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| **C:\HRECOS\HRECOS_logo.small.TIFMetadata: Pier 25 Weather Station**  **Location:**  Beginning July 2018: Pier 25, New York, NY ([40.720474, -74.016363](https://www.google.com/maps/place/Pier+25+at+Hudson+River+Park/@40.7198403,-74.0150607,62m/data=!3m1!1e3!4m6!3m5!1s0x89c259f62b939287:0x8d965a08cff27149!8m2!3d40.7202901!4d-74.0141132!16s%2Fg%2F1wzt38tj?entry=ttu))  Prior to July 2018: Pier 26, New York, NY ([40.721538 , -74.015600](https://www.google.com/maps/place/40%C2%B043'17.5%22N+74%C2%B000'56.2%22W/@40.7215314,-74.0157962,93m/data=!3m1!1e3!4m5!3m4!1s0x0:0x0!8m2!3d40.721538!4d-74.0156?hl=en) )  **Data collection period:** 9/16/2016 – present  **Parameters:** air temperature, barometric pressure, dew point, precipitation, relative humidity, wind speed, direction & gusts. | |
| **Disclaimer**: HRECOS is a research project. No warranty—either express or implied—is made for any information presented by this program. | |
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| **Location and equipment:**  The purpose of the Hudson River Park Pier 26 station is to generate a consistent and precise stream of weather data to the general public and interested stakeholders. The goal in collecting this data is to ultimately inform Hudson River management policies, restoration efforts, and extreme event planning. This station was selected due to its location near the NYC Harbor and in lower Manhattan, one of the world’s most heavily developed and densely populated urban environments.  The meteorological station is located on the northwestern piling at the end of Pier 26 (40.721538 N, 74.015600 W). The station records Air Temperature (°C), Relative Humidity (%), Wind Speed (m/s), Wind Direction (°), and Barometric Pressure (hPa) (see sensor specs section for details) using a Vaisala WXT530 instrument. Rainfall data is recorded using a supplemental TE525WS tipping bucket gage attached to the station. Data is recorded by a CR200 datalogger and transmitted every 15 minutes to the HRECOS database via a cellular modem. Dew point is calculated on the HRECOS database server-side using air temperature and relative humidity. | |
| **Special notes:**  9/16/16 - 9/19/16: Time zone set incorrectly in logger. Corrected on 9/19/16. Data before this data is offset by 1 hour.  10/7/16 11:45 EST: Averaging and update intervals changed to match those of Pier 84 station. Data prior to this time stamp are calculated using a 3-second interval rather than an 870-second interval. Intermittent jumps in wind gust values. Cause unknown and continuing to monitor.  July 2018: Station moved from Pier 26 to Pier 25 due to construction. | |
| **Distribution terms:**  HRECOS requests that attribution be given whenever HRECOS material is reproduced and re-disseminated and the HRECOS Coordinator be notified prior to publications including any part of the data. Example citation: “Hudson River Environmental Conditions Observing System. 2016. Pier 26 Weather Station data. Accessed April 13th, 2016. <http://www.hrecos.org/>.” | |
| **Data Quality Assurance:**  Data collection and verification have been performed since the establishment of this station according to the HRECOS Quality Assurance Project Plan, which is available at [www.hrecos.org](http://www.hrecos.org). See relevant section on following pages for QAQC flag and comment code definitions. | |
| **QAQC Comment Code definitions:**  General Errors  [GIM] instrument malfunction  [GIT] instrument recording error, recovered telemetry data  [GMC] no instrument deployed due to maintenance/calibration  [GPF] power failure/low battery  [GQR] rejected due to QAQC checks  [GSM] see metadata  [GIC] no instrument deployed due to ice  [GNF] deployment tube clogged/no flow  [GOW] out of water event  Sensor Errors  [SBO] blocked optic  [STF] catastrophic temperature sensor failure  [SCF] conductivity sensor failure  [SDF] depth port frozen  [SDP] DO membrane puncture  [SDO] DO suspect  [SIC] incorrect calibration/contaminated standard  [SNV] negative value  [SPC] post calibration out of range  [SSD] sensor drift  [SSM] sensor malfunction  [SOW] sensor out of water  [SSR] sensor removed (not deployed)  [STS] turbidity spike  [SWM] wiper malfunction/loss  Comments  (CAB) algal bloom  (CAF) acceptable calibration/accuracy error of sensor  (CAP) depth sensor in water, affected by atmospheric pressure  (CBF) biofouling  (CCU) cause unknown  (CDA) DO hypoxia < 28 percent saturation  (CDB) disturbed bottom  (CDF) data appear to fit conditions  (CFK) fish kill  (CIP) surface ice present at sample station  (CLT) low tide  (CMC) in field maintenance/cleaning  (CMD) mud in probe guard  (CND) new deployment begins  (CRE) significant rain event  (CSM) see metadata  (CTS) turbidity spike  (CVT) possible vandalism/tampering  (CWD) data collected at wrong depth  (CWE) significant weather event | |

**Table 1. Weather station sensor specifications.**

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| Parameter | Model | Sensor type | Units | Range | Accuracy | Misc. |
| **Air temperature** | WXT530 | Capacitive | °C | -52 to 60 °C | ±0.3 °C | NA |
| **Barometric pressure** | WXT530 | Capacitive | hPa | 600-1100 hPa | ±0.5 hPa at 0 to +30 °C (+32 to +86 °F)  ±1 hPa at -52 to +60 °C (-60 to +140 °F) | NA |
| **Precipitation** | TE525WS | Tipping bucket | mm | NA | Up to 1 in./hr: ±1% 1 to 2 in./hr: +0, -2.5% 2 to 3 in./hr: +0, -3.5% | 8” funnel diameter; 0.01” precip per bucket tip |
| **Relative humidity** | WXT530 | Capacitive | % | 0 to 100% | ±3 %RH within 0-90 %RH  ±5 %RH within 90-100 %RH | NA |
| **Wind direction** | WXT530 | Ultrasound via 3 transducers | degrees | 0 – 360 degrees | ±3 degrees | NA |
| **Wind speed** | WXT530 | Ultrasound via 3 transducers | m/s | 0 to 60 m/s | ±3% at 10 m/s | NA |