | 0.4 | 4.0 |

cont'd

| Day | $u_b$ | $A_b$ | $f_{cws}$ | $u_{*cs}$ | $u_{*ws}$ | $u_{*cws}$ | $u_{*c}$ | $u_{*w}$ | $u_{*cw}$ | $\delta_{cw}$ | $z_0$ | $z_{0c}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [cm/s] | [cm] | (x 100) | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm] | [cm] | [cm] |
| 71.50 | 25.4 | 38.1 | 1.35 | 0.4 | 2.1 | 2.1 | 0.9 | 6.0 | 6.0 | 7.2 | 0.4 | 4.6 |
| 71.58 | 24.3 | 35.5 | 1.39 | 0.1 | 2.0 | 2.0 | 0.2 | 5.7 | 5.7 | 6.7 | 0.4 | 6.1 |
| 71.67 | 24.5 | 36.4 | 1.38 | 0.2 | 2.0 | 2.0 | 0.5 | 5.8 | 5.8 | 6.9 | 0.4 | 5.4 |
| 71.75 | 19.9 | 29.2 | 1.48 | 0.1 | 1.7 | 1.7 | 0.1 | 4.7 | 4.7 | 5.5 | 0.3 | 5.1 |
| 71.83 | 15.6 | 22.7 | 1.61 | 0.3 | 1.4 | 1.4 | 0.3 | 1.4 | 1.4 | 1.6 | 0 | 0.5 |
| 71.92 | 14.9 | 20.9 | 1.66 | 0 | 1.4 | 1.4 | 0 | 1.4 | 1.4 | 1.5 | 0 | 1.4 |
| 72.00 | 15.3 | 21.6 | 1.63 | 0.4 | 1.4 | 1.4 | 0.4 | 1.4 | 1.4 | 1.6 | 0 | 0.3 |
| 72.08 | 14.5 | 19.9 | 1.63 | 0.6 | 1.4 | 1.4 | 0.6 | 1.4 | 1.4 | 1.6 | 0 | 0.1 |
| 72.17 | 10 | 12.4 | 1.88 | 0.5 | 1.1 | 1.1 | 0.5 | 1.1 | 1.1 | 1.1 | 0 | 0.1 |
| 72.25 | 6.6 | 7.6 | 2.41 | 0.1 | 0.7 | 0.7 | 0.1 | 0.7 | 0.7 | 0.7 | 0 | 0.4 |
| 72.33 | 7.4 | 9.2 | 2.03 | 0.5 | 0.9 | 1.0 | 0.5 | 0.9 | 1.0 | 1.0 | 0 | 0.1 |
| 72.42 | 7.0 | 9.0 | 1.98 | 0.6 | 0.8 | 1.0 | 0.6 | 0.8 | 1.0 | 1.0 | 0 | 0.0 |
| 72.50 | 4.6 | 5.1 | 2.79 | 0.1 | 0.6 | 0.6 | 0.1 | 0.6 | 0.6 | 0.5 | 0 | 0.1 |
| 72.58 | 8.2 | 11.3 | 1.98 | 0.3 | 0.9 | 0.9 | 0.3 | 0.9 | 0.9 | 1.0 | 0 | 0.1 |
| 72.67 | 5.9 | 7.5 | 2.22 | 0.4 | 0.7 | 0.8 | 0.4 | 0.7 | 0.8 | 0.8 | 0 | 0.0 |
| 72.75 | 4.4 | 5.5 | 2.52 | 0.3 | 0.5 | 0.6 | 0.3 | 0.5 | 0.6 | 0.6 | 0 | 0.0 |
| 72.83 | 2.5 | 2.7 | 3.31 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0 | 0.0 |
| 72.92 | 2.4 | 3.0 | 3.34 | 0.2 | 0.3 | 0.4 | 0.2 | 0.3 | 0.4 | 0.4 | 0 | 0.0 |
| 73.00 | 2.9 | 3.8 | 2.95 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0 | 0.0 |
| 73.08 | 2.6 | 3.0 | 2.71 | 0.4 | 0.4 | 0.6 | 0.4 | 0.4 | 0.6 | 0.5 | 0 | 0.0 |
| 73.17 | 3.2 | 3.9 | 2.41 | 0.5 | 0.5 | 0.7 | 0.5 | 0.5 | 0.7 | 0.7 | 0 | 0.0 |
| 73.25 | 2.8 | 3.3 | 2.89 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.5 | 0.5 | 0 | 0.0 |
| 73.33 | 1.1 | 1.0 | 4.72 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0 | 0.0 |
| 73.42 | 3.0 | 3.6 | 2.60 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 0 | 0.0 |
| 73.50 | 1.9 | 2.3 | 3.83 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0 | 0.0 |
| 73.58 | 8.8 | 10.6 | 2.05 | 0.3 | 0.9 | 1.0 | 0.3 | 0.9 | 1.0 | 0.9 | 0 | 0.2 |
| 73.67 | 17.9 | 23.5 | 1.55 | 0.5 | 1.6 | 1.7 | 1.0 | 4.5 | 4.6 | 4.9 | 0.3 | 2.7 |
| 73.75 | 16.4 | 21.9 | 1.62 | 0.2 | 1.5 | 1.5 | 0.2 | 1.5 | 1.5 | 1.6 | 0 | 0.6 |
| 73.83 | 17.9 | 24.6 | 1.56 | 0.2 | 1.6 | 1.6 | 0.2 | 1.6 | 1.6 | 1.8 | 0 | 0.7 |
| 73.92 | 18.8 | 26.2 | 1.53 | 0.2 | 1.7 | 1.7 | 0.3 | 4.5 | 4.5 | 5.0 | 0.3 | 4.2 |
| 74.00 | 30.2 | 45.1 | 1.28 | 0.4 | 2.4 | 2.5 | 0.7 | 6.6 | 6.6 | 7.9 | 0.4 | 5.6 |
| 74.08 | 28.8 | 44.6 | 1.28 | 0.5 | 2.3 | 2.4 | 1.1 | 6.7 | 6.7 | 8.3 | 0.5 | 5.1 |
| 74.17 | 32.1 | 49.4 | 1.24 | 0.7 | 2.6 | 2.6 | 1.3 | 6.3 | 6.4 | 7.8 | 0.3 | 4.0 |
| 74.25 | 26.7 | 40.5 | 1.32 | 0.5 | 2.2 | 2.2 | 1.1 | 6.3 | 6.3 | 7.6 | 0.4 | 4.6 |
| 74.33 | 25.1 | 38.0 | 1.36 | 0.2 | 2.1 | 2.1 | 0.3 | 5.9 | 5.9 | 7.1 | 0.4 | 6.0 |
| 74.42 | 26.9 | 40.4 | 1.33 | 0.5 | 2.2 | 2.2 | 1.1 | 6.3 | 6.3 | 7.6 | 0.4 | 4.6 |
| 74.50 | 24.4 | 35.7 | 1.38 | 0.4 | 2.0 | 2.0 | 0.9 | 5.8 | 5.8 | 6.8 | 0.4 | 4.3 |
| 74.58 | 23.0 | 33.6 | 1.41 | 0 | 1.9 | 1.9 | 0.1 | 5.4 | 5.4 | 6.4 | 0.4 | 6.2 |
| 74.67 | 17.2 | 25.6 | 1.54 | 0.2 | 1.5 | 1.5 | 0.2 | 1.5 | 1.5 | 1.8 | 0 | 0.9 |
| 74.75 | 14.1 | 20.5 | 1.66 | 0.2 | 1.3 | 1.3 | 0.2 | 1.3 | 1.3 | 1.5 | 0 | 0.6 |
| 74.83 | 18.2 | 26.8 | 1.51 | 0.2 | 1.6 | 1.6 | 0.2 | 1.6 | 1.6 | 1.9 | 0 | 0.7 |
| 74.92 | 16.0 | 23.5 | 1.57 | 0.4 | 1.4 | 1.5 | 0.4 | 1.4 | 1.5 | 1.7 | 0 | 0.3 |

cont'd

| Day | $u_b$ | $A_b$ | $f_{cws}$ | $u_{*cs}$ | $u_{*ws}$ | $u_{*cws}$ | $u_{*c}$ | $u_{*w}$ | $u_{*cw}$ | $\delta_{cw}$ | $z_0$ | $z_{0c}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [cm/s] | [cm] | (x 100) | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm] | [cm] | [cm] |
| 75.00 | 14.5 | 21.1 | 1.65 | 0.1 | 1.3 | 1.3 | 0.1 | 1.3 | 1.3 | 1.5 | 0 | 0.9 |
| 75.08 | 10.7 | 15.2 | 1.84 | 0.4 | 1.0 | 1.1 | 0.4 | 1.0 | 1.1 | 1.2 | 0 | 0.1 |
| 75.17 | 10.4 | 14.2 | 1.84 | 0.6 | 1.0 | 1.1 | 0.6 | 1.0 | 1.1 | 1.2 | 0 | 0.0 |
| 75.25 | 9.8 | 13.1 | 1.91 | 0.6 | 1.0 | 1.0 | 0.6 | 1.0 | 1.0 | 1.1 | 0 | 0.0 |
| 75.33 | 9.3 | 12.7 | 1.97 | 0.2 | 0.9 | 0.9 | 0.2 | 0.9 | 0.9 | 1.0 | 0 | 0.2 |
| 75.42 | 7.0 | 8.7 | 2.18 | 0.3 | 0.8 | 0.8 | 0.3 | 0.8 | 0.8 | 0.8 | 0 | 0.1 |
| 75.50 | 15.5 | 20 | 1.67 | 0.4 | 1.4 | 1.4 | 0.4 | 1.4 | 1.4 | 1.5 | 0 | 0.3 |
| 75.58 | 17.7 | 23.1 | 1.60 | 0.1 | 1.6 | 1.6 | 0.1 | 1.6 | 1.6 | 1.7 | 0 | 1.1 |
| 75.67 | 14.3 | 19.1 | 1.71 | 0.3 | 1.3 | 1.3 | 0.3 | 1.3 | 1.3 | 1.4 | 0 | 0.3 |
| 75.75 | 14.4 | 19.0 | 1.71 | 0.4 | 1.3 | 1.3 | 0.4 | 1.3 | 1.3 | 1.4 | 0 | 0.2 |
| 75.83 | 12.0 | 15.8 | 1.83 | 0.2 | 1.1 | 1.1 | 0.2 | 1.1 | 1.1 | 1.2 | 0 | 0.5 |
| 75.92 | 10.9 | 14.3 | 1.89 | 0.3 | 1.1 | 1.1 | 0.3 | 1.1 | 1.1 | 1.1 | 0 | 0.2 |
| 76.00 | 8.9 | 11.6 | 2.04 | 0.3 | 0.9 | 0.9 | 0.3 | 0.9 | 0.9 | 0.9 | 0 | 0.2 |
| 76.08 | 6.1 | 7.8 | 2.38 | 0.1 | 0.7 | 0.7 | 0.1 | 0.7 | 0.7 | 0.7 | 0 | 0.3 |
| 76.17 | 7.5 | 9.3 | 2.18 | 0.2 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 0.8 | 0 | 0.2 |
| 76.25 | 13.5 | 18.2 | 1.71 | 0.3 | 1.3 | 1.3 | 0.3 | 1.3 | 1.3 | 1.4 | 0 | 0.4 |
| 76.33 | 9.9 | 12.2 | 2.00 | 0.2 | 1.0 | 1.0 | 0.2 | 1.0 | 1.0 | 1.0 | 0 | 0.3 |
| 76.42 | 8.4 | 9.5 | 1.98 | 0.6 | 1.0 | 1.1 | 0.6 | 1.0 | 1.1 | 1.0 | 0 | 0.1 |
| 76.50 | 14.1 | 16.2 | 1.72 | 0.6 | 1.4 | 1.5 | 0.6 | 1.4 | 1.5 | 1.4 | 0 | 0.1 |
| 76.58 | 13.3 | 16.0 | 1.81 | 0.2 | 1.3 | 1.3 | 0.2 | 1.3 | 1.3 | 1.2 | 0 | 0.5 |
| 76.67 | 10.9 | 13.0 | 1.95 | 0.2 | 1.1 | 1.1 | 0.2 | 1.1 | 1.1 | 1.1 | 0 | 0.4 |
| 76.75 | 11.3 | 14.2 | 1.83 | 0.4 | 1.1 | 1.2 | 0.4 | 1.1 | 1.2 | 1.2 | 0 | 0.2 |
| 76.83 | 8.4 | 9.8 | 2.14 | 0.2 | 0.9 | 0.9 | 0.2 | 0.9 | 0.9 | 0.9 | 0 | 0.2 |
| 76.92 | 6.1 | 6.4 | 2.43 | 0.3 | 0.7 | 0.8 | 0.3 | 0.7 | 0.8 | 0.7 | 0 | 0.1 |
| 77.00 | 9.2 | 10.4 | 2.02 | 0.4 | 1.0 | 1.1 | 0.4 | 1.0 | 1.1 | 1.0 | 0 | 0.1 |
| 77.08 | 8.4 | 10.2 | 2.13 | 0.1 | 0.9 | 0.9 | 0.1 | 0.9 | 0.9 | 0.9 | 0 | 0.4 |
| 77.17 | 8.6 | 10.6 | 1.98 | 0.4 | 0.9 | 1.0 | 0.4 | 0.9 | 1.0 | 1.0 | 0 | 0.1 |
| 77.25 | 2.7 | 3.3 | 2.57 | 0.4 | 0.4 | 0.6 | 0.4 | 0.4 | 0.6 | 0.6 | 0 | 0.0 |
| 77.33 | 1.6 | 1.6 | 3.30 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0 | 0.0 |
| 77.42 | 3.5 | 4.5 | 2.96 | 0.1 | 0.4 | 0.4 | 0.1 | 0.4 | 0.4 | 0.4 | 0 | 0.1 |
| 77.50 | 1.0 | 0.9 | 5.07 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0 | 0.0 |
| 77.58 | 2.6 | 3.5 | 3.32 | 0.1 | 0.3 | 0.4 | 0.1 | 0.3 | 0.4 | 0.4 | 0 | 0.1 |
| 77.67 | 2.8 | 3.4 | 2.82 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.5 | 0.5 | 0 | 0.0 |
| 77.75 | 2.3 | 2.9 | 2.78 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0 | 0.0 |
| 77.83 | 2.9 | 3.8 | 2.76 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.5 | 0.5 | 0 | 0.0 |
| 77.92 | 4.7 | 6.9 | 2.47 | 0.1 | 0.5 | 0.5 | 0.1 | 0.5 | 0.5 | 0.6 | 0 | 0.1 |
| 78.00 | 1.4 | 1.6 | 3.31 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0 | 0.0 |
| 78.08 | 2.8 | 3.3 | 2.81 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.5 | 0.5 | 0 | 0.0 |
| 78.17 | 1.8 | 1.9 | 4.27 | 0.1 | 0.3 | 0.3 | 0.1 | 0.3 | 0.3 | 0.2 | 0 | 0.1 |
| 78.25 | 2.8 | 3.4 | 3.22 | 0.1 | 0.4 | 0.4 | 0.1 | 0.4 | 0.4 | 0.4 | 0 | 0.1 |
| 78.33 | 3.1 | 4.3 | 2.89 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.5 | 0 | 0.1 |
| 78.42 | 2.5 | 3.1 | 3.15 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0 | 0.0 |

cont'd

| Day | $u_b$ | $A_b$ | $f_{cws}$ | $u_{*cs}$ | $u_{*ws}$ | $u_{*cws}$ | $u_{*c}$ | $u_{*w}$ | $u_{*cw}$ | $\delta_{cw}$ | $z_0$ | $z_{0c}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [cm/s] | [cm] | (x 100) | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm] | [cm] | [cm] |
| 78.50 | 2.0 | 2.3 | 3.03 | 0.3 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.4 | 0 | 0.0 |
| 78.58 | 3.1 | 3.9 | 2.98 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0 | 0.1 |
| 78.67 | 0.2 | 0.2 | 7.07 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0 | 0.0 |
| 78.75 | 3.4 | 4.3 | 2.50 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 0 | 0.0 |
| 78.83 | 3.7 | 5.1 | 2.46 | 0.3 | 0.5 | 0.6 | 0.3 | 0.5 | 0.6 | 0.6 | 0 | 0.0 |
| 78.92 | 4.0 | 5.9 | 2.58 | 0.1 | 0.5 | 0.5 | 0.1 | 0.5 | 0.5 | 0.6 | 0 | 0.1 |
| 79.00 | 2.9 | 3.8 | 2.95 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0 | 0.1 |
| 79.08 | 2.9 | 3.7 | 2.86 | 0.2 | 0.4 | 0.5 | 0.2 | 0.4 | 0.5 | 0.5 | 0 | 0.0 |
| 79.17 | 3.5 | 4.4 | 2.99 | 0.1 | 0.4 | 0.4 | 0.1 | 0.4 | 0.4 | 0.4 | 0 | 0.2 |
| 79.25 | 2.8 | 3.4 | 3.01 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0 | 0.0 |
| 79.33 | 2.9 | 3.3 | 2.99 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.5 | 0.4 | 0 | 0.0 |
| 79.42 | 5.2 | 7.6 | 2.40 | 0.1 | 0.6 | 0.6 | 0.1 | 0.6 | 0.6 | 0.7 | 0 | 0.3 |
| 79.50 | 6.3 | 9.3 | 2.22 | 0.1 | 0.7 | 0.7 | 0.1 | 0.7 | 0.7 | 0.8 | 0 | 0.4 |
| 79.58 | 5.8 | 7.7 | 2.39 | 0.1 | 0.6 | 0.7 | 0.1 | 0.6 | 0.7 | 0.7 | 0 | 0.2 |
| 79.67 | 3.6 | 4.7 | 2.54 | 0.3 | 0.5 | 0.6 | 0.3 | 0.5 | 0.6 | 0.6 | 0 | 0.0 |
| 79.75 | 3.1 | 3.8 | 2.33 | 0.5 | 0.5 | 0.7 | 0.5 | 0.5 | 0.7 | 0.7 | 0 | 0.0 |
| 79.83 | 3.9 | 4.7 | 2.19 | 0.6 | 0.6 | 0.8 | 0.6 | 0.6 | 0.8 | 0.8 | 0 | 0.0 |
| 79.92 | 5.2 | 6.6 | 2.21 | 0.4 | 0.7 | 0.8 | 0.4 | 0.7 | 0.8 | 0.8 | 0 | 0.0 |
| 80 | 5.5 | 7.9 | 2.37 | 0.1 | 0.6 | 0.6 | 0.1 | 0.6 | 0.6 | 0.7 | 0 | 0.4 |
| 80.08 | 5.8 | 8.3 | 2.32 | 0.1 | 0.6 | 0.6 | 0.1 | 0.6 | 0.6 | 0.7 | 0 | 0.4 |
| 80.17 | 5.1 | 7.0 | 2.27 | 0.3 | 0.6 | 0.7 | 0.3 | 0.6 | 0.7 | 0.8 | 0 | 0.1 |
| 80.25 | 3.4 | 3.9 | 2.96 | 0.2 | 0.4 | 0.5 | 0.2 | 0.4 | 0.5 | 0.4 | 0 | 0.1 |
| 80.33 | 7.6 | 11.0 | 2.09 | 0.1 | 0.8 | 0.8 | 0.1 | 0.8 | 0.8 | 0.9 | 0 | 0.4 |
| 80.42 | 13.9 | 17.8 | 1.74 | 0.2 | 1.3 | 1.3 | 0.2 | 1.3 | 1.3 | 1.4 | 0 | 0.5 |
| 80.50 | 15.7 | 19.2 | 1.68 | 0.3 | 1.5 | 1.5 | 0.3 | 1.5 | 1.5 | 1.5 | 0 | 0.4 |
| 80.58 | 22.6 | 27.6 | 1.49 | 0.3 | 2.0 | 2.0 | 0.7 | 5.7 | 5.8 | 5.7 | 0.4 | 4.2 |
| 80.67 | 49.0 | 70.1 | 1.12 | 0.7 | 3.7 | 3.7 | 1.3 | 8.0 | 8.0 | 9.2 | 0.2 | 4.9 |
| 80.75 | 64.1 | 100.6 | 1.01 | 0.9 | 4.6 | 4.6 | 1.8 | 10.5 | 10.5 | 13.2 | 0.3 | 6.8 |
| 80.83 | 67.5 | 104.9 | 1.00 | 0.9 | 4.8 | 4.8 | 1.8 | 11.2 | 11.2 | 13.9 | 0.3 | 7.4 |
| 80.92 | 56.0 | 88.7 | 1.05 | 0.4 | 4.0 | 4.1 | 0.7 | 9.0 | 9.0 | 11.4 | 0.2 | 8.5 |
| 81.00 | 50.5 | 79.0 | 1.08 | 0.1 | 3.7 | 3.7 | 0.1 | 8.0 | 8.0 | 10 | 0.2 | 9.5 |
| 81.08 | 43.6 | 67.7 | 1.13 | 0.7 | 3.3 | 3.3 | 1.2 | 6.8 | 6.8 | 8.4 | 0.2 | 4.1 |
| 81.17 | 37.8 | 58.6 | 1.16 | 0.9 | 3.0 | 3.1 | 1.6 | 6.0 | 6.1 | 7.6 | 0.1 | 2.6 |
| 81.25 | 47.2 | 72.2 | 1.11 | 0.6 | 3.5 | 3.5 | 1.2 | 7.5 | 7.5 | 9.2 | 0.2 | 5.0 |
| 81.33 | 42.2 | 62.7 | 1.16 | 0.3 | 3.2 | 3.2 | 0.5 | 6.6 | 6.6 | 7.9 | 0.1 | 5.9 |
| 81.42 | 49.4 | 75.0 | 1.10 | 0.2 | 3.7 | 3.7 | 0.4 | 7.9 | 7.9 | 9.6 | 0.2 | 7.9 |
| 81.50 | 37.9 | 57.7 | 1.19 | 0.3 | 2.9 | 2.9 | 0.5 | 6.0 | 6.0 | 7.3 | 0.1 | 5.4 |
| 81.58 | 40.7 | 62.2 | 1.16 | 0.1 | 3.1 | 3.1 | 0.2 | 6.3 | 6.3 | 7.7 | 0.1 | 6.8 |
| 81.67 | 37.8 | 57.8 | 1.19 | 0.2 | 2.9 | 2.9 | 0.4 | 6.0 | 6.0 | 7.3 | 0.1 | 5.8 |
| 81.75 | 31.8 | 48.4 | 1.26 | 0.4 | 2.5 | 2.5 | 0.8 | 6.5 | 6.5 | 7.9 | 0.3 | 5.2 |
| 81.83 | 36.8 | 51.6 | 1.23 | 0.3 | 2.9 | 2.9 | 0.5 | 6.0 | 6.0 | 6.8 | 0.1 | 4.7 |
| 81.92 | 50.8 | 73.8 | 1.10 | 0.2 | 3.8 | 3.8 | 0.3 | 8.2 | 8.2 | 9.6 | 0.2 | 8.3 |

cont'd

| Day | $u_b$ | $A_b$ | $f_{cws}$ | $u_{*cs}$ | $u_{*ws}$ | $u_{*cws}$ | $u_{*c}$ | $u_{*w}$ | $u_{*cw}$ | $\delta_{cw}$ | $z_0$ | $z_{0c}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [cm/s] | [cm] | (x 100) | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm] | [cm] | [cm] |
| 82.00 | 44.6 | 63.7 | 1.14 | 0.8 | 3.4 | 3.5 | 1.4 | 7.3 | 7.4 | 8.5 | 0.2 | 4.2 |
| 82.08 | 51.6 | 74.9 | 1.07 | 1.3 | 3.9 | 4.1 | 2.6 | 8.8 | 9.1 | 10.5 | 0.2 | 3.5 |
| 82.17 | 44.3 | 63.0 | 1.11 | 1.6 | 3.6 | 3.9 | 3.1 | 7.8 | 8.3 | 9.4 | 0.2 | 2.3 |
| 82.25 | 43.5 | 63.3 | 1.13 | 1.2 | 3.4 | 3.6 | 2.3 | 7.3 | 7.5 | 8.8 | 0.2 | 2.7 |
| 82.33 | 53.4 | 77.3 | 1.08 | 0.9 | 4.0 | 4.1 | 1.7 | 8.9 | 9.0 | 10.5 | 0.2 | 5.1 |
| 82.42 | 51.0 | 74.6 | 1.10 | 0.6 | 3.8 | 3.8 | 1.1 | 8.4 | 8.4 | 9.8 | 0.2 | 6.1 |
| 82.50 | 44.2 | 63.8 | 1.14 | 0.7 | 3.4 | 3.5 | 1.2 | 7.2 | 7.3 | 8.4 | 0.2 | 4.3 |
| 82.58 | 37.8 | 54.2 | 1.19 | 0.9 | 3.0 | 3.1 | 1.5 | 6.1 | 6.2 | 7.1 | 0.1 | 2.8 |
| 82.67 | 35.1 | 51.2 | 1.23 | 0.6 | 2.8 | 2.8 | 1.0 | 6.0 | 6.0 | 7.0 | 0.2 | 3.8 |
| 82.75 | 33.0 | 47.5 | 1.26 | 0.2 | 2.6 | 2.6 | 0.3 | 6.3 | 6.3 | 7.2 | 0.2 | 6.2 |
| 82.83 | 35.6 | 52.5 | 1.22 | 0.2 | 2.8 | 2.8 | 0.3 | 6.1 | 6.1 | 7.2 | 0.2 | 5.9 |
| 82.92 | 29.7 | 43.8 | 1.30 | 0.2 | 2.4 | 2.4 | 0.4 | 6.7 | 6.7 | 7.9 | 0.4 | 6.8 |
| 83.00 | 31.6 | 45.8 | 1.28 | 0.2 | 2.5 | 2.5 | 0.3 | 6.5 | 6.5 | 7.5 | 0.3 | 6.4 |
| 83.08 | 33.8 | 47.9 | 1.25 | 0.4 | 2.7 | 2.7 | 0.8 | 6.1 | 6.2 | 7.0 | 0.2 | 4.4 |
| 83.17 | 29.4 | 41.9 | 1.29 | 0.7 | 2.4 | 2.5 | 1.4 | 6.4 | 6.5 | 7.4 | 0.4 | 3.8 |
| 83.25 | 29.8 | 43.3 | 1.29 | 0.7 | 2.4 | 2.5 | 1.4 | 6.5 | 6.6 | 7.6 | 0.4 | 4.0 |
| 83.33 | 29.6 | 43.2 | 1.29 | 0.6 | 2.4 | 2.5 | 1.2 | 6.6 | 6.6 | 7.7 | 0.4 | 4.5 |
| 83.42 | 31.1 | 45.1 | 1.28 | 0.3 | 2.5 | 2.5 | 0.5 | 6.5 | 6.5 | 7.6 | 0.3 | 5.8 |
| 83.50 | 29.7 | 42.6 | 1.31 | 0.1 | 2.4 | 2.4 | 0.1 | 6.7 | 6.7 | 7.7 | 0.4 | 7.3 |
| 83.58 | 25.2 | 37.3 | 1.36 | 0.2 | 2.1 | 2.1 | 0.5 | 5.9 | 5.9 | 7.0 | 0.4 | 5.6 |
| 83.67 | 24.4 | 35.2 | 1.39 | 0.2 | 2.0 | 2.0 | 0.4 | 5.8 | 5.8 | 6.7 | 0.4 | 5.6 |
| 83.75 | 23.3 | 32.5 | 1.43 | 0 | 2.0 | 2.0 | 0 | 5.6 | 5.6 | 6.3 | 0.4 | 6.1 |
| 83.83 | 27.1 | 38.4 | 1.35 | 0.3 | 2.2 | 2.2 | 0.7 | 6.5 | 6.5 | 7.3 | 0.4 | 5.5 |
| 83.92 | 28.8 | 41.2 | 1.32 | 0.4 | 2.4 | 2.4 | 0.9 | 6.7 | 6.8 | 7.8 | 0.4 | 5.2 |
| 84.00 | 28.0 | 39.2 | 1.34 | 0.5 | 2.3 | 2.3 | 1.1 | 6.8 | 6.8 | 7.6 | 0.5 | 4.8 |
| 84.08 | 26.6 | 37.3 | 1.36 | 0.2 | 2.2 | 2.2 | 0.4 | 6.3 | 6.4 | 7.1 | 0.4 | 5.9 |
| 84.17 | 22.7 | 31.5 | 1.42 | 0.5 | 1.9 | 2.0 | 1.1 | 5.5 | 5.6 | 6.2 | 0.4 | 3.7 |
| 84.25 | 18.3 | 25.3 | 1.51 | 0.6 | 1.7 | 1.7 | 1.3 | 4.6 | 4.7 | 5.2 | 0.3 | 2.5 |
| 84.33 | 17.0 | 22.7 | 1.55 | 0.7 | 1.6 | 1.7 | 1.5 | 4.4 | 4.5 | 4.8 | 0.3 | 1.9 |
| 84.42 | 18.5 | 25.1 | 1.52 | 0.6 | 1.7 | 1.7 | 1.2 | 4.6 | 4.7 | 5.1 | 0.3 | 2.5 |
| 84.50 | 15.8 | 21.5 | 1.63 | 0.3 | 1.5 | 1.5 | 0.3 | 1.5 | 1.5 | 1.6 | 0 | 0.5 |
| 84.58 | 19.6 | 26.2 | 1.53 | 0.2 | 1.7 | 1.7 | 0.4 | 4.8 | 4.8 | 5.2 | 0.3 | 4.1 |
| 84.67 | 21.9 | 28.4 | 1.46 | 0.5 | 1.9 | 2.0 | 1.1 | 5.5 | 5.6 | 5.8 | 0.4 | 3.4 |
| 84.75 | 20.6 | 26.7 | 1.50 | 0.5 | 1.8 | 1.9 | 0.9 | 5.2 | 5.3 | 5.5 | 0.4 | 3.4 |
| 84.83 | 22.8 | 29.7 | 1.47 | 0.1 | 2.0 | 2.0 | 0.3 | 5.6 | 5.7 | 5.9 | 0.4 | 5.2 |
| 84.92 | 17.2 | 23.1 | 1.56 | 0.5 | 1.6 | 1.6 | 1.0 | 4.3 | 4.4 | 4.7 | 0.3 | 2.5 |
| 85.00 | 12.5 | 15.7 | 1.72 | 0.7 | 1.3 | 1.4 | 0.7 | 1.3 | 1.4 | 1.4 | 0 | 0.1 |
| 85.08 | 12.2 | 16.1 | 1.77 | 0.5 | 1.2 | 1.2 | 0.5 | 1.2 | 1.2 | 1.3 | 0 | 0.1 |
| 85.17 | 8.3 | 9.3 | 2.23 | 0.2 | 0.9 | 0.9 | 0.2 | 0.9 | 0.9 | 0.8 | 0 | 0.3 |
| 85.25 | 7.6 | 9.5 | 2.15 | 0.3 | 0.8 | 0.9 | 0.3 | 0.8 | 0.9 | 0.9 | 0 | 0.2 |
| 85.33 | 9.0 | 10.9 | 1.95 | 0.5 | 1.0 | 1.1 | 0.5 | 1.0 | 1.1 | 1.1 | 0 | 0.1 |
| 85.42 | 5.6 | 6.8 | 2.40 | 0.3 | 0.7 | 0.7 | 0.3 | 0.7 | 0.7 | 0.7 | 0 | 0.1 |

cont'd

| Day | $u_b$ | $A_b$ | $f_{cws}$ | $u_{*cs}$ | $u_{*ws}$ | $u_{*cws}$ | $u_{*c}$ | $u_{*w}$ | $u_{*cw}$ | $\delta_{cw}$ | $z_0$ | $z_{0c}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [cm/s] | [cm] | (x 100) | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm] | [cm] | [cm] |
| 85.50 | 6.2 | 7.8 | 2.34 | 0.3 | 0.7 | 0.7 | 0.3 | 0.7 | 0.7 | 0.7 | 0 | 0.1 |
| 85.58 | 3.8 | 4.9 | 2.71 | 0.2 | 0.5 | 0.5 | 0.2 | 0.5 | 0.5 | 0.5 | 0 | 0.0 |
| 85.67 | 3.2 | 4.2 | 3.03 | 0.1 | 0.4 | 0.4 | 0.1 | 0.4 | 0.4 | 0.4 | 0 | 0.1 |
| 85.75 | 3.7 | 4.8 | 2.70 | 0.2 | 0.5 | 0.5 | 0.2 | 0.5 | 0.5 | 0.5 | 0 | 0.1 |
| 85.83 | 0.6 | 0.7 | 4.42 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0 | 0.0 |
| 85.92 | 0.7 | 0.7 | 4.69 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0 | 0.0 |
| 86.00 | 0.3 | 0.4 | 3.10 | 0.4 | 0.1 | 0.5 | 0.4 | 0.1 | 0.5 | 0.4 | 0 | 0.0 |
| 86.08 | 0.6 | 0.7 | 2.95 | 0.5 | 0.2 | 0.5 | 0.5 | 0.2 | 0.5 | 0.4 | 0 | 0.0 |
| 86.17 | 0.5 | 0.5 | 4.29 | 0.3 | 0.1 | 0.3 | 0.3 | 0.1 | 0.3 | 0.2 | 0 | 0.0 |
| 86.25 | 1.1 | 1.4 | 4.99 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0 | 0.1 |
| 86.33 | 1.2 | 1.5 | 3.09 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0 | 0.0 |
| 86.42 | 0.4 | 0.4 | 4.22 | 0.3 | 0.1 | 0.3 | 0.3 | 0.1 | 0.3 | 0.2 | 0 | 0.0 |
| 86.50 | 8.4 | 9.3 | 2.22 | 0.1 | 0.9 | 0.9 | 0.1 | 0.9 | 0.9 | 0.8 | 0 | 0.4 |
| 86.58 | 11.3 | 13.4 | 1.87 | 0.4 | 1.1 | 1.2 | 0.4 | 1.1 | 1.2 | 1.2 | 0 | 0.2 |
| 86.67 | 14.5 | 18.7 | 1.71 | 0.3 | 1.4 | 1.4 | 0.3 | 1.4 | 1.4 | 1.4 | 0 | 0.4 |
| 86.75 | 25.5 | 35.2 | 1.39 | 0.5 | 2.1 | 2.1 | 0.9 | 6.2 | 6.2 | 6.8 | 0.4 | 4.5 |
| 86.83 | 25.7 | 34.8 | 1.38 | 0.7 | 2.2 | 2.2 | 1.5 | 6.3 | 6.3 | 6.9 | 0.4 | 3.6 |
| 86.92 | 27.4 | 37.9 | 1.35 | 0.4 | 2.3 | 2.3 | 0.7 | 6.9 | 6.9 | 7.7 | 0.5 | 5.7 |
| 87.00 | 21.2 | 29.0 | 1.48 | 0.3 | 1.8 | 1.8 | 0.6 | 5.1 | 5.2 | 5.7 | 0.4 | 4.1 |
| 87.08 | 27.0 | 36.4 | 1.36 | 0.6 | 2.3 | 2.3 | 1.4 | 6.9 | 6.9 | 7.4 | 0.5 | 4.4 |
| 87.17 | 26.5 | 35.9 | 1.37 | 0.5 | 2.2 | 2.2 | 1.1 | 6.5 | 6.5 | 7.0 | 0.4 | 4.4 |
| 87.25 | 28.2 | 39.0 | 1.35 | 0.1 | 2.3 | 2.3 | 0.2 | 6.9 | 6.9 | 7.6 | 0.5 | 6.9 |
| 87.33 | 30.7 | 43.4 | 1.29 | 0.6 | 2.5 | 2.5 | 1.3 | 6.5 | 6.5 | 7.3 | 0.3 | 4.0 |
| 87.42 | 35.1 | 49.7 | 1.24 | 0.7 | 2.8 | 2.8 | 1.1 | 6.0 | 6.0 | 6.8 | 0.2 | 3.4 |
| 87.50 | 35.3 | 50.7 | 1.24 | 0 | 2.8 | 2.8 | 0.1 | 6.1 | 6.1 | 7.0 | 0.2 | 6.7 |
| 87.58 | 35.5 | 51.2 | 1.23 | 0.4 | 2.8 | 2.8 | 0.6 | 6.0 | 6.0 | 7.0 | 0.2 | 4.9 |
| 87.67 | 39.6 | 58.7 | 1.18 | 0.4 | 3.1 | 3.1 | 0.6 | 6.2 | 6.2 | 7.3 | 0.1 | 4.9 |
| 87.75 | 32.7 | 47.9 | 1.26 | 0.1 | 2.6 | 2.6 | 0.3 | 6.3 | 6.3 | 7.4 | 0.3 | 6.4 |
| 87.83 | 37.0 | 56.2 | 1.20 | 0.5 | 2.9 | 2.9 | 0.9 | 6.0 | 6.0 | 7.3 | 0.1 | 4.1 |
| 87.92 | 40.4 | 62.4 | 1.16 | 0.3 | 3.1 | 3.1 | 0.5 | 6.2 | 6.2 | 7.7 | 0.1 | 5.5 |
| 88.00 | 46.3 | 72.4 | 1.11 | 0.2 | 3.5 | 3.5 | 0.4 | 7.2 | 7.3 | 9.1 | 0.2 | 7.3 |
| 88.08 | 41.6 | 66.6 | 1.14 | 0.5 | 3.1 | 3.2 | 0.9 | 6.4 | 6.4 | 8.2 | 0.1 | 4.7 |
| 88.17 | 38.0 | 59.4 | 1.17 | 0.6 | 2.9 | 3.0 | 1.0 | 6.0 | 6.0 | 7.5 | 0.1 | 3.8 |
| 88.25 | 31.5 | 49.6 | 1.25 | 0.2 | 2.5 | 2.5 | 0.4 | 6.5 | 6.5 | 8.2 | 0.4 | 6.8 |
| 88.33 | 32.8 | 50.1 | 1.24 | 0.3 | 2.6 | 2.6 | 0.6 | 6.3 | 6.4 | 7.8 | 0.3 | 5.7 |
| 88.42 | 37.1 | 58.5 | 1.18 | 0.5 | 2.9 | 2.9 | 0.8 | 6.0 | 6.0 | 7.6 | 0.2 | 4.4 |
| 88.50 | 28.1 | 43.0 | 1.30 | 0.2 | 2.3 | 2.3 | 0.4 | 6.9 | 6.9 | 8.4 | 0.5 | 7.1 |
| 88.58 | 30.7 | 46.5 | 1.27 | 0.3 | 2.5 | 2.5 | 0.6 | 6.6 | 6.6 | 8.0 | 0.4 | 6.1 |
| 88.67 | 26.6 | 41.1 | 1.31 | 0.4 | 2.2 | 2.2 | 0.9 | 6.2 | 6.2 | 7.7 | 0.4 | 5.0 |
| 88.75 | 24.6 | 37.7 | 1.36 | 0.2 | 2.0 | 2.0 | 0.3 | 5.7 | 5.7 | 7.0 | 0.4 | 6.0 |
| 88.83 | 22.5 | 33.7 | 1.40 | 0.5 | 1.9 | 1.9 | 0.9 | 5.3 | 5.4 | 6.5 | 0.4 | 3.9 |
| 88.92 | 22.3 | 33.1 | 1.39 | 0.6 | 1.9 | 2.0 | 1.2 | 5.4 | 5.5 | 6.5 | 0.4 | 3.4 |

cont'd

| Day | $u_b$ | $A_b$ | $f_{cws}$ | $u_{*cs}$ | $u_{*ws}$ | $u_{*cws}$ | $u_{*c}$ | $u_{*w}$ | $u_{*cw}$ | $\delta_{cw}$ | $z_0$ | $z_{0c}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [cm/s] | [cm] | (x 100) | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm] | [cm] | [cm] |
| 89.00 | 20.1 | 29.4 | 1.47 | 0.3 | 1.7 | 1.7 | 0.5 | 4.8 | 4.8 | 5.6 | 0.3 | 4.1 |
| 89.08 | 19.2 | 28.8 | 1.48 | 0.3 | 1.7 | 1.7 | 0.5 | 4.5 | 4.5 | 5.5 | 0.3 | 4.1 |
| 89.17 | 18.6 | 27.5 | 1.49 | 0.4 | 1.6 | 1.7 | 0.7 | 4.5 | 4.5 | 5.3 | 0.3 | 3.4 |
| 89.25 | 17.8 | 26.1 | 1.53 | 0.2 | 1.6 | 1.6 | 0.2 | 1.6 | 1.6 | 1.8 | 0 | 0.7 |
| 89.33 | 16.8 | 25.4 | 1.54 | 0.3 | 1.5 | 1.5 | 0.3 | 1.5 | 1.5 | 1.8 | 0 | 0.6 |
| 89.42 | 15.8 | 22.6 | 1.55 | 0.6 | 1.5 | 1.6 | 0.6 | 1.5 | 1.6 | 1.8 | 0 | 0.2 |
| 89.50 | 19.0 | 28.1 | 1.48 | 0.4 | 1.7 | 1.7 | 0.7 | 4.5 | 4.6 | 5.4 | 0.3 | 3.5 |
| 89.58 | 14.4 | 20.8 | 1.65 | 0.2 | 1.3 | 1.3 | 0.2 | 1.3 | 1.3 | 1.5 | 0 | 0.5 |
| 89.67 | 14.7 | 21.2 | 1.61 | 0.5 | 1.4 | 1.4 | 0.5 | 1.4 | 1.4 | 1.6 | 0 | 0.2 |
| 89.75 | 13.4 | 19.0 | 1.66 | 0.4 | 1.3 | 1.3 | 0.4 | 1.3 | 1.3 | 1.5 | 0 | 0.2 |
| 89.83 | 14.3 | 20.6 | 1.65 | 0.2 | 1.3 | 1.3 | 0.2 | 1.3 | 1.3 | 1.5 | 0 | 0.5 |
| 89.92 | 12.5 | 17.1 | 1.68 | 0.6 | 1.2 | 1.4 | 0.6 | 1.2 | 1.4 | 1.5 | 0 | 0.1 |
| 90 | 10.3 | 13.8 | 1.83 | 0.5 | 1.1 | 1.1 | 0.5 | 1.1 | 1.1 | 1.2 | 0 | 0.1 |
| 90.08 | 11.1 | 15.2 | 1.85 | 0.1 | 1.1 | 1.1 | 0.1 | 1.1 | 1.1 | 1.2 | 0 | 0.7 |
| 90.17 | 11.8 | 16.0 | 1.79 | 0.4 | 1.1 | 1.2 | 0.4 | 1.1 | 1.2 | 1.3 | 0 | 0.2 |
| 90.25 | 7.7 | 10.1 | 2.00 | 0.5 | 0.9 | 0.9 | 0.5 | 0.9 | 0.9 | 1.0 | 0 | 0.1 |
| 90.33 | 8.5 | 11.0 | 2.08 | 0.1 | 0.9 | 0.9 | 0.1 | 0.9 | 0.9 | 0.9 | 0 | 0.5 |
| 90.42 | 9.4 | 11.9 | 1.93 | 0.5 | 1.0 | 1.1 | 0.5 | 1.0 | 1.1 | 1.1 | 0 | 0.1 |
| 90.50 | 10.1 | 13.4 | 1.92 | 0.3 | 1.0 | 1.0 | 0.3 | 1.0 | 1.0 | 1.1 | 0 | 0.2 |
| 90.58 | 9.5 | 12.6 | 1.97 | 0.2 | 0.9 | 1.0 | 0.2 | 0.9 | 1.0 | 1.0 | 0 | 0.3 |
| 90.67 | 10.7 | 14.2 | 1.82 | 0.5 | 1.1 | 1.1 | 0.5 | 1.1 | 1.1 | 1.2 | 0 | 0.1 |
| 90.75 | 11.4 | 15.0 | 1.76 | 0.6 | 1.2 | 1.3 | 0.6 | 1.2 | 1.3 | 1.3 | 0 | 0.1 |
| 90.83 | 13.4 | 18.3 | 1.73 | 0.2 | 1.2 | 1.3 | 0.2 | 1.2 | 1.3 | 1.4 | 0 | 0.5 |
| 90.92 | 9.9 | 13.3 | 1.88 | 0.4 | 1.0 | 1.1 | 0.4 | 1.0 | 1.1 | 1.1 | 0 | 0.1 |
| 91.00 | 9.0 | 11.7 | 1.90 | 0.5 | 1.0 | 1.1 | 0.5 | 1.0 | 1.1 | 1.1 | 0 | 0.1 |
| 91.08 | 9.7 | 12.7 | 1.95 | 0.4 | 1.0 | 1.0 | 0.4 | 1.0 | 1.0 | 1.1 | 0 | 0.1 |
| 91.17 | 7.8 | 9.2 | 2.22 | 0.1 | 0.8 | 0.8 | 0.1 | 0.8 | 0.8 | 0.8 | 0 | 0.3 |
| 91.25 | 9.6 | 13.1 | 1.92 | 0.3 | 1.0 | 1.0 | 0.3 | 1.0 | 1.0 | 1.1 | 0 | 0.2 |
| 91.33 | 7.7 | 10.1 | 2.13 | 0.2 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 0.9 | 0 | 0.2 |
| 91.42 | 8.7 | 11.6 | 2.01 | 0.2 | 0.9 | 0.9 | 0.2 | 0.9 | 0.9 | 1.0 | 0 | 0.3 |
| 91.50 | 6.7 | 8.1 | 2.31 | 0.2 | 0.7 | 0.8 | 0.2 | 0.7 | 0.8 | 0.7 | 0 | 0.2 |
| 91.58 | 9.8 | 13.2 | 1.93 | 0.4 | 1.0 | 1.0 | 0.4 | 1.0 | 1.0 | 1.1 | 0 | 0.1 |
| 91.67 | 7.9 | 10.4 | 1.91 | 0.7 | 0.9 | 1.1 | 0.7 | 0.9 | 1.1 | 1.1 | 0 | 0.0 |
| 91.75 | 8.9 | 11.5 | 1.85 | 0.8 | 1.0 | 1.1 | 0.8 | 1.0 | 1.1 | 1.2 | 0 | 0.0 |
| 91.83 | 11.3 | 15.6 | 1.74 | 0.6 | 1.1 | 1.2 | 0.6 | 1.1 | 1.2 | 1.4 | 0 | 0.1 |
| 91.92 | 12.5 | 17.8 | 1.75 | 0.2 | 1.2 | 1.2 | 0.2 | 1.2 | 1.2 | 1.4 | 0 | 0.4 |
| 92.00 | 15.0 | 20.8 | 1.61 | 0.6 | 1.4 | 1.5 | 0.6 | 1.4 | 1.5 | 1.6 | 0 | 0.1 |
| 92.08 | 13.0 | 17.5 | 1.67 | 0.7 | 1.3 | 1.4 | 0.7 | 1.3 | 1.4 | 1.5 | 0 | 0.1 |
| 92.17 | 19.0 | 25.5 | 1.53 | 0.5 | 1.7 | 1.7 | 1.1 | 4.7 | 4.7 | 5.1 | 0.3 | 2.7 |
| 92.25 | 25.1 | 34.7 | 1.40 | 0.3 | 2.1 | 2.1 | 0.7 | 6.0 | 6.0 | 6.7 | 0.4 | 4.9 |
| 92.33 | 25.8 | 33.7 | 1.41 | 0.3 | 2.2 | 2.2 | 0.6 | 6.3 | 6.3 | 6.6 | 0.4 | 5.1 |
| 92.42 | 26.8 | 35.9 | 1.38 | 0.6 | 2.2 | 2.2 | 1.3 | 7.0 | 7.0 | 7.5 | 0.5 | 4.6 |

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| Day | $u_b$ | $A_b$ | $f_{cws}$ | $u_{*cs}$ | $u_{*ws}$ | $u_{*cws}$ | $u_{*c}$ | $u_{*w}$ | $u_{*cw}$ | $\delta_{cw}$ | $z_0$ | $z_{0c}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [cm/s] | [cm] | (x 100) | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm/s] | [cm] | [cm] | [cm] |
| 92.50 | 36.8 | 49.7 | 1.24 | 0.8 | 2.9 | 2.9 | 1.4 | 6.0 | 6.0 | 6.5 | 0.1 | 2.7 |
| 92.58 | 36.8 | 52.2 | 1.23 | 0.3 | 2.9 | 2.9 | 0.6 | 6.0 | 6.0 | 6.8 | 0.1 | 4.7 |
| 92.67 | 30.1 | 41.4 | 1.32 | 0.4 | 2.5 | 2.5 | 0.8 | 6.6 | 6.6 | 7.3 | 0.4 | 5.1 |
| 92.75 | 24.2 | 33.1 | 1.40 | 0.6 | 2.1 | 2.1 | 1.2 | 5.9 | 6.0 | 6.5 | 0.4 | 3.7 |
| 92.83 | 25.9 | 35.5 | 1.38 | 0.6 | 2.2 | 2.2 | 1.2 | 6.3 | 6.3 | 6.9 | 0.4 | 4.0 |
| 92.92 | 26.4 | 36.7 | 1.37 | 0 | 2.2 | 2.2 | 0.1 | 6.3 | 6.3 | 7.0 | 0.4 | 6.9 |
| 93.00 | 24.5 | 33.8 | 1.38 | 0.7 | 2.1 | 2.2 | 1.6 | 6.0 | 6.2 | 6.8 | 0.4 | 3.4 |
| 93.08 | 21.8 | 30.2 | 1.45 | 0.8 | 1.9 | 1.9 | 1.8 | 5.3 | 5.3 | 5.9 | 0.4 | 2.3 |
| 93.17 | 18.2 | 24.8 | 1.55 | 0.6 | 1.6 | 1.7 | 1.1 | 4.5 | 4.5 | 4.9 | 0.3 | 2.4 |
| 93.25 | 18.2 | 25.0 | 1.55 | 0.2 | 1.6 | 1.6 | 0.2 | 1.6 | 1.6 | 1.8 | 0 | 0.8 |
| 93.33 | 12.9 | 17.7 | 1.75 | 0.3 | 1.2 | 1.2 | 0.3 | 1.2 | 1.2 | 1.4 | 0 | 0.4 |
| 93.42 | 13.1 | 17.6 | 1.76 | 0.2 | 1.2 | 1.2 | 0.2 | 1.2 | 1.2 | 1.3 | 0 | 0.4 |
| 93.50 | 10.4 | 13.6 | 1.92 | 0.1 | 1.0 | 1.0 | 0.1 | 1.0 | 1.0 | 1.1 | 0 | 0.5 |
| 93.58 | 10.6 | 13.5 | 1.94 | 0.3 | 1.0 | 1.0 | 0.3 | 1.0 | 1.0 | 1.1 | 0 | 0.2 |
| 93.67 | 11.4 | 15.1 | 1.82 | 0.6 | 1.1 | 1.2 | 0.6 | 1.1 | 1.2 | 1.2 | 0 | 0.1 |
| 93.75 | 10.5 | 13.3 | 1.88 | 0.7 | 1.1 | 1.1 | 0.7 | 1.1 | 1.1 | 1.1 | 0 | 0.0 |
| 93.83 | 10.7 | 13.4 | 1.89 | 0.7 | 1.1 | 1.1 | 0.7 | 1.1 | 1.1 | 1.1 | 0 | 0.0 |
| 93.92 | 9.2 | 11.7 | 1.88 | 0.6 | 1.0 | 1.1 | 0.6 | 1.0 | 1.1 | 1.1 | 0 | 0.1 |
| 94.00 | 7.5 | 8.9 | 2.26 | 0 | 0.8 | 0.8 | 0 | 0.8 | 0.8 | 0.8 | 0 | 0.7 |
| 94.08 | 7.6 | 9.2 | 2.12 | 0.4 | 0.8 | 0.9 | 0.4 | 0.8 | 0.9 | 0.9 | 0 | 0.1 |
| 94.17 | 4.2 | 5.0 | 2.58 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 0 | 0.0 |
| 94.25 | 7.8 | 9.2 | 2.18 | 0.3 | 0.8 | 0.9 | 0.3 | 0.8 | 0.9 | 0.8 | 0 | 0.1 |
| 94.33 | 3.5 | 4.2 | 3.06 | 0.1 | 0.4 | 0.4 | 0.1 | 0.4 | 0.4 | 0.4 | 0 | 0.1 |
| 94.42 | 7.6 | 8.3 | 2.33 | 0 | 0.8 | 0.8 | 0 | 0.8 | 0.8 | 0.7 | 0 | 0.5 |
| 94.50 | 11.4 | 14.1 | 1.91 | 0.1 | 1.1 | 1.1 | 0.1 | 1.1 | 1.1 | 1.1 | 0 | 0.7 |
| 94.58 | 14.7 | 18.6 | 1.73 | 0.1 | 1.4 | 1.4 | 0.1 | 1.4 | 1.4 | 1.4 | 0 | 0.8 |
| 94.67 | 16.0 | 20.7 | 1.66 | 0.4 | 1.5 | 1.5 | 0.4 | 1.5 | 1.5 | 1.5 | 0 | 0.4 |
| 94.75 | 13.1 | 17.2 | 1.77 | 0.5 | 1.2 | 1.2 | 0.5 | 1.2 | 1.2 | 1.3 | 0 | 0.1 |
| 94.83 | 16.9 | 23.4 | 1.58 | 0.6 | 1.5 | 1.5 | 0.6 | 1.5 | 1.5 | 1.7 | 0 | 0.2 |
| 94.92 | 17.6 | 24.4 | 1.56 | 0.6 | 1.6 | 1.6 | 0.6 | 1.6 | 1.6 | 1.8 | 0 | 0.2 |
| 95.00 | 13.6 | 18.5 | 1.72 | 0.2 | 1.3 | 1.3 | 0.2 | 1.3 | 1.3 | 1.4 | 0 | 0.6 |
| 95.08 | 14.4 | 19.2 | 1.70 | 0.4 | 1.3 | 1.4 | 0.4 | 1.3 | 1.4 | 1.4 | 0 | 0.2 |
| 95.17 | 11.5 | 14.2 | 1.83 | 0.7 | 1.2 | 1.2 | 0.7 | 1.2 | 1.2 | 1.2 | 0 | 0.0 |
| 95.25 | 9.8 | 12.0 | 1.92 | 0.7 | 1.0 | 1.1 | 0.7 | 1.0 | 1.1 | 1.1 | 0 | 0.0 |
| 95.33 | 13.5 | 16.9 | 1.73 | 0.5 | 1.3 | 1.4 | 0.5 | 1.3 | 1.4 | 1.4 | 0 | 0.1 |
| 95.42 | 8.5 | 10.8 | 2.08 | 0.2 | 0.9 | 0.9 | 0.2 | 0.9 | 0.9 | 0.9 | 0 | 0.3 |
| 95.50 | 10 | 13.0 | 1.95 | 0.1 | 1.0 | 1.0 | 0.1 | 1.0 | 1.0 | 1.1 | 0 | 0.5 |
| 95.58 | 9.4 | 12.4 | 2.00 | 0.1 | 0.9 | 0.9 | 0.1 | 0.9 | 0.9 | 1.0 | 0 | 0.5 |
| 95.67 | 7.6 | 10.1 | 2.12 | 0.3 | 0.8 | 0.8 | 0.3 | 0.8 | 0.8 | 0.9 | 0 | 0.1 |
| 95.75 | 9.1 | 11.6 | 1.95 | 0.5 | 1.0 | 1.0 | 0.5 | 1.0 | 1.0 | 1.1 | 0 | 0.1 |
| 95.83 | 7.4 | 9.0 | 2.01 | 0.6 | 0.9 | 1.0 | 0.6 | 0.9 | 1.0 | 1.0 | 0 | 0.0 |
| 95.92 | 7.1 | 8.5 | 2.13 | 0.7 | 0.8 | 0.9 | 0.7 | 0.8 | 0.9 | 0.9 | 0 | 0.0 |

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| Day | $u_b$ [cm/s] | $A_b$ [cm] | $f_{cws}$ (x 100) | $u_{*cs}$ [cm/s] | $u_{*ws}$ [cm/s] | $u_{*cws}$ [cm/s] | $u_{*c}$ [cm/s] | $u_{*w}$ [cm/s] | $u_{*cw}$ [cm/s] | $\delta_{cw}$ [cm] | $z_0$ [cm] | $z_{0c}$ [cm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 96.00 | 6.5 | 8.2 | 2.27 | 0.5 | 0.7 | 0.8 | 0.5 | 0.7 | 0.8 | 0.8 | 0 | 0.0 |
| 96.08 | 5.1 | 6.5 | 2.56 | 0.1 | 0.6 | 0.6 | 0.1 | 0.6 | 0.6 | 0.6 | 0 | 0.2 |
| 96.17 | 6.2 | 7.9 | 2.31 | 0.2 | 0.7 | 0.7 | 0.2 | 0.7 | 0.7 | 0.7 | 0 | 0.1 |
| 96.25 | 0.1 | 0.1 | 8.04 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0 | 0.0 |
| 96.33 | 3.1 | 3.6 | 3.07 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0 | 0.1 |
| 96.42 | 5.7 | 7.5 | 2.38 | 0.2 | 0.6 | 0.7 | 0.2 | 0.6 | 0.7 | 0.7 | 0 | 0.2 |
| 96.50 | 5.6 | 7.0 | 2.26 | 0.4 | 0.7 | 0.8 | 0.4 | 0.7 | 0.8 | 0.8 | 0 | 0.1 |
| 96.58 | 5.9 | 7.8 | 2.25 | 0.3 | 0.7 | 0.7 | 0.3 | 0.7 | 0.7 | 0.8 | 0 | 0.1 |
| 96.67 | 5.4 | 6.5 | 2.43 | 0.3 | 0.6 | 0.7 | 0.3 | 0.6 | 0.7 | 0.7 | 0 | 0.1 |
| 96.75 | 3.5 | 4.0 | 2.68 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.6 | 0.5 | 0 | 0.0 |
| 96.83 | 6.6 | 8.8 | 2.01 | 0.5 | 0.8 | 0.9 | 0.5 | 0.8 | 0.9 | 1.0 | 0 | 0.0 |
| 96.92 | 9.0 | 11.8 | 1.83 | 0.6 | 1.0 | 1.2 | 0.6 | 1.0 | 1.2 | 1.2 | 0 | 0.1 |
| 97.00 | 10.6 | 14.6 | 1.77 | 0.5 | 1.1 | 1.2 | 0.5 | 1.1 | 1.2 | 1.3 | 0 | 0.1 |
| 97.08 | 13.6 | 19.7 | 1.67 | 0.3 | 1.3 | 1.3 | 0.3 | 1.3 | 1.3 | 1.5 | 0 | 0.5 |
| 97.17 | 9.3 | 12.8 | 1.93 | 0.4 | 0.9 | 1.0 | 0.4 | 0.9 | 1.0 | 1.1 | 0 | 0.1 |
| 97.25 | 6.8 | 8.3 | 2.10 | 0.5 | 0.8 | 0.9 | 0.5 | 0.8 | 0.9 | 0.9 | 0 | 0.0 |
| 97.33 | 5.8 | 7.0 | 2.13 | 0.5 | 0.7 | 0.9 | 0.5 | 0.7 | 0.9 | 0.9 | 0 | 0.0 |
| 97.42 | 6.6 | 8.6 | 2.18 | 0.3 | 0.7 | 0.8 | 0.3 | 0.7 | 0.8 | 0.8 | 0 | 0.1 |
| 97.50 | 6.2 | 7.2 | 2.42 | 0.2 | 0.7 | 0.7 | 0.2 | 0.7 | 0.7 | 0.7 | 0 | 0.2 |
| 97.58 | 10.9 | 15.3 | 1.82 | 0.2 | 1.1 | 1.1 | 0.2 | 1.1 | 1.1 | 1.2 | 0 | 0.3 |
| 97.67 | 10.6 | 14.2 | 1.90 | 0.1 | 1.0 | 1.0 | 0.1 | 1.0 | 1.0 | 1.1 | 0 | 0.6 |
| 97.75 | 8.0 | 11.6 | 2.03 | 0.2 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 1.0 | 0 | 0.3 |
| 97.83 | 5.4 | 7.3 | 2.36 | 0.2 | 0.6 | 0.7 | 0.2 | 0.6 | 0.7 | 0.7 | 0 | 0.1 |
| 97.92 | 6.3 | 8.8 | 2.07 | 0.4 | 0.7 | 0.8 | 0.4 | 0.7 | 0.8 | 0.9 | 0 | 0.0 |
| 98.00 | 5.4 | 7.1 | 2.04 | 0.6 | 0.7 | 0.9 | 0.6 | 0.7 | 0.9 | 1.0 | 0 | 0.0 |
| 98.08 | 5.4 | 7.2 | 2.15 | 0.4 | 0.7 | 0.8 | 0.4 | 0.7 | 0.8 | 0.9 | 0 | 0.0 |
| 98.17 | 7.2 | 9.9 | 2.14 | 0.2 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 0.9 | 0 | 0.2 |
| 98.25 | 6.2 | 8.5 | 2.27 | 0.1 | 0.7 | 0.7 | 0.1 | 0.7 | 0.7 | 0.8 | 0 | 0.3 |
| 98.33 | 5.3 | 7.4 | 2.30 | 0.3 | 0.6 | 0.7 | 0.3 | 0.6 | 0.7 | 0.7 | 0 | 0.1 |
| 98.42 | 5.7 | 7.8 | 2.38 | 0.1 | 0.6 | 0.6 | 0.1 | 0.6 | 0.6 | 0.7 | 0 | 0.3 |
| 98.50 | 6.2 | 8.4 | 2.22 | 0.2 | 0.7 | 0.7 | 0.2 | 0.7 | 0.7 | 0.8 | 0 | 0.1 |
| 98.58 | 4.0 | 4.9 | 2.71 | 0.2 | 0.5 | 0.5 | 0.2 | 0.5 | 0.5 | 0.5 | 0 | 0.1 |
| 98.67 | 4.9 | 6.6 | 2.55 | 0.1 | 0.6 | 0.6 | 0.1 | 0.6 | 0.6 | 0.6 | 0 | 0.4 |
| 98.75 | 3.6 | 4.8 | 2.76 | 0.2 | 0.4 | 0.5 | 0.2 | 0.4 | 0.5 | 0.5 | 0 | 0.1 |
| 98.83 | 4.3 | 6.0 | 2.66 | 0 | 0.5 | 0.5 | 0 | 0.5 | 0.5 | 0.5 | 0 | 0.4 |
| 98.92 | 3.9 | 5.1 | 2.54 | 0.3 | 0.5 | 0.6 | 0.3 | 0.5 | 0.6 | 0.6 | 0 | 0.0 |
| 99.00 | 3.0 | 3.8 | 2.42 | 0.5 | 0.5 | 0.7 | 0.5 | 0.5 | 0.7 | 0.7 | 0 | 0.0 |
| 99.08 | 4.5 | 5.8 | 2.17 | 0.5 | 0.6 | 0.8 | 0.5 | 0.6 | 0.8 | 0.8 | 0 | 0.0 |
| 99.17 | 0.4 | 0.3 | 7.58 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 0.0 |
| 99.25 | 1.5 | 2.0 | 3.56 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0 | 0.0 |
| 99.33 | 2.7 | 3.3 | 2.47 | 0.5 | 0.4 | 0.7 | 0.5 | 0.4 | 0.7 | 0.6 | 0 | 0.0 |
| 99.42 | 2.0 | 2.3 | 2.83 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0 | 0.0 |

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| Day | $u_b$ [cm/s] | $A_b$ [cm] | $f_{cws}$ (x 100) | $u_{*cs}$ [cm/s] | $u_{*ws}$ [cm/s] | $u_{*cws}$ [cm/s] | $u_{*c}$ [cm/s] | $u_{*w}$ [cm/s] | $u_{*cw}$ [cm/s] | $\delta_{cw}$ [cm] | $z_0$ [cm] | $z_{0c}$ [cm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 99.50 | 0.9 | 1.0 | 5.04 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0 | 0.0 |
| 99.58 | 3.0 | 3.8 | 3.05 | 0.1 | 0.4 | 0.4 | 0.1 | 0.4 | 0.4 | 0.4 | 0 | 0.1 |
| 99.67 | 1.2 | 1.6 | 4.80 | 0 | 0.2 | 0.2 | 0 | 0.2 | 0.2 | 0.2 | 0 | 0.1 |
| 99.75 | 1.7 | 1.9 | 3.64 | 0.2 | 0.3 | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | 0 | 0.0 |
| 99.83 | 2.4 | 3.0 | 3.01 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0 | 0.0 |
| 99.92 | 1.4 | 1.7 | 4.39 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0 | 0.0 |
| 100 | 0.9 | 1.1 | 4.05 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0 | 0.0 |
| 100.08 | 1.7 | 1.9 | 3.11 | 0.4 | 0.3 | 0.5 | 0.4 | 0.3 | 0.5 | 0.4 | 0 | 0.0 |
| 100.17 | 1.3 | 1.6 | 4.17 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0 | 0.0 |
| 100.25 | 2.4 | 2.7 | 3.27 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0 | 0.0 |
| 100.33 | 2.5 | 2.8 | 2.70 | 0.5 | 0.4 | 0.6 | 0.5 | 0.4 | 0.6 | 0.5 | 0 | 0.0 |
| 100.42 | 6.3 | 7.2 | 2.19 | 0.5 | 0.8 | 0.9 | 0.5 | 0.8 | 0.9 | 0.8 | 0 | 0.0 |
| 100.50 | 9.0 | 10.7 | 2.11 | 0 | 0.9 | 0.9 | 0 | 0.9 | 0.9 | 0.9 | 0 | 0.8 |
| 100.58 | 12.5 | 14.6 | 1.86 | 0.3 | 1.2 | 1.2 | 0.3 | 1.2 | 1.2 | 1.2 | 0 | 0.2 |
| 100.67 | 2.3 | 2.6 | 3.46 | 0.2 | 0.3 | 0.4 | 0.2 | 0.3 | 0.4 | 0.3 | 0 | 0.0 |
| 100.75 | 12.3 | 15.3 | 1.84 | 0.2 | 1.2 | 1.2 | 0.2 | 1.2 | 1.2 | 1.2 | 0 | 0.4 |
| 100.83 | 14.6 | 18.9 | 1.70 | 0.4 | 1.4 | 1.4 | 0.4 | 1.4 | 1.4 | 1.4 | 0 | 0.2 |
| 100.92 | 13.0 | 16.5 | 1.80 | 0.2 | 1.2 | 1.2 | 0.2 | 1.2 | 1.2 | 1.3 | 0 | 0.5 |
| 101.00 | 13.9 | 18.7 | 1.68 | 0.4 | 1.3 | 1.4 | 0.4 | 1.3 | 1.4 | 1.5 | 0 | 0.3 |
| 101.08 | 11.7 | 15.5 | 1.77 | 0.4 | 1.2 | 1.2 | 0.4 | 1.2 | 1.2 | 1.3 | 0 | 0.2 |
| 101.17 | 8.6 | 10.4 | 2.10 | 0.2 | 0.9 | 0.9 | 0.2 | 0.9 | 0.9 | 0.9 | 0 | 0.2 |
| 101.25 | 11.2 | 15.4 | 1.83 | 0.2 | 1.1 | 1.1 | 0.2 | 1.1 | 1.1 | 1.2 | 0 | 0.4 |
| 101.33 | 13.8 | 19.6 | 1.60 | 0.6 | 1.3 | 1.5 | 0.6 | 1.3 | 1.5 | 1.7 | 0 | 0.1 |
| 101.42 | 10.4 | 14.1 | 1.83 | 0.4 | 1.1 | 1.1 | 0.4 | 1.1 | 1.1 | 1.2 | 0 | 0.1 |
| 101.50 | 7.5 | 9.1 | 2.22 | 0.2 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 0.8 | 0 | 0.2 |
| 101.58 | 4.3 | 5.6 | 2.45 | 0.3 | 0.5 | 0.6 | 0.3 | 0.5 | 0.6 | 0.7 | 0 | 0.0 |
| 101.67 | 7.8 | 10 | 2.11 | 0.2 | 0.8 | 0.9 | 0.2 | 0.8 | 0.9 | 0.9 | 0 | 0.2 |
| 101.75 | 6.6 | 8.3 | 2.31 | 0.1 | 0.7 | 0.7 | 0.1 | 0.7 | 0.7 | 0.7 | 0 | 0.2 |
| 101.83 | 8.3 | 11.2 | 2.01 | 0.3 | 0.9 | 0.9 | 0.3 | 0.9 | 0.9 | 1.0 | 0 | 0.2 |
| 101.92 | 6.8 | 8.4 | 2.23 | 0.3 | 0.8 | 0.8 | 0.3 | 0.8 | 0.8 | 0.8 | 0 | 0.1 |
| 102.00 | 7.7 | 10.1 | 2.10 | 0.3 | 0.8 | 0.9 | 0.3 | 0.8 | 0.9 | 0.9 | 0 | 0.2 |
| 102.08 | 8.0 | 10.3 | 1.93 | 0.5 | 0.9 | 1.0 | 0.5 | 0.9 | 1.0 | 1.1 | 0 | 0.1 |
| 102.17 | 8.5 | 11.6 | 1.82 | 0.6 | 1.0 | 1.1 | 0.6 | 1.0 | 1.1 | 1.2 | 0 | 0.0 |
| 102.25 | 9.3 | 13.4 | 1.86 | 0.4 | 0.9 | 1.0 | 0.4 | 0.9 | 1.0 | 1.2 | 0 | 0.2 |
| 102.33 | 9.5 | 14.4 | 1.83 | 0.3 | 0.9 | 1.0 | 0.3 | 0.9 | 1.0 | 1.2 | 0 | 0.2 |
| 102.42 | 8.3 | 12.6 | 1.91 | 0.3 | 0.9 | 0.9 | 0.3 | 0.9 | 0.9 | 1.1 | 0 | 0.2 |
| 102.50 | 5.5 | 7.1 | 2.45 | 0.1 | 0.6 | 0.6 | 0.1 | 0.6 | 0.6 | 0.7 | 0 | 0.3 |
| 102.58 | 7.1 | 10.1 | 1.97 | 0.4 | 0.8 | 0.9 | 0.4 | 0.8 | 0.9 | 1.0 | 0 | 0.1 |
| 102.67 | 7.4 | 10.5 | 1.89 | 0.5 | 0.9 | 1.0 | 0.5 | 0.9 | 1.0 | 1.1 | 0 | 0.0 |
| 102.75 | 7.0 | 9.9 | 1.92 | 0.5 | 0.8 | 1.0 | 0.5 | 0.8 | 1.0 | 1.1 | 0 | 0.0 |
| 102.83 | 6.9 | 9.7 | 2.09 | 0.3 | 0.8 | 0.8 | 0.3 | 0.8 | 0.8 | 0.9 | 0 | 0.1 |
| 102.92 | 7.6 | 10.7 | 2.02 | 0.3 | 0.8 | 0.9 | 0.3 | 0.8 | 0.9 | 1.0 | 0 | 0.1 |

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| Day | $u_b$ [cm/s] | $A_b$ [cm] | $f_{cws}$ (x 100) | $u_{*cs}$ [cm/s] | $u_{*ws}$ [cm/s] | $u_{*cws}$ [cm/s] | $u_{*c}$ [cm/s] | $u_{*w}$ [cm/s] | $u_{*cw}$ [cm/s] | $\delta_{cw}$ [cm] | $z_0$ [cm] | $z_{0c}$ [cm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.00 | 7.1 | 10.3 | 2.07 | 0.2 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 0.9 | 0 | 0.2 |
| 103.08 | 8.2 | 11.6 | 1.95 | 0.4 | 0.9 | 0.9 | 0.4 | 0.9 | 0.9 | 1.1 | 0 | 0.1 |
| 103.17 | 2.4 | 2.5 | 3.05 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0 | 0.0 |
| 103.25 | 7.8 | 10.7 | 2.04 | 0.3 | 0.8 | 0.9 | 0.3 | 0.8 | 0.9 | 0.9 | 0 | 0.2 |
| 103.33 | 7.0 | 9.8 | 2.10 | 0.3 | 0.8 | 0.8 | 0.3 | 0.8 | 0.8 | 0.9 | 0 | 0.1 |
| 103.42 | 7.1 | 9.8 | 2.03 | 0.4 | 0.8 | 0.9 | 0.4 | 0.8 | 0.9 | 1.0 | 0 | 0.1 |
| 103.50 | 5.9 | 8.0 | 2.36 | 0.1 | 0.6 | 0.6 | 0.1 | 0.6 | 0.6 | 0.7 | 0 | 0.3 |
| 103.58 | 7.6 | 10.3 | 1.92 | 0.5 | 0.9 | 1.0 | 0.5 | 0.9 | 1.0 | 1.1 | 0 | 0.0 |
| 103.67 | 6.6 | 8.8 | 1.95 | 0.6 | 0.8 | 1.0 | 0.6 | 0.8 | 1.0 | 1.1 | 0 | 0.0 |
| 103.75 | 6.2 | 8.2 | 1.98 | 0.6 | 0.8 | 0.9 | 0.6 | 0.8 | 0.9 | 1.0 | 0 | 0.0 |
| 103.83 | 6.8 | 9.2 | 2.14 | 0.3 | 0.8 | 0.8 | 0.3 | 0.8 | 0.8 | 0.9 | 0 | 0.1 |
| 103.92 | 5.5 | 7.0 | 2.16 | 0.5 | 0.7 | 0.8 | 0.5 | 0.7 | 0.8 | 0.8 | 0 | 0.0 |
| 104.00 | 5.9 | 7.6 | 2.16 | 0.4 | 0.7 | 0.8 | 0.4 | 0.7 | 0.8 | 0.8 | 0 | 0.0 |
| 104.08 | 6.7 | 9.2 | 2.18 | 0.2 | 0.7 | 0.8 | 0.2 | 0.7 | 0.8 | 0.8 | 0 | 0.2 |
| 104.17 | 6.7 | 9.0 | 2.05 | 0.4 | 0.8 | 0.9 | 0.4 | 0.8 | 0.9 | 0.9 | 0 | 0.1 |
| 104.25 | 7.2 | 10.2 | 2.06 | 0.3 | 0.8 | 0.8 | 0.3 | 0.8 | 0.8 | 0.9 | 0 | 0.1 |
| 104.33 | 7.1 | 9.6 | 2.13 | 0.2 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 0.9 | 0 | 0.2 |
| 104.42 | 5.8 | 7.6 | 2.23 | 0.3 | 0.7 | 0.8 | 0.3 | 0.7 | 0.8 | 0.8 | 0 | 0.1 |
| 104.50 | 5.7 | 7.4 | 2.38 | 0.2 | 0.6 | 0.7 | 0.2 | 0.6 | 0.7 | 0.7 | 0 | 0.1 |
| 104.58 | 5.7 | 7.3 | 2.30 | 0.4 | 0.7 | 0.7 | 0.4 | 0.7 | 0.7 | 0.7 | 0 | 0.0 |
| 104.67 | 5.6 | 7.3 | 2.15 | 0.5 | 0.7 | 0.8 | 0.5 | 0.7 | 0.8 | 0.9 | 0 | 0.0 |
| 104.75 | 0.9 | 1.2 | 3.57 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0 | 0.0 |
| 104.83 | 4.5 | 5.8 | 2.57 | 0.2 | 0.5 | 0.6 | 0.2 | 0.5 | 0.6 | 0.6 | 0 | 0.1 |
| 104.92 | 4.3 | 5.1 | 2.27 | 0.6 | 0.6 | 0.8 | 0.6 | 0.6 | 0.8 | 0.8 | 0 | 0.0 |
| 105.00 | 6.5 | 7.5 | 1.94 | 0.8 | 0.9 | 1.1 | 0.8 | 0.9 | 1.1 | 1.1 | 0 | 0.0 |
| 105.08 | 3.0 | 3.6 | 3.08 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0 | 0.0 |
| 105.17 | 7.8 | 8.9 | 2.22 | 0.2 | 0.8 | 0.9 | 0.2 | 0.8 | 0.9 | 0.8 | 0 | 0.2 |
| 105.25 | 10.3 | 12.5 | 1.94 | 0.4 | 1.1 | 1.1 | 0.4 | 1.1 | 1.1 | 1.1 | 0 | 0.1 |
| 105.33 | 9.6 | 11.9 | 1.95 | 0.4 | 1.0 | 1.1 | 0.4 | 1.0 | 1.1 | 1.1 | 0 | 0.2 |
| 105.42 | 12.4 | 15.8 | 1.77 | 0.5 | 1.2 | 1.3 | 0.5 | 1.2 | 1.3 | 1.3 | 0 | 0.1 |
| 105.50 | 10.7 | 13.7 | 1.91 | 0.2 | 1.1 | 1.1 | 0.2 | 1.1 | 1.1 | 1.1 | 0 | 0.4 |
| 105.58 | 11.5 | 14.9 | 1.84 | 0.3 | 1.1 | 1.1 | 0.3 | 1.1 | 1.1 | 1.2 | 0 | 0.2 |
| 105.67 | 8.1 | 10.4 | 2.11 | 0.4 | 0.9 | 0.9 | 0.4 | 0.9 | 0.9 | 0.9 | 0 | 0.1 |
| 105.75 | 7.3 | 8.9 | 2.25 | 0.3 | 0.8 | 0.8 | 0.3 | 0.8 | 0.8 | 0.8 | 0 | 0.1 |
| 105.83 | 7.7 | 9.7 | 2.14 | 0.2 | 0.8 | 0.9 | 0.2 | 0.8 | 0.9 | 0.9 | 0 | 0.2 |
| 105.92 | 6.2 | 8.0 | 2.08 | 0.5 | 0.8 | 0.9 | 0.5 | 0.8 | 0.9 | 0.9 | 0 | 0.0 |
| 106.00 | 1.9 | 2.2 | 2.40 | 0.6 | 0.4 | 0.7 | 0.6 | 0.4 | 0.7 | 0.7 | 0 | 0.0 |
| 106.08 | 4.3 | 5.1 | 2.44 | 0.4 | 0.6 | 0.7 | 0.4 | 0.6 | 0.7 | 0.7 | 0 | 0.0 |
| 106.17 | 3.0 | 3.8 | 3.06 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 | 0.4 | 0 | 0.1 |
| 106.25 | 5.4 | 6.5 | 2.35 | 0.4 | 0.7 | 0.7 | 0.4 | 0.7 | 0.7 | 0.7 | 0 | 0.1 |
| 106.33 | 1.7 | 2.2 | 3.54 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0 | 0.0 |
| 106.42 | 9.1 | 11.6 | 2.05 | 0.1 | 0.9 | 0.9 | 0.1 | 0.9 | 0.9 | 0.9 | 0 | 0.4 |

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| Day | $u_b$ [cm/s] | $A_b$ [cm] | $f_{cws}$ (x 100) | $u_{*cs}$ [cm/s] | $u_{*ws}$ [cm/s] | $u_{*cws}$ [cm/s] | $u_{*c}$ [cm/s] | $u_{*w}$ [cm/s] | $u_{*cw}$ [cm/s] | $\delta_{cw}$ [cm] | $z_0$ [cm] | $z_{0c}$ [cm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 106.50 | 10 | 13.0 | 1.95 | 0.2 | 1.0 | 1.0 | 0.2 | 1.0 | 1.0 | 1.1 | 0 | 0.4 |
| 106.58 | 10.9 | 14.2 | 1.89 | 0.2 | 1.1 | 1.1 | 0.2 | 1.1 | 1.1 | 1.1 | 0 | 0.4 |
| 106.67 | 11.1 | 14.4 | 1.88 | 0.2 | 1.1 | 1.1 | 0.2 | 1.1 | 1.1 | 1.1 | 0 | 0.4 |
| 106.75 | 10.3 | 13.1 | 1.82 | 0.8 | 1.1 | 1.2 | 0.8 | 1.1 | 1.2 | 1.2 | 0 | 0.0 |
| 106.83 | 8.8 | 11.3 | 1.98 | 0.5 | 0.9 | 1.0 | 0.5 | 0.9 | 1.0 | 1.0 | 0 | 0.1 |
| 106.92 | 8.2 | 10.2 | 2.13 | 0.2 | 0.9 | 0.9 | 0.2 | 0.9 | 0.9 | 0.9 | 0 | 0.3 |
| 107.00 | 9.2 | 11.8 | 1.99 | 0.5 | 0.9 | 1.0 | 0.5 | 0.9 | 1.0 | 1.0 | 0 | 0.0 |
| 107.08 | 10.3 | 13.1 | 1.92 | 0.5 | 1.0 | 1.1 | 0.5 | 1.0 | 1.1 | 1.1 | 0 | 0.1 |
| 107.17 | 9.9 | 12.6 | 1.95 | 0.3 | 1.0 | 1.0 | 0.3 | 1.0 | 1.0 | 1.1 | 0 | 0.2 |
| 107.25 | 7.0 | 9.1 | 2.18 | 0.2 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 0.8 | 0 | 0.2 |
| 107.33 | 7.6 | 9.7 | 2.16 | 0.2 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 0.8 | 0 | 0.2 |
| 107.42 | 8.1 | 10.4 | 2.10 | 0.4 | 0.9 | 0.9 | 0.4 | 0.9 | 0.9 | 0.9 | 0 | 0.1 |