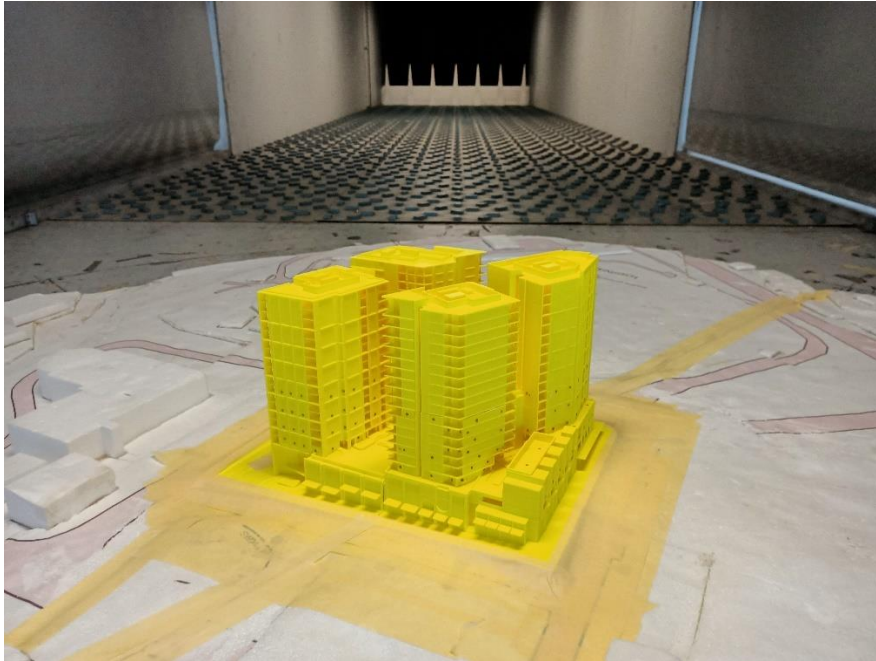




NATURAL VENTILATION STUDY

2 MANDALA PARADE, CASTLE HILL

WF350-05F05(REV2)- NV REPORT

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Prepared for:

Deicorp Projects Showground Pty Ltd

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DOCUMENT CONTROL

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EXECUTIVE SUMMARY

This report presents the results of the natural ventilation wind tunnel study of the 2 Mandala Parade development located in Castle Hill. The natural ventilation performance of the development has been assessed by calculating the hourly mean difference in pressures acting on the various openings of each unit. The results are presented as tabulated mean differential pressures between openings for each unit.

The mean pressures have been subjected to a directional probability weighting summed over the various wind directions to calculate the 50th percentile pressures within the target wind model. The target wind model includes all wind events that occur between temperatures of 20°C to 29.5°C, which are the conditions when occupants are mostly likely to utilise natural ventilation to regulate thermal comfort. Note that the target wind model shows a decreased influence of the westerly winds, which are prevalent during the colder months.

Testing was performed at Windtech's boundary layer wind tunnel facility. The wind tunnel has a 3.0m wide working section and a fetch length of 14m, and measurements were taken from 16 wind directions at 22.5 degree increments. Testing was carried out using a 1:300 scale model of the development. The effects of nearby buildings and land topography have been accounted for through the use of a proximity model which represents an area with a radius of 375m.

The wind tunnel study models of the buildings were fitted with a total of 325 pressure sensors spread across the external openings for the natural ventilation analysis. The mean pressure differentials were calculated for each wind direction using a total of 981 flow paths.

The results of the initial study indicate that 60% of units (114 out of 189) are deemed to satisfy the guidelines set out in the Apartment Design Guide (ADG) for openings on opposite or orthogonal aspects. When compared to these units, an additional 8% of units (15 out of 189) also have a significant pressure differential at the openings that is equivalent or better than a unit that is deemed to satisfy the ADG. Therefore, the development can achieve a total of 68% (129 out of 189) of residential apartments that satisfy the ADG requirements for natural cross-ventilation through locating openings in significantly different pressure regions such as the proposed plenum ducts.

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INTRODUCTION

A wind tunnel study has been undertaken for the determination of the mean external pressures acting on the various openings of the subject development. The test procedures followed for this wind tunnel study were based on the guidelines set out in the Australasian Wind Engineering Society Quality Assurance Manual (AWES-QAM-1-2019), ASCE-7-16 (Chapter C31), and CTBUH (2013). Further details of the wind tunnel data acquisition procedure are provided in Appendix F.

The close agreement between Windtech's wind tunnel pressure measurement results and full-scale data observed from the Texas Tech Experimental Building provides some indication of the accuracy of Windtech's wind tunnel results (A.W. Rofail, 1995). Windtech's pressure results show the closest recorded comparison to full-scale results, within an accuracy of $\pm 5\%$.

A scale model of the development was prepared, including the surrounding buildings and land topography. The model was fitted with pressure sensors spread across the external openings on the façade of the development. Testing was performed at Windtech's boundary layer wind tunnel facility. The wind tunnel has a 3.0m wide working section and a fetch length of 14m. Measurements were taken from 16 wind directions at 22.5-degree increments, and the wind tunnel was configured to the appropriate boundary layer wind profile. All pressures were measured simultaneously. Mean external pressure coefficients were obtained from the wind tunnel measurements for each individual pressure sensor for each wind direction tested. Tabulated results and plots of the recorded directional pressure coefficients are provided in Appendix A for each pressure sensor. Further details on how the pressure coefficients are defined are provided in Appendix F.

WIND TUNNEL MODEL

Wind tunnel testing was carried out using a 1:300 scale model of the development and surroundings. The study model incorporates all necessary architectural features on the façade of the development to ensure an accurate wind flow is achieved around the model, and was constructed using a Computer Aided Manufacturing (CAM) process to ensure that a high level of detail and accuracy is achieved. The effect of nearby buildings and land topography has been accounted for through the use of a proximity model, which represents a radius of 375m from the development site. It is noted that several other developments are proposed nearby, and hence testing for this tower was conducted with those proposed development taken into consideration.

Photographs of the wind tunnel model are presented in Figures 1. A plan of the proximity model is provided in Figure 2.

The wind tunnel study model of the building was fitted with a total of 325 pressure sensors spread across the external openings for the natural ventilation analysis. The mean pressure differentials were calculated for each wind direction using 935 flow paths, assuming an annual median probability of occurrence. These calculations are for wind events that occur when temperatures are between 20°C to 29.5°C, which are the conditions when occupants are mostly likely to utilise natural ventilation. This has been further detailed in Section 4.

The name and location of these pressure sensors are shown in the form of marked-up drawings in Appendix C.1.



Figure 1a: Photograph of the Wind Tunnel Model - Proposed Scenario (view from the south)



Figure 1b: Photograph of the Wind Tunnel Model - Proposed Scenario (view from the south-west)



Figure 1c: Photograph of the Wind Tunnel Model - Proposed Scenario (view from the south-east)

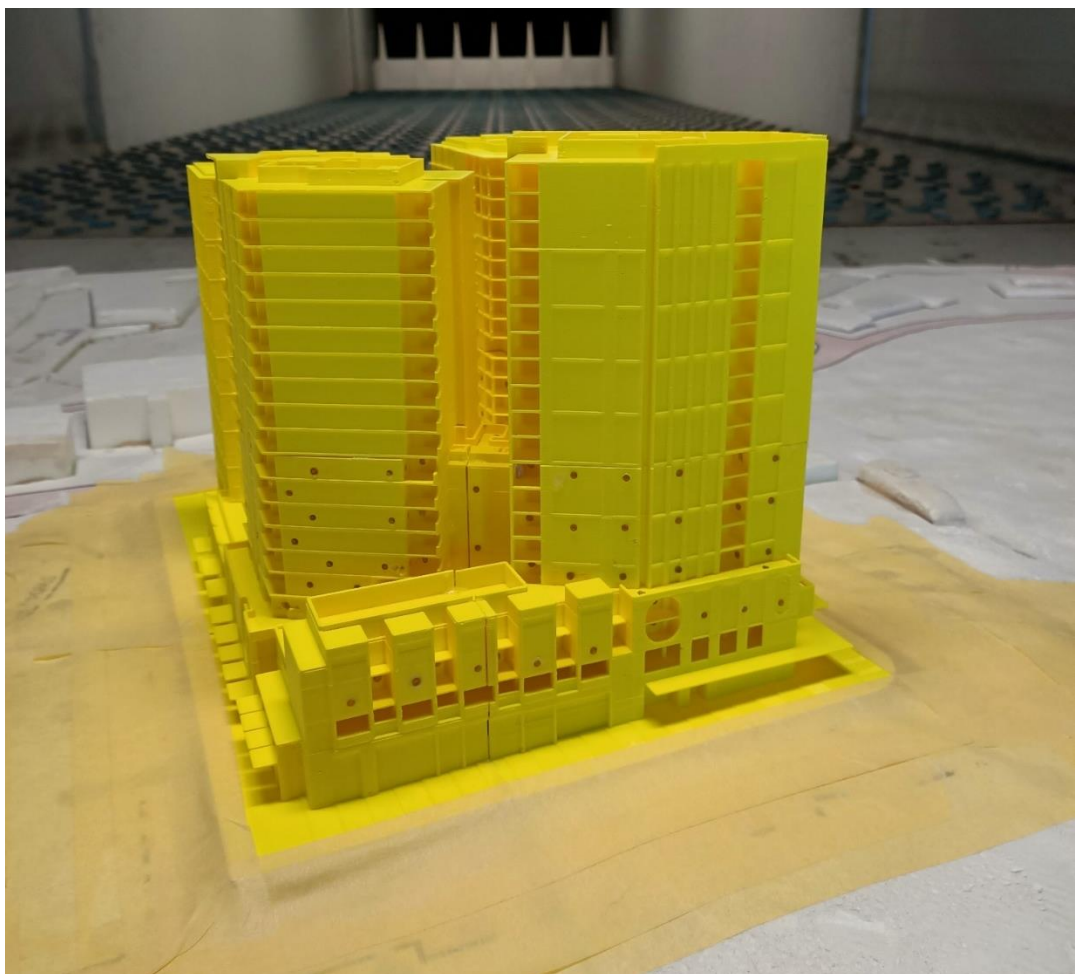


Figure 1d: Photograph of the Wind Tunnel Model - Proposed Scenario (view from the south)



Figure 2: Proximity Model Plan

BOUNDARY LAYER WIND PROFILES AT THE SITE

The roughness of the surface of the earth has the effect of slowing down the wind near the ground. This effect is observed up to the boundary layer height, which can range between 500m to 3km above the earth's surface depending on the roughness of the surface (i.e. oceans, open farmland, etc.). Within this range the prevailing wind forms a boundary layer wind profile.

Various wind codes and standards and other publications classify various types of boundary layer wind flows depending on the surface roughness z_0 . Descriptions of typical boundary layer wind profiles, based on D.M. Deaves and R.I. Harris (1978), are summarised as follows:

- Flat terrain ($0.002\text{m} < z_0 < 0.003\text{m}$). Examples include inland water bodies such as lakes, dams, rivers, etc., and the open ocean.
- Semi-open terrain ($0.006\text{m} < z_0 < 0.01\text{m}$). Examples include flat deserts and plains.
- Open terrain ($0.02\text{m} < z_0 < 0.03\text{m}$). Examples include grassy fields, semi-flat plains, and open farmland (without buildings or trees).
- Semi-suburban/semi-forest terrain ($0.06\text{m} < z_0 < 0.1\text{m}$). Examples include farm land with scattered trees and buildings and very low-density suburban areas.
- Suburban/forest terrain ($0.2\text{m} < z_0 < 0.3\text{m}$). Examples include suburban areas of towns and areas with dense vegetation such as forests, bushland, etc.
- Semi-urban terrain ($0.6\text{m} < z_0 < 1.0\text{m}$). Examples include centres of small cities, industrial parks, etc.
- Urban terrain ($2.0\text{m} < z_0 < 3.0\text{m}$). Examples include centres of large cities with many high-rise towers, and also areas with many closely-spaced mid-rise buildings.

The boundary layer wind profile does not change instantly due to changes in the terrain roughness. It can take many kilometres (at least 100km) of a constant surface roughness for the boundary layer wind profile to achieve a state of equilibrium. Hence an analysis of the effect of changes in the upwind terrain roughness is necessary to determine an accurate boundary layer wind profile at the development site location.

For this study this has been undertaken based on the method given in ESDU-82026:2002 and ESDU-83045:2002. Aerial images showing the surrounding terrain are presented in Figures 3 for ranges of 5km and 50km from the edge of the proximity model used for the wind tunnel study. The resulting mean and gust terrain and height multipliers at the site location are presented in Table 1, referenced to the study reference height of 70.3m. Note that the approaching winds to the site vary in speed with respect to height above ground. For each of the 16 wind directions tested in this study, the approaching boundary layer wind profiles modelled in the wind tunnel closely matched the profiles listed in Table 1. Plots of the boundary layer wind profiles used for the wind tunnel testing are presented in Appendix D of this report.

Table 1: Mean Terrain and Height Factors (at the reference height)

Wind Direction	Mean Terrain and Height Factors $k_{tr,T=1hr}$
N	0.75
NNE	0.75
NE	0.76
ENE	0.77
E	0.78
ESE	0.78
SE	0.78
SSE	0.77
S	0.74
SSW	0.71
SW	0.70
WSW	0.71
W	0.71
WNW	0.73
NW	0.74
NNW	0.74

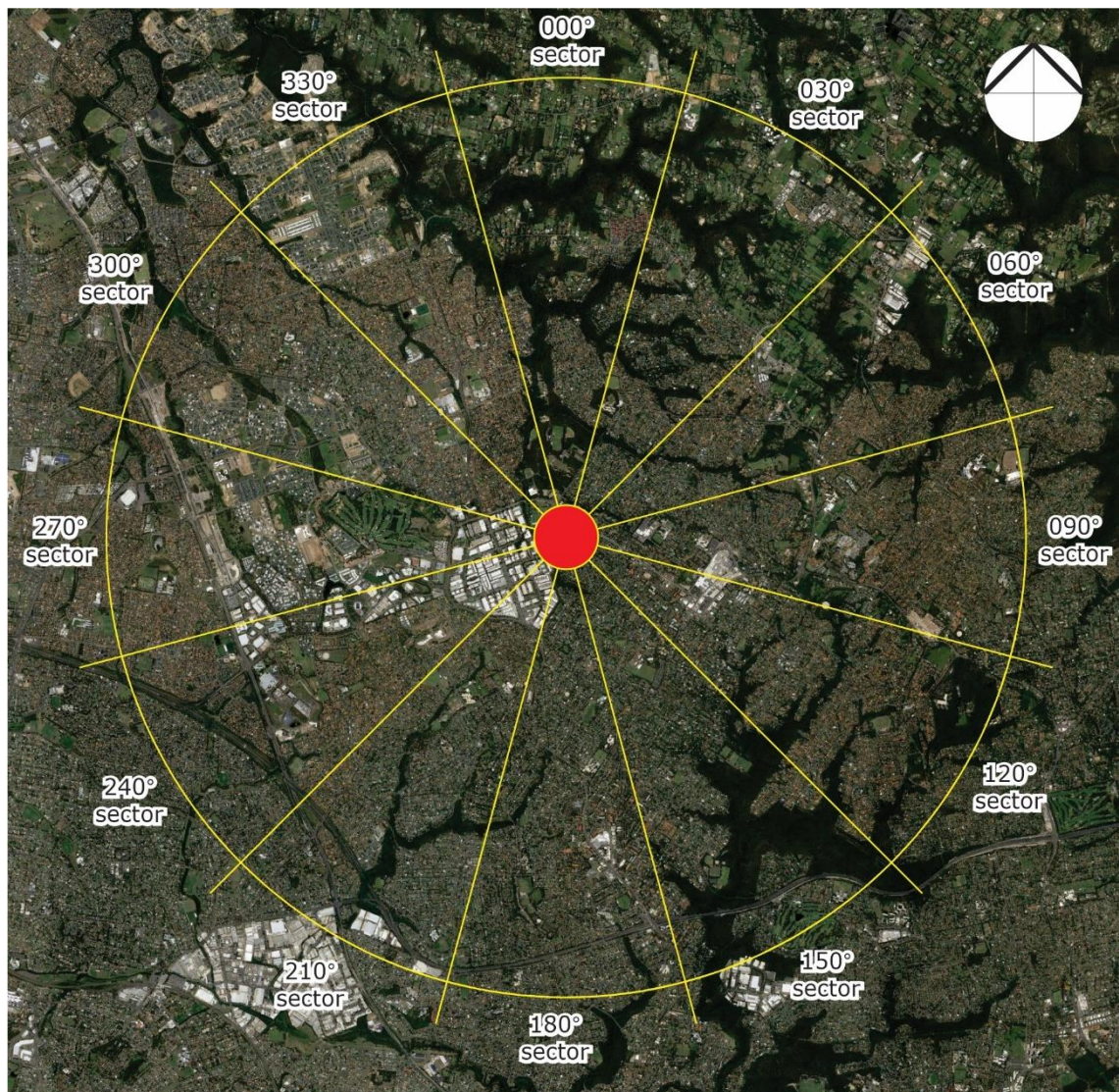


Figure 3a: Aerial Image of the Surrounding Terrain
(radius of 5km from the edge of the proximity model)



Figure 3b: Aerial Image of the Surrounding Terrain
(radius of 50km)

4 REGIONAL WIND MODEL

The regional wind model used in this study was determined from an analysis of measured directional mean wind speeds obtained at the meteorological recording station located at Bankstown Airport. Data was collected from 1993 to 2016, excluding wind events outside of the temperature range from 20°C to 29.5°C, and corrected so that it represents wind speeds over standard open terrain at a height of 10m above ground for each wind direction. From this analysis directional frequencies of occurrence for the region are determined and are presented in Figure 4. The calculations presented in this report are based on the directional wind speed event frequency table.

The wind climate data indicates that the north-easterly and south-easterly winds are the most frequent winds for the region during warmer weather. The temperature range was selected to represent the warmer conditions when natural ventilation is most desirable to improve occupant thermal comfort.

Table 2: Directional Probabilities of Occurrence of Wind Events

Wind Direction	Daily Average Mean Wind Speeds (m/s)	Directional Probability of Wind Event (%) (Temperatures between 20-29.5°C)
N	4.5	5.4
NNE	4.5	5.2
NE	5.5	10.2
ENE	5.5	11.1
E	5.1	7.6
ESE	5.7	10.3
SE	6.1	10.7
SSE	6.2	7.9
S	5.0	4.6
SSW	3.6	2.6
SW	4.3	3.0
WSW	5.0	3.3
W	5.1	3.7
WNW	5.0	4.7
NW	4.2	4.6
NNW	4.4	5.3

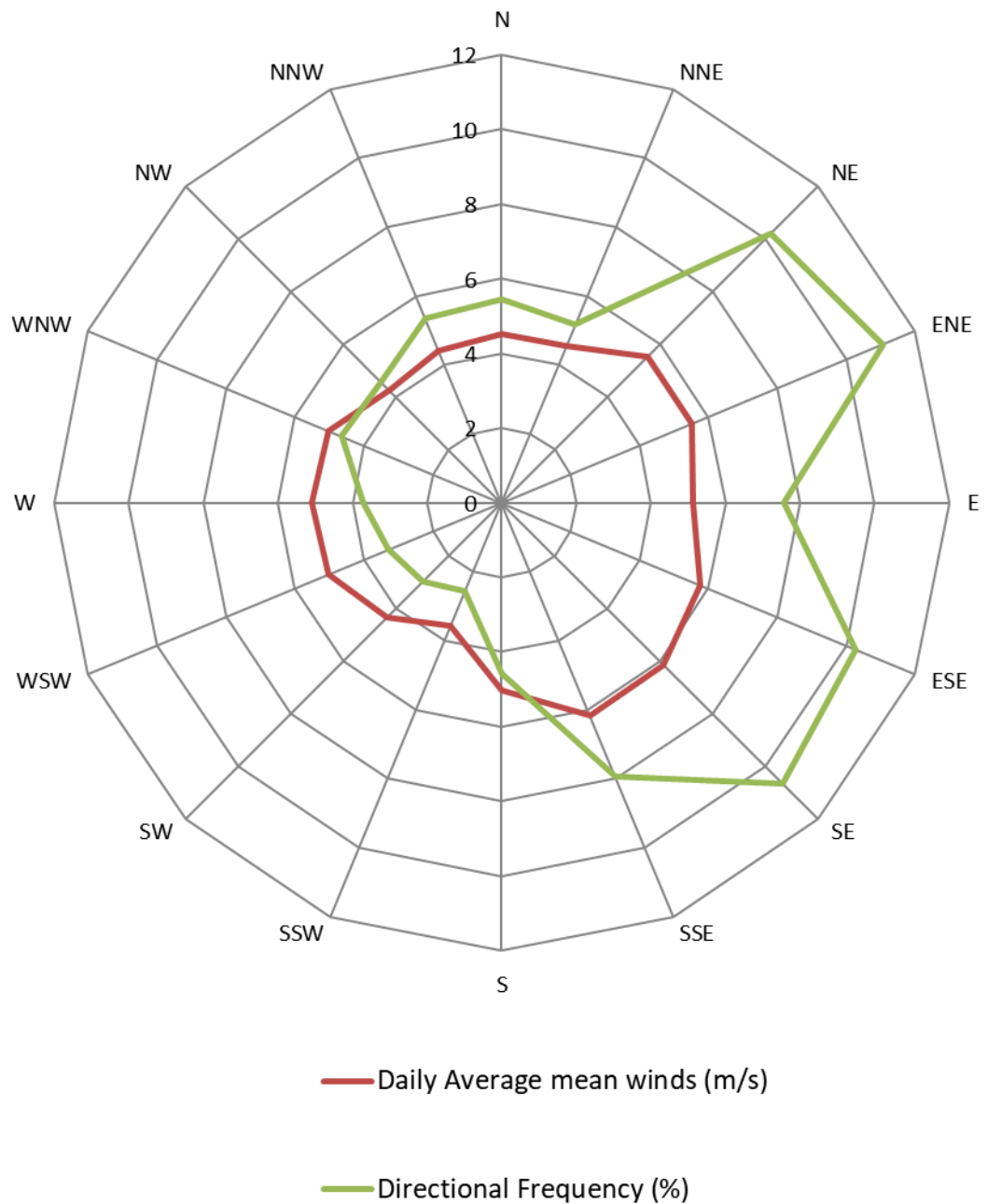


Figure 4: Daily Average Winds and Directional Frequencies of Wind Events for the region (Obtained from Bankstown Airport between 1993 to 2016 Corrected to Open Terrain, at 10m Height)

5 NATURAL VENTILATION PRINCIPLES AND CRITERIA

Natural ventilation is a primary design concept to reduce or remove the requirement for mechanical ventilation and/or air-conditioning of a building. This provides an environmental benefit by reducing greenhouse gas emissions due to the constant demand for mechanical ventilation and air-conditioning by the occupants. Natural ventilation is not only environmentally beneficial but also has financial benefits in terms of both construction and running costs of the development. Although a naturally ventilated designed building will require more window openings, the benefit of not having to install mechanical ventilation units greatly outweighs this cost. Running costs are also reduced with no ongoing mechanical ventilators and benefits from reduced reliance on artificial lighting (Peddie and Rofail, 2010)

Natural ventilation of indoor areas can be used to improve both the level of occupant comfort and the air quality of an internal space. It is also beneficial in improving occupant comfort during warmer temperatures when the occupants will generally have windows and doors open, while during cooler temperatures it is considered primarily beneficial for air quality purposes only. The predominant wind directions for the region have been analysed in Section 4 of this report.

Furthermore, it has been found that a naturally ventilated building reduces what is commonly known as Sick Building Syndrome (SBS) (Chenvidyakarn, 2010 and Awbi, 2010). Occupants of mechanical or air-conditioned buildings are known to be susceptible to symptoms including itchy eyes, coughs, sneezes and drowsiness. This commonly leads to lower productivity or higher incidences of sickness then when compared to naturally ventilated buildings.

The NSW State Environmental Planning Policy No. 65 (SEPP65) Apartment Design Guide (ADG) states that, for a development to be considered naturally ventilated, at least 60% of the individual apartments in the first nine storeys of the building must be considered to be naturally cross ventilated. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.

The ADG states that natural cross ventilation is achieved by apartments having more than one aspect with direct exposure to the prevailing winds, or windows located in significantly different pressure regions, rather than relying on purely wind driven air. Examples of apartments which are classified as being naturally cross ventilated by SEPP65 are shown in Figures 5a and 5b below, which also show examples of flow paths for natural cross ventilation through the apartments.

The ADG does provide design guidance for the layout and design of single aspect apartments to maximise natural ventilation. While these are not considered naturally cross ventilated, they provide guidance in situations where there are site restraints to achieve design excellence in single aspect apartments. The design allows for the inclusion of plenums, vertical ventilation shafts and building indentations with a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells.

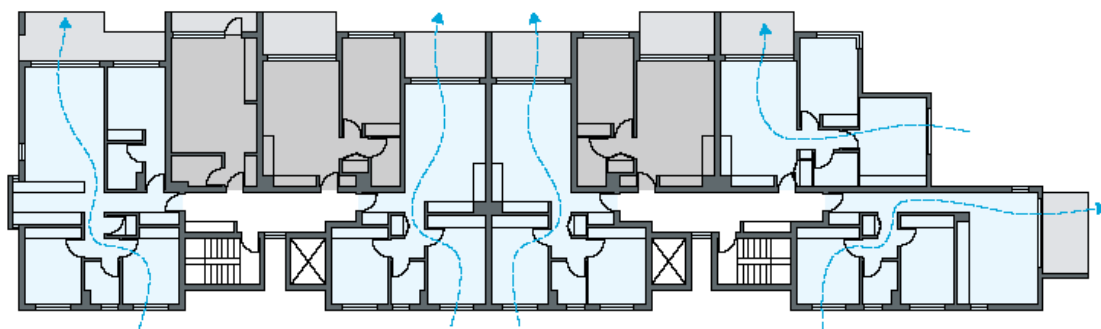


Figure 5a: Examples of Apartments Achieving Effective Natural Cross Ventilation
(from ADG, floor plan of a typical residential building)

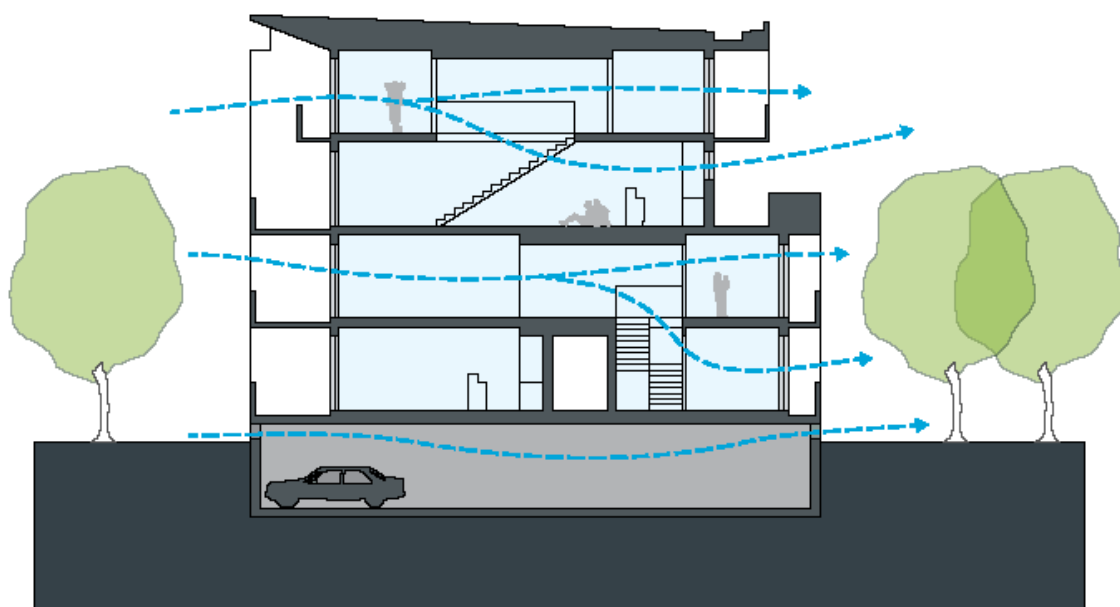


Figure 5b: Examples of Apartments Achieving Effective Natural Cross Ventilation
(from ADG, section of a typical residential building)

To be effective, the ventilating flow paths in an apartment should flow through the entire apartment, particularly the bedrooms and living spaces, driven by a significant pressure differential at the openings. According to the ADG, the flow paths should generally remain under 18m to maximise the air flow through the apartment. It should be noted that flow paths that flow through a bathroom have not been considered to be a valid flow path due to issues with odours.

Due to the complicated nature of flow paths driven by pressure differentials at different openings of an apartment, apartment design which are outside of those presented in Figures 5a and 5b have the potential to achieve the same or exceed the same levels of pressure differential for a flow path that satisfies the design guidance in the ADG of a deemed to satisfy apartment, and therefore provide effective natural ventilation.

RESULTS AND DISCUSSION

The results of the study for each individual apartment are shown in Tables 3. The flow path achieving the highest pressure differential has been presented for each apartment being assessed against the units that are deemed to satisfy the ADG. The mean pressure differential (ΔP) for a 50% probability of occurrence has been given in pascals (Pa), where flow paths that meet the requirements of the ADG have been deemed to satisfy. The results for all other apartments have been compared to a pressure differential for a flow path that clearly satisfies all the requirements of the ADG. The selected mean differential pressure for an apartment which satisfies the guidelines of the ADG is 0.44Pa.

Each flow path analysed has been included in Appendix B, where for each apartment, the various openings have been numbered sequentially in a clockwise manner around the exterior of the building, based on the architectural drawings received on April, 2022 as shown in Appendix C.2.

The results of the initial study indicate that 60% of units (114 out of 189) are deemed to satisfy the guidelines set out in the Apartment Design Guide (ADG) for openings on opposite or orthogonal aspects. When compared to these units, an additional 8 of units (15 out of 189) also have a significant pressure differential at the openings that is equivalent or better than a unit that is deemed to satisfy the ADG. Therefore, the development can achieve a total of 68% (129 out of 189) of residential apartments that satisfy the ADG requirements for natural cross-ventilation through locating openings in significantly different pressure regions such as the proposed plenum ducts.

The results of the study are summarised in Table 4 as well as Appendix C.2. If in the future there is a significant change in the form of the development, the addition or alteration of the facade elements, or a significant change in the layout of surrounding buildings in the immediate vicinity, Windtech should be contacted to review the results presented in this report.

Table 3: Apartment Ventilation Performance Results

Apartment No.	Deemed to Satisfy (DTS) ADG	ΔP (Pa)	Opening 1	Opening 2	Naturally Cross-Ventilated Result
A208	YES	0.06	A208_W01	A208_W03	DTS
A209	NO	0.06	A209_W01	A209_W03	FAIL
A210	NO	0.04	A210_W01	A210_W02	FAIL
A211	NO	0.18	A211_W01	A211_W02	FAIL
A212	YES	0.08	A212_W01	A212_W03	DTS
A213	YES	0.26	A213_W02	A213_W03	DTS
A214	NO	0.30	A214_W01	A214_W02	FAIL
A215	YES	0.21	A215_W02	A215_W03	DTS
A216	NO	0.13	A216_W01	A216_W02	FAIL
B201	NO	0.08	B201_W01	B201_W03	FAIL
B202	NO	0.05	B202_W01	B202_W02	FAIL
B203	YES	0.21	B203_W02	B203_W03	DTS
B204	NO	0.00	B204_W01	B204_W02	FAIL
B205	NO	0.00	B205_W01	B205_W02	FAIL
B206	YES	0.15	B206_W03	B206_W04	DTS
B207	YES	0.04	B207_W01	B207_W02	DTS
A308	YES	0.06	A308_W01	A308_W02	DTS
A309	NO	0.10	A309_W01	A309_W03	FAIL
A310	NO	0.31	A310_W01	A310_W02	FAIL
A311	NO	0.34	A311_W01	A311_W02	FAIL
A312	YES	0.11	A312_W01	A312_W03	DTS
A313	YES	0.82	A313_W01	A313_W04	DTS
A314	YES	0.38	A314_W01	A314_W03	DTS
A315	NO	0.00	A315_W01	A315_W02	FAIL
A316	YES	2.14	A316_W01	A316_W02	DTS
A317	NO	0.13	A317_W01	A317_W03	FAIL
B301	NO	0.11	B301_W01	B301_W03	FAIL
B302	NO	0.07	B302_W01	B302_W02	FAIL
B303	YES	0.46	B303_W02	B303_W03	DTS
B304	NO	0.47	B304_W01	B304_W03	PASS
B305	YES	0.24	B305_W01	B305_W03	DTS
B306	YES	1.54	B306_W01	B306_W03	DTS
B307	YES	0.10	B307_W01	B307_W02	DTS

Apartment No.	Deemed to Satisfy (DTS) ADG	ΔP (Pa)	Opening 1	Opening 2	Naturally Cross-Ventilated Result
C318	YES	0.81	C318_W01	C318_W02	DTS
C319	YES	0.99	C319_W01	C319_W03	DTS
C320	NO	2.24	C320_W02	C320_W03	PASS
C321	YES	0.13	C321_W02	C321_W03	DTS
C322	YES	1.52	C322_W01	C322_W02	DTS
C323	YES	0.15	C323_W01	C323_W02	DTS
C324	YES	0.23	C324_W04	C324_W05	DTS
C325	YES	0.28	C325_W02	C325_W06	DTS
C326	YES	0.13	C326_W01	C326_W05	DTS
C327	YES	0.29	C327_W01	C327_W05	DTS
C328	YES	0.29	C328_W01	C328_W05	DTS
D329	YES	1.17	D329_W02	D329_W04	DTS
D330	YES	0.13	D330_W05	D330_W06	DTS
D331	NO	0.00	D331_W01	D331_W02	FAIL
D332	YES	1.47	D332_W01	D332_W03	DTS
D333	YES	0.60	D333_W01	D333_W02	DTS
A408	YES	0.08	A408_W01	A408_W02	DTS
A409	NO	0.10	A409_W01	A409_W03	FAIL
A410	NO	0.31	A410_W01	A410_W02	FAIL
A411	NO	0.39	A411_W01	A411_W03	FAIL
A412	YES	0.24	A412_W03	A412_W04	DTS
A413	YES	0.15	A413_W01	A413_W02	DTS
A414	YES	0.51	A414_W01	A414_W03	DTS
A415	NO	0.08	A415_W01	A415_W02	FAIL
A416	YES	0.16	A416_W02	A416_W03	DTS
A417	NO	0.29	A417_W01	A417_W03	FAIL
B401	NO	0.11	B401_W01	B401_W03	FAIL
B402	NO	0.07	B402_W01	B402_W02	FAIL
B403	YES	2.11	B403_W01	B403_W02	DTS
B404	NO	0.69	B404_W01	B404_W03	PASS
B405	YES	0.47	B405_W01	B405_W03	DTS
B406	YES	0.21	B406_W03	B406_W04	DTS
B407	YES	0.10	B407_W01	B407_W02	DTS
C418	YES	0.53	C418_W01	C418_W02	DTS

Apartment No.	Deemed to Satisfy (DTS) ADG	ΔP (Pa)	Opening 1	Opening 2	Naturally Cross-Ventilated Result
C419	YES	0.31	C419_W01	C419_W03	DTS
C420	NO	0.46	C420_W01	C420_W03	PASS
C421	YES	0.18	C421_W02	C421_W04	DTS
C422	YES	0.65	C422_W01	C422_W04	DTS
C423	YES	0.23	C423_W01	C423_W02	DTS
D424	YES	0.35	D424_W01	D424_W02	DTS
D425	YES	0.58	D425_W01	D425_W03	DTS
D426	YES	0.20	D426_W01	D426_W02	DTS
D427	YES	0.08	D427_W01	D427_W03	DTS
D428	YES	0.28	D428_W01	D428_W02	DTS
A508	YES	0.12	A508_W03	A508_W04	DTS
A509	NO	0.10	A509_W01	A509_W03	FAIL
A510	NO	0.31	A510_W01	A510_W02	FAIL
A511	NO	0.39	A511_W01	A511_W02	FAIL
A512	YES	0.24	A512_W04	A512_W05	DTS
A513	YES	0.15	A513_W01	A513_W02	DTS
A514	YES	0.38	A514_W01	A514_W03	DTS
A515	NO	0.00	A515_W01	A515_W02	FAIL
A516	YES	0.14	A516_W02	A516_W03	DTS
A517	NO	0.18	A517_W01	A517_W02	FAIL
B501	NO	0.09	B501_W01	B501_W03	FAIL
B502	NO	0.15	B502_W01	B502_W02	FAIL
B503	YES	2.17	B503_W01	B503_W02	DTS
B504	NO	0.23	B504_W01	B504_W03	FAIL
B505	YES	0.37	B505_W01	B505_W03	DTS
B506	YES	0.93	B506_W01	B506_W03	DTS
B507	YES	0.25	B507_W01	B507_W02	DTS
C518	NO	0.24	C518_W01	C518_W03	FAIL
C519	YES	0.60	C519_W03	C519_W04	DTS
C520	NO	0.31	C520_W01	C520_W02	FAIL
C521	NO	0.46	C521_W01	C521_W02	PASS
C522	YES	0.18	C522_W02	C522_W03	DTS
C523	YES	0.19	C523_W01	C523_W02	DTS
D524	YES	2.01	D524_W01	D524_W03	DTS

Apartment No.	Deemed to Satisfy (DTS) ADG	ΔP (Pa)	Opening 1	Opening 2	Naturally Cross-Ventilated Result
D525	YES	0.28	D525_W02	D525_W03	DTS
D526	YES	0.20	D526_W01	D526_W04	DTS
D527	NO	0.08	D527_W01	D527_W03	FAIL
D528	YES	0.28	D528_W01	D528_W02	DTS
D529	NO	0.61	D529_W01	D529_W04	PASS
A608	YES	0.22	A608_W03	A608_W04	DTS
A609	NO	0.07	A609_W01	A609_W03	FAIL
A610	NO	0.08	A610_W01	A610_W02	FAIL
A611	YES	0.37	A611_W01	A611_W03	DTS
A612	YES	0.13	A612_W03	A612_W04	DTS
A613	NO	0.00	A613_W01	A613_W02	FAIL
A614	YES	0.14	A614_W02	A614_W03	DTS
A615	NO	0.18	A615_W01	A615_W02	FAIL
B601	NO	0.09	B601_W01	B601_W03	FAIL
B602	NO	0.15	B602_W01	B602_W02	FAIL
B603	YES	0.40	B603_W01	B603_W02	DTS
B604	NO	0.23	B604_W01	B604_W03	FAIL
B605	YES	0.37	B605_W01	B605_W03	DTS
B606	YES	0.15	B606_W02	B606_W03	DTS
B607	YES	0.25	B607_W01	B607_W02	DTS
C616	NO	0.35	C616_W02	C616_W03	FAIL
C617	YES	0.53	C617_W01	C617_W02	DTS
C618	NO	0.50	C618_W01	C618_W04	PASS
C619	NO	0.46	C619_W01	C619_W03	PASS
C620	YES	0.18	C620_W02	C620_W04	DTS
C621	YES	0.19	C621_W01	C621_W02	DTS
D622	YES	0.24	D622_W01	D622_W03	DTS
D623	YES	0.76	D623_W01	D623_W02	DTS
D624	YES	0.20	D624_W01	D624_W04	DTS
D625	NO	0.28	D625_W01	D625_W04	FAIL
D626	YES	0.28	D626_W01	D626_W02	DTS
D627	NO	0.32	D627_W01	D627_W03	FAIL
A708	YES	0.10	A708_W03	A708_W04	DTS
A709	NO	0.82	A709_W02	A709_W03	PASS

Apartment No.	Deemed to Satisfy (DTS) ADG	ΔP (Pa)	Opening 1	Opening 2	Naturally Cross-Ventilated Result
A710	NO	0.07	A710_W01	A710_W03	FAIL
A711	YES	0.37	A711_W01	A711_W03	DTS
A712	YES	0.13	A712_W03	A712_W04	DTS
A713	NO	0.00	A713_W01	A713_W02	FAIL
A714	YES	1.92	A714_W01	A714_W02	DTS
A715	NO	0.28	A715_W01	A715_W03	FAIL
B701	NO	0.13	B701_W01	B701_W03	FAIL
B702	NO	0.11	B702_W01	B702_W02	FAIL
B703	YES	3.04	B703_W01	B703_W02	DTS
B704	NO	0.31	B704_W01	B704_W03	FAIL
B705	YES	0.28	B705_W01	B705_W03	DTS
B706	YES	0.38	B706_W03	B706_W04	DTS
B707	YES	0.19	B707_W01	B707_W02	DTS
C716	NO	0.44	C716_W01	C716_W03	FAIL
C717	YES	0.70	C717_W01	C717_W03	DTS
C718	NO	0.96	C718_W01	C718_W03	PASS
C719	NO	0.33	C719_W01	C719_W03	FAIL
C720	YES	0.11	C720_W02	C720_W04	DTS
C721	YES	0.54	C721_W01	C721_W02	DTS
D722	YES	0.71	D722_W01	D722_W04	DTS
D723	YES	0.27	D723_W01	D723_W02	DTS
D724	YES	0.19	D724_W01	D724_W02	DTS
D725	NO	0.40	D725_W01	D725_W04	FAIL
D726	YES	0.26	D726_W01	D726_W02	DTS
D727	NO	0.62	D727_W02	D727_W03	PASS
A807	YES	0.10	A807_W03	A807_W04	DTS
A808	NO	0.27	A808_W01	A808_W03	FAIL
A809	NO	0.11	A809_W01	A809_W02	FAIL
A810	YES	0.16	A810_W03	A810_W04	DTS
A811	YES	0.17	A811_W03	A811_W04	DTS
A812	NO	0.00	A812_W01	A812_W02	FAIL
A813	YES	0.13	A813_W01	A813_W02	DTS
C814	NO	0.44	C814_W01	C814_W03	FAIL
C815	YES	0.43	C815_W03	C815_W04	DTS

Apartment No.	Deemed to Satisfy (DTS) ADG	ΔP (Pa)	Opening 1	Opening 2	Naturally Cross-Ventilated Result
C816	NO	0.96	C816_W01	C816_W03	PASS
C817	NO	3.42	C817_W02	C817_W03	PASS
C818	YES	0.11	C818_W02	C818_W04	DTS
C819	YES	0.54	C819_W01	C819_W02	DTS
D820	YES	0.73	D820_W03	D820_W04	DTS
D821	YES	0.27	D821_W01	D821_W02	DTS
D822	YES	0.29	D822_W01	D822_W02	DTS
D823	NO	0.31	D823_W01	D823_W03	FAIL
D824	YES	0.20	D824_W01	D824_W02	DTS
D825	NO	1.39	D825_W01	D825_W04	PASS
C914	YES	0.44	C914_W01	C914_W03	DTS
C915	YES	0.95	C915_W01	C915_W03	DTS
C916	NO	0.33	C916_W01	C916_W04	FAIL
C917	YES	0.11	C917_W02	C917_W03	DTS
C918	YES	0.66	C918_W01	C918_W06	DTS
D919	YES	0.18	D919_W03	D919_W04	DTS
D920	YES	0.18	D920_W04	D920_W05	DTS
D921	NO	0.87	D921_W01	D921_W02	PASS
D922	YES	0.23	D922_W01	D922_W02	DTS
D923	YES	0.21	D923_W02	D923_W03	DTS

Table 4: Natural Ventilation Performance Summary

Apartments	Number	Percentage
Satisfies ADG (Deemed to Satisfy)	114	60.3%
Significant Pressure Differential	15	7.9%
No Significant Pressure Differential	60	31.7%
Naturally Cross Ventilated	129	68.3%

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APPENDIX A RESULTS OF THE MEAN EXTERNAL PRESSURE COEFFICIENTS

A.1 Tabulated Results Summary of the External Pressure Coefficients

Table A1
Summary of the External Pressure Coefficients
(referenced to an hourly mean velocity)

Individual Tap ID	Means				Std Dev (Max)		Peak Positive		Peak Negative	
	Maximum		Minimum		Coeff.	Dir	Coeff.	Dir	Coeff.	Dir
	Coeff.	Dir	Coeff.	Dir						
SM01	-0.35	120	-0.44	290	+0.16	200	+0.62	330	-1.27	130
SL01	-0.36	250	-0.44	290	+0.16	200	+0.74	330	-1.28	130
NJ01	+0.49	20	-0.75	70	+0.45	40	+1.92	10	-2.50	60
NJ02	+0.50	350	-0.63	60	+0.34	30	+1.95	10	-1.82	70
NJ03	+0.55	350	-0.64	50	+0.41	30	+1.95	10	-1.89	60
NJ04	+0.53	80	-0.44	200	+0.26	90	+1.93	70	-1.28	180
NJ05	+0.19	330	-0.47	260	+0.26	300	+1.58	320	-1.32	250
NJ06	-0.33	20	-0.48	260	+0.16	260	+0.49	290	-1.35	250
WJ01	+0.49	320	-0.69	20	+0.38	350	+1.77	320	-2.27	10
WJ02	+0.50	310	-0.65	30	+0.37	10	+1.88	300	-1.88	30
WJ03	+0.25	310	-0.59	30	+0.28	20	+1.29	310	-2.03	10
WJ06	-0.23	320	-0.55	80	+0.18	80	+0.42	240	-1.57	80
WJ07	+0.05	330	-0.47	260	+0.23	300	+1.22	320	-1.28	260
WJ08	-0.30	230	-0.47	260	+0.18	250	+0.89	270	-1.34	250
WJ09	-0.34	220	-0.48	260	+0.17	170	+0.48	230	-1.37	170
WJ10	-0.28	340	-0.48	160	+0.21	220	+0.66	230	-1.64	180
WJ11	-0.24	340	-0.99	210	+0.25	200	+0.39	340	-2.37	210
WJ12	+0.32	220	-0.82	180	+0.47	200	+1.67	230	-3.10	190
SJ01	+0.54	200	-0.55	80	+0.42	240	+1.96	190	-1.72	80
SJ02	+0.53	180	-0.56	80	+0.28	210	+1.86	180	-1.78	80
SJ03	+0.54	150	-0.68	80	+0.33	90	+1.92	160	-2.45	90
SJ04	+0.43	290	-0.65	30	+0.32	270	+1.76	300	-1.83	30
SJ05	+0.08	130	-0.81	60	+0.29	70	+1.11	120	-2.70	70
SJ07	+0.50	60	-0.64	350	+0.32	0	+1.90	70	-2.18	350
EJ01	+0.49	120	-0.52	180	+0.27	160	+1.97	120	-1.82	180
EJ02	+0.53	110	-0.46	200	+0.25	120	+1.84	110	-1.40	180
EJ03	+0.52	90	-0.46	200	+0.28	120	+2.01	110	-1.31	180
EJ04	+0.54	110	-0.50	180	+0.27	130	+1.83	110	-1.74	180
EJ05	+0.49	110	-0.50	10	+0.24	90	+1.74	90	-1.53	20
EJ06	+0.47	80	-0.65	10	+0.25	90	+1.84	90	-1.65	10
EJ07	+0.55	80	-0.63	160	+0.28	130	+1.93	70	-1.69	350
EJ08	+0.50	50	-0.74	350	+0.42	10	+1.85	60	-2.53	350
RJ01	-0.26	190	-0.57	320	+0.19	340	+0.51	140	-1.67	320
RJ02	-0.25	190	-0.74	140	+0.26	160	+0.50	190	-2.16	130
NI01	+0.50	30	-0.58	310	+0.41	60	+1.92	60	-1.78	310
NI02	+0.53	350	-0.49	250	+0.30	40	+1.83	350	-1.66	250
NI03	+0.54	350	-0.48	250	+0.23	350	+1.81	350	-1.56	260
NI04	+0.53	350	-0.47	250	+0.23	350	+1.80	350	-1.55	270
NI05	+0.51	330	-0.47	250	+0.23	350	+1.73	350	-1.48	270
NI06	+0.53	330	-0.43	260	+0.23	330	+1.76	340	-1.46	270
NI07	+0.51	320	-0.48	260	+0.26	290	+1.80	320	-1.51	260
NI08	+0.52	310	-0.51	250	+0.35	280	+1.94	320	-1.68	270
WI01	+0.51	310	-0.43	10	+0.35	280	+1.92	310	-1.52	270
WI02	+0.49	290	-0.55	350	+0.36	320	+1.85	310	-1.58	350
WI03	+0.51	280	-0.54	350	+0.29	330	+1.86	290	-1.61	350
WI04	+0.49	280	-0.54	350	+0.24	280	+1.77	280	-1.57	350
WI05	+0.49	260	-0.55	350	+0.23	270	+1.72	290	-1.64	350
WI06	+0.53	280	-0.48	120	+0.25	340	+1.83	290	-1.36	160
WI07	+0.49	260	-0.46	0	+0.23	270	+1.76	270	-1.47	340
WI08	+0.51	260	-0.45	0	+0.24	270	+1.73	260	-1.42	350
WI09	+0.50	250	-0.45	0	+0.24	270	+1.79	260	-1.38	350
WI10	+0.49	250	-0.45	180	+0.29	200	+1.73	230	-1.42	200
WI11	+0.49	220	-0.36	10	+0.32	250	+1.95	230	-1.03	10
SI02	+0.53	190	-0.51	240	+0.36	220	+1.88	190	-2.04	250
SG05	+0.47	160	-0.53	250	+0.29	120	+1.83	170	-1.88	250

Summary of Peak Values and Corresponding Wind Directions (data on this page only)

Peak Tap ID	Max Mean		Min Mean		Max St Dev		Max Peak		Min Peak	
	+0.55	350	-0.99	210	+0.47	200	+2.01	110	-3.10	190
	NJ03		WJ11		WJ12		EJ03		WJ12	

Table A1
Summary of the External Pressure Coefficients
(referenced to an hourly mean velocity)

Individual Tap ID	Means				Std Dev (Max)		Peak Positive		Peak Negative	
	Maximum Coeff.	Dir	Minimum Coeff.	Dir	Coeff.	Dir	Coeff.	Dir	Coeff.	Dir
SG06	+0.49	110	-0.59	200	+0.39	170	+1.89	130	-2.14	170
SG07	+0.12	150	-0.46	350	+0.15	200	+0.92	140	-1.17	350
SG09	+0.18	150	-0.45	350	+0.20	190	+1.32	140	-1.16	350
SG10	+0.26	150	-0.45	350	+0.25	190	+1.55	130	-1.15	350
SG11	+0.43	150	-0.75	80	+0.35	90	+1.76	160	-2.47	90
SG12	+0.50	150	-0.82	90	+0.39	100	+1.94	170	-2.77	90
EG01	+0.43	130	-0.67	190	+0.31	160	+1.77	130	-2.16	190
EG02	+0.51	110	-0.66	190	+0.40	170	+1.95	110	-2.44	200
EG03	+0.10	130	-0.52	200	+0.25	190	+0.97	130	-2.31	190
EG04	-0.06	140	-0.49	210	+0.21	190	+0.57	140	-1.75	200
EG05	-0.02	140	-0.44	210	+0.20	190	+0.59	140	-1.67	200
EG06	-0.09	150	-0.44	320	+0.19	200	+0.52	280	-1.43	350
EG07	+0.01	150	-0.48	350	+0.21	200	+0.78	150	-1.40	350
EG08	+0.02	150	-0.47	350	+0.15	260	+0.75	150	-1.22	350
EG09	-0.29	270	-0.53	130	+0.21	200	+0.53	280	-2.21	200
EG10	-0.28	270	-0.60	0	+0.20	10	+0.68	270	-1.72	10
EG12	-0.15	50	-0.85	10	+0.40	30	+0.90	30	-2.95	10
EG13	+0.40	30	-0.53	300	+0.33	60	+1.80	10	-1.55	310
RF01	-0.25	50	-0.68	200	+0.22	200	+0.68	270	-2.15	200
RF02	-0.29	270	-0.88	0	+0.29	10	+0.64	270	-2.62	10
RF03	-0.20	340	-0.46	70	+0.20	330	+1.13	330	-2.00	70
RF04	-0.29	270	-0.54	10	+0.18	210	+0.80	270	-1.63	10
NE01	+0.41	20	-0.97	60	+0.57	50	+1.78	10	-3.86	50
NE02	+0.43	0	-0.61	60	+0.31	30	+1.75	10	-1.84	70
NE03	+0.48	350	-0.63	60	+0.36	30	+1.81	350	-2.10	70
NE04	+0.43	110	-0.47	30	+0.22	90	+1.53	120	-1.33	40
NE05	-0.21	180	-0.45	260	+0.15	260	+0.33	160	-1.24	250
NE06	+0.02	40	-0.60	300	+0.34	50	+1.65	40	-1.79	310
NE07	+0.40	10	-0.46	80	+0.34	60	+1.73	10	-1.53	70
NE08	+0.48	350	-0.45	250	+0.22	350	+1.78	350	-1.50	250
NE09	+0.51	350	-0.46	250	+0.22	350	+1.74	350	-1.45	250
WE01	+0.45	320	-0.70	30	+0.39	0	+1.67	320	-2.54	10
WE02	+0.39	310	-0.65	30	+0.34	10	+1.57	320	-2.16	40
WE03	+0.06	320	-0.52	40	+0.20	30	+0.72	330	-1.71	40
WE04	-0.15	330	-0.49	40	+0.16	40	+0.71	120	-1.31	40
WE05	-0.10	330	-0.45	50	+0.15	40	+0.68	120	-1.29	40
WE06	-0.26	180	-0.44	350	+0.15	260	+0.35	120	-1.24	250
WE07	-0.20	170	-0.42	70	+0.15	310	+0.51	340	-1.24	130
WE08	-0.23	180	-0.45	260	+0.16	150	+0.32	160	-1.26	140
WE09	-0.33	340	-0.46	150	+0.19	160	+0.34	230	-1.48	170
WE10	-0.26	340	-0.90	220	+0.27	230	+0.28	340	-2.48	220
WE11	+0.20	220	-0.77	180	+0.41	200	+1.52	230	-2.76	190
WE12	+0.44	220	-0.55	140	+0.42	240	+1.97	230	-2.18	160
SE01	+0.22	160	-0.46	350	+0.28	200	+1.57	190	-1.33	220
SE02	+0.43	190	-0.50	70	+0.24	190	+1.80	170	-1.59	80
SE03	-0.08	190	-0.51	310	+0.23	210	+1.17	210	-1.35	270
SE04	-0.33	240	-0.66	200	+0.22	200	+0.27	270	-2.08	200
SE05	+0.46	150	-0.60	80	+0.26	90	+1.78	170	-2.23	80
SE06	+0.38	310	-0.64	30	+0.32	10	+1.49	310	-1.90	40
SE07	+0.45	130	-0.63	50	+0.27	90	+1.67	130	-1.91	60
SE08	+0.51	60	-0.60	350	+0.30	0	+1.90	80	-2.01	350
EE01	+0.39	130	-0.57	200	+0.23	170	+1.57	130	-1.65	190
EE02	+0.42	120	-0.46	30	+0.22	90	+1.53	120	-1.30	40
EE05	+0.43	110	-0.46	30	+0.21	120	+1.56	120	-1.37	40
EE06	+0.46	110	-0.52	40	+0.26	90	+1.59	110	-1.36	40

Summary of Peak Values and Corresponding Wind Directions (data on this page only)

Peak Tap ID	Max Mean		Min Mean		Max St Dev		Max Peak		Min Peak	
	+0.51	110	-0.97	60	+0.57	50	+1.97	230	-3.86	50
	EG02		NE01		NE01		WE12		NE01	

Table A1
Summary of the External Pressure Coefficients
(referenced to an hourly mean velocity)

Individual Tap ID	Means				Std Dev (Max)		Peak Positive		Peak Negative	
	Maximum Coeff.	Dir	Minimum Coeff.	Dir	Coeff.	Dir	Coeff.	Dir	Coeff.	Dir
EE07	+0.49	90	-0.50	160	+0.27	130	+1.81	100	-1.49	350
EE08	+0.48	90	-0.50	170	+0.27	130	+1.74	100	-1.45	190
EE09	+0.51	80	-0.47	330	+0.24	100	+1.71	90	-1.49	340
EE10	-0.39	270	-0.85	200	+0.26	210	+0.31	270	-2.51	200
EE11	+0.52	80	-0.50	350	+0.25	80	+1.94	80	-1.68	340
EE12	-0.34	240	-0.56	40	+0.19	310	+0.29	270	-1.60	200
EE13	-0.17	340	-0.50	210	+0.19	40	+0.51	50	-1.38	200
EE14	+0.47	50	-0.71	350	+0.39	10	+1.81	60	-2.31	350
EE15	-0.22	330	-0.69	30	+0.28	40	+0.50	40	-2.28	40
EE16	+0.35	40	-0.46	80	+0.36	60	+1.79	60	-1.71	70
RE01	+0.51	50	-0.68	350	+0.41	10	+2.01	60	-2.29	350
RE02	+0.53	80	-0.48	330	+0.25	90	+1.93	90	-1.62	340
RE03	+0.49	90	-0.51	160	+0.29	130	+1.83	100	-1.48	350
RE04	+0.42	110	-0.55	180	+0.23	90	+1.49	90	-1.56	180
RE05	+0.32	120	-0.71	180	+0.29	150	+1.31	140	-1.90	190
ND01	+0.48	350	-0.47	250	+0.22	350	+1.71	350	-1.58	260
ND02	+0.48	350	-0.44	250	+0.22	350	+1.70	340	-1.49	260
ND03	+0.47	330	-0.47	260	+0.22	280	+1.71	340	-1.66	270
ND04	+0.46	320	-0.46	260	+0.24	280	+1.66	320	-1.58	260
ND05	+0.46	320	-0.46	260	+0.23	290	+1.74	320	-1.51	260
ND06	+0.47	310	-0.48	250	+0.32	340	+1.77	320	-1.67	260
WD01	+0.47	310	-0.40	0	+0.33	280	+1.86	310	-1.48	350
WD02	+0.44	290	-0.57	350	+0.33	320	+1.76	310	-1.89	350
WD03	+0.47	280	-0.53	350	+0.27	330	+1.78	290	-1.58	350
WD04	+0.48	280	-0.49	350	+0.22	280	+1.71	290	-1.42	350
WD05	+0.46	280	-0.53	350	+0.23	340	+1.70	290	-1.54	350
WD06	+0.50	260	-0.45	350	+0.22	270	+1.70	260	-1.25	350
WD07	+0.48	260	-0.45	350	+0.22	280	+1.70	280	-1.35	350
WD08	+0.49	260	-0.44	0	+0.22	270	+1.66	280	-1.36	350
WD09	+0.49	260	-0.44	0	+0.22	270	+1.67	260	-1.48	0
WD10	+0.47	260	-0.45	0	+0.22	270	+1.69	260	-1.43	0
WD11	+0.48	250	-0.42	0	+0.22	270	+1.68	260	-1.37	350
WD12	+0.37	250	-0.44	180	+0.28	200	+1.60	240	-1.49	180
WD13	+0.45	220	-0.36	310	+0.35	250	+1.91	230	-1.14	240
SD01	+0.40	210	-0.40	310	+0.28	230	+1.64	220	-1.32	260
SD02	+0.43	190	-0.50	250	+0.34	230	+1.77	200	-1.81	230
SD03	+0.46	180	-0.51	250	+0.34	230	+1.82	190	-1.76	230
SD04	+0.43	180	-0.53	250	+0.32	230	+1.77	190	-2.01	230
SD05	+0.43	160	-0.53	250	+0.28	120	+1.71	170	-1.88	250
SD06	+0.48	110	-0.57	200	+0.40	170	+2.01	120	-2.39	190
SD07	+0.26	220	-0.51	150	+0.39	200	+1.83	230	-1.77	170
SD08	+0.47	120	-0.46	40	+0.23	130	+1.69	130	-1.25	40
SD09	+0.41	220	-0.55	40	+0.29	240	+1.93	230	-1.71	90
SD11	+0.43	130	-0.53	40	+0.24	90	+1.64	190	-1.41	80
SD12	+0.47	130	-0.55	40	+0.24	90	+1.73	130	-1.31	40
SD13	+0.46	120	-0.52	40	+0.24	90	+1.66	120	-1.35	40
ED01	+0.40	130	-0.62	200	+0.27	170	+1.60	130	-1.90	180
ED02	+0.48	110	-0.65	190	+0.40	170	+1.88	120	-2.49	190
ED03	+0.40	120	-0.44	30	+0.21	130	+1.47	130	-1.32	40
ED04	+0.12	130	-0.49	210	+0.23	190	+0.95	130	-1.86	200
ED05	-0.02	140	-0.48	210	+0.20	200	+0.65	140	-1.61	210
ED06	+0.03	150	-0.44	220	+0.19	200	+0.74	320	-1.38	220
ED08	-0.00	150	-0.44	220	+0.19	200	+0.58	150	-1.24	200
ED09	+0.09	150	-0.45	350	+0.22	200	+0.84	150	-1.45	200
ED10	+0.09	150	-0.47	350	+0.15	140	+0.88	140	-1.27	350

Summary of Peak Values and Corresponding Wind Directions (data on this page only)

Peak Tap ID	Max Mean		Min Mean		Max St Dev		Max Peak		Min Peak	
	+0.53	80	-0.85	200	+0.41	10	+2.01	60	-2.51	200
	RE02		EE10		RE01		RE01		EE10	

Table A1
Summary of the External Pressure Coefficients
(referenced to an hourly mean velocity)

Individual Tap ID	Means				Std Dev (Max)		Peak Positive		Peak Negative	
	Maximum Coeff.	Dir	Minimum Coeff.	Dir	Coeff.	Dir	Coeff.	Dir	Coeff.	Dir
ED11	+0.42	70	-0.47	330	+0.25	80	+1.79	80	-1.48	350
EC01	+0.43	60	-0.49	340	+0.23	0	+1.70	80	-1.60	350
EC02	+0.40	60	-0.66	350	+0.31	0	+1.73	60	-2.30	350
NB01	+0.42	80	-0.50	170	+0.23	80	+1.74	80	-1.55	170
NB02	+0.31	90	-0.60	180	+0.22	90	+1.54	90	-1.54	180
NB03	+0.39	80	-0.49	180	+0.22	90	+1.57	100	-1.49	350
NB04	+0.41	80	-0.46	180	+0.22	80	+1.57	80	-1.53	350
NB05	+0.42	80	-0.50	170	+0.22	80	+1.63	80	-1.55	340
NB06	+0.37	30	-0.51	80	+0.32	50	+1.66	30	-1.88	70
NB07	+0.37	20	-0.63	330	+0.39	350	+1.72	10	-2.31	340
NB08	+0.37	0	-0.62	60	+0.29	30	+1.71	10	-1.96	70
NB09	+0.41	350	-0.56	60	+0.31	30	+1.70	350	-1.82	70
NB10	-0.14	170	-0.43	10	+0.15	260	+0.43	170	-1.38	110
NB11	+0.03	330	-0.49	210	+0.25	50	+1.33	30	-1.29	70
NB12	+0.36	10	-0.45	210	+0.27	60	+1.57	10	-1.44	70
NB13	+0.46	350	-0.44	80	+0.21	350	+1.66	350	-1.52	70
NB14	+0.47	350	-0.46	250	+0.22	350	+1.69	350	-1.51	250
WB01	+0.39	310	-0.84	20	+0.49	10	+1.54	310	-3.47	20
WB02	+0.37	320	-0.50	40	+0.24	20	+1.50	320	-1.71	40
WB03	+0.06	320	-0.51	40	+0.18	30	+0.80	320	-1.50	40
WB04	-0.14	140	-0.43	70	+0.15	260	+0.56	120	-1.14	70
WB05	-0.13	320	-0.47	70	+0.14	70	+0.51	120	-1.17	70
WB06	-0.31	110	-0.53	310	+0.16	260	+0.40	120	-1.35	260
WB07	-0.15	160	-0.43	70	+0.15	260	+0.42	150	-1.25	110
WB08	+0.48	120	-0.46	40	+0.23	130	+1.68	120	-1.23	40
WB09	-0.20	170	-0.41	70	+0.16	150	+0.41	160	-1.22	130
WB10	+0.50	130	-0.48	40	+0.25	90	+1.72	120	-1.18	40
WB11	+0.46	130	-0.49	40	+0.23	130	+1.72	130	-1.26	40
WB12	-0.29	340	-0.85	220	+0.31	230	+0.26	330	-2.60	220
WB13	+0.41	130	-0.44	30	+0.25	200	+1.72	200	-1.24	40
WB15	+0.16	220	-0.81	180	+0.46	190	+1.47	230	-3.11	190
SB01	+0.12	130	-0.43	320	+0.16	140	+1.02	140	-1.13	350
SB02	+0.27	130	-0.43	310	+0.21	130	+1.64	130	-1.20	350
SB04	+0.31	130	-0.48	310	+0.26	200	+1.69	130	-1.30	350
SB05	+0.11	200	-0.49	350	+0.27	200	+1.78	200	-1.53	270
SB06	+0.36	190	-0.45	280	+0.22	210	+1.65	190	-1.48	250
SB07	-0.29	180	-0.47	260	+0.19	160	+0.36	160	-1.46	160
SB08	+0.47	150	-0.49	70	+0.24	160	+1.85	160	-1.57	250
SB09	+0.46	150	-0.75	80	+0.29	90	+1.78	160	-2.23	80
SB10	+0.38	150	-0.72	80	+0.27	90	+1.38	170	-1.97	80
EB01	+0.38	130	-0.75	200	+0.33	170	+1.68	130	-2.33	190
EB02	+0.33	110	-0.56	170	+0.21	140	+1.49	100	-1.48	170
EB03	+0.34	90	-0.57	180	+0.22	90	+1.58	90	-1.51	180
EB04	+0.33	110	-0.54	180	+0.21	90	+1.49	100	-1.40	180
EB05	+0.36	80	-0.57	180	+0.22	80	+1.55	90	-1.56	350
EB06	+0.39	80	-0.51	180	+0.22	80	+1.58	90	-1.51	350
EB07	+0.41	80	-0.53	180	+0.22	80	+1.63	80	-1.55	350
EB08	+0.41	80	-0.47	330	+0.22	80	+1.62	80	-1.51	350
EB09	+0.40	80	-0.43	180	+0.21	80	+1.54	80	-1.43	350
EB10	+0.48	120	-0.49	40	+0.23	90	+1.66	120	-1.40	40
EB11	+0.44	80	-0.47	170	+0.22	80	+1.69	80	-1.54	340
EB12	+0.40	80	-0.48	170	+0.21	80	+1.60	80	-1.67	170
EB13	+0.44	80	-0.48	170	+0.23	80	+1.75	80	-1.53	170
EB14	+0.41	80	-0.50	330	+0.23	80	+1.71	80	-1.47	350
EB15	-0.08	310	-0.52	210	+0.18	40	+0.68	310	-1.35	220

Summary of Peak Values and Corresponding Wind Directions (data on this page only)

Peak Tap ID	Max Mean		Min Mean		Max St Dev		Max Peak		Min Peak	
	+0.50	130	-0.85	220	+0.49	10	+1.85	160	-3.47	20
	WB10		WB12		WB01		SB08		WB01	

Table A1
Summary of the External Pressure Coefficients
(referenced to an hourly mean velocity)

Individual Tap ID	Means				Std Dev (Max)		Peak Positive		Peak Negative	
	Maximum Coeff.	Dir	Minimum Coeff.	Dir	Coeff.	Dir	Coeff.	Dir	Coeff.	Dir
EB16	+0.40	50	-0.76	350	+0.37	10	+1.76	60	-2.29	350
EB17	-0.24	330	-0.68	30	+0.24	40	+0.49	260	-2.03	40
EB18	+0.34	30	-0.48	210	+0.29	60	+1.60	10	-1.46	70
NA01	+0.41	350	-0.47	210	+0.28	60	+1.61	350	-1.57	250
NA03	+0.50	350	-0.46	250	+0.22	350	+1.81	350	-1.81	250
NA04	+0.50	350	-0.45	250	+0.23	350	+1.84	350	-1.71	260
NA05	+0.50	350	-0.45	250	+0.22	350	+1.80	340	-1.56	260
NA06	+0.48	330	-0.46	250	+0.22	340	+1.77	340	-1.54	260
NA07	+0.48	330	-0.46	260	+0.22	280	+1.73	340	-1.51	270
NA08	+0.47	320	-0.46	260	+0.27	280	+1.73	320	-1.54	260
WA01	+0.45	290	-0.60	350	+0.33	330	+1.68	310	-2.02	350
WA02	+0.47	280	-0.53	350	+0.23	310	+1.77	290	-1.54	350
WA03	+0.48	280	-0.49	350	+0.22	340	+1.74	290	-1.44	350
WA04	+0.47	280	-0.51	350	+0.23	340	+1.75	290	-1.56	350
WA05	+0.50	260	-0.45	350	+0.23	270	+1.68	260	-1.33	350
WA06	+0.48	260	-0.45	350	+0.22	270	+1.68	280	-1.43	350
WA07	+0.48	260	-0.46	0	+0.22	270	+1.68	280	-1.54	350
WA08	+0.50	260	-0.46	0	+0.23	340	+1.77	260	-1.76	350
WA09	+0.51	250	-0.44	0	+0.23	270	+1.78	260	-1.66	350
WA10	+0.49	250	-0.44	0	+0.23	270	+1.78	260	-1.58	350
WA11	+0.41	230	-0.43	180	+0.30	200	+1.81	230	-1.66	180
WA12	+0.39	220	-0.41	310	+0.33	240	+1.80	230	-1.26	250
SA02	+0.40	190	-0.51	250	+0.33	230	+1.63	200	-1.69	230
SA03	+0.39	190	-0.51	250	+0.31	230	+1.45	190	-1.46	230
SA04	+0.40	180	-0.50	250	+0.29	230	+1.67	190	-1.63	250
SA05	+0.41	160	-0.50	250	+0.23	200	+1.75	170	-1.71	250
SA06	+0.13	150	-0.42	350	+0.16	140	+1.01	140	-1.15	350
SA07	+0.13	130	-0.42	320	+0.16	140	+1.04	140	-1.12	250
SA08	+0.22	130	-0.46	310	+0.24	210	+1.56	130	-1.24	350
SA09	-0.05	220	-0.48	310	+0.22	210	+1.13	220	-1.63	270
SA10	-0.30	320	-0.70	200	+0.22	210	+0.65	270	-2.23	200
EA01	+0.47	110	-0.67	190	+0.42	170	+1.92	120	-2.53	170
EA02	+0.04	310	-0.47	210	+0.20	190	+1.22	320	-1.59	200
EA03	+0.01	150	-0.42	220	+0.20	310	+1.20	310	-1.36	210
EA04	+0.08	150	-0.39	220	+0.20	310	+0.94	300	-1.25	220
EA05	+0.08	150	-0.45	350	+0.18	300	+1.03	300	-1.42	350
EA06	+0.14	150	-0.44	350	+0.16	260	+0.99	140	-1.26	350
EA07	-0.34	270	-0.80	200	+0.24	210	+0.81	300	-2.32	200
EA08	-0.31	320	-0.60	40	+0.18	40	+0.66	270	-1.62	40
EA09	-0.21	320	-0.49	210	+0.18	40	+0.63	260	-1.39	40
SG04	+0.47	160	-0.52	250	+0.30	230	+1.76	170	-1.78	230
SA01	+0.37	210	-0.41	310	+0.28	230	+1.64	220	-1.28	250
SI03	+0.52	180	-0.51	250	+0.32	230	+1.84	190	-1.87	250
SI04	+0.47	160	-0.55	250	+0.28	230	+1.80	170	-1.81	230
SI05	+0.50	160	-0.53	250	+0.31	120	+1.88	170	-1.85	250
SI06	+0.53	110	-0.60	190	+0.40	170	+1.95	110	-2.16	160
SI07	+0.08	150	-0.47	350	+0.19	130	+1.15	150	-1.23	260
SI08	+0.33	130	-0.47	350	+0.28	130	+1.92	130	-1.27	250
SI09	+0.41	150	-0.48	350	+0.28	190	+1.82	130	-1.28	350
SI10	+0.35	220	-0.72	180	+0.46	200	+1.95	240	-2.72	190
SI11	+0.43	150	-0.75	80	+0.35	90	+1.76	160	-2.47	90
SI12	+0.53	150	-0.79	90	+0.40	100	+1.93	130	-2.45	90
EI01	+0.45	130	-0.69	180	+0.37	150	+1.83	120	-2.44	180
EI02	+0.51	110	-0.69	190	+0.41	160	+1.91	110	-2.31	200
EI03	+0.13	120	-0.55	200	+0.26	190	+1.06	130	-2.39	200

Summary of Peak Values and Corresponding Wind Directions (data on this page only)

Peak Tap ID	Max Mean		Min Mean		Max St Dev		Max Peak		Min Peak	
	+0.53	110	-0.80	200	+0.46	200	+1.95	240	-2.72	190
	SI06		EA07		SI10		SI10		SI10	

Table A1
Summary of the External Pressure Coefficients
(referenced to an hourly mean velocity)

Individual Tap ID	Means		Std Dev (Max)		Peak Positive		Peak Negative	
	Maximum Coeff.	Dir	Minimum Coeff.	Dir	Coeff.	Dir	Coeff.	Dir
EI04	-0.10	140	-0.50	210	+0.21	190	+0.54	350
EI05	-0.03	130	-0.45	210	+0.21	190	+0.63	350
EI06	-0.18	30	-0.45	70	+0.20	350	+0.90	350
EI07	-0.32	50	-0.64	130	+0.24	130	+0.33	280
EI08	-0.25	180	-0.65	0	+0.23	10	+0.43	200
EI10	-0.23	50	-0.82	10	+0.35	40	+0.64	30
EI11	+0.46	30	-0.61	310	+0.41	60	+1.82	60
RI01	-0.27	190	-0.64	130	+0.24	140	+0.41	190
RI02	-0.12	300	-0.78	220	+0.32	240	+1.10	310
NH01	+0.48	80	-0.46	320	+0.26	80	+1.96	80
NH02	-0.26	180	-0.50	310	+0.16	290	+0.32	160
WH01	-0.28	180	-0.54	320	+0.16	340	+0.29	160
WH02	-0.03	330	-0.44	260	+0.20	300	+0.97	320
WH03	-0.30	190	-0.44	260	+0.17	160	+0.43	220
WH04	-0.32	340	-0.49	160	+0.19	170	+0.46	220
WH05	-0.23	340	-0.93	210	+0.26	230	+0.33	340
SH01	+0.50	60	-0.60	350	+0.31	0	+1.85	60
EH01	+0.46	130	-0.55	190	+0.27	160	+1.82	130
EH02	+0.47	110	-0.50	200	+0.23	120	+1.67	110
EH03	+0.48	110	-0.44	200	+0.24	90	+1.71	80
EH04	+0.46	100	-0.60	40	+0.37	50	+1.78	90
EH05	+0.48	110	-0.57	170	+0.29	130	+1.69	120
EH06	+0.43	90	-0.49	180	+0.25	130	+1.69	90
EH07	+0.51	80	-0.56	10	+0.26	20	+1.75	90
EH08	+0.50	80	-0.56	150	+0.25	80	+1.92	80
EH09	+0.48	50	-0.71	350	+0.41	0	+1.87	60
NG01	+0.41	10	-0.51	300	+0.34	60	+1.77	10
NG02	+0.55	350	-0.47	250	+0.26	40	+1.90	10
NG03	+0.56	350	-0.45	250	+0.23	350	+1.87	350
NG04	+0.56	350	-0.44	250	+0.23	350	+1.87	350
NG05	+0.53	330	-0.43	250	+0.23	350	+1.81	340
NG06	+0.54	320	-0.42	260	+0.24	280	+1.82	340
NG07	+0.54	320	-0.44	260	+0.26	300	+1.90	320
NG08	+0.55	310	-0.45	250	+0.35	280	+1.86	320
WG01	+0.53	310	-0.43	0	+0.36	280	+1.97	300
WG02	+0.47	290	-0.56	350	+0.34	320	+1.85	310
WG03	+0.50	280	-0.53	350	+0.28	330	+1.85	290
WG04	+0.48	280	-0.53	350	+0.23	280	+1.73	290
WG05	+0.47	280	-0.56	350	+0.23	340	+1.73	290
WG06	+0.52	250	-0.49	350	+0.24	270	+1.82	230
WG07	+0.53	280	-0.45	350	+0.23	280	+1.86	290
WG08	+0.49	280	-0.45	0	+0.23	340	+1.69	280
WG09	+0.50	260	-0.44	0	+0.22	270	+1.67	270
WG10	+0.49	260	-0.44	0	+0.23	270	+1.69	270
WG11	+0.51	250	-0.42	0	+0.23	270	+1.70	260
WG12	+0.42	230	-0.44	180	+0.29	200	+1.70	230
WG13	+0.47	220	-0.35	310	+0.33	250	+1.85	230
SG01	+0.47	210	-0.37	310	+0.28	240	+1.77	200
SG02	+0.48	190	-0.51	240	+0.35	230	+1.85	190
SG03	+0.51	180	-0.48	250	+0.31	230	+1.83	190

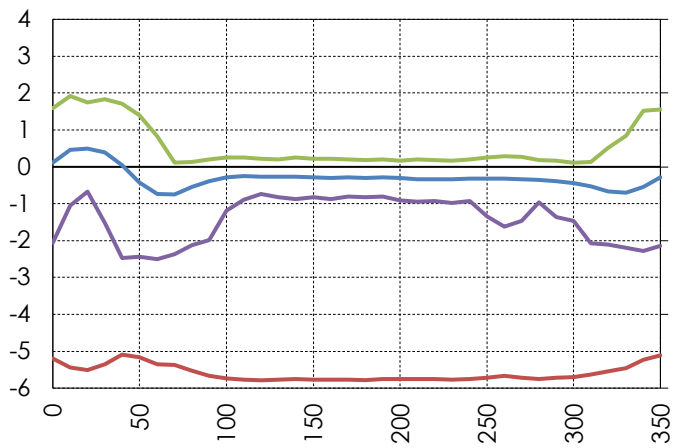
Summary of Peak Values and Corresponding Wind Directions (data on this page only)

Peak Tap ID	Max Mean		Min Mean		Max St Dev		Max Peak		Min Peak	
	+0.56	350	-0.93	210	+0.41	0	+1.97	300	-2.74	10
	NG04		WH05		EH09		WG01		EI10	

A.2 Plots of the External Pressure Coefficients

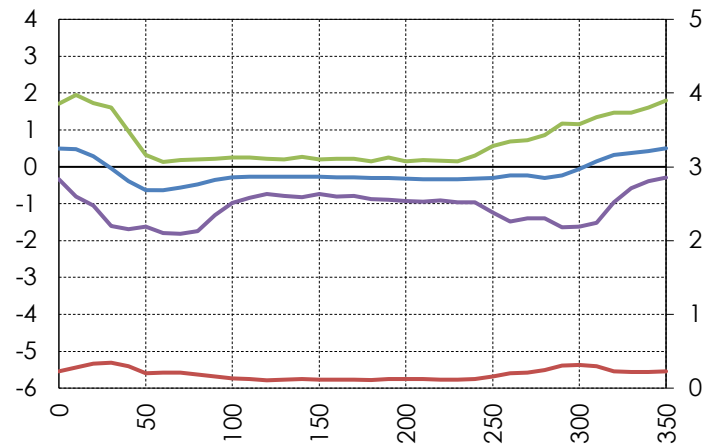
Individual Tap ID: NJ01

Port ID: 3



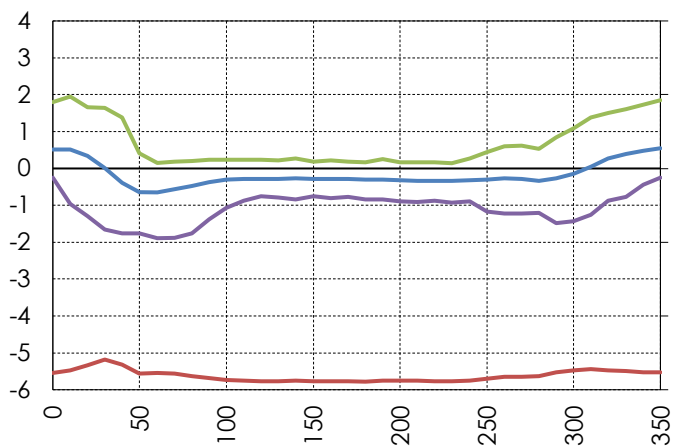
Individual Tap ID: NJ02

Port ID: 4



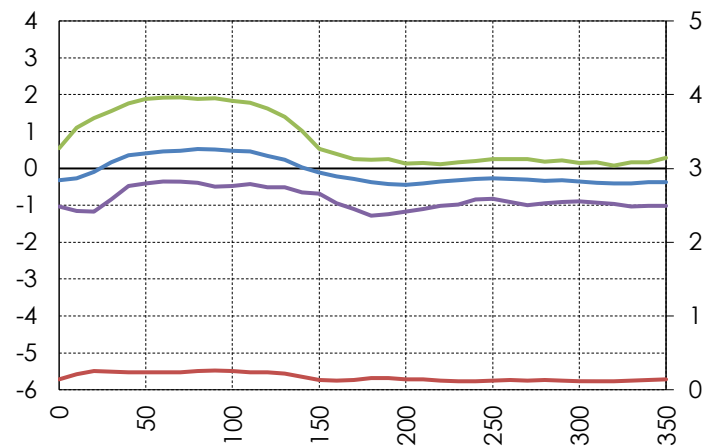
Individual Tap ID: NJ03

Port ID: 5



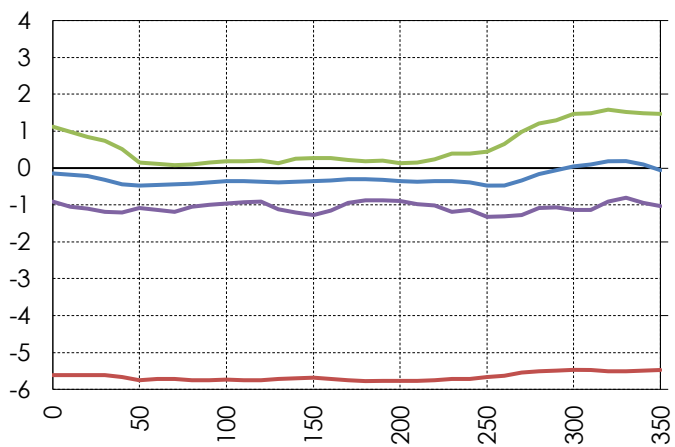
Individual Tap ID: NJ04

Port ID: 6



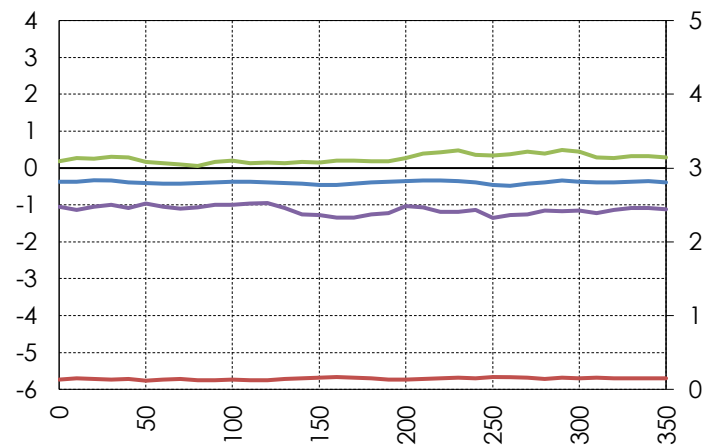
Individual Tap ID: NJ05

Port ID: 7

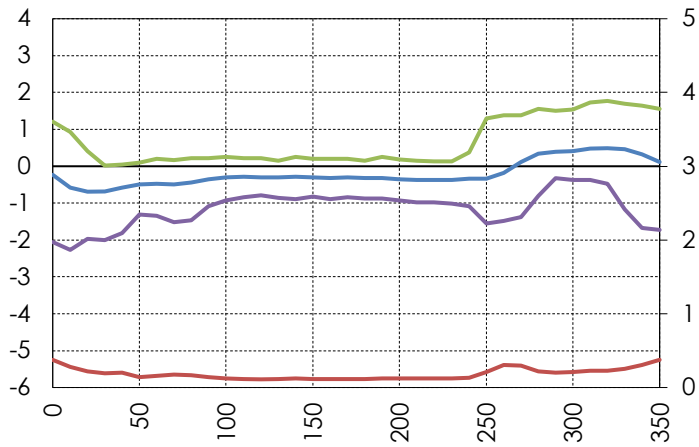


Individual Tap ID: NJ06

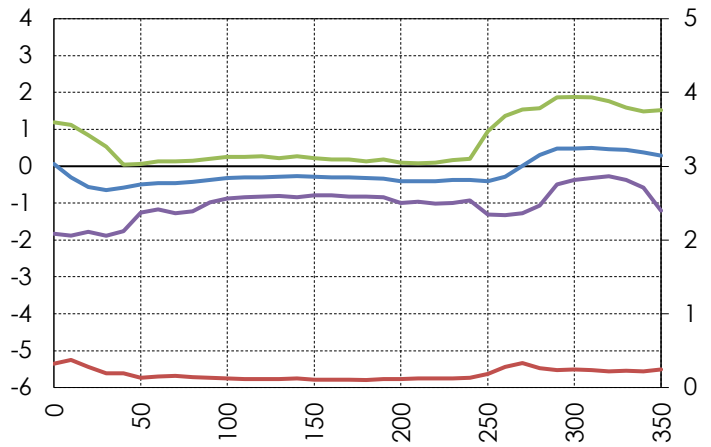
Port ID: 8



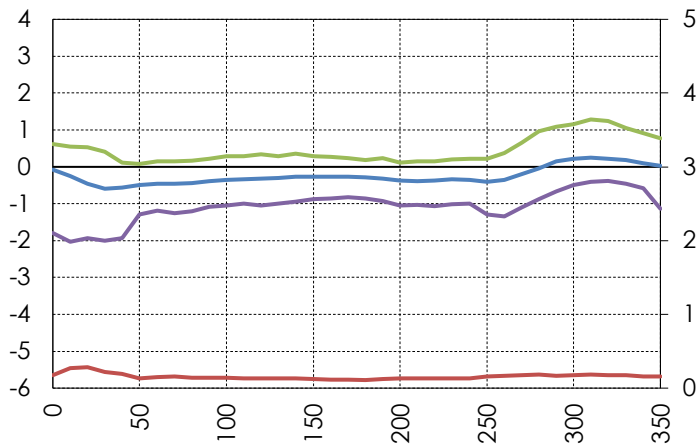
Individual Tap ID: WJ01 Port ID: 9



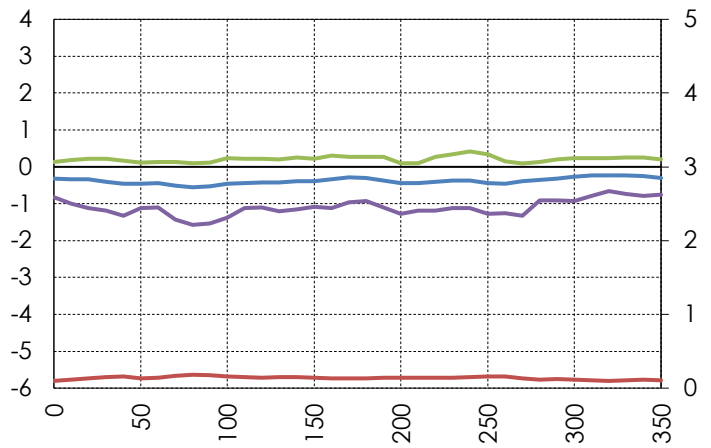
Individual Tap ID: WJ02 Port ID: 10



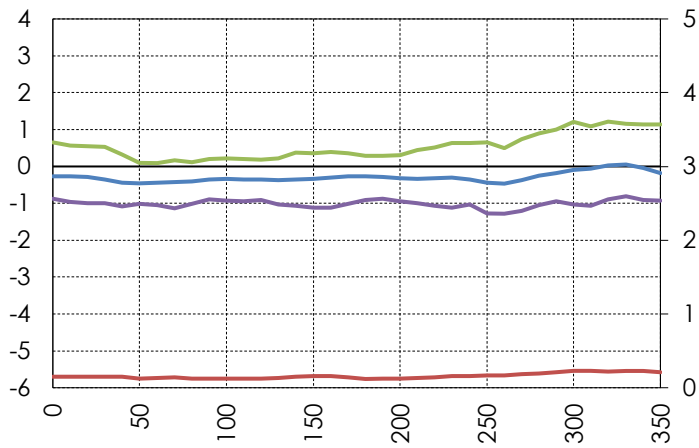
Individual Tap ID: WJ03 Port ID: 11



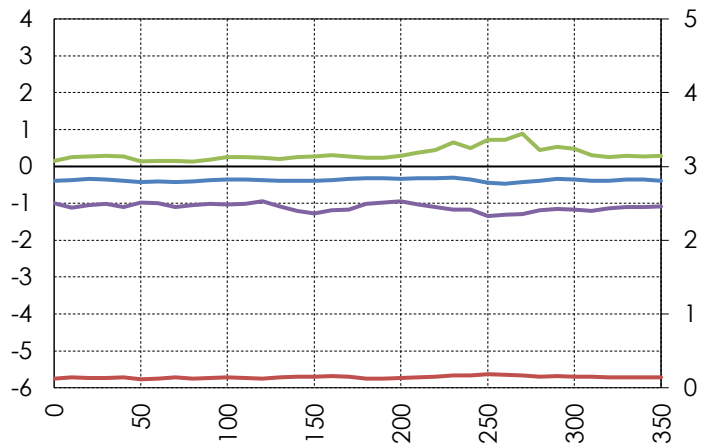
Individual Tap ID: WJ06 Port ID: 15



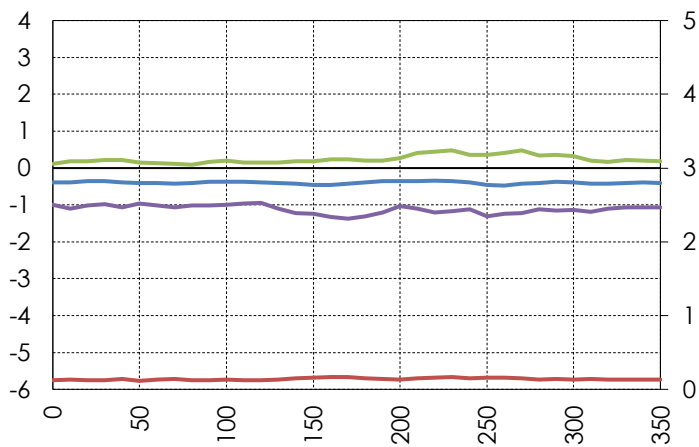
Individual Tap ID: WJ07 Port ID: 16



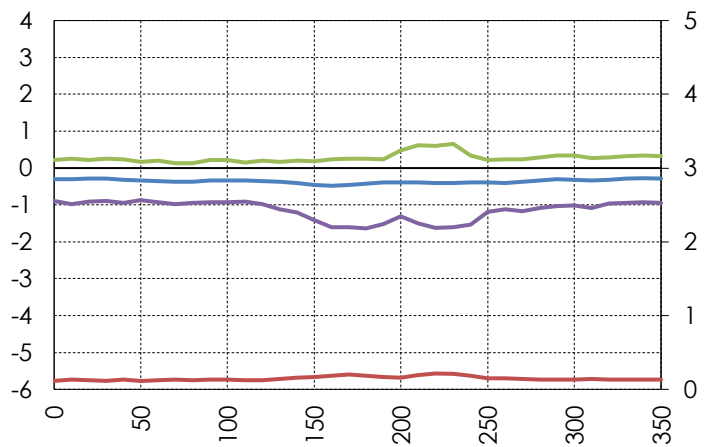
Individual Tap ID: WJ08 Port ID: 17



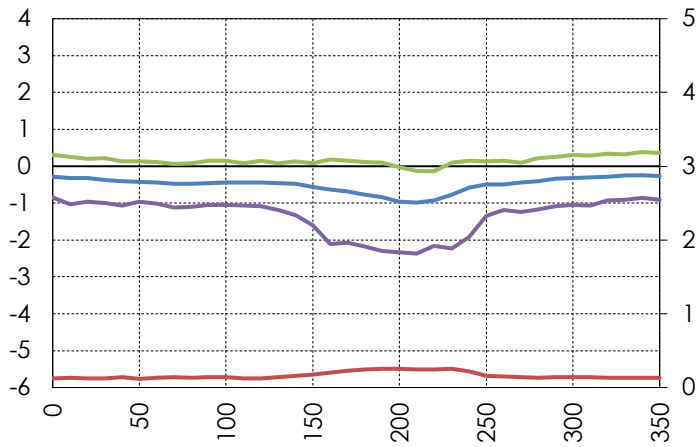
Individual Tap ID: WJ09 Port ID: 18



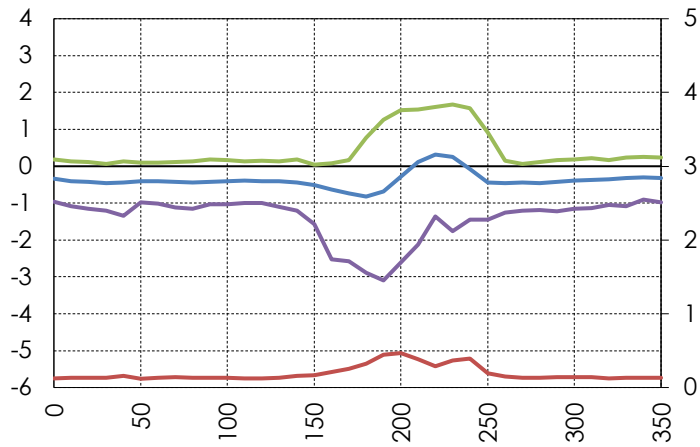
Individual Tap ID: WJ10 Port ID: 19



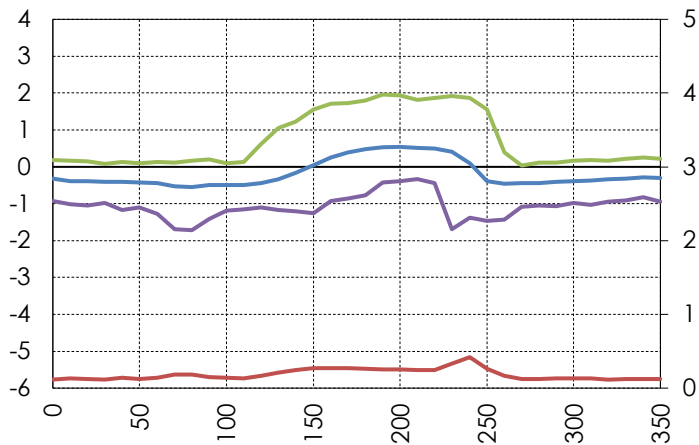
Individual Tap ID: WJ11 Port ID: 20



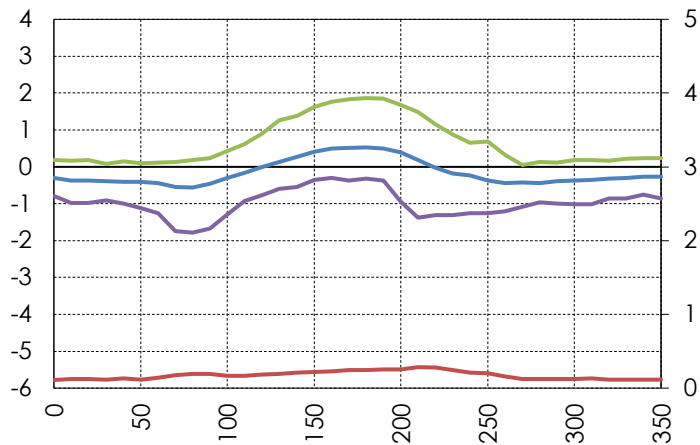
Individual Tap ID: WJ12 Port ID: 21



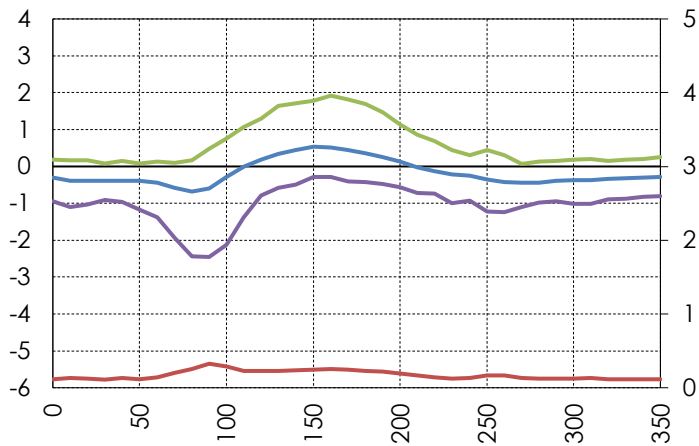
Individual Tap ID: SJ01 Port ID: 22



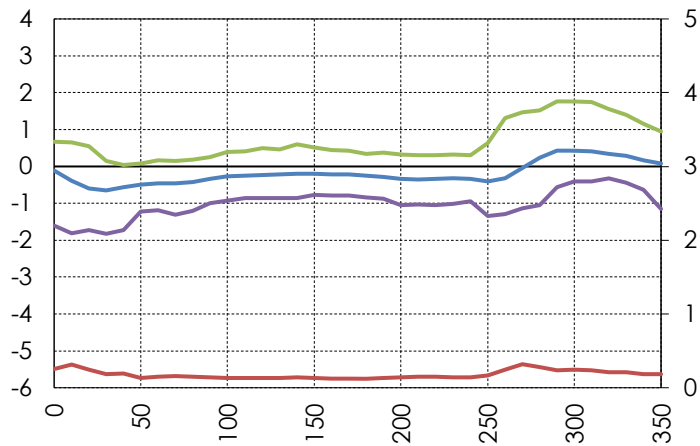
Individual Tap ID: SJ02 Port ID: 23



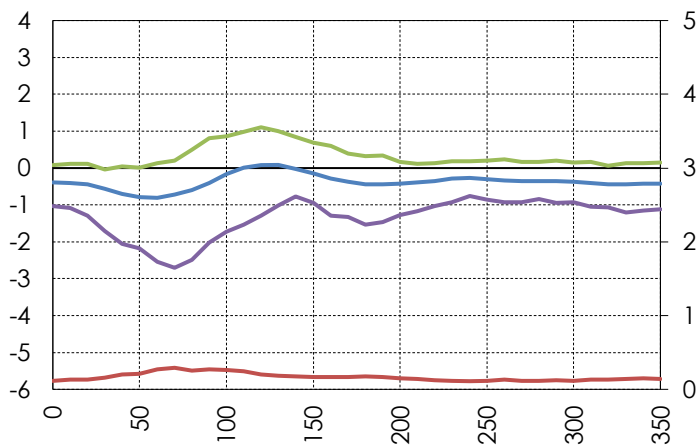
Individual Tap ID: SJ03 Port ID: 24



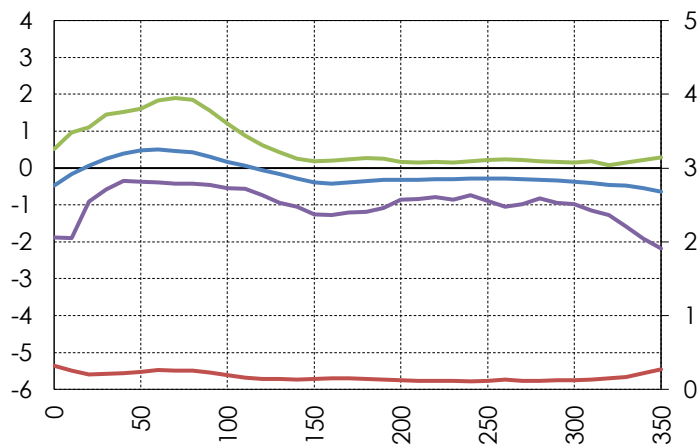
Individual Tap ID: SJ04 Port ID: 25



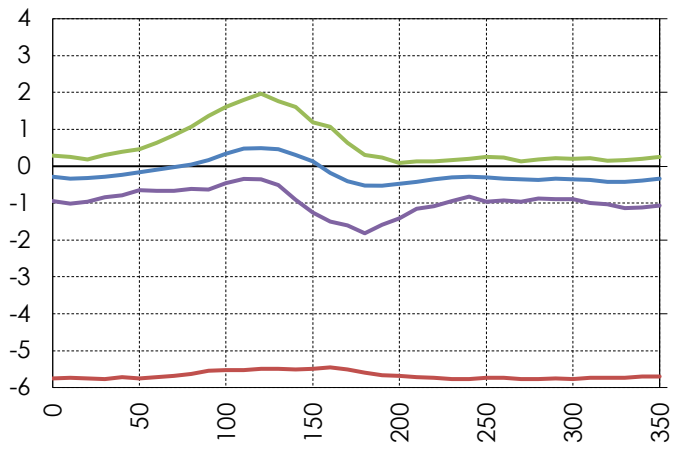
Individual Tap ID: SJ05 Port ID: 26



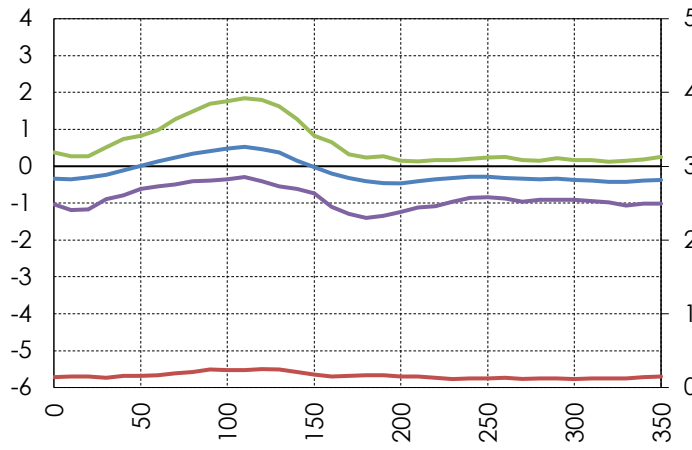
Individual Tap ID: SJ07 Port ID: 28



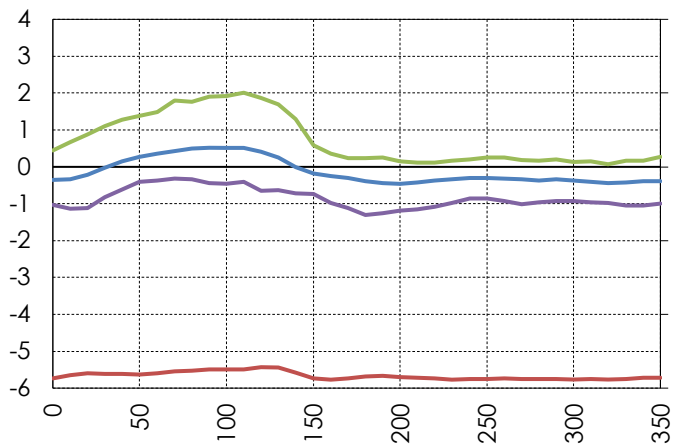
Individual Tap ID: EJ01 Port ID: 29



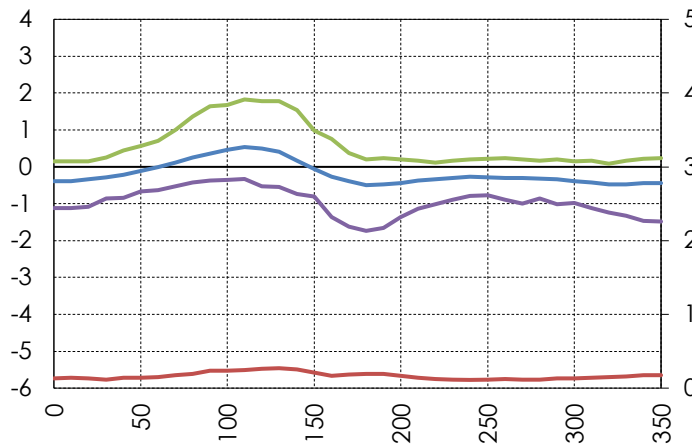
Individual Tap ID: EJ02 Port ID: 30



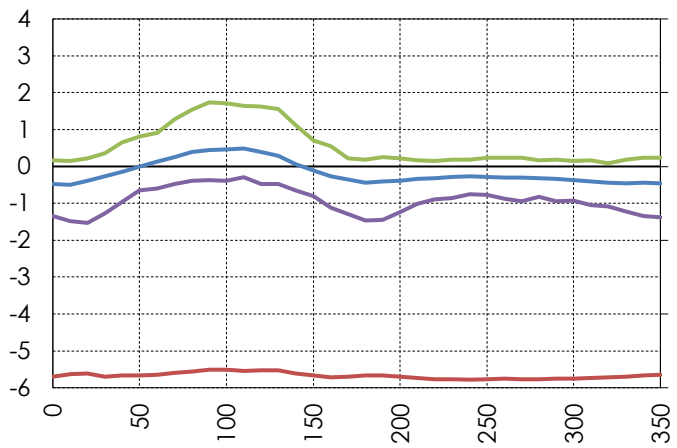
Individual Tap ID: EJ03 Port ID: 31



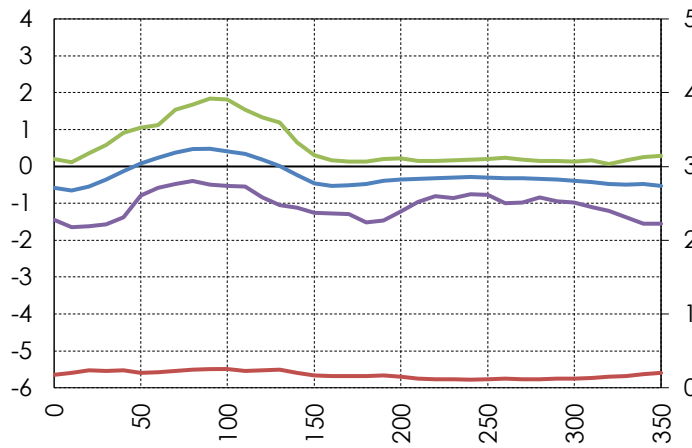
Individual Tap ID: EJ04 Port ID: 32



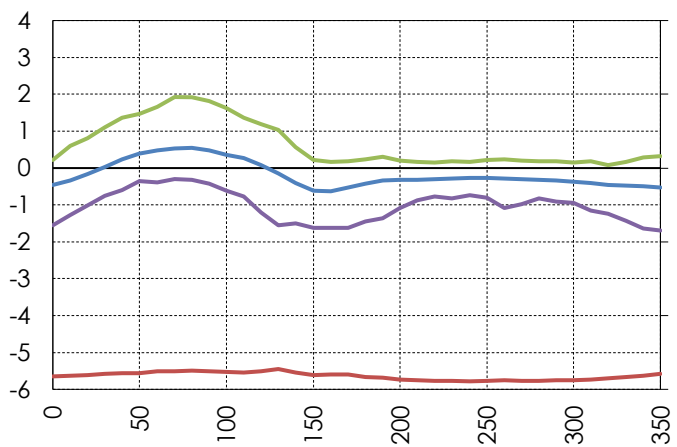
Individual Tap ID: EJ05 Port ID: 33



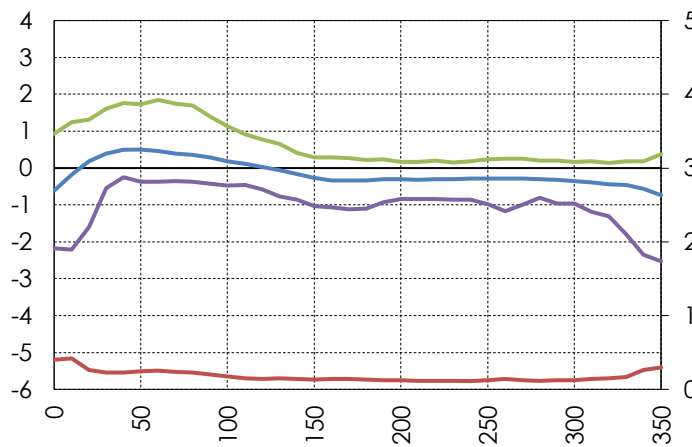
Individual Tap ID: EJ06 Port ID: 34



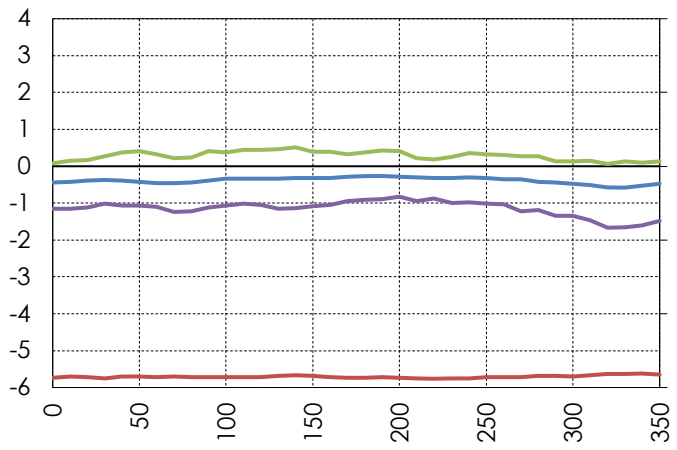
Individual Tap ID: EJ07 Port ID: 35



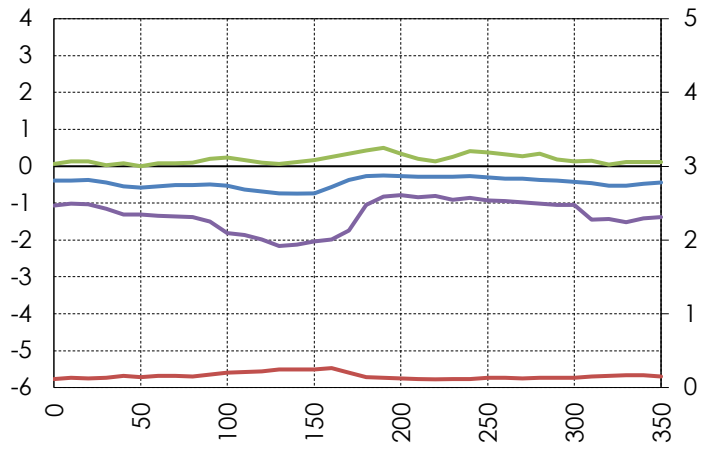
Individual Tap ID: EJ08 Port ID: 36



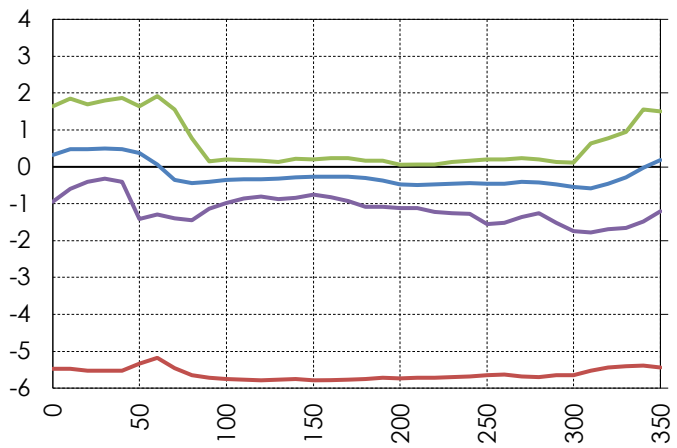
Individual Tap ID: RJ01 Port ID: 37



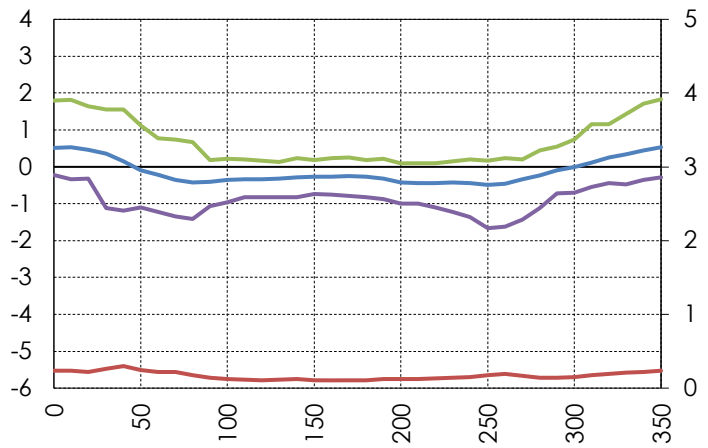
Individual Tap ID: RJ02 Port ID: 38



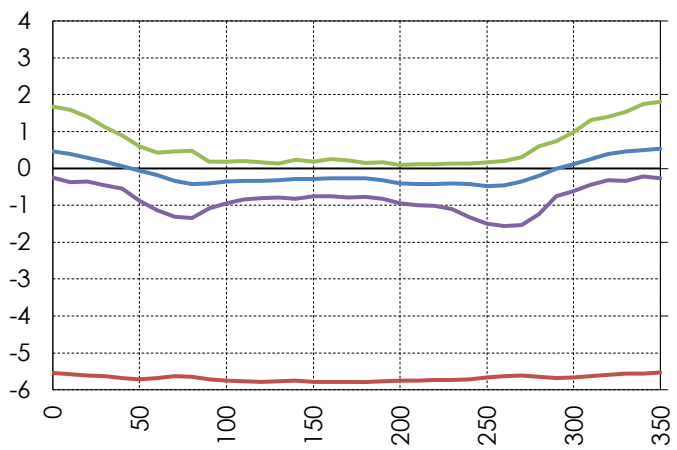
Individual Tap ID: NI01 Port ID: 39



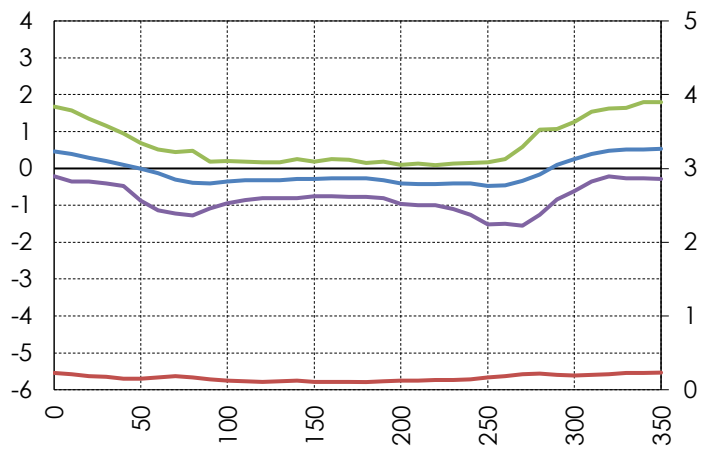
Individual Tap ID: NI02 Port ID: 40



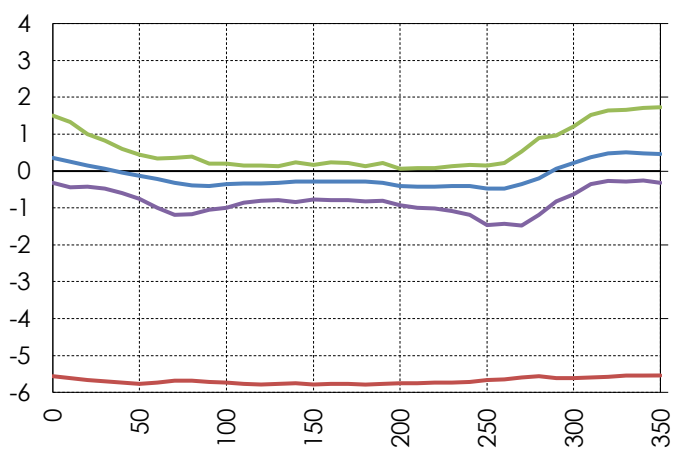
Individual Tap ID: NI03 Port ID: 41



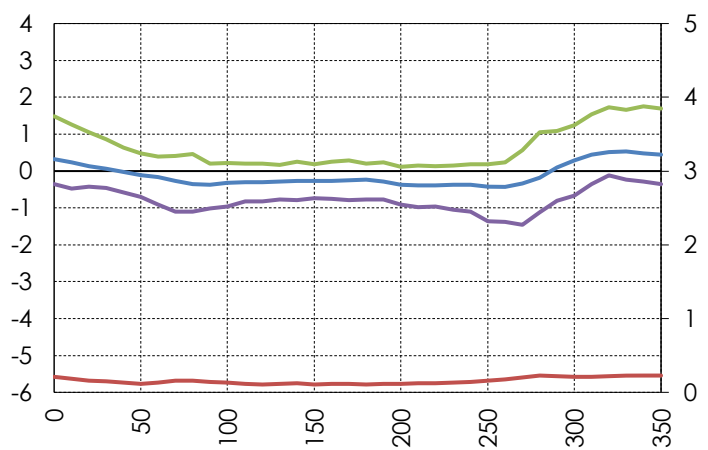
Individual Tap ID: NI04 Port ID: 42



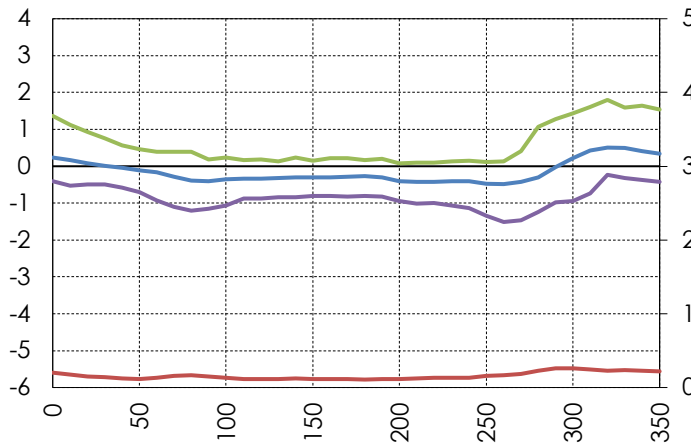
Individual Tap ID: NI05 Port ID: 43



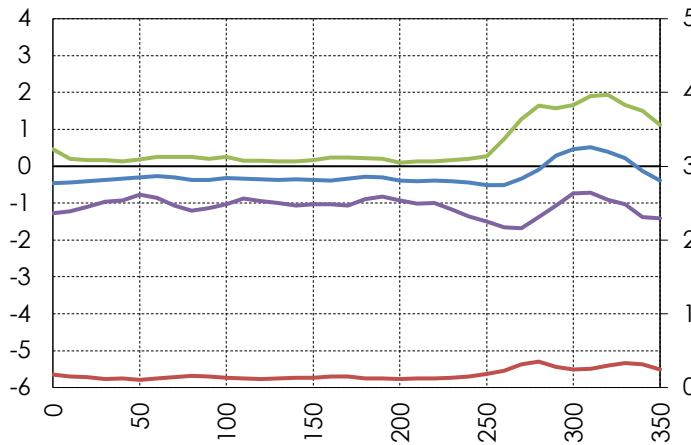
Individual Tap ID: NI06 Port ID: 48



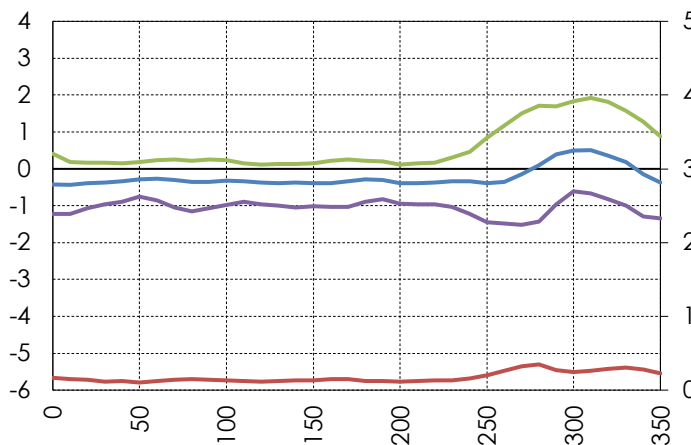
Individual Tap ID: NI07 Port ID: 49



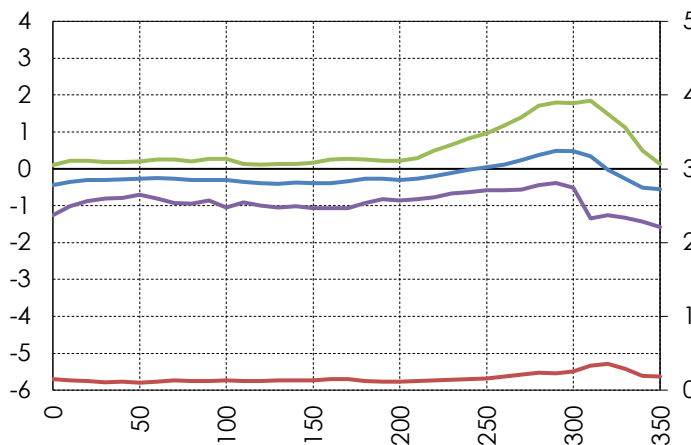
Individual Tap ID: NI08 Port ID: 50



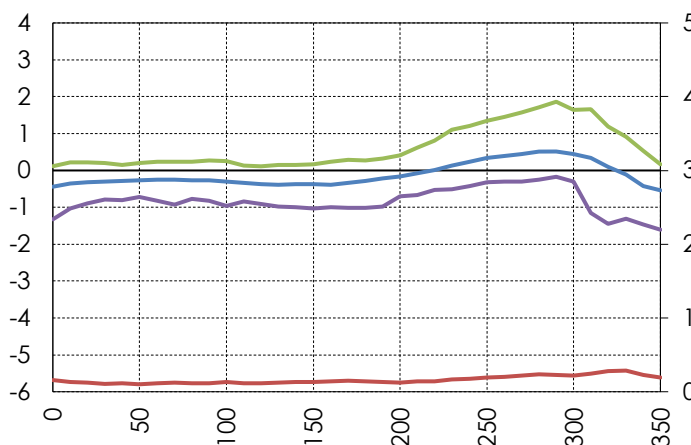
Individual Tap ID: WI01 Port ID: 51



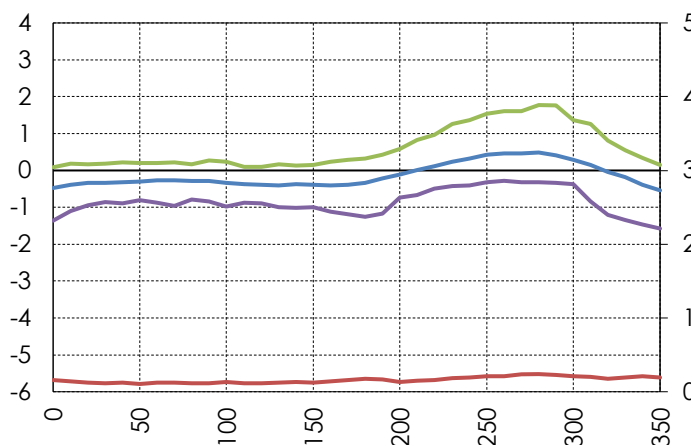
Individual Tap ID: WI02 Port ID: 52



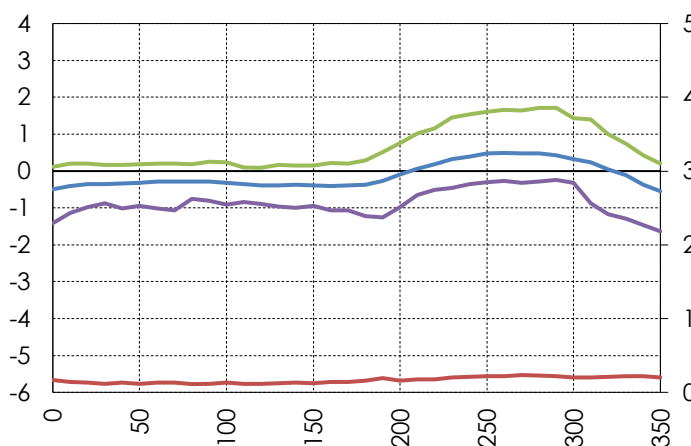
Individual Tap ID: WI03 Port ID: 53



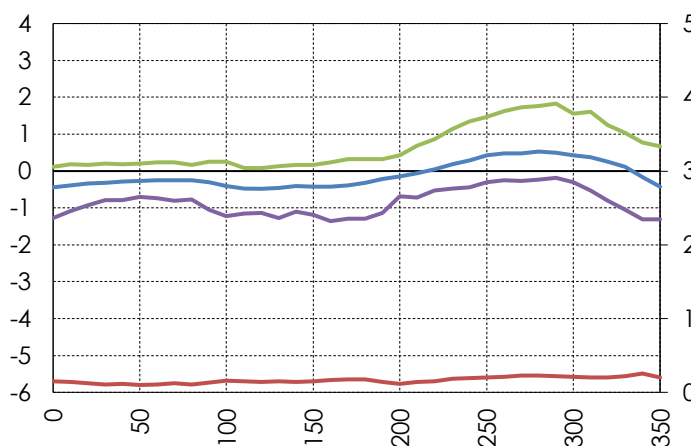
Individual Tap ID: WI04 Port ID: 54



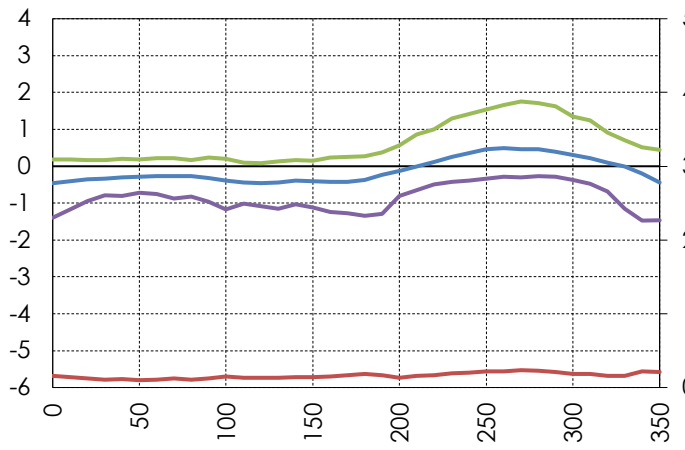
Individual Tap ID: WI05 Port ID: 55



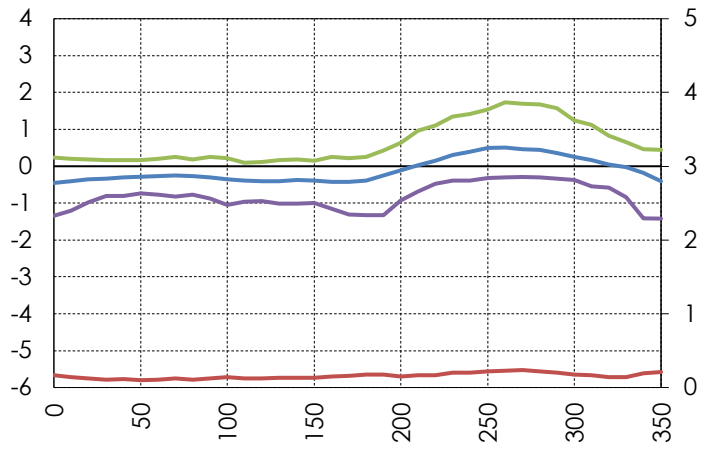
Individual Tap ID: WI06 Port ID: 56



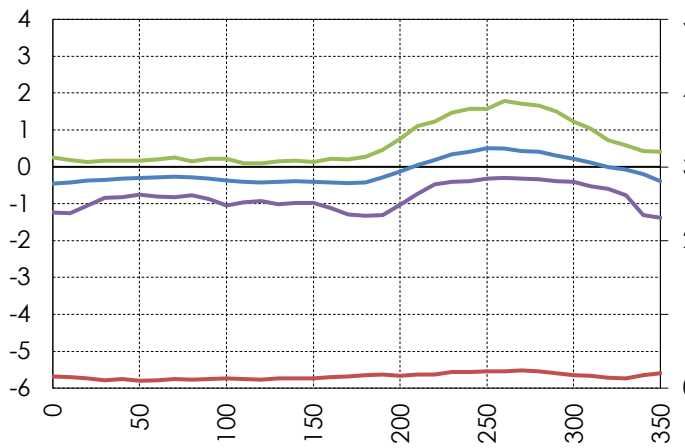
Individual Tap ID: WI07 Port ID: 57



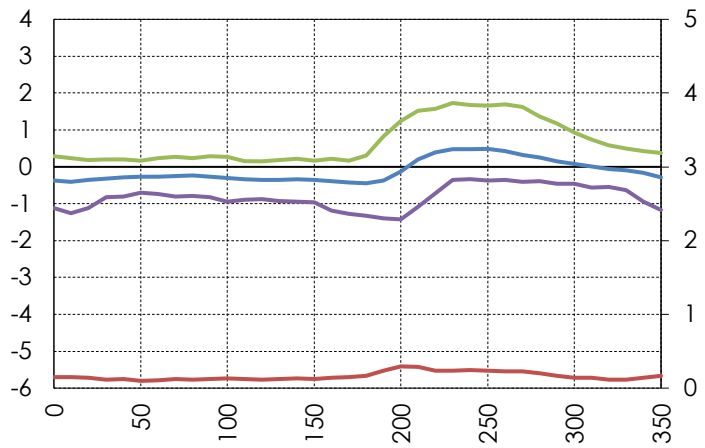
Individual Tap ID: WI08 Port ID: 58



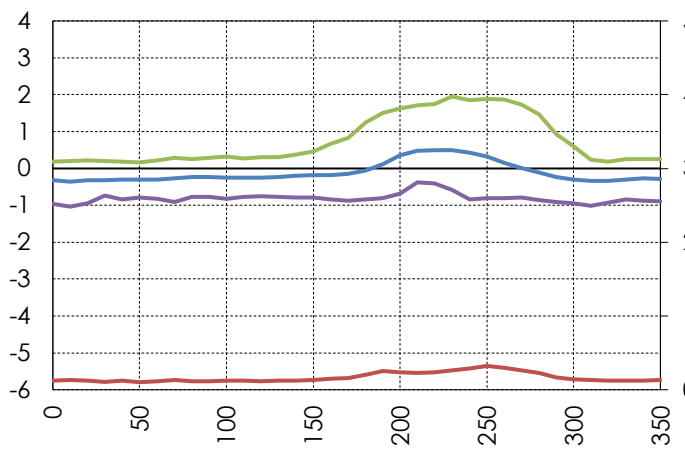
Individual Tap ID: WI09 Port ID: 59



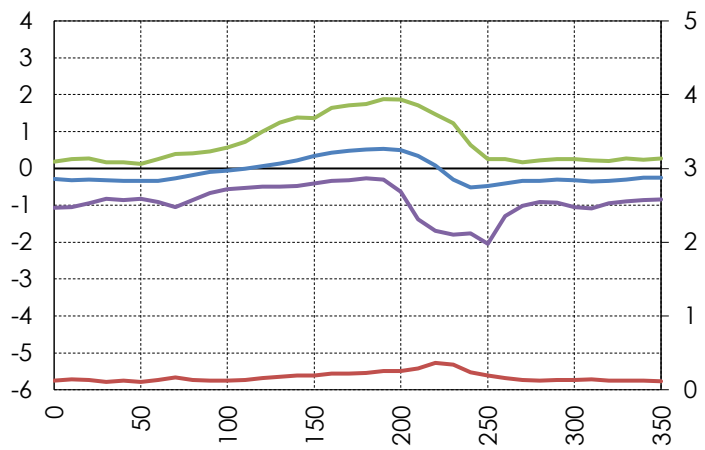
Individual Tap ID: WI10 Port ID: 60



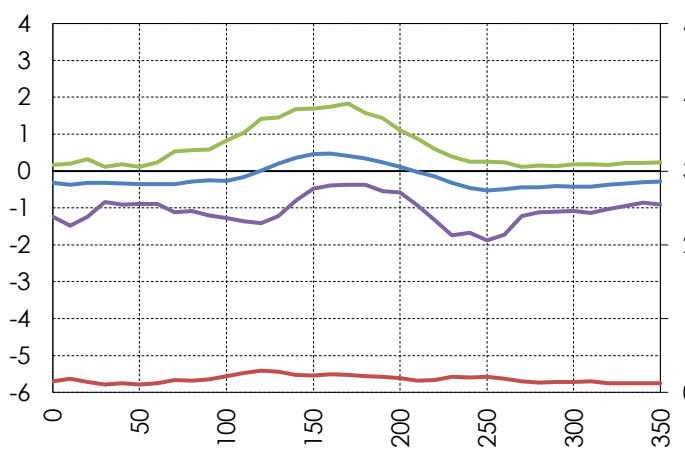
Individual Tap ID: WI11 Port ID: 61



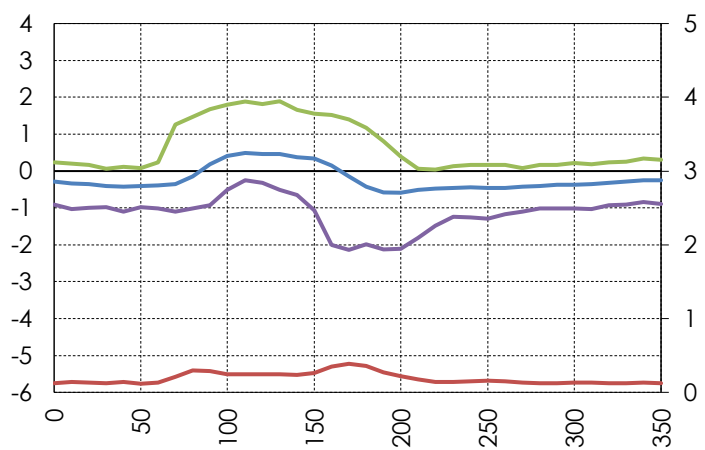
Individual Tap ID: SI02 Port ID: 63



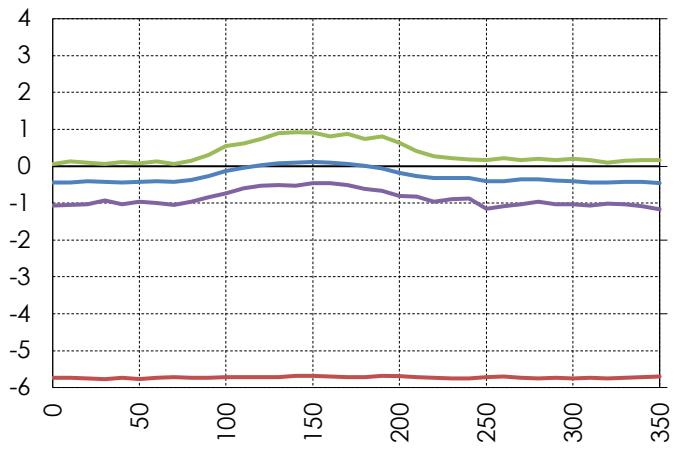
Individual Tap ID: SG05 Port ID: 128



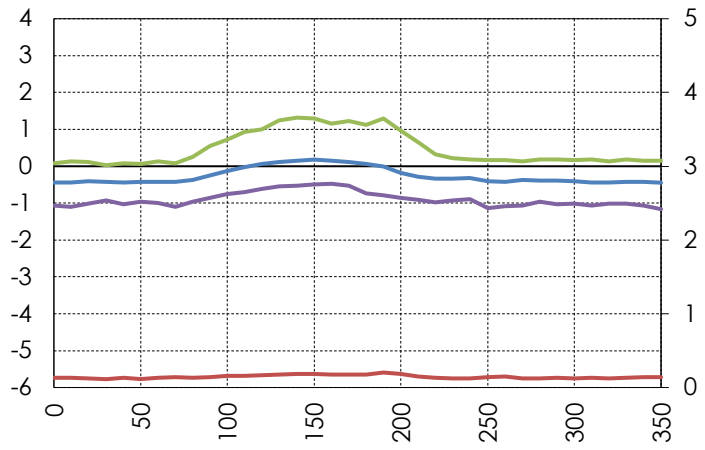
Individual Tap ID: SG06 Port ID: 129



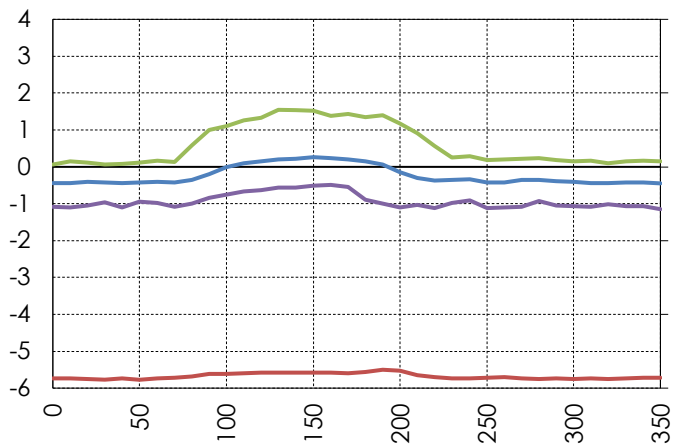
Individual Tap ID: SG07 Port ID: 130



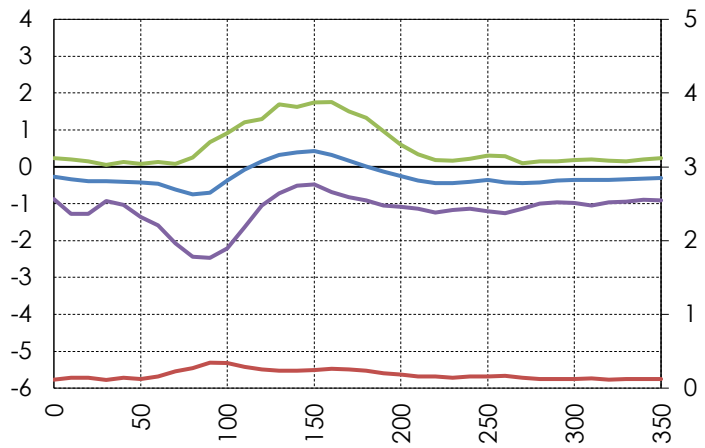
Individual Tap ID: SG09 Port ID: 131



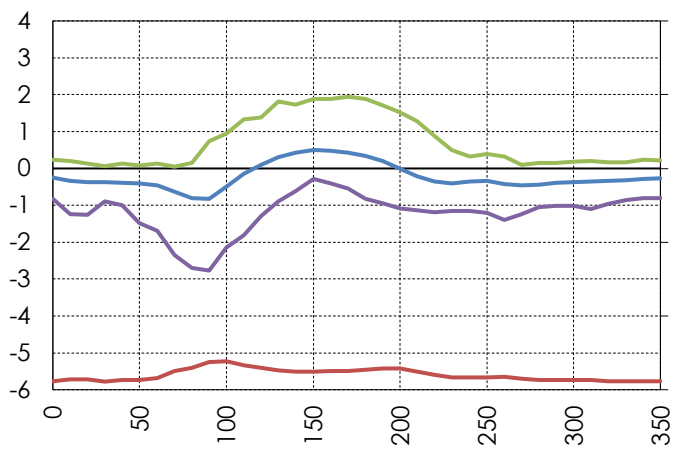
Individual Tap ID: SG10 Port ID: 132



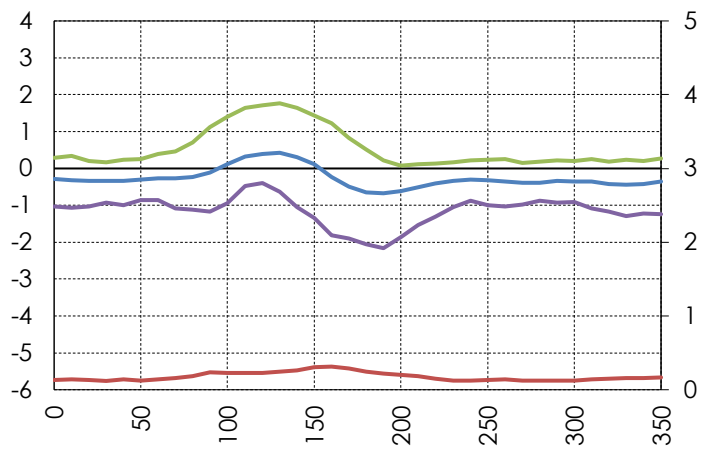
Individual Tap ID: SG11 Port ID: 133



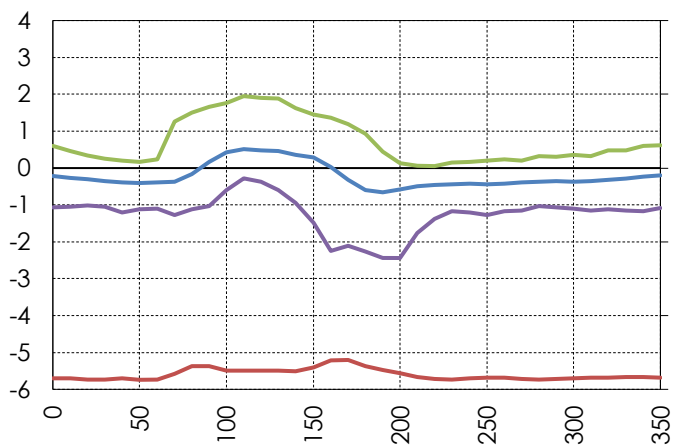
Individual Tap ID: SG12 Port ID: 134



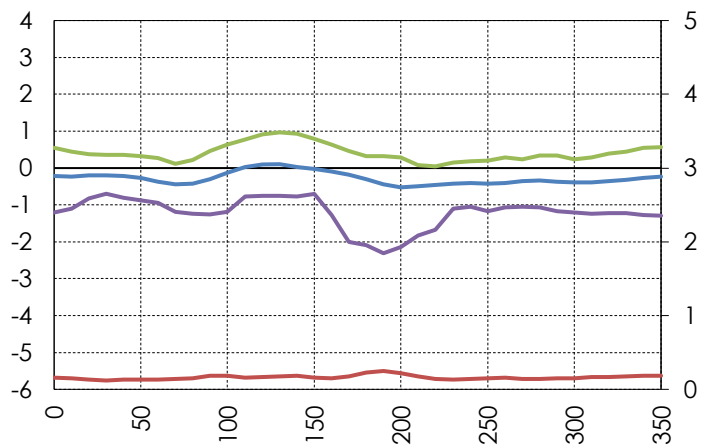
Individual Tap ID: EG01 Port ID: 135



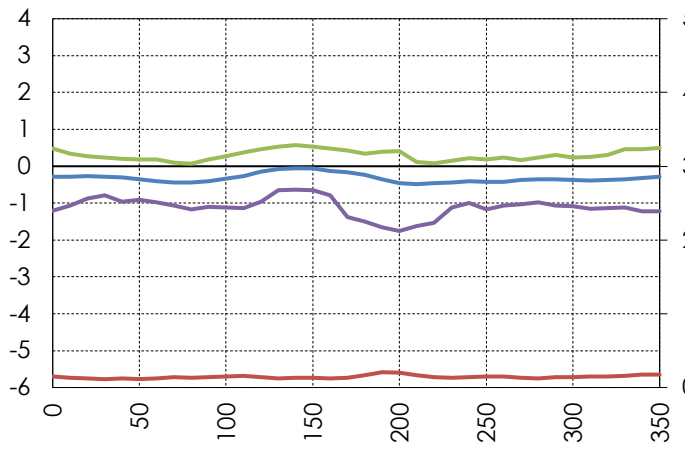
Individual Tap ID: EG02 Port ID: 136



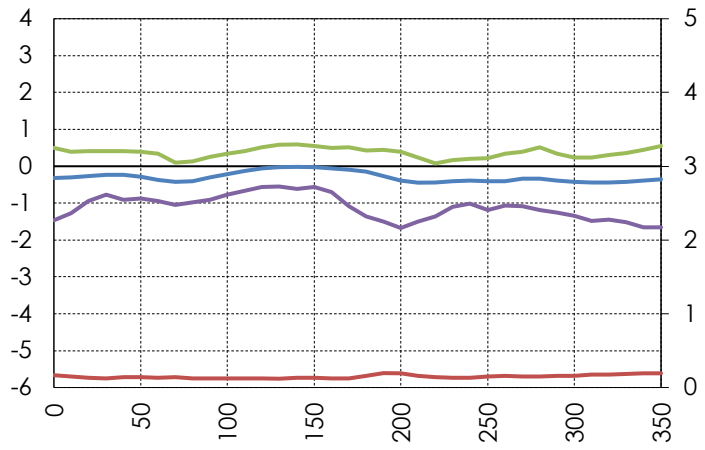
Individual Tap ID: EG03 Port ID: 137



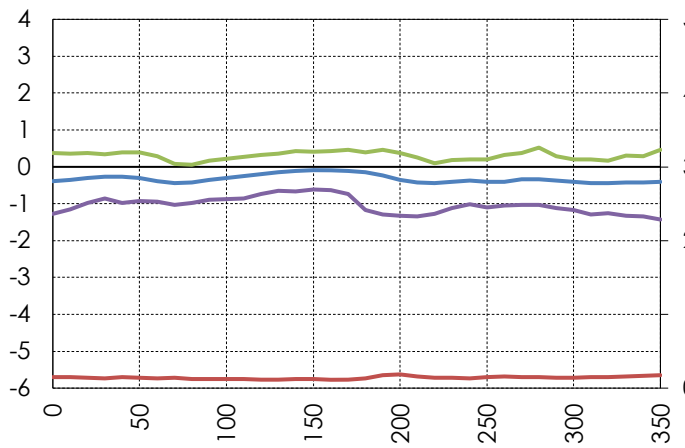
Individual Tap ID: EG04 Port ID: 138



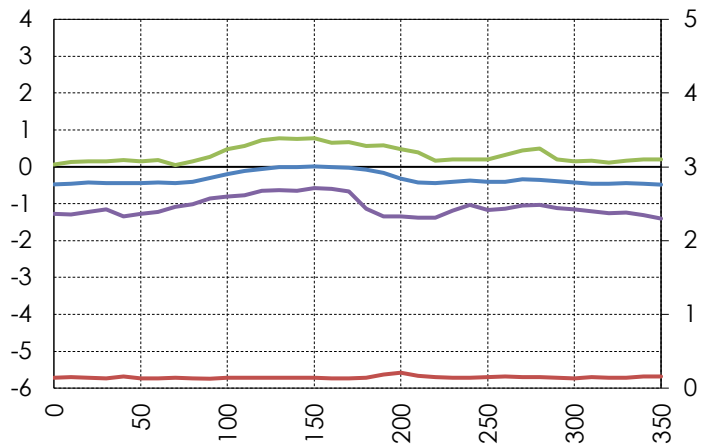
Individual Tap ID: EG05 Port ID: 139



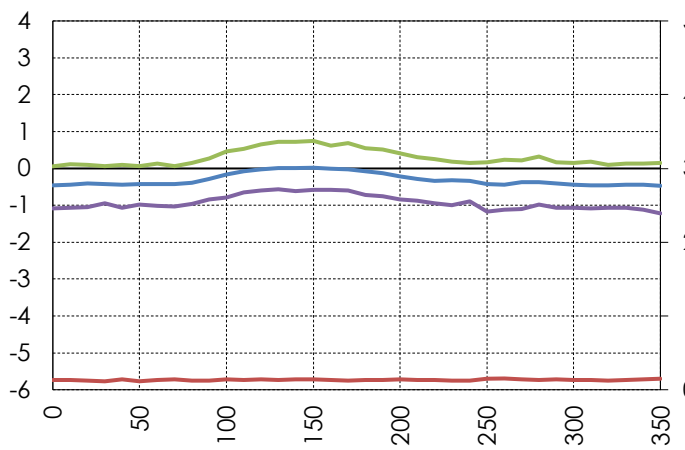
Individual Tap ID: EG06 Port ID: 140



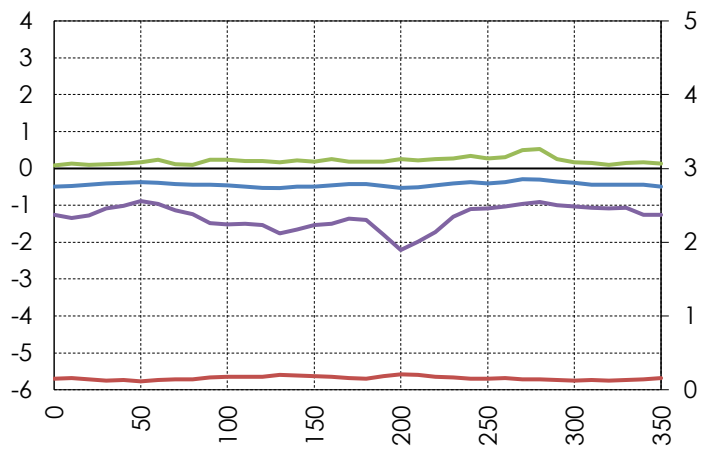
Individual Tap ID: EG07 Port ID: 141



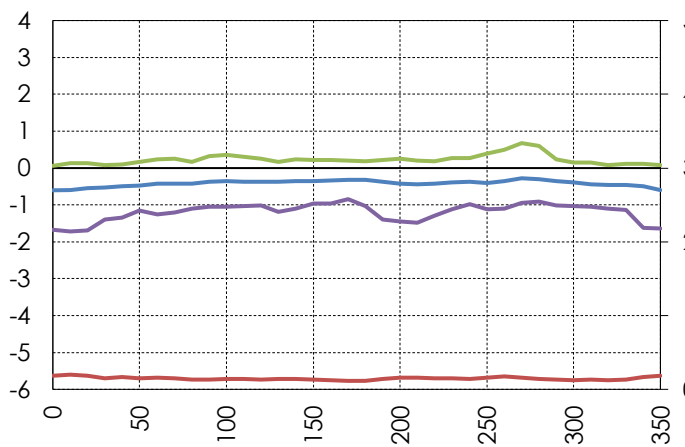
Individual Tap ID: EG08 Port ID: 142



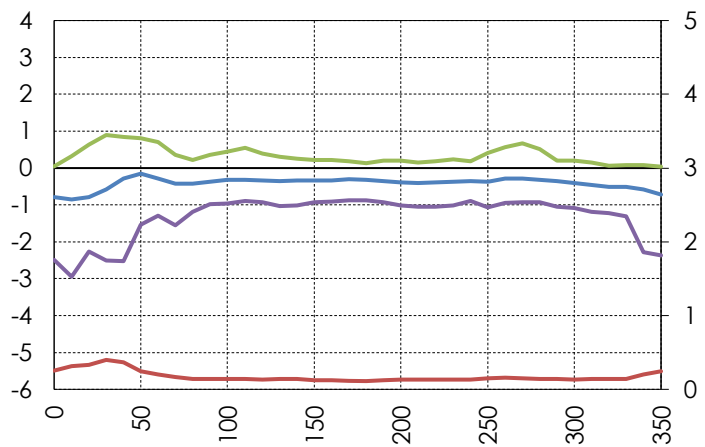
Individual Tap ID: EG09 Port ID: 143



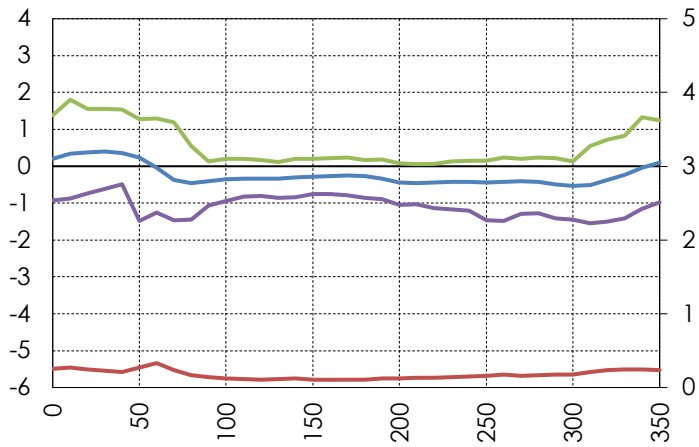
Individual Tap ID: EG10 Port ID: 144



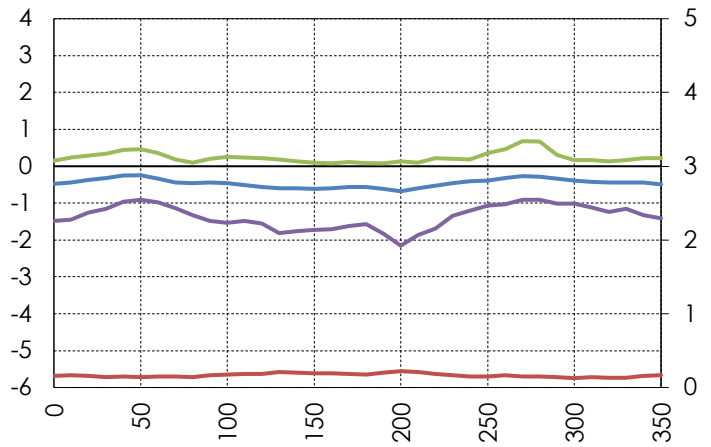
Individual Tap ID: EG12 Port ID: 145



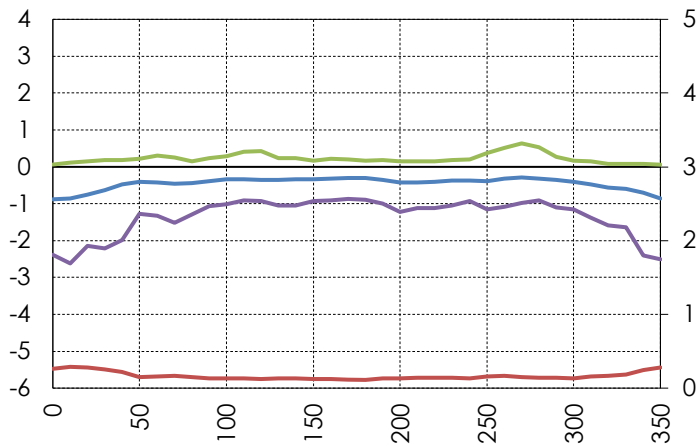
Individual Tap ID: EG13 Port ID: 146



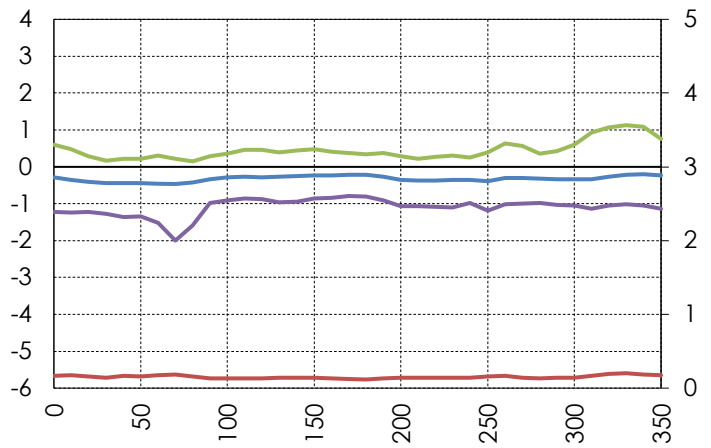
Individual Tap ID: RF01 Port ID: 147



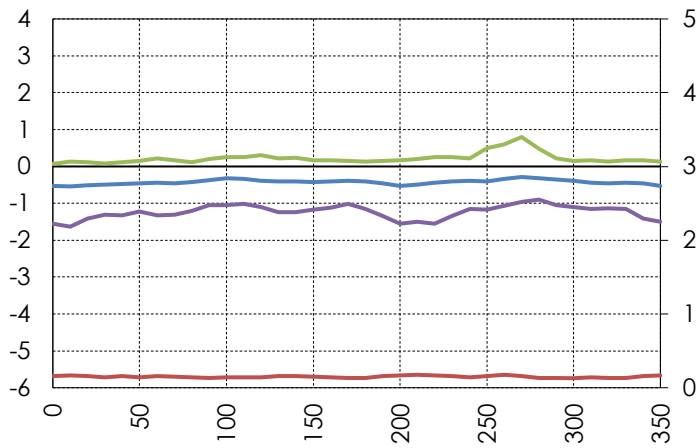
Individual Tap ID: RF02 Port ID: 148



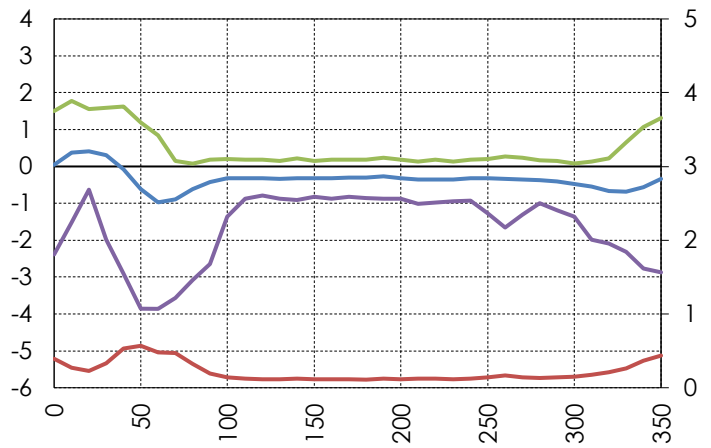
Individual Tap ID: RF03 Port ID: 149



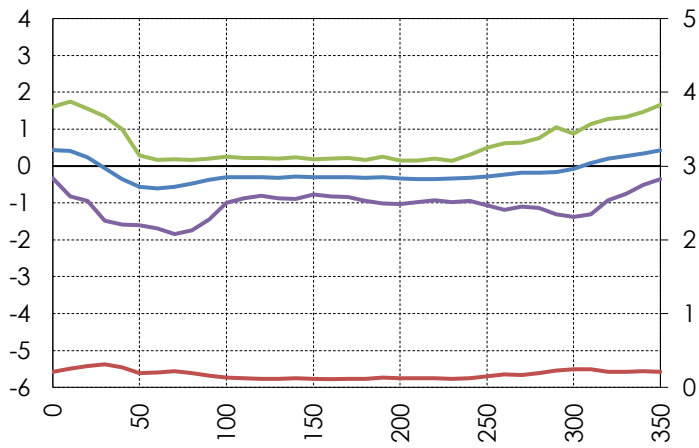
Individual Tap ID: RF04 Port ID: 150



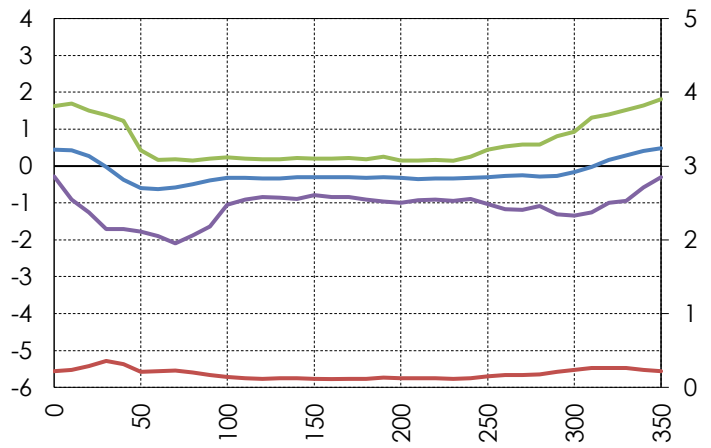
Individual Tap ID: NE01 Port ID: 151



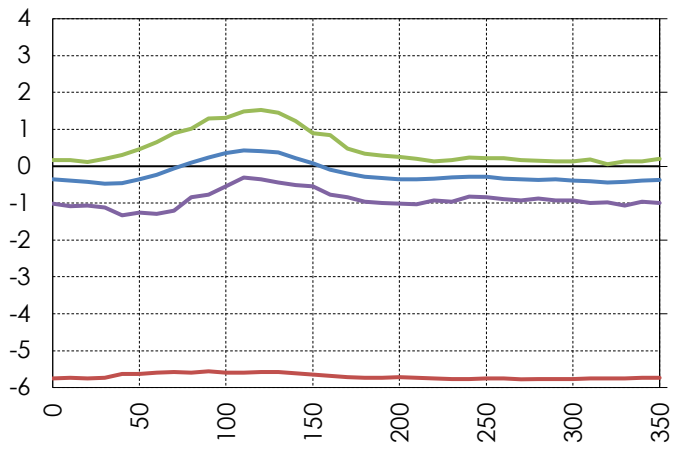
Individual Tap ID: NE02 Port ID: 152



Individual Tap ID: NE03 Port ID: 153



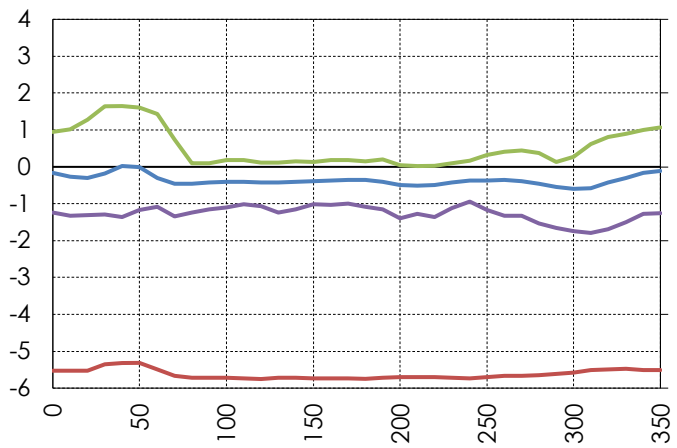
Individual Tap ID: NE04 Port ID: 154



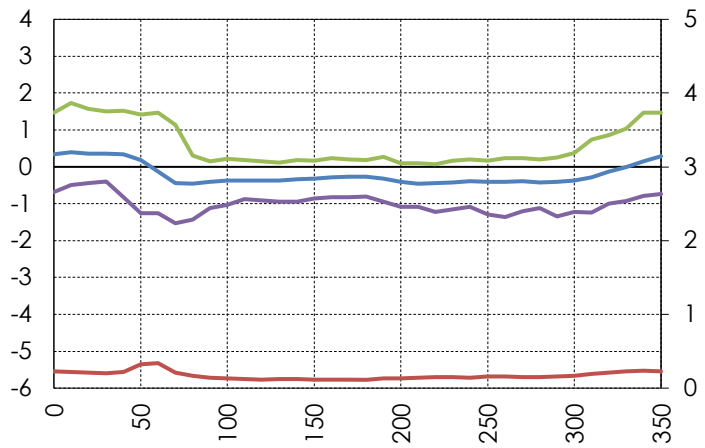
Individual Tap ID: NE05 Port ID: 155



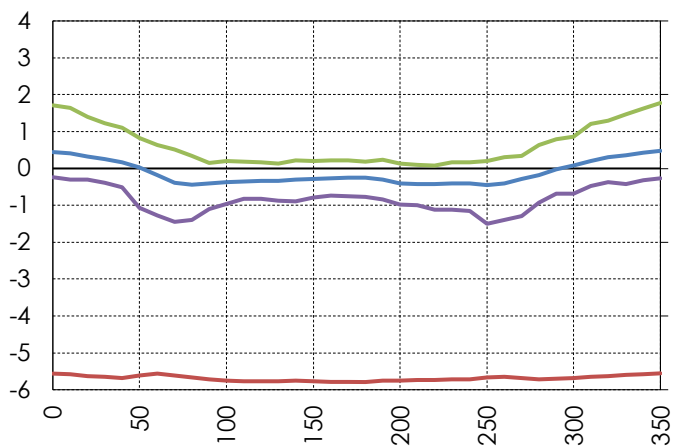
Individual Tap ID: NE06 Port ID: 156



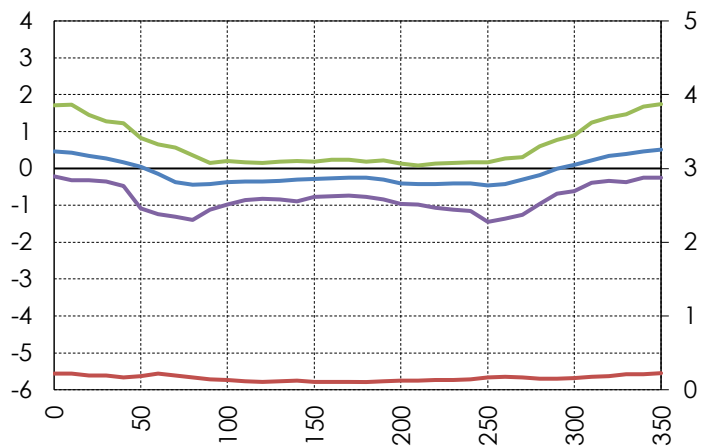
Individual Tap ID: NE07 Port ID: 157



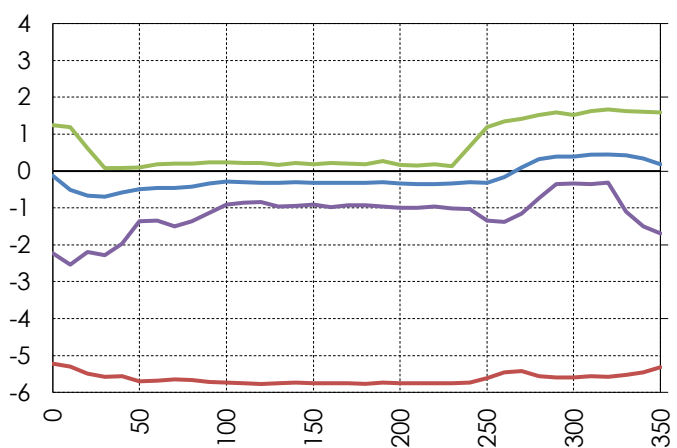
Individual Tap ID: NE08 Port ID: 158



Individual Tap ID: NE09 Port ID: 159



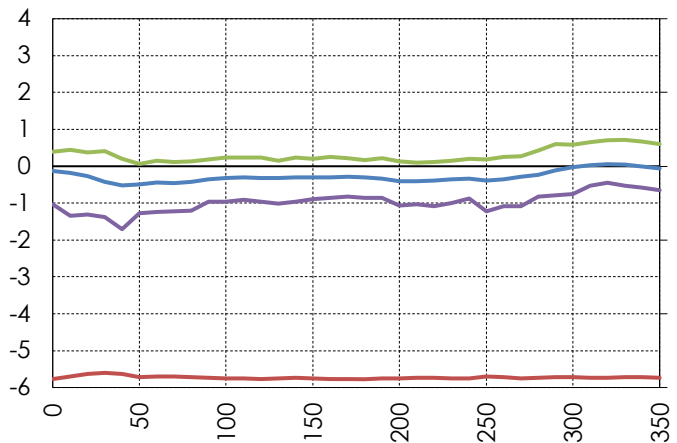
Individual Tap ID: WE01 Port ID: 160



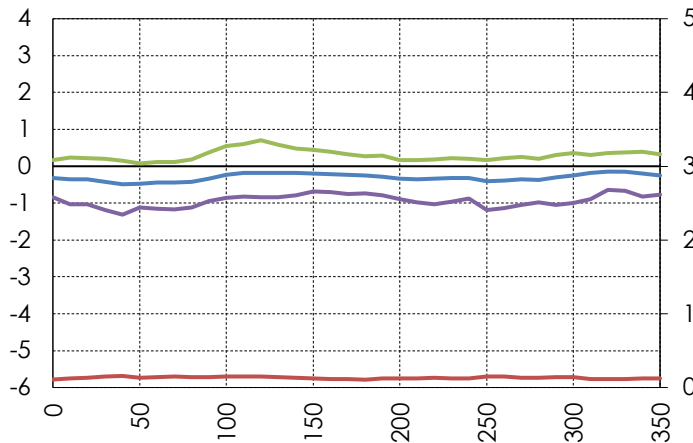
Individual Tap ID: WE02 Port ID: 161



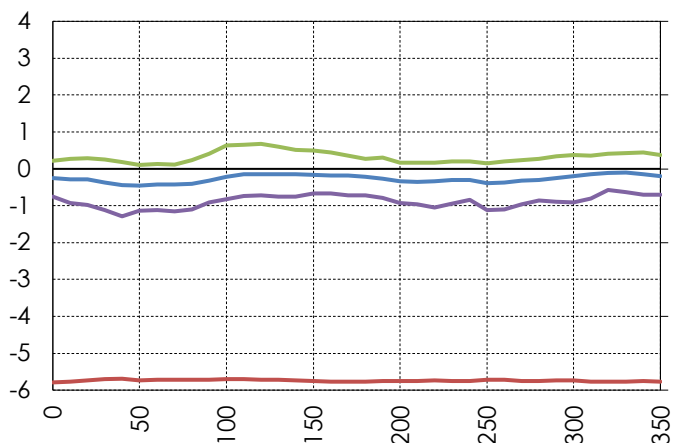
Individual Tap ID: WE03 Port ID: 162



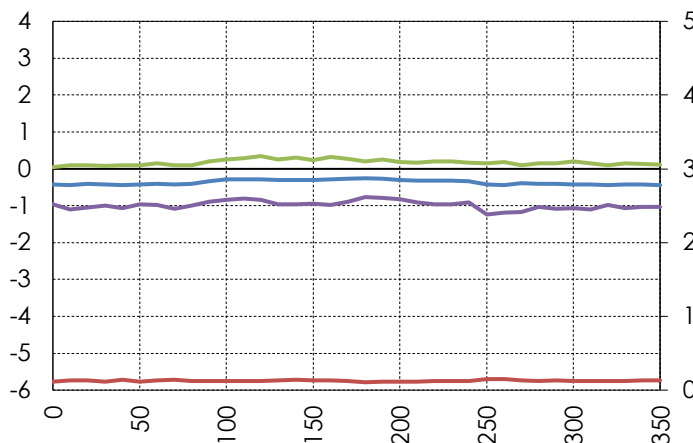
Individual Tap ID: WE04 Port ID: 163



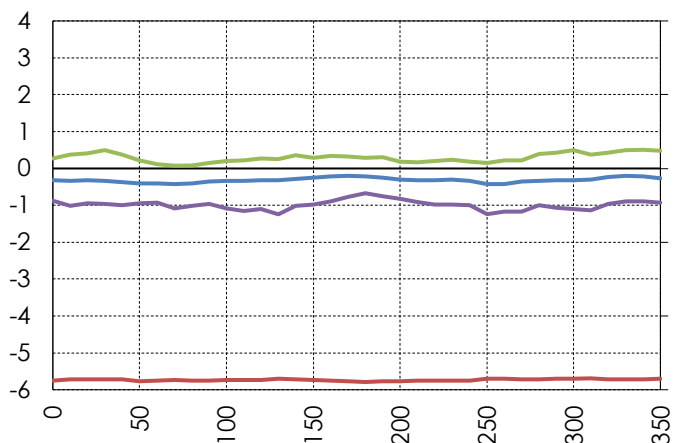
Individual Tap ID: WE05 Port ID: 164



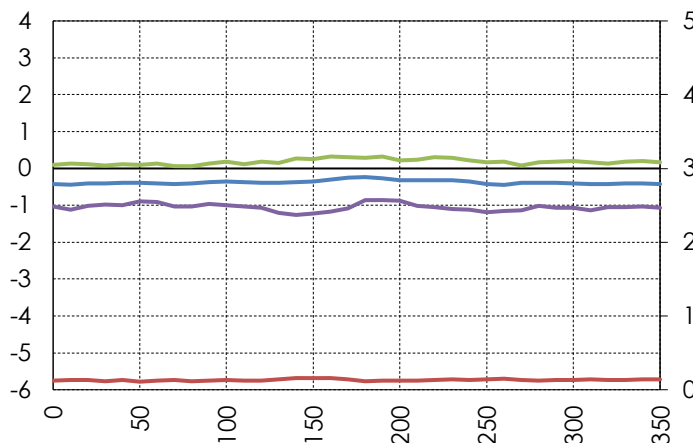
Individual Tap ID: WE06 Port ID: 165



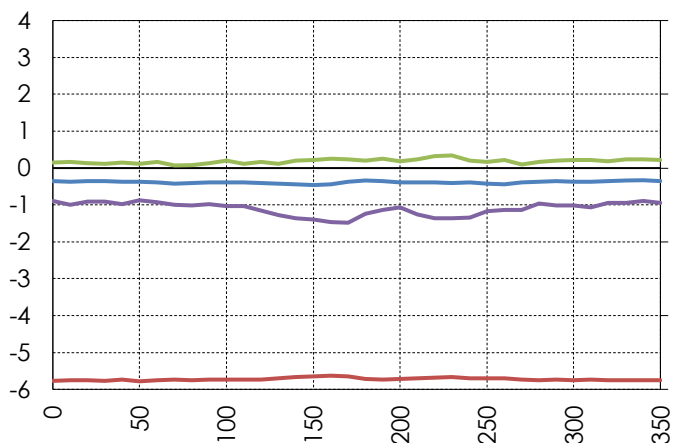
Individual Tap ID: WE07 Port ID: 166



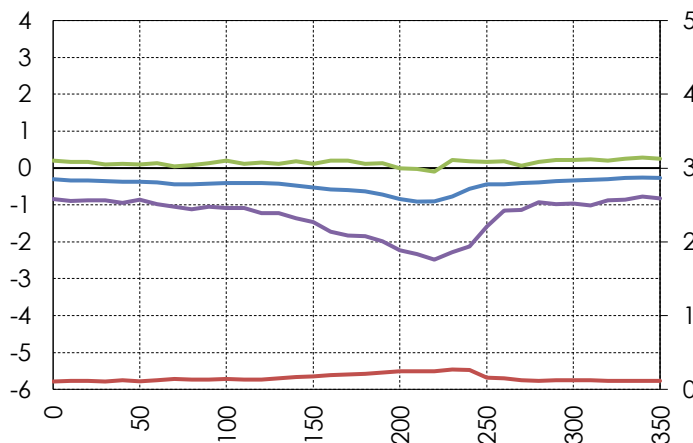
Individual Tap ID: WE08 Port ID: 167



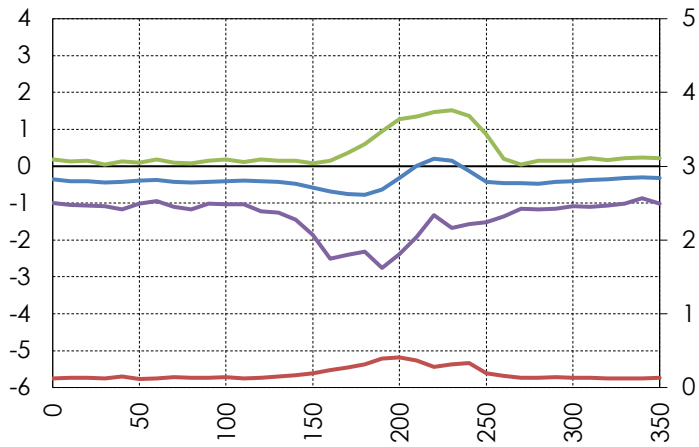
Individual Tap ID: WE09 Port ID: 168



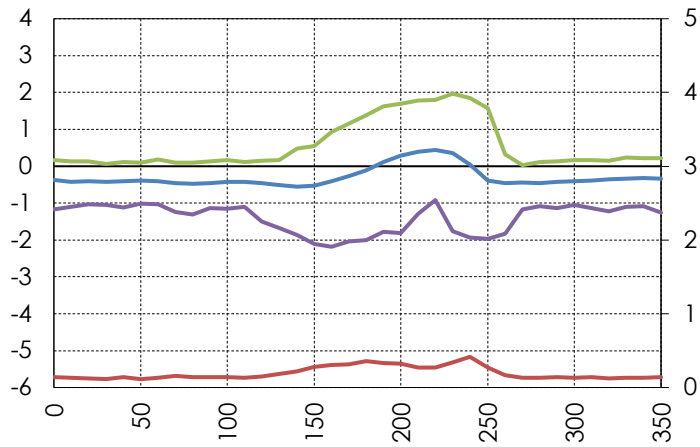
Individual Tap ID: WE10 Port ID: 169



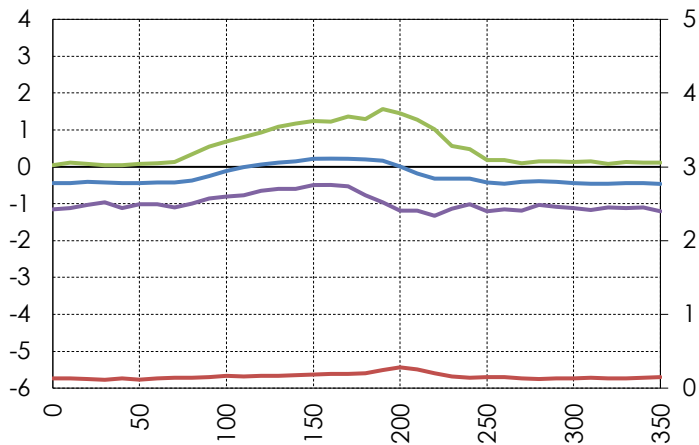
Individual Tap ID: WE11 Port ID: 171



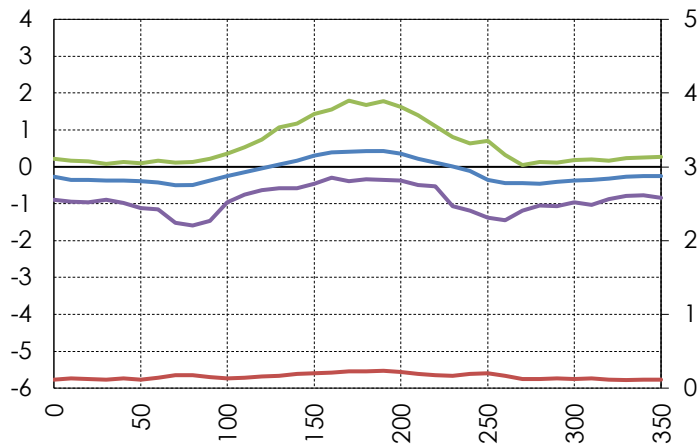
Individual Tap ID: WE12 Port ID: 172



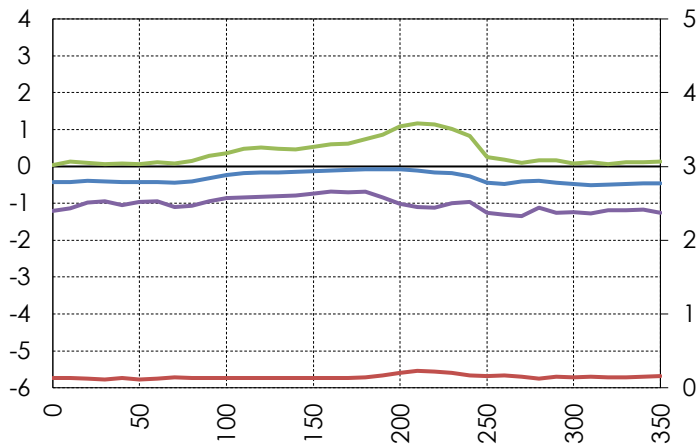
Individual Tap ID: SE01 Port ID: 173



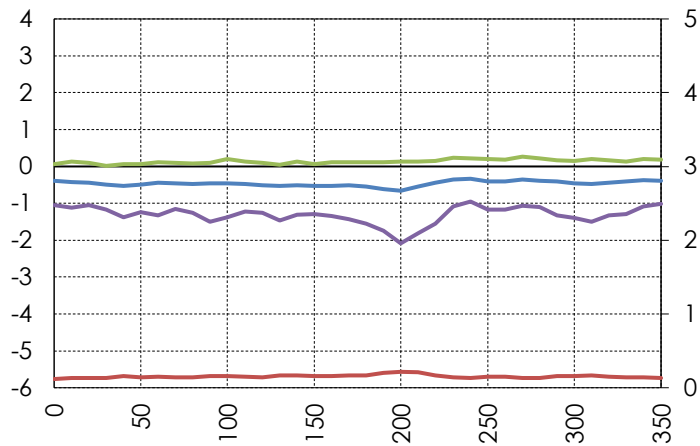
Individual Tap ID: SE02 Port ID: 174



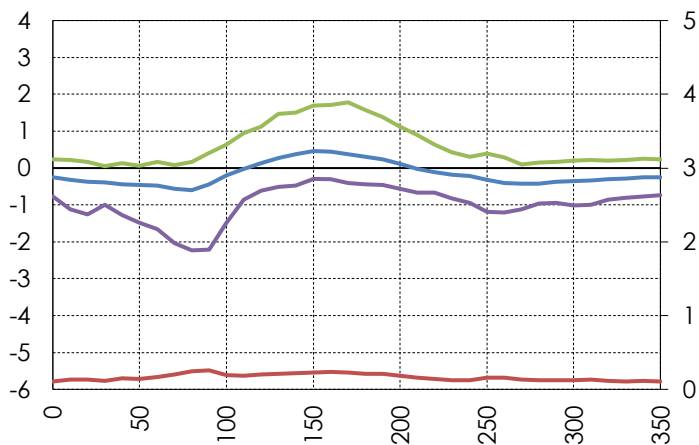
Individual Tap ID: SE03 Port ID: 175



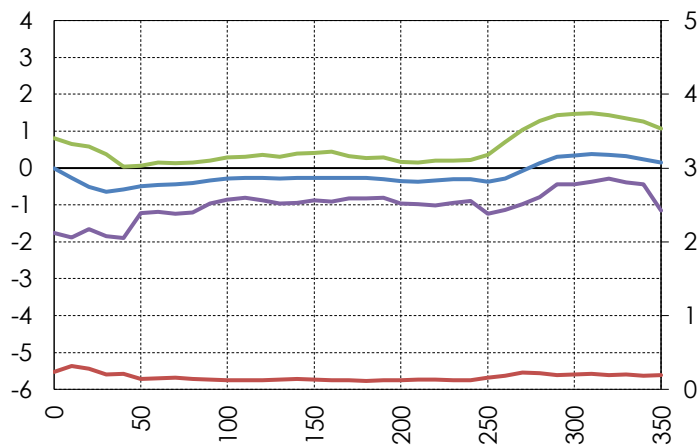
Individual Tap ID: SE04 Port ID: 176



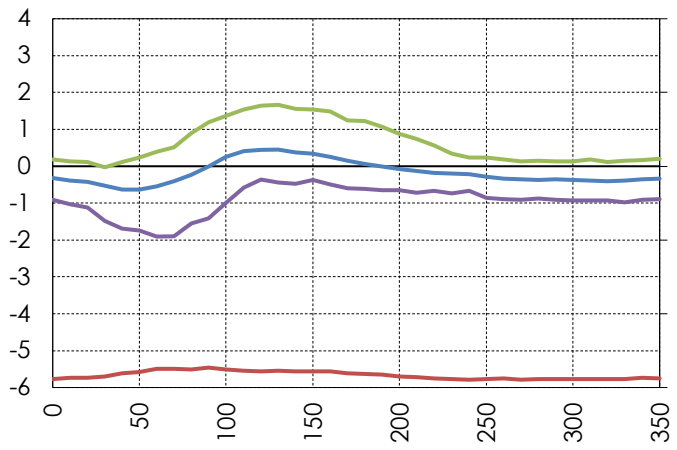
Individual Tap ID: SE05 Port ID: 177



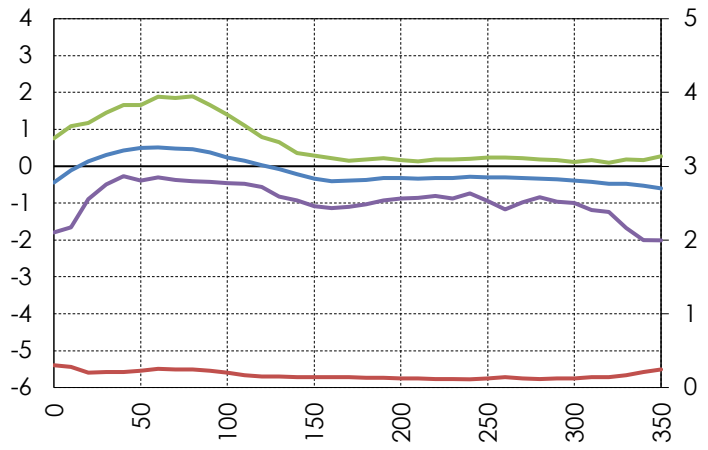
Individual Tap ID: SE06 Port ID: 178



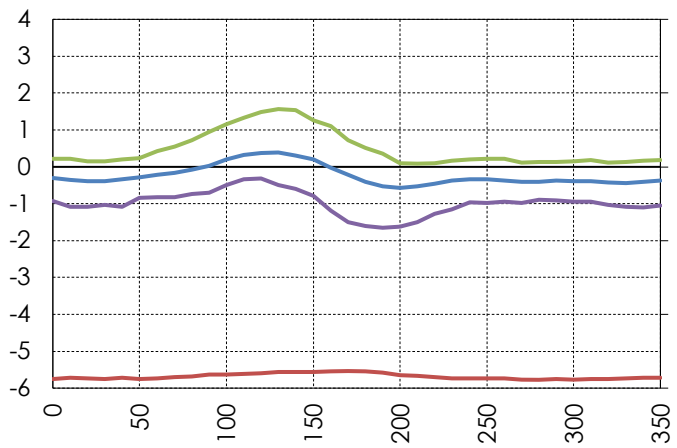
Individual Tap ID: SE07 Port ID: 179



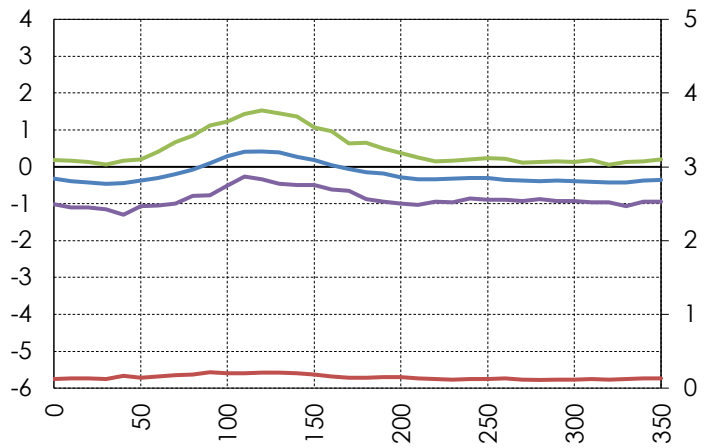
Individual Tap ID: SE08 Port ID: 180



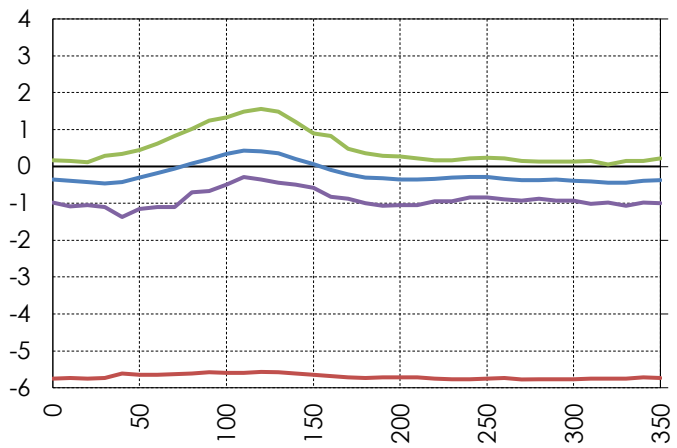
Individual Tap ID: EE01 Port ID: 181



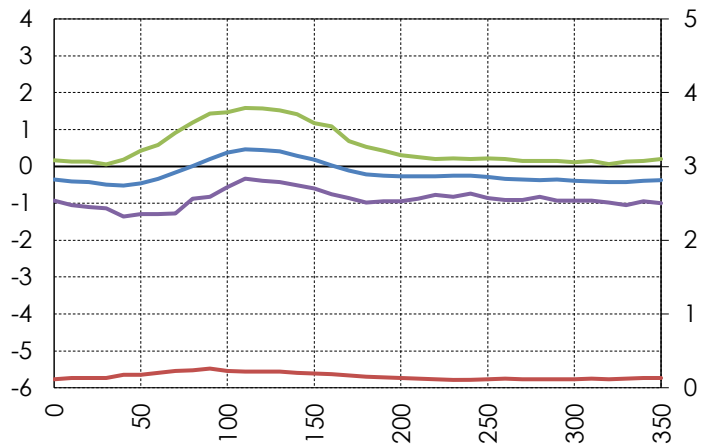
Individual Tap ID: EE02 Port ID: 182



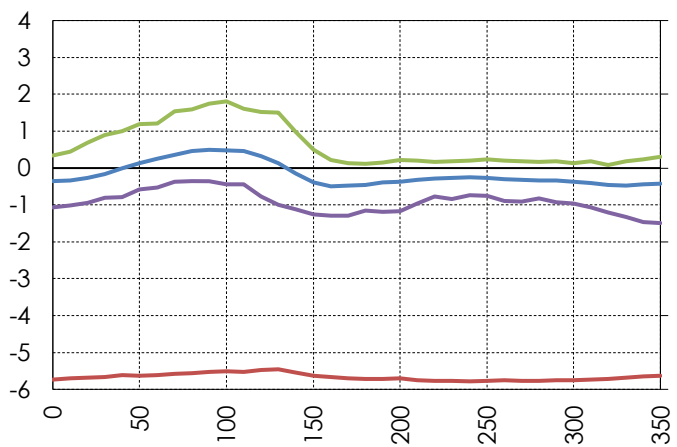
Individual Tap ID: EE05 Port ID: 183



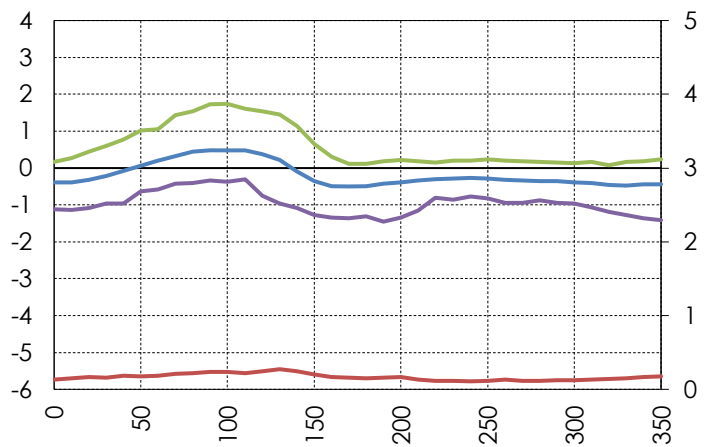
Individual Tap ID: EE06 Port ID: 184



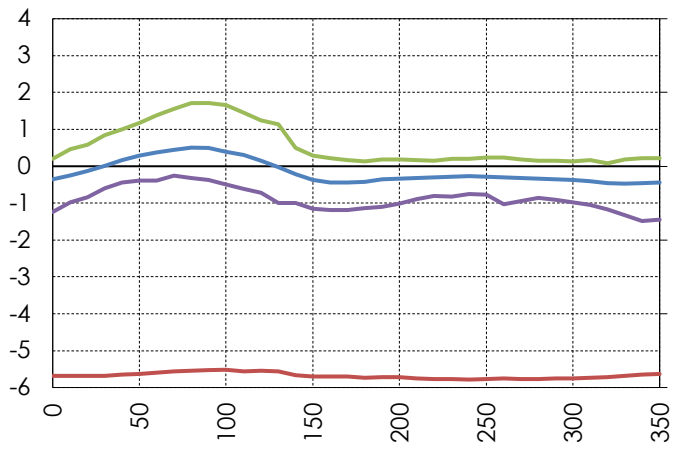
Individual Tap ID: EE07 Port ID: 185



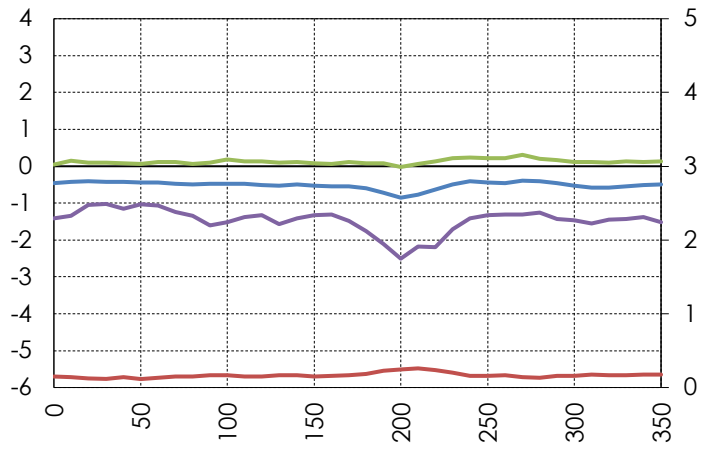
Individual Tap ID: EE08 Port ID: 186



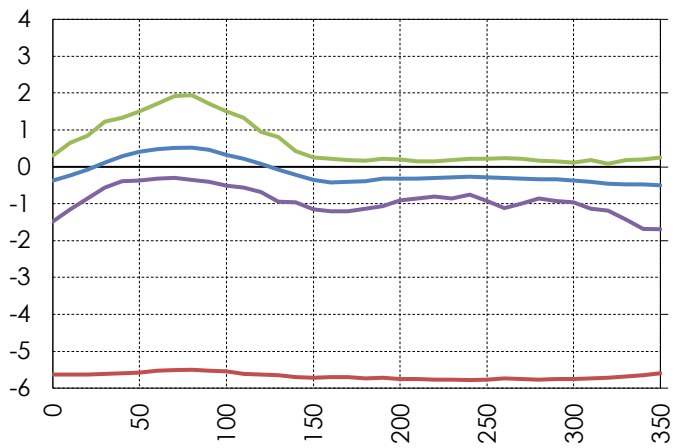
Individual Tap ID: EE09 Port ID: 187



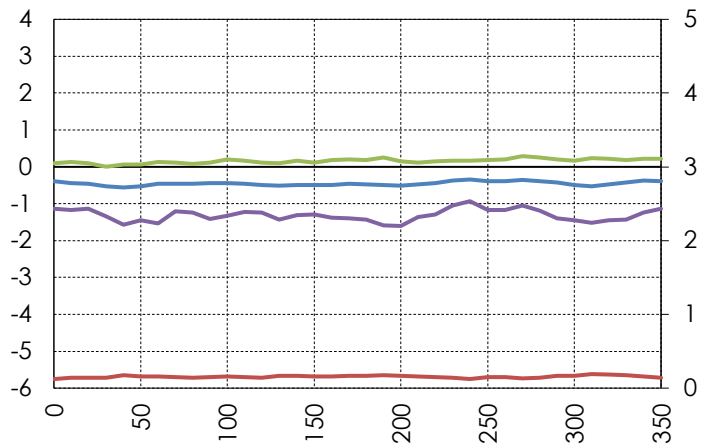
Individual Tap ID: EE10 Port ID: 188



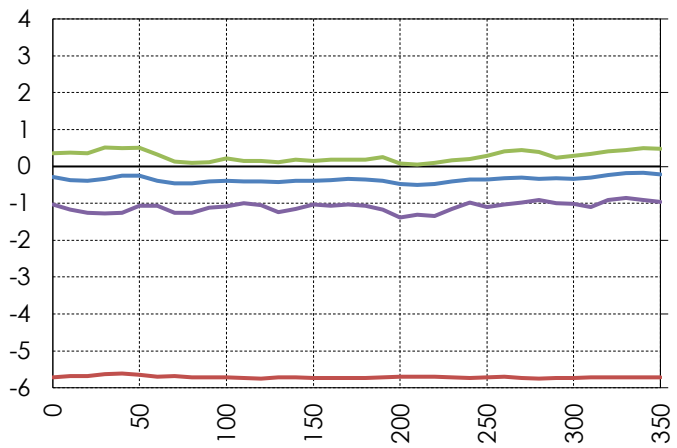
Individual Tap ID: EE11 Port ID: 190



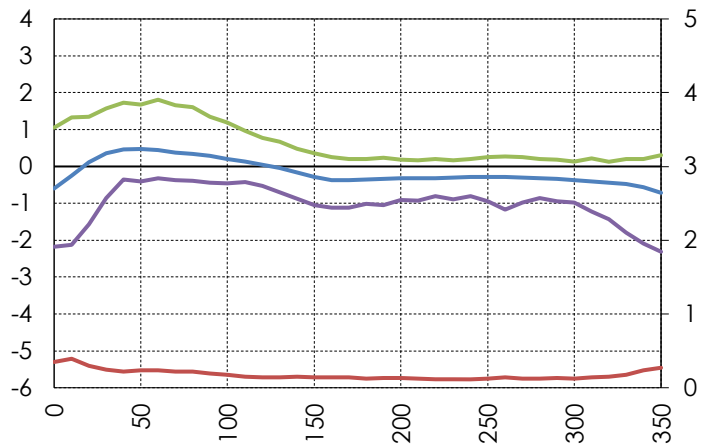
Individual Tap ID: EE12 Port ID: 191



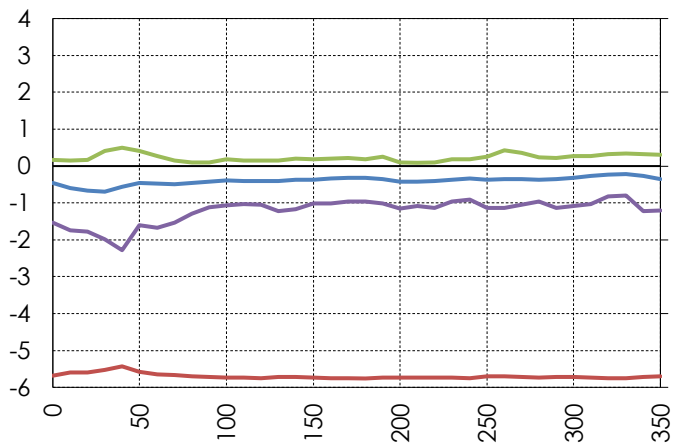
Individual Tap ID: EE13 Port ID: 192



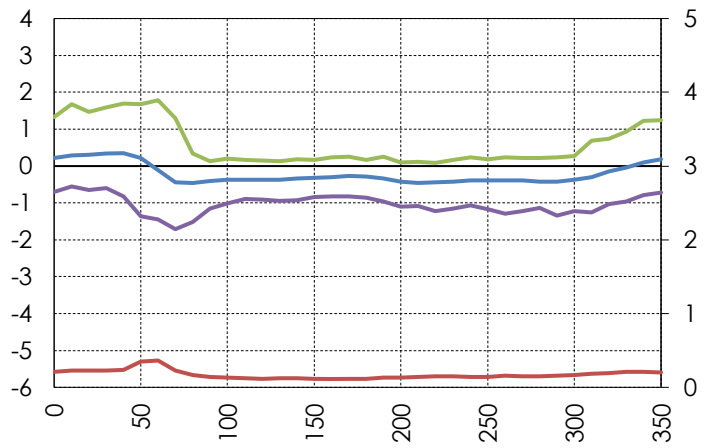
Individual Tap ID: EE14 Port ID: 193



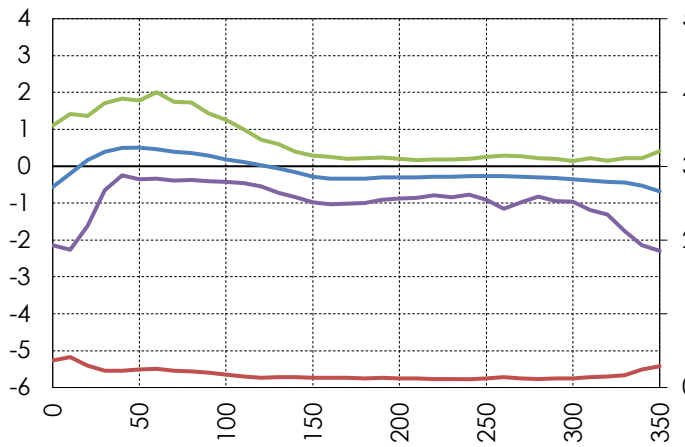
Individual Tap ID: EE15 Port ID: 194



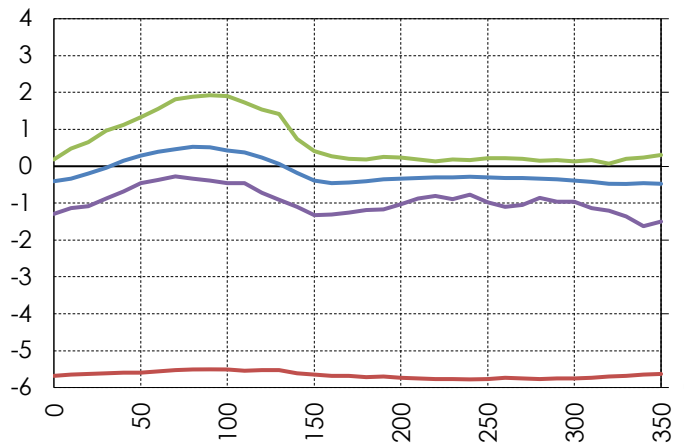
Individual Tap ID: EE16 Port ID: 196



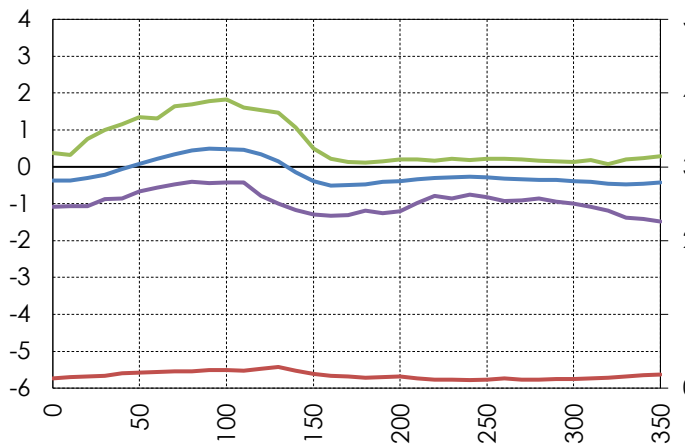
Individual Tap ID: RE01 Port ID: 197



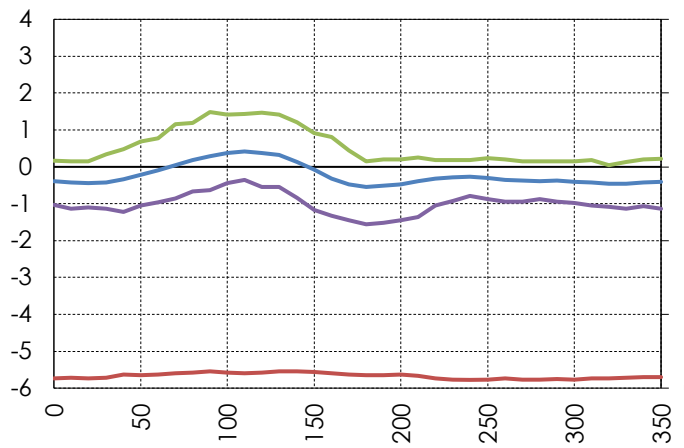
Individual Tap ID: RE02 Port ID: 198



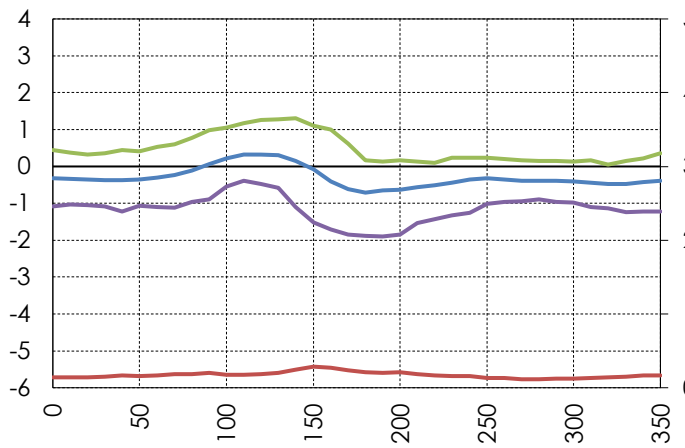
Individual Tap ID: RE03 Port ID: 199



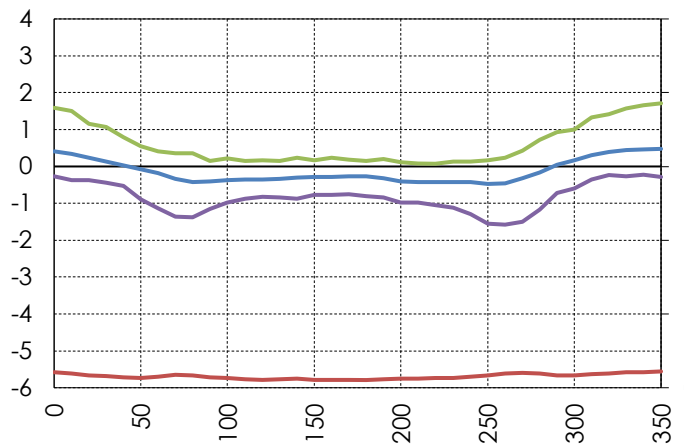
Individual Tap ID: RE04 Port ID: 208



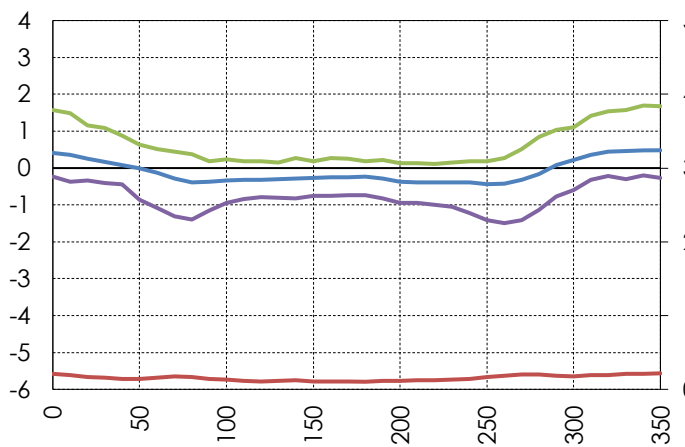
Individual Tap ID: RE05 Port ID: 209



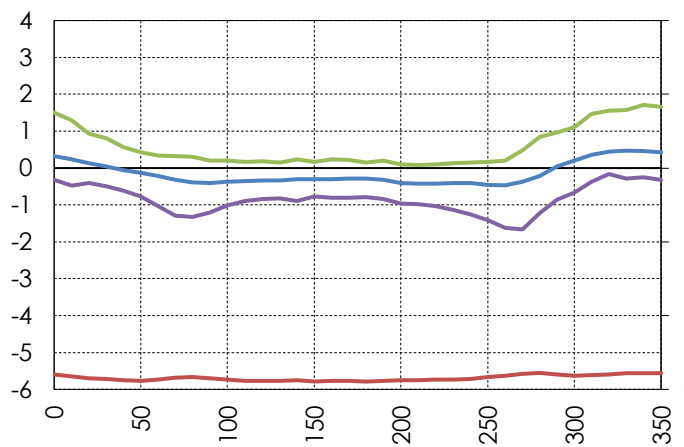
Individual Tap ID: ND01 Port ID: 210



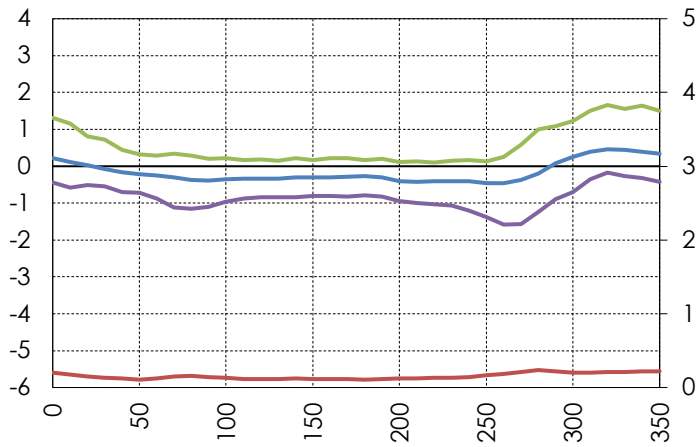
Individual Tap ID: ND02 Port ID: 211



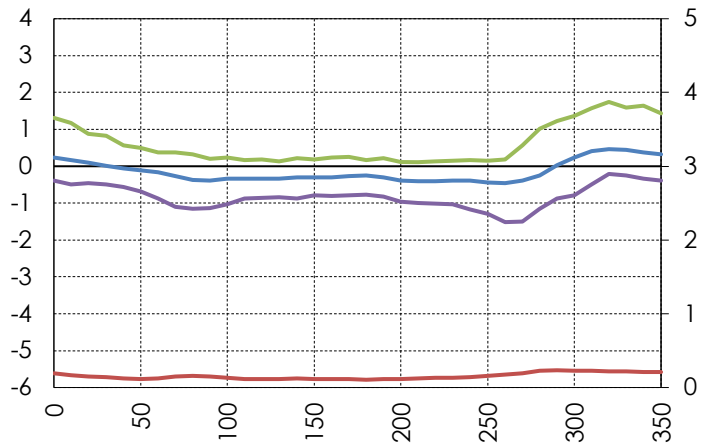
Individual Tap ID: ND03 Port ID: 212



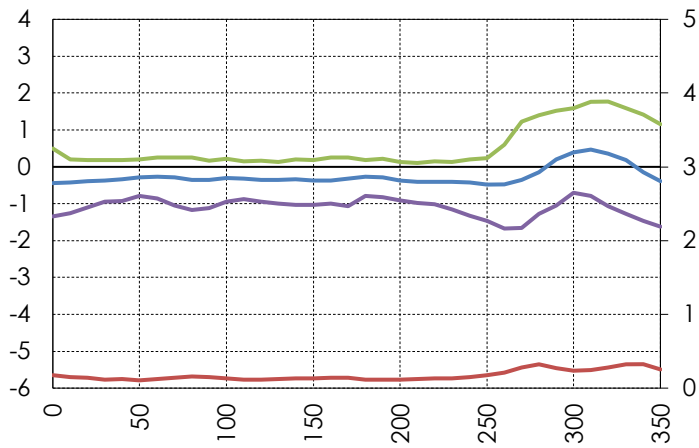
Individual Tap ID: ND04 Port ID: 213



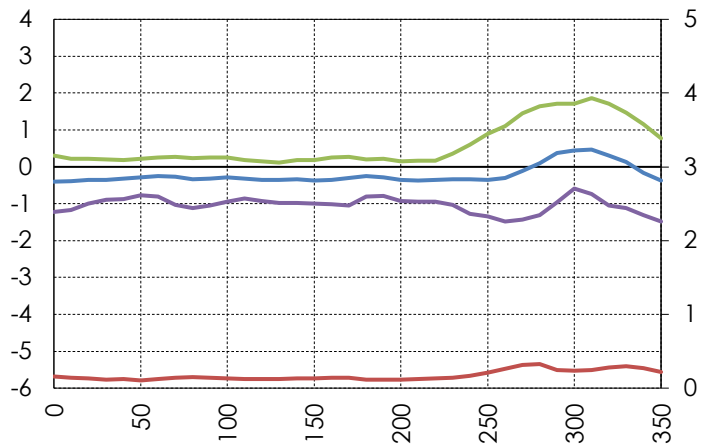
Individual Tap ID: ND05 Port ID: 214



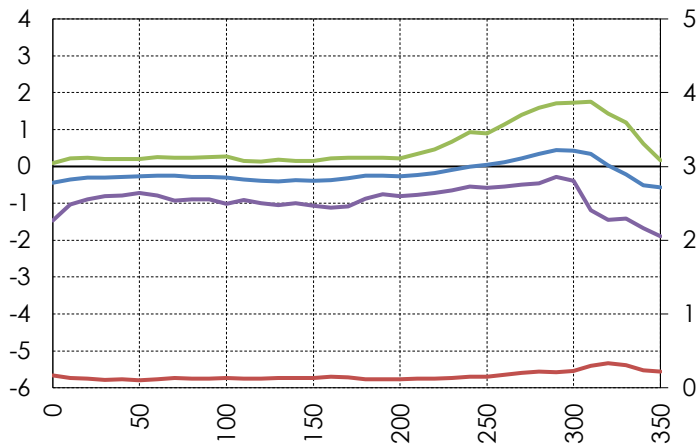
Individual Tap ID: ND06 Port ID: 215



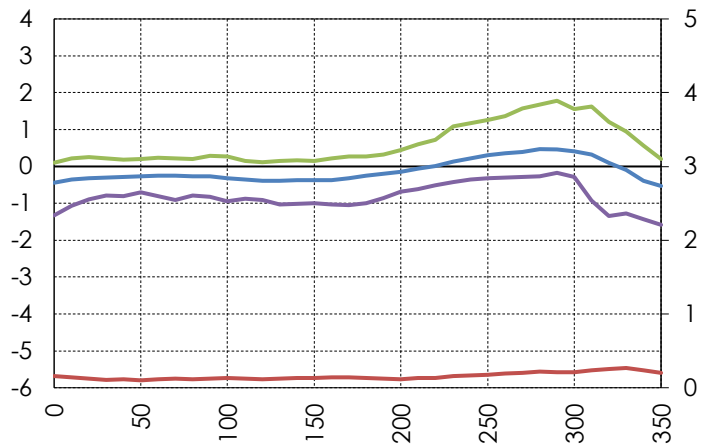
Individual Tap ID: WD01 Port ID: 224



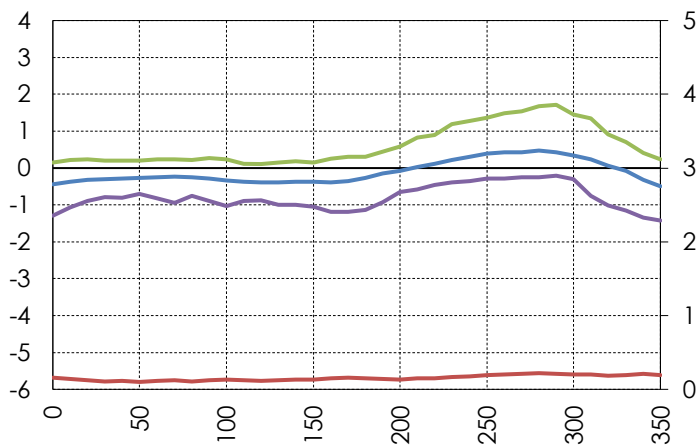
Individual Tap ID: WD02 Port ID: 225



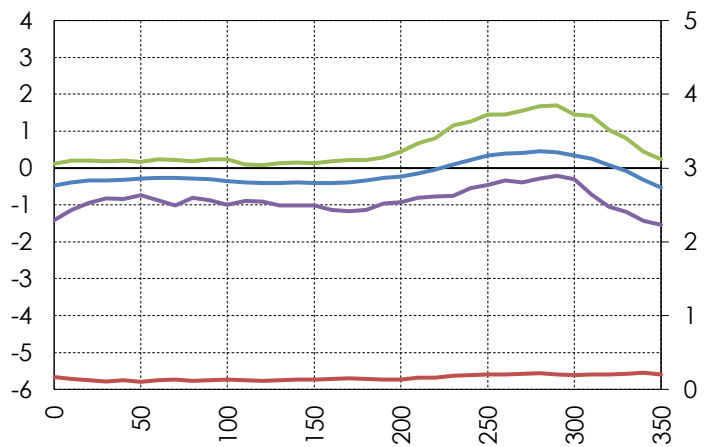
Individual Tap ID: WD03 Port ID: 226



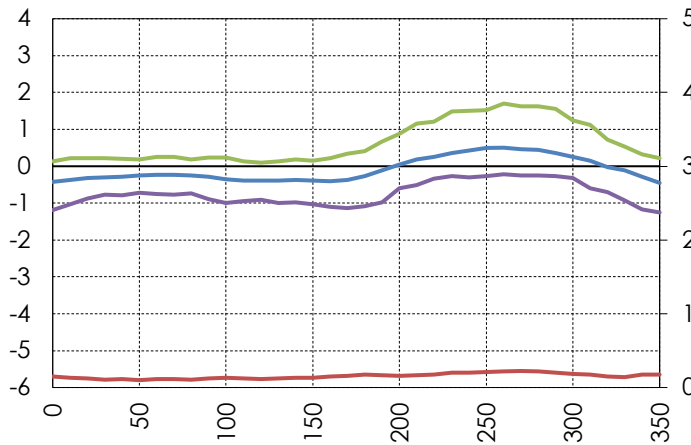
Individual Tap ID: WD04 Port ID: 227



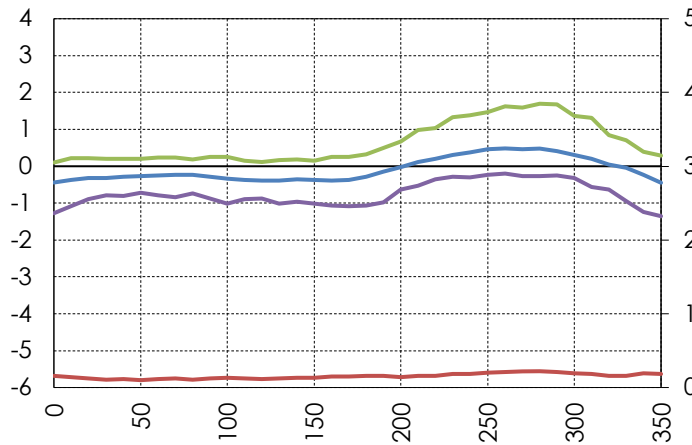
Individual Tap ID: WD05 Port ID: 228



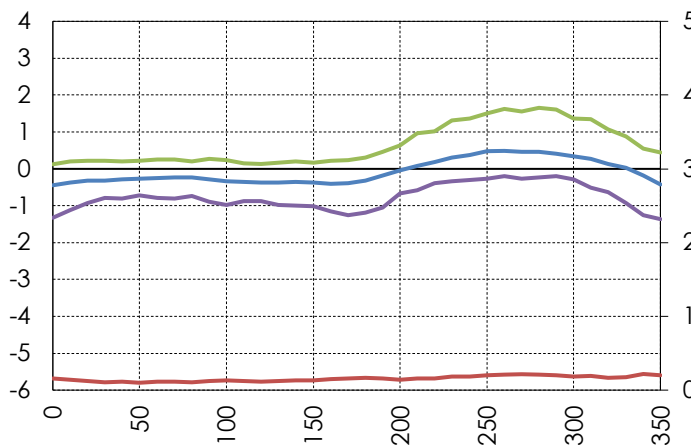
Individual Tap ID: WD06 Port ID: 229



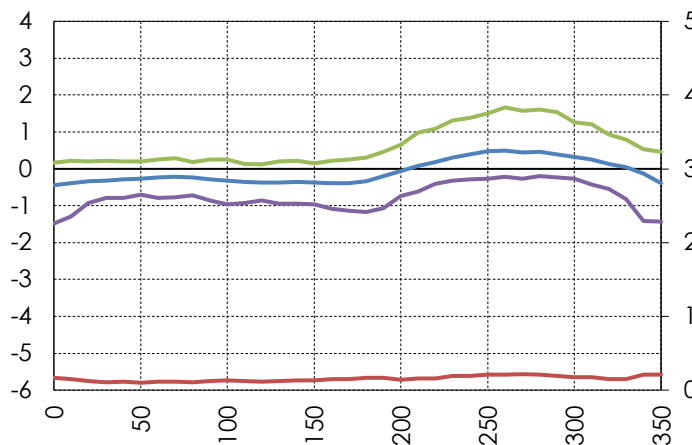
Individual Tap ID: WD07 Port ID: 230



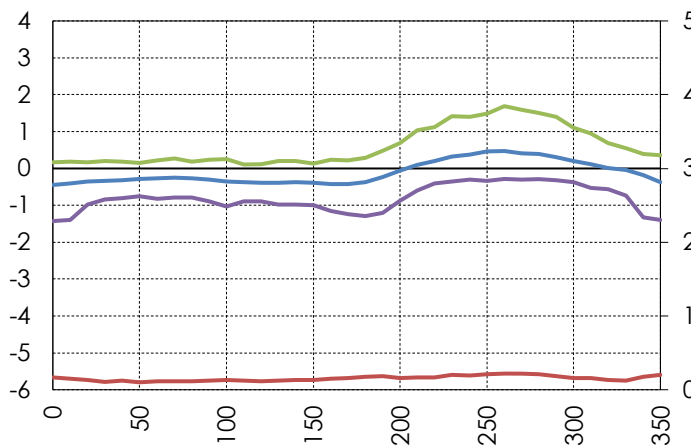
Individual Tap ID: WD08 Port ID: 231



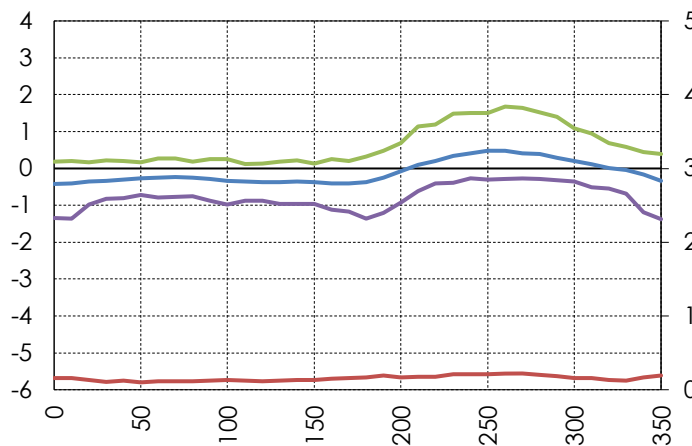
Individual Tap ID: WD09 Port ID: 232



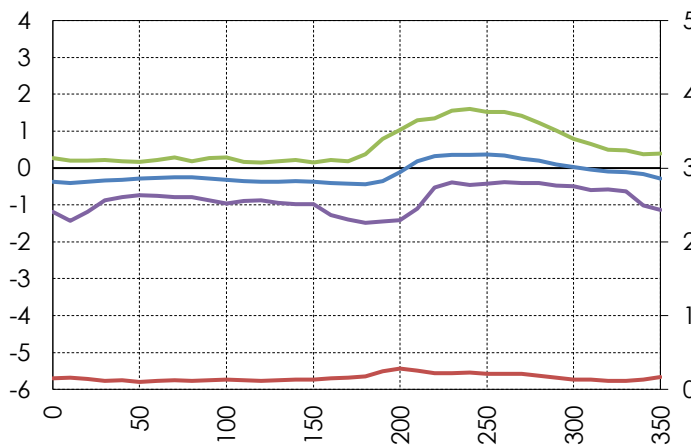
Individual Tap ID: WD10 Port ID: 233



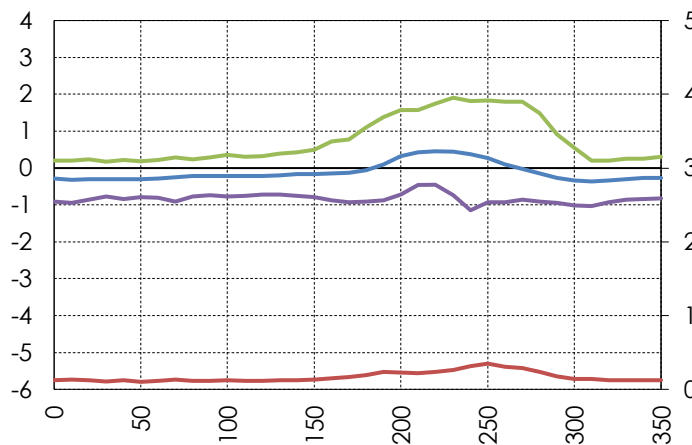
Individual Tap ID: WD11 Port ID: 234



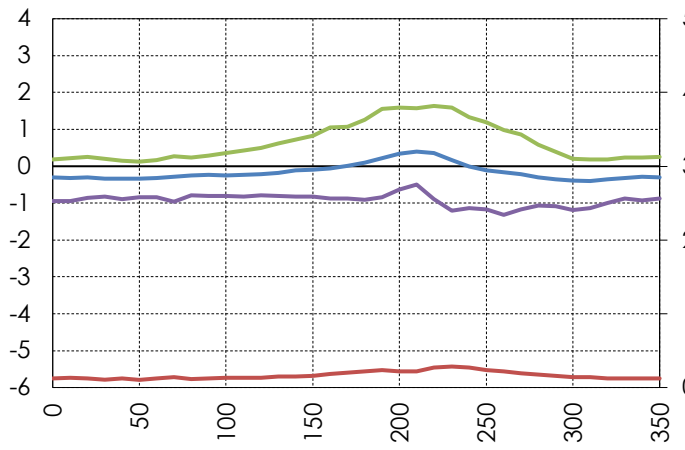
Individual Tap ID: WD12 Port ID: 235



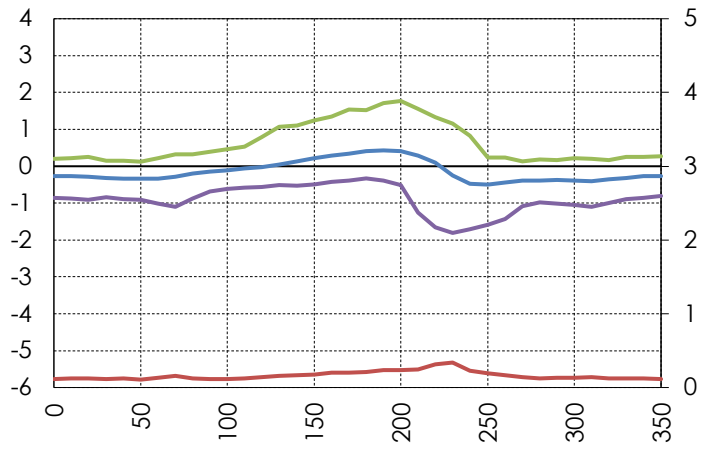
Individual Tap ID: WD13 Port ID: 236



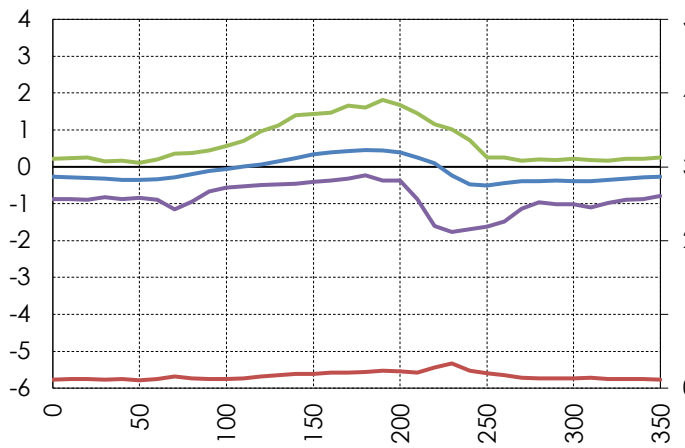
Individual Tap ID: SD01 Port ID: 237



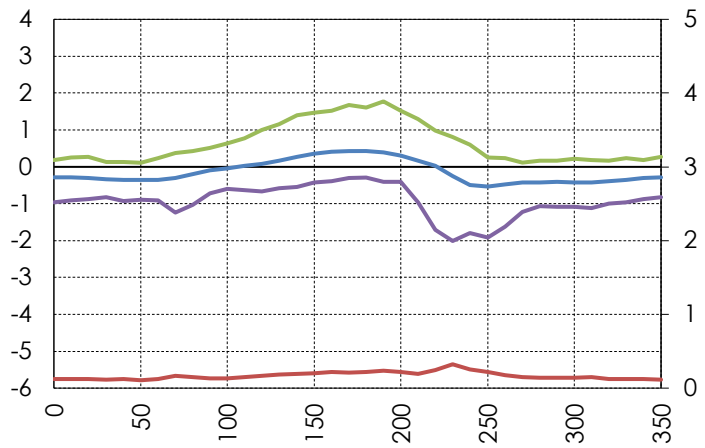
Individual Tap ID: SD02 Port ID: 238



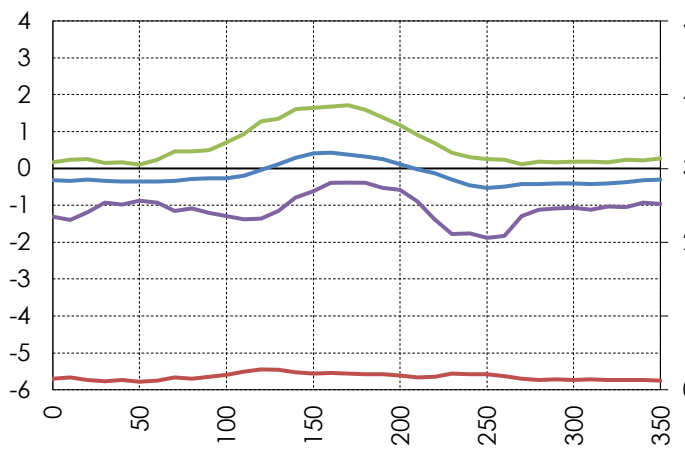
Individual Tap ID: SD03 Port ID: 239



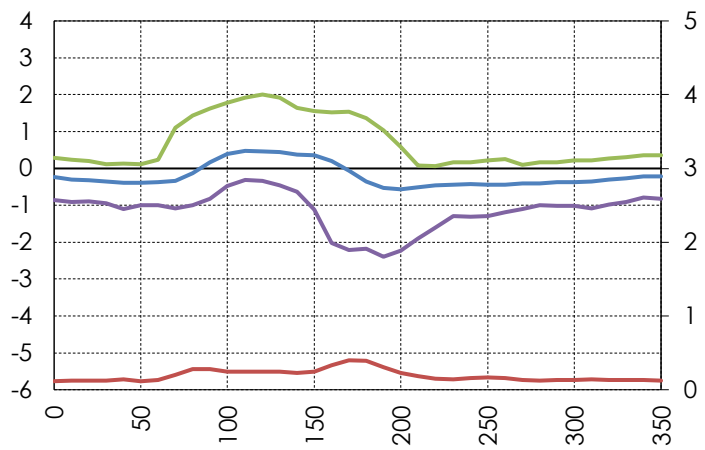
Individual Tap ID: SD04 Port ID: 240



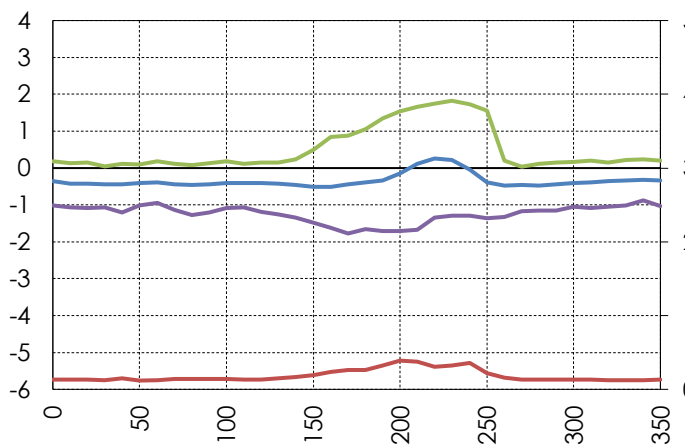
Individual Tap ID: SD05 Port ID: 241



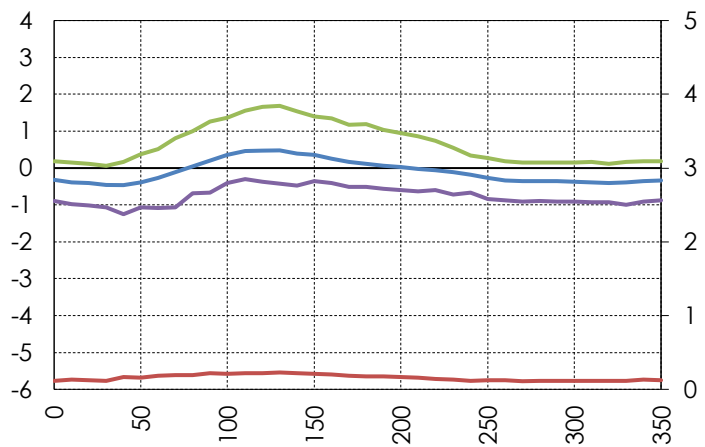
Individual Tap ID: SD06 Port ID: 242



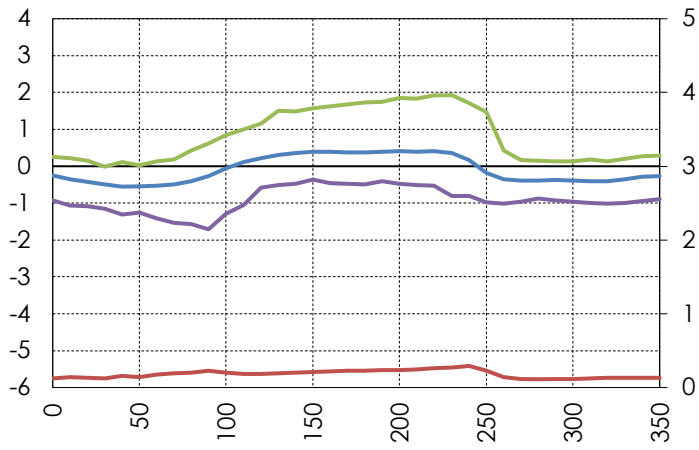
Individual Tap ID: SD07 Port ID: 243



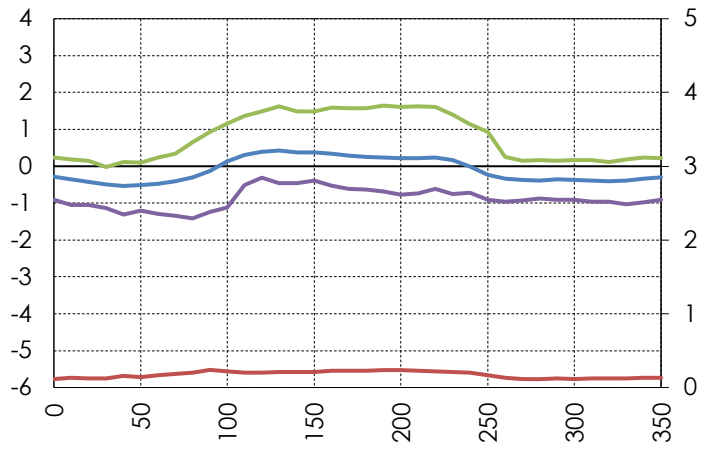
Individual Tap ID: SD08 Port ID: 244



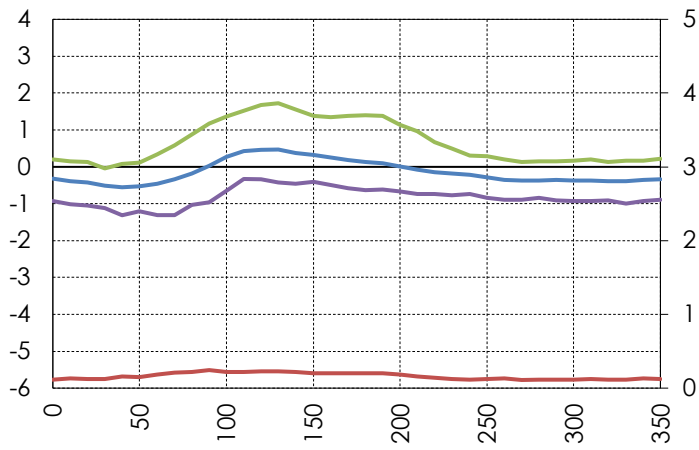
Individual Tap ID: SD09 Port ID: 245



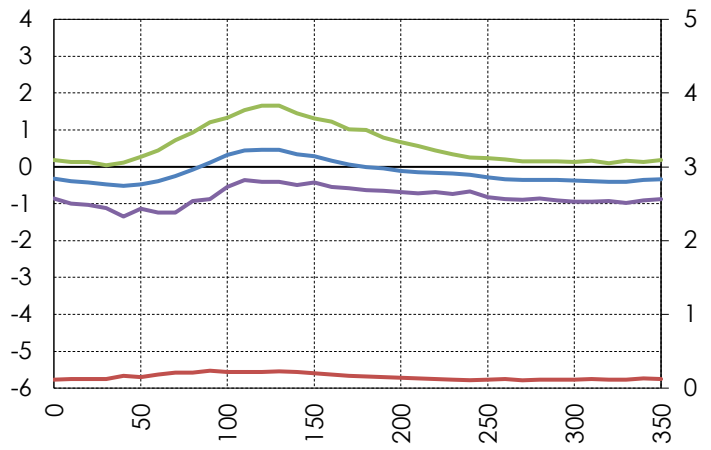
Individual Tap ID: SD11 Port ID: 246



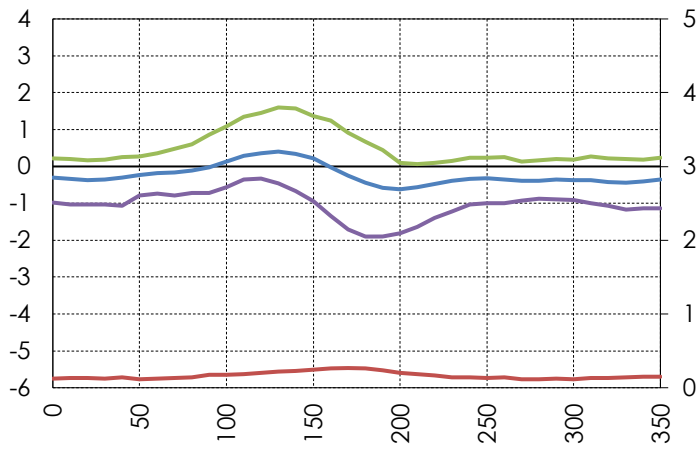
Individual Tap ID: SD12 Port ID: 247



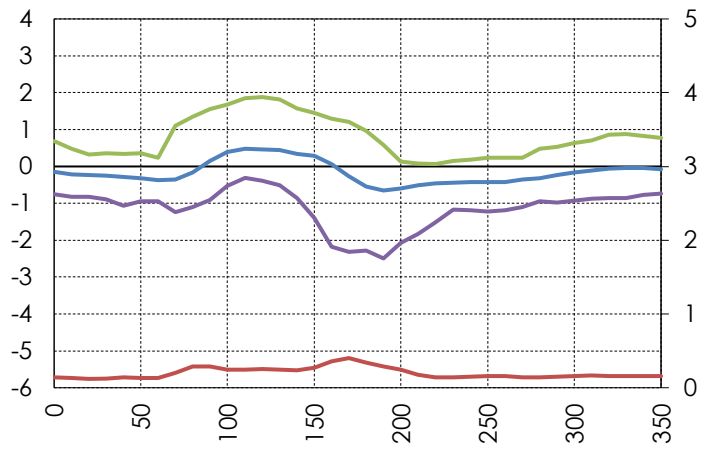
Individual Tap ID: SD13 Port ID: 248



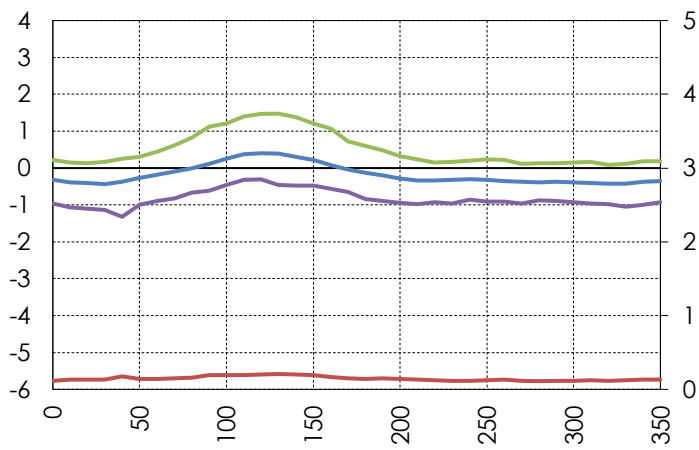
Individual Tap ID: ED01 Port ID: 249



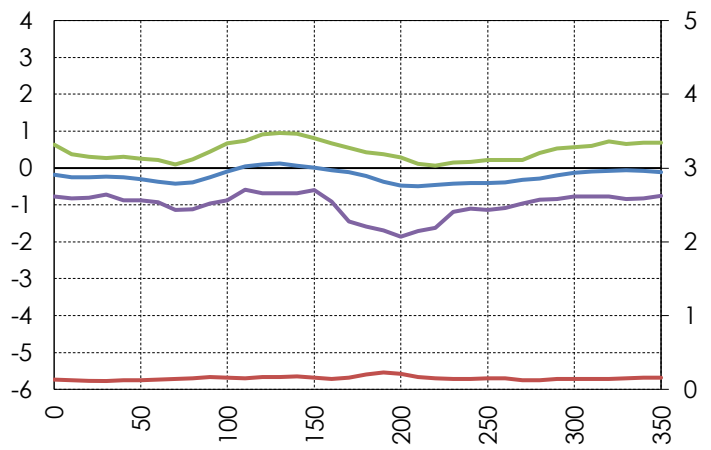
Individual Tap ID: ED02 Port ID: 250



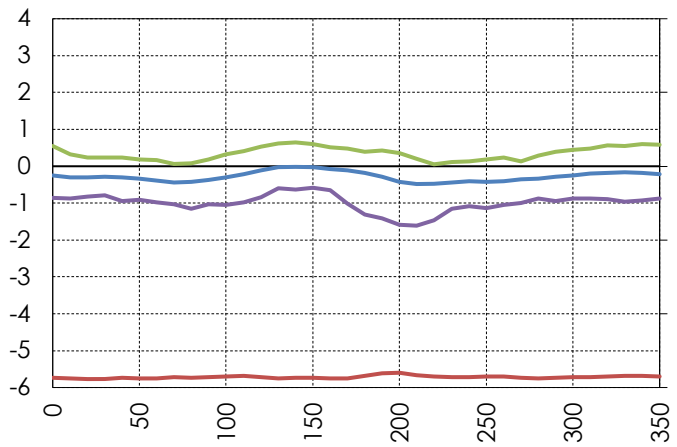
Individual Tap ID: ED03 Port ID: 251



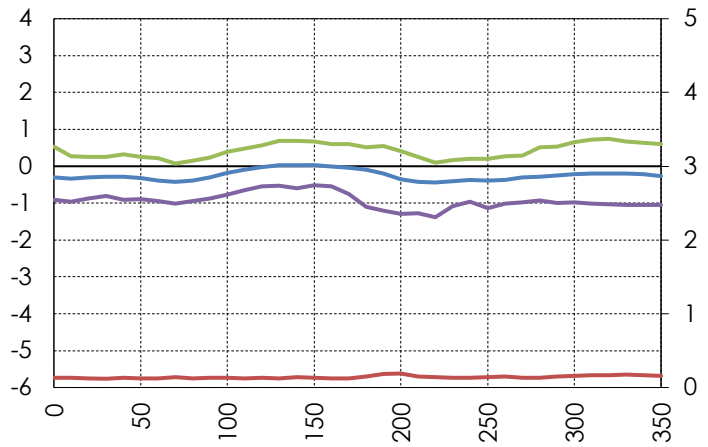
Individual Tap ID: ED04 Port ID: 252



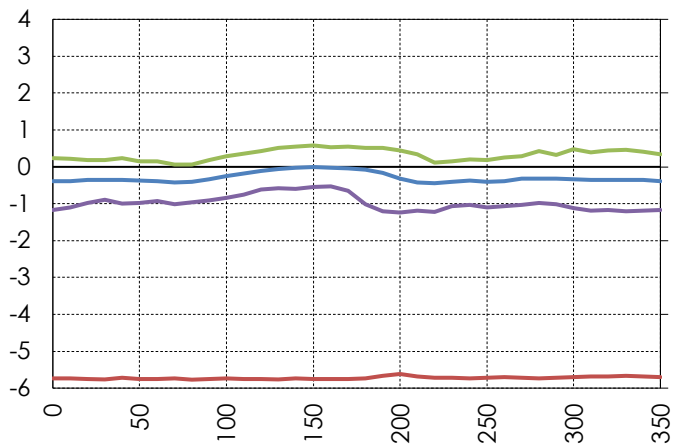
Individual Tap ID: ED05 Port ID: 253



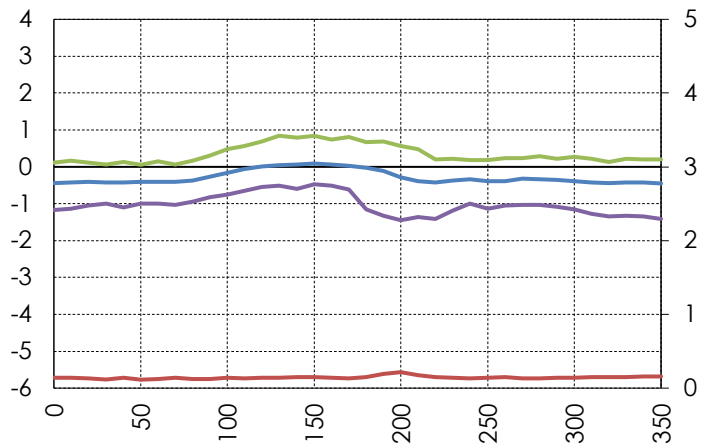
Individual Tap ID: ED06 Port ID: 254



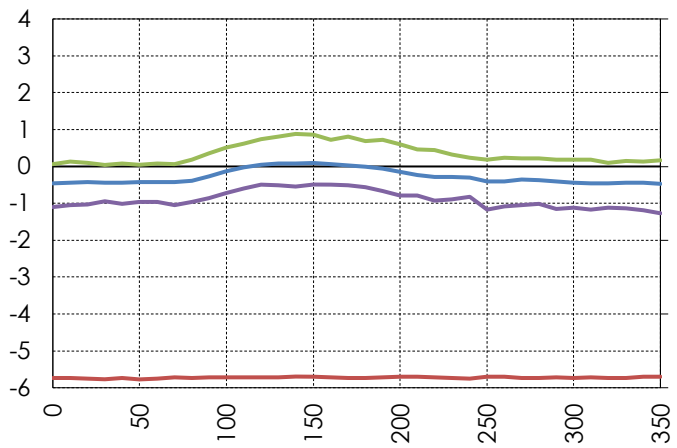
Individual Tap ID: ED08 Port ID: 255



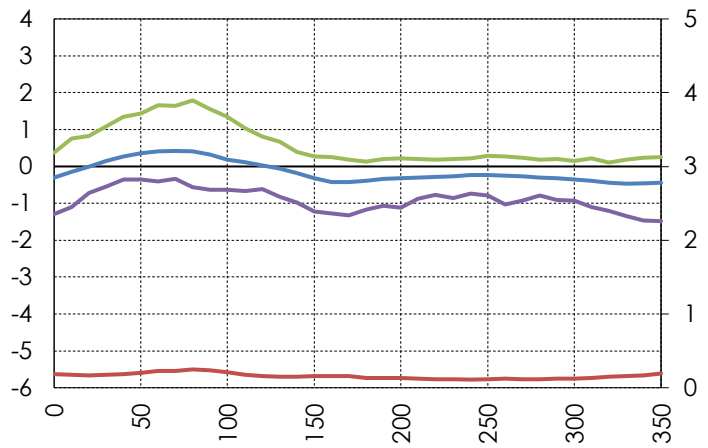
Individual Tap ID: ED09 Port ID: 256



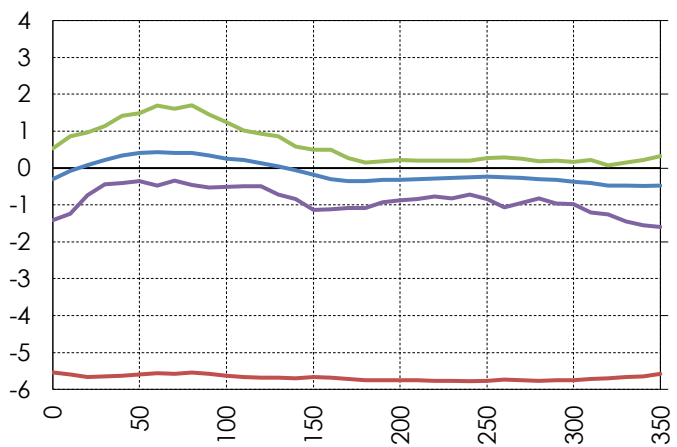
Individual Tap ID: ED10 Port ID: 257



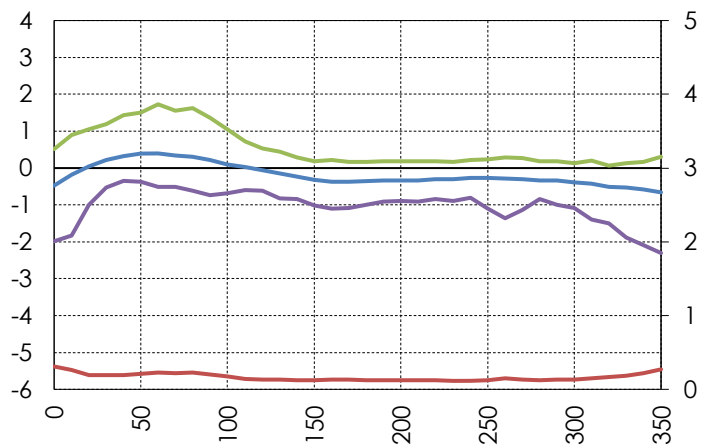
Individual Tap ID: ED11 Port ID: 258



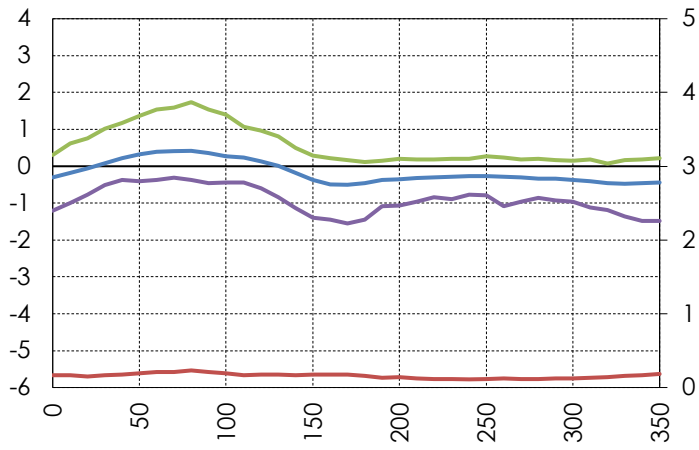
Individual Tap ID: EC01 Port ID: 259



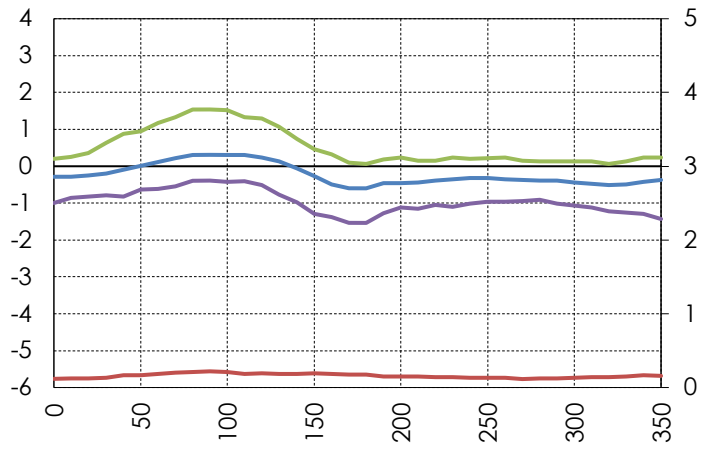
Individual Tap ID: EC02 Port ID: 260



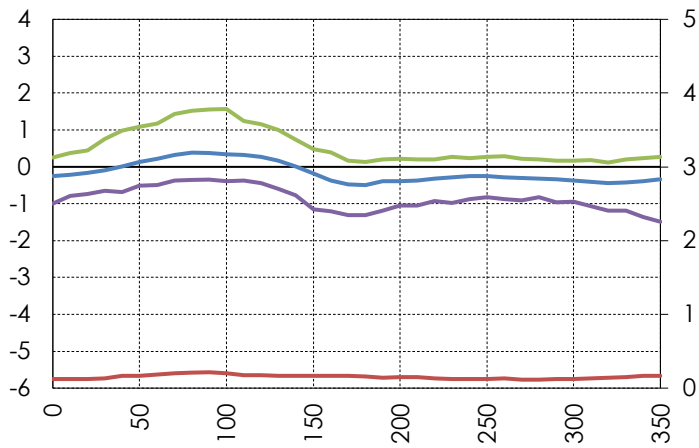
Individual Tap ID: NB01 Port ID: 261



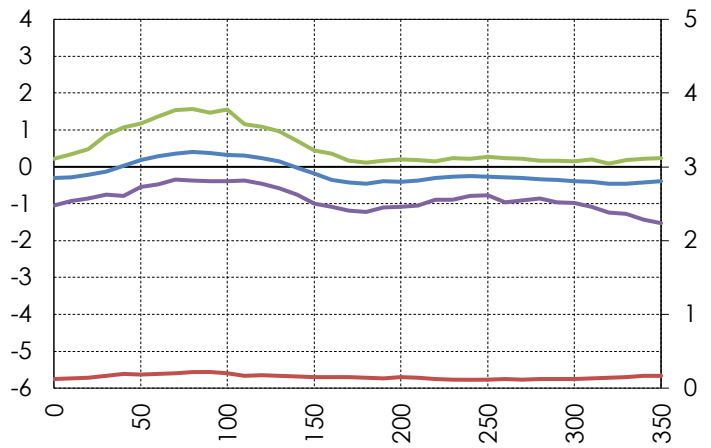
Individual Tap ID: NB02 Port ID: 262



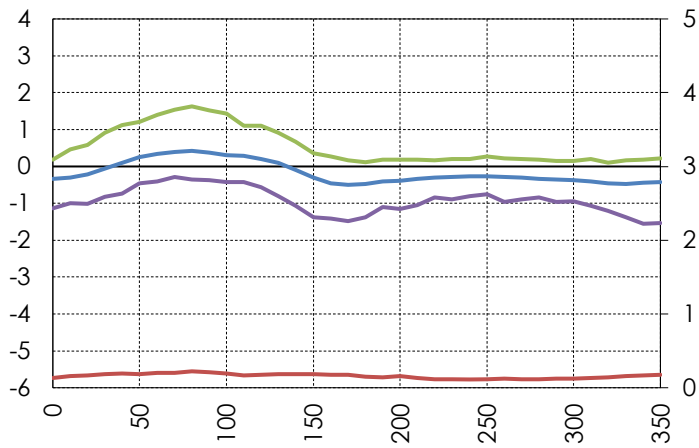
Individual Tap ID: NB03 Port ID: 263



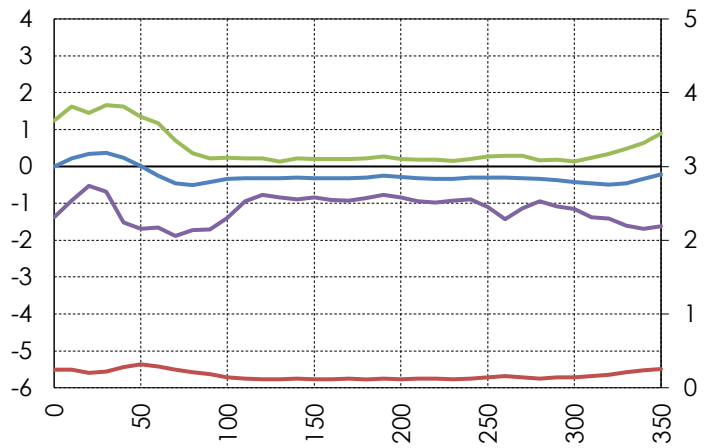
Individual Tap ID: NB04 Port ID: 264



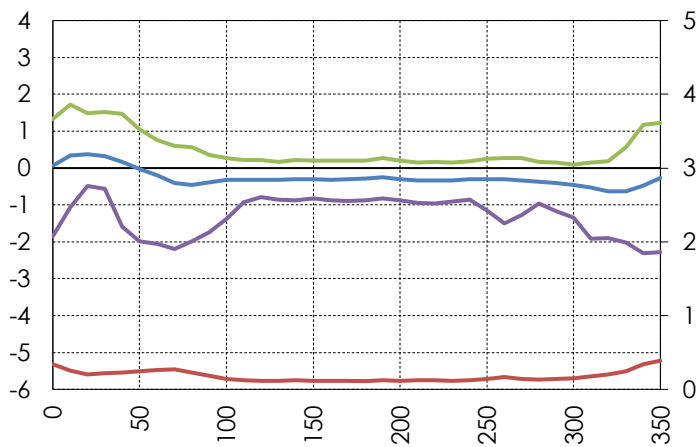
Individual Tap ID: NB05 Port ID: 265



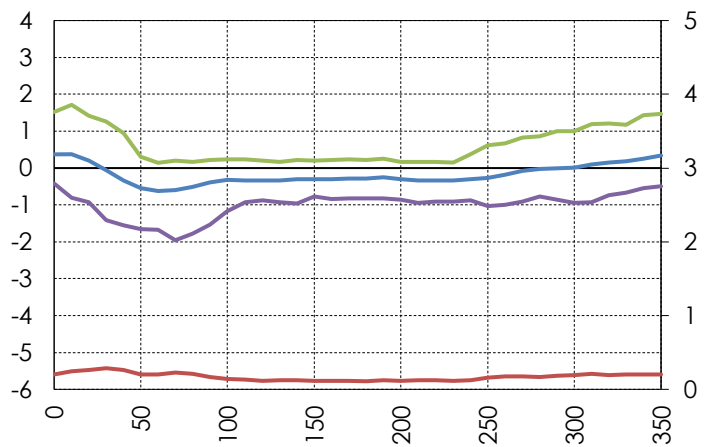
Individual Tap ID: NB06 Port ID: 266



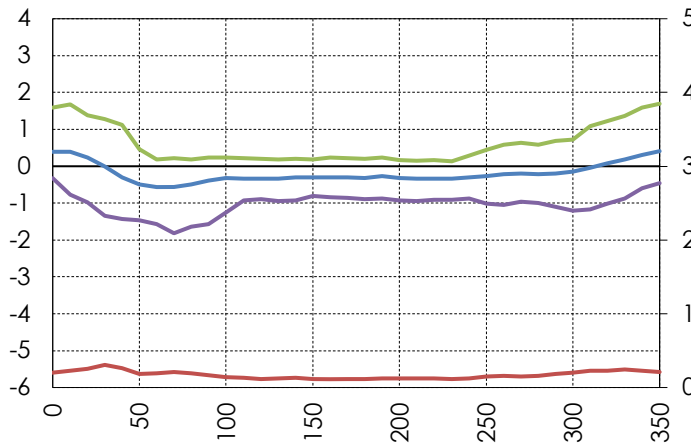
Individual Tap ID: NB07 Port ID: 267



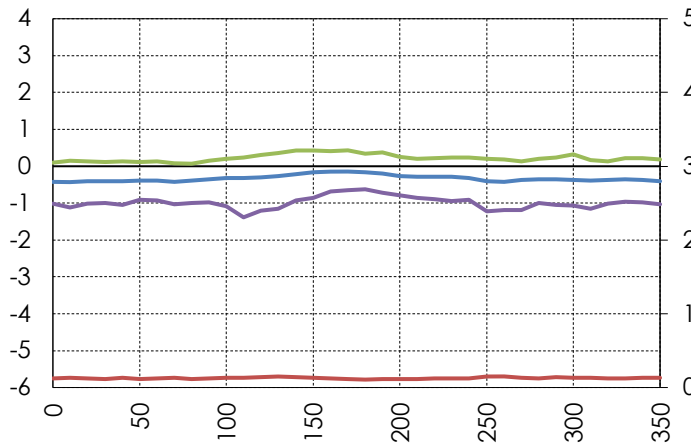
Individual Tap ID: NB08 Port ID: 268



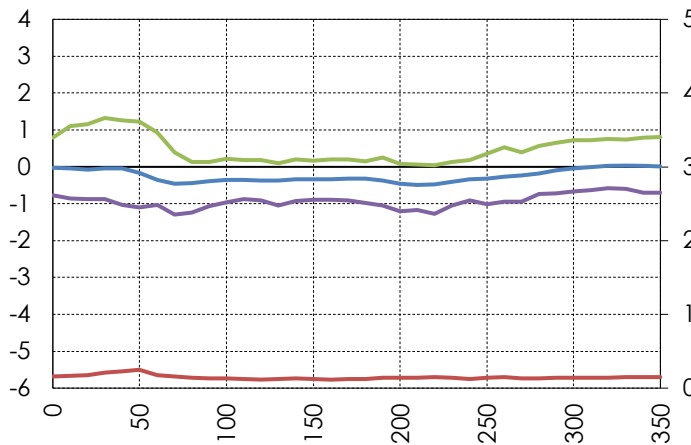
Individual Tap ID: NB09 Port ID: 269



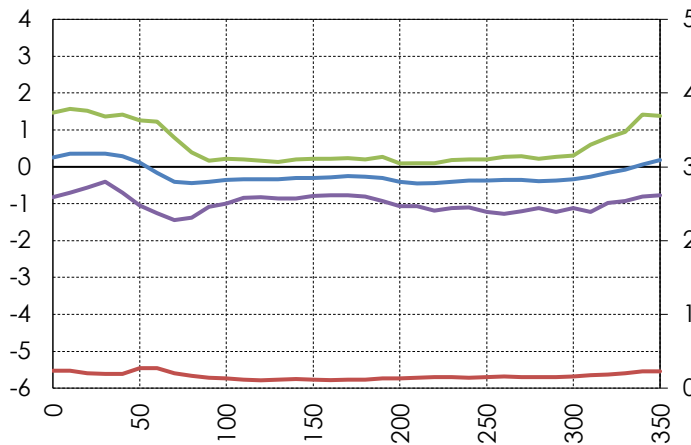
Individual Tap ID: NB10 Port ID: 270



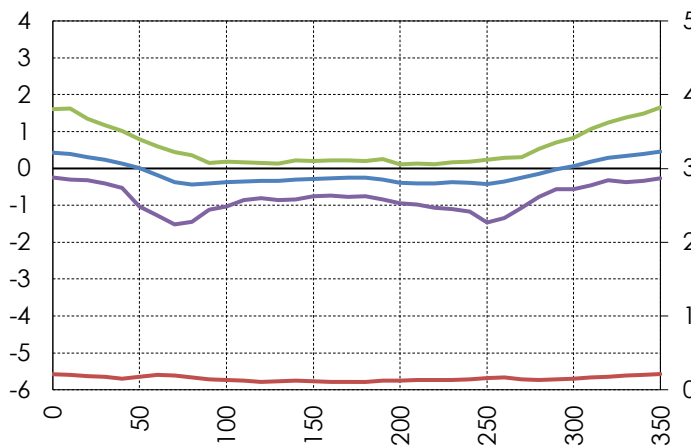
Individual Tap ID: NB11 Port ID: 271



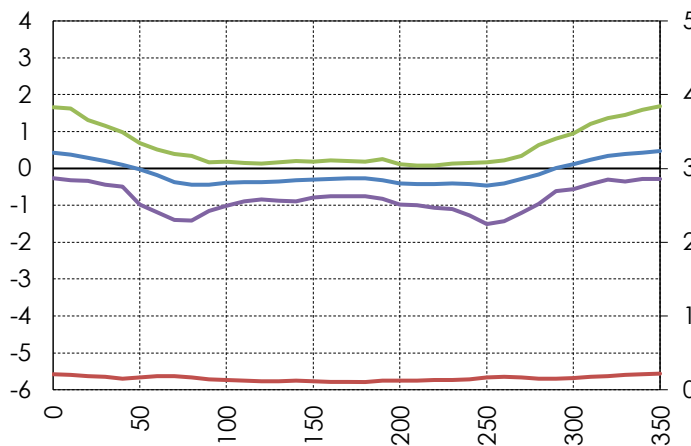
Individual Tap ID: NB12 Port ID: 272



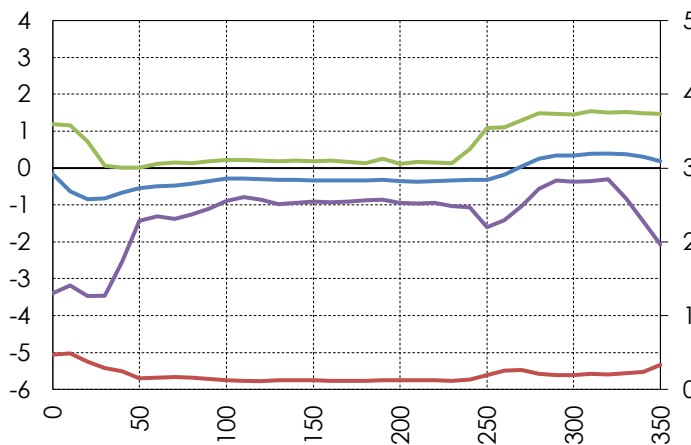
Individual Tap ID: NB13 Port ID: 273



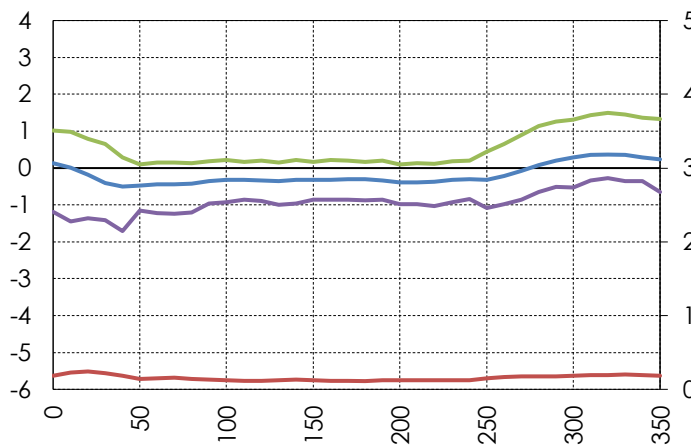
Individual Tap ID: NB14 Port ID: 274



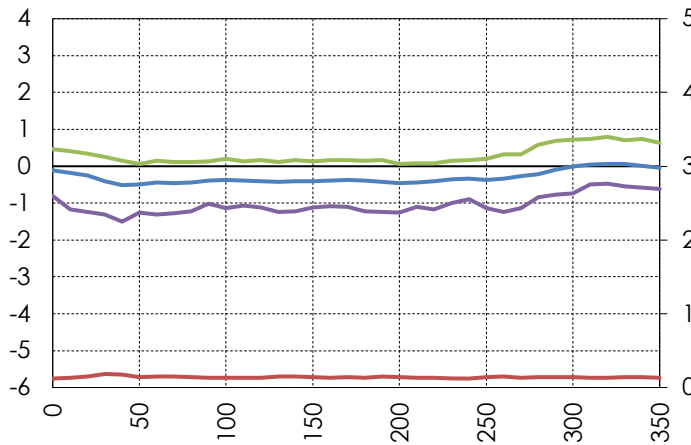
Individual Tap ID: WB01 Port ID: 275



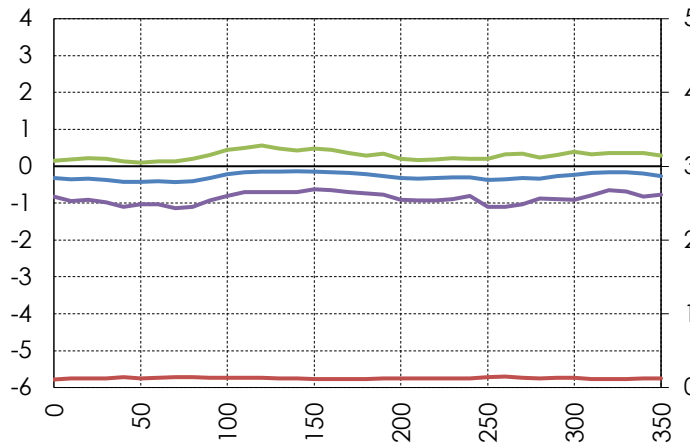
Individual Tap ID: WB02 Port ID: 276



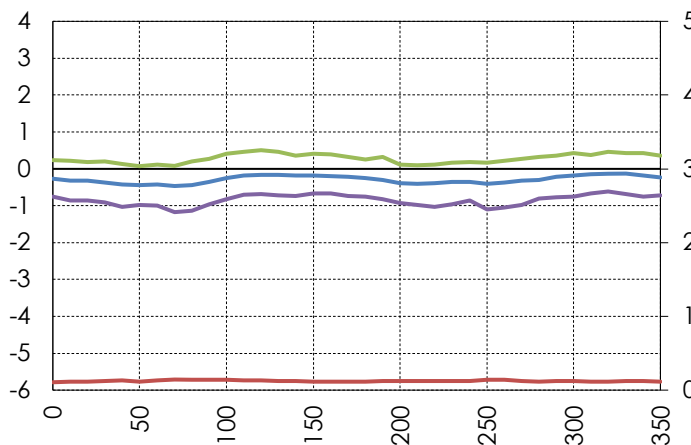
Individual Tap ID: WB03 Port ID: 277



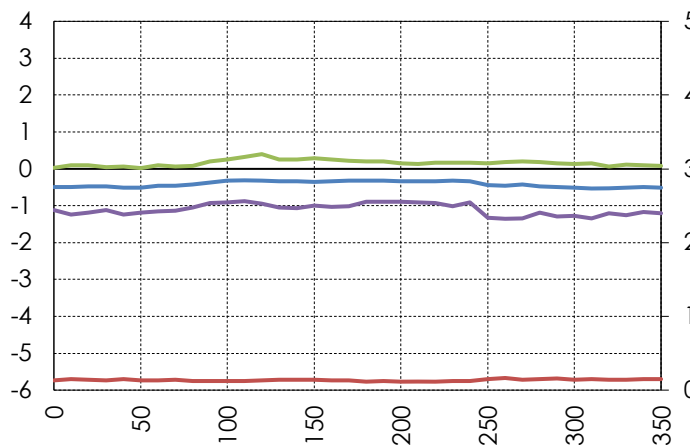
Individual Tap ID: WB04 Port ID: 278



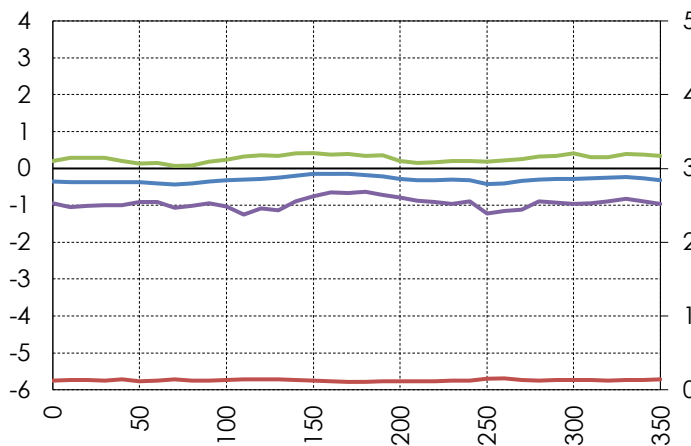
Individual Tap ID: WB05 Port ID: 279



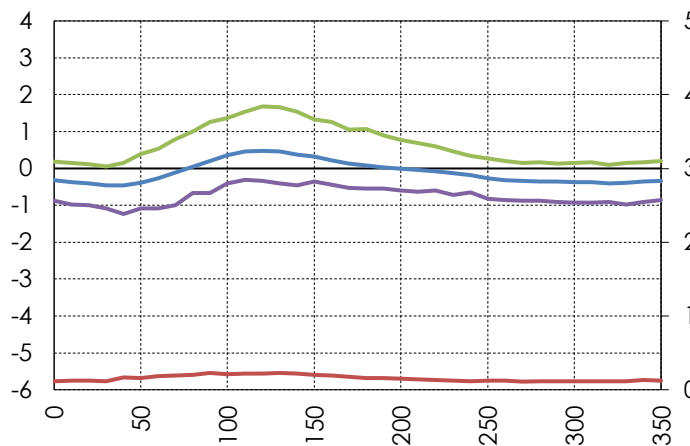
Individual Tap ID: WB06 Port ID: 280



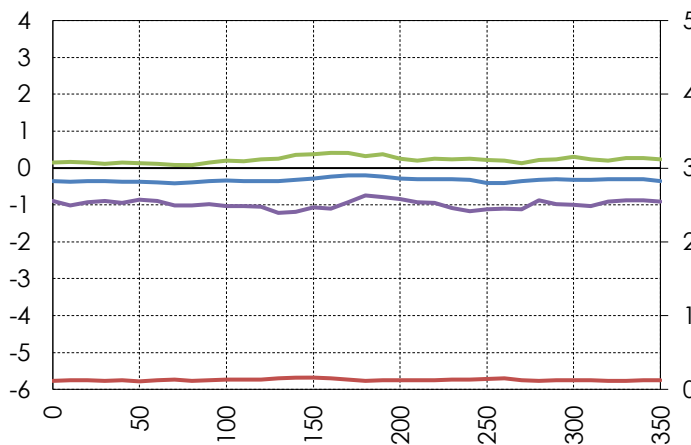
Individual Tap ID: WB07 Port ID: 281



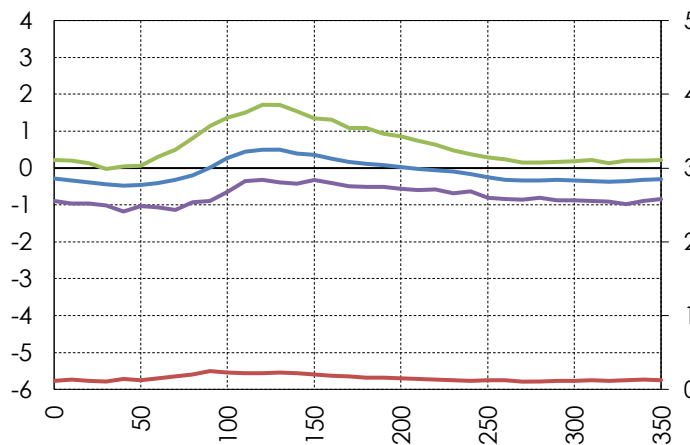
Individual Tap ID: WB08 Port ID: 282



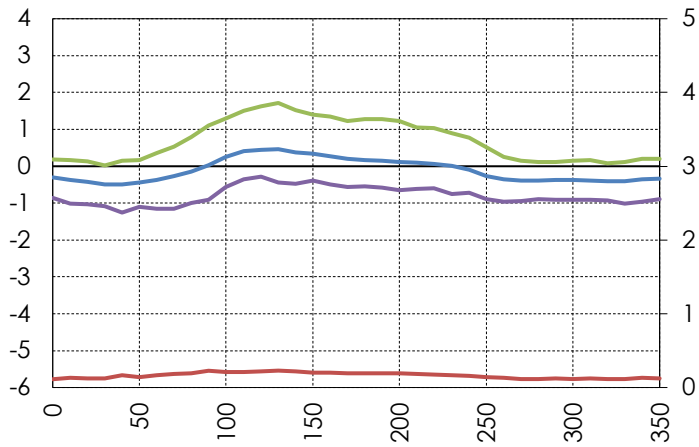
Individual Tap ID: WB09 Port ID: 283



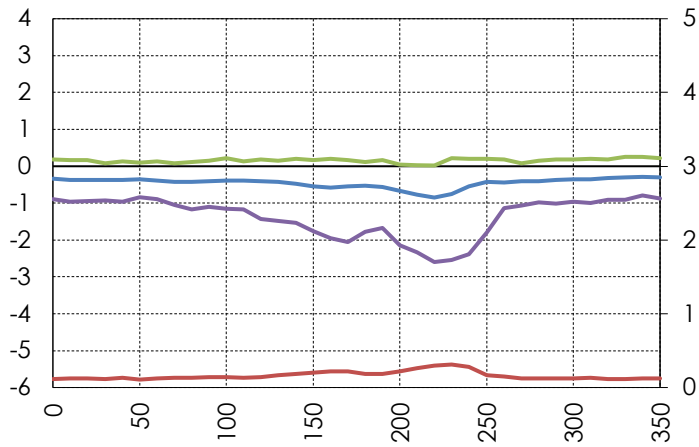
Individual Tap ID: WB10 Port ID: 284



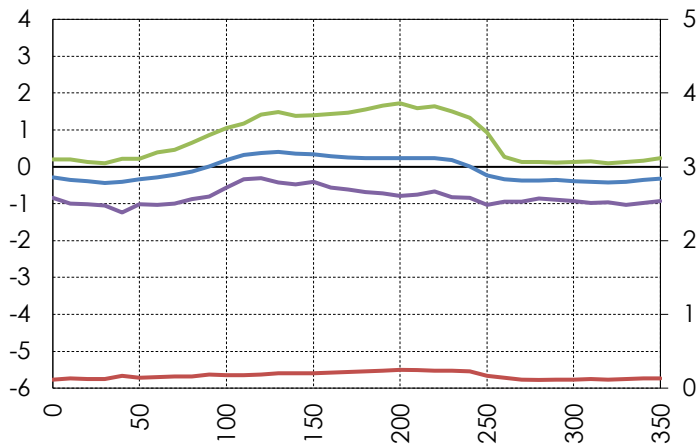
Individual Tap ID: WB11 Port ID: 285



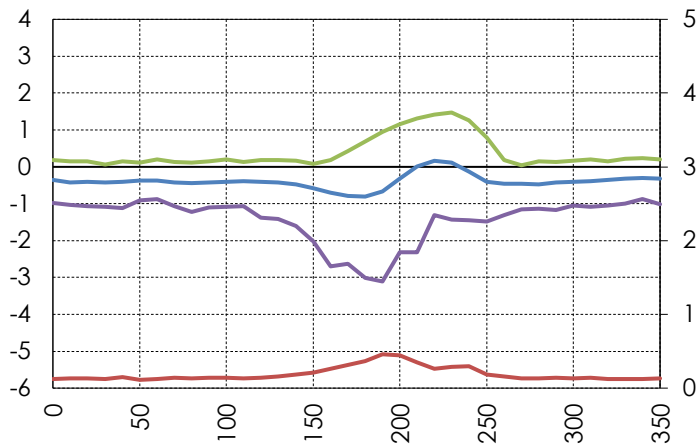
Individual Tap ID: WB12 Port ID: 286



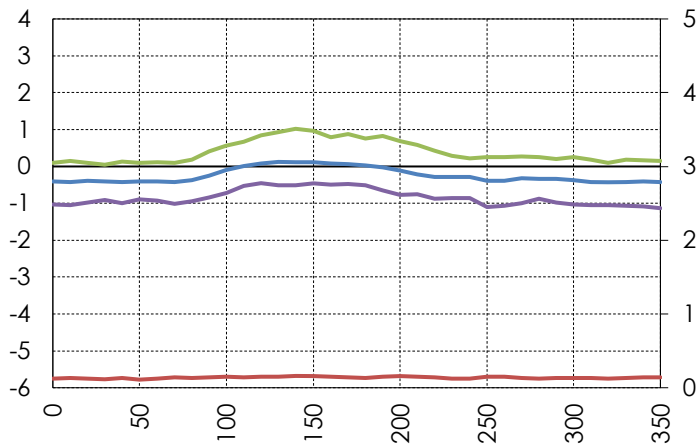
Individual Tap ID: WB13 Port ID: 287



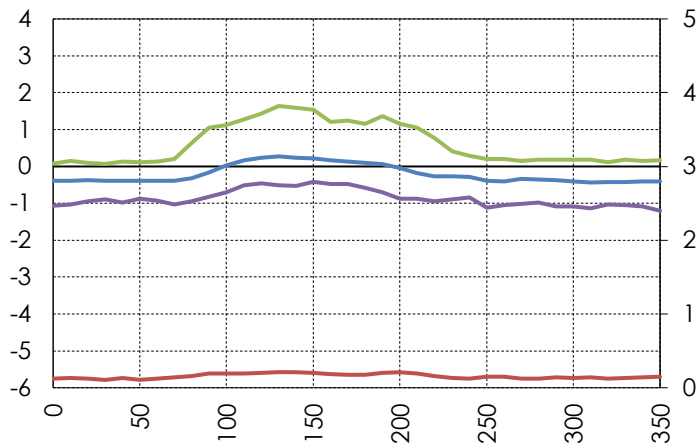
Individual Tap ID: WB15 Port ID: 288



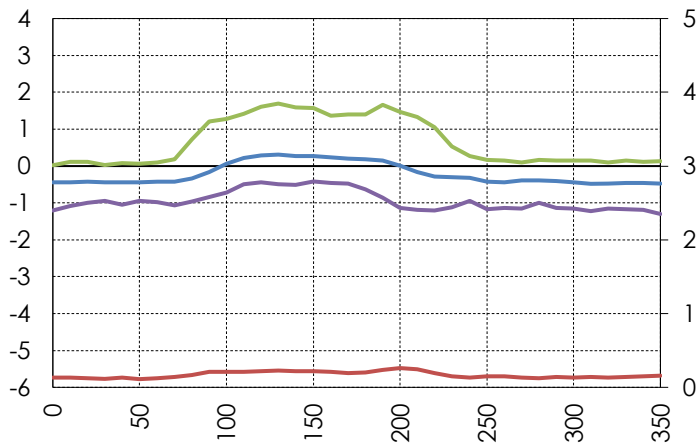
Individual Tap ID: SB01 Port ID: 289



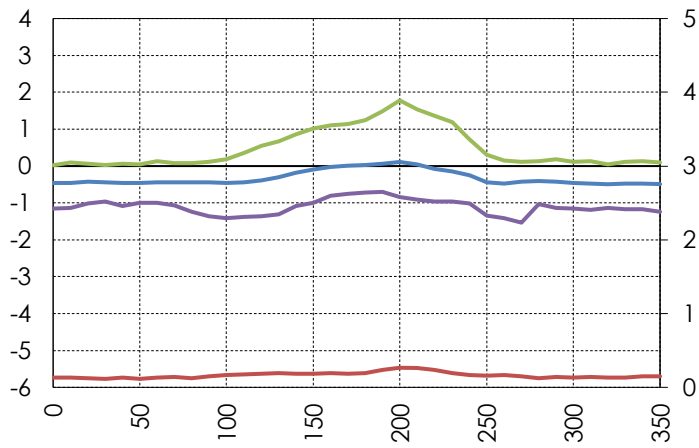
Individual Tap ID: SB02 Port ID: 290



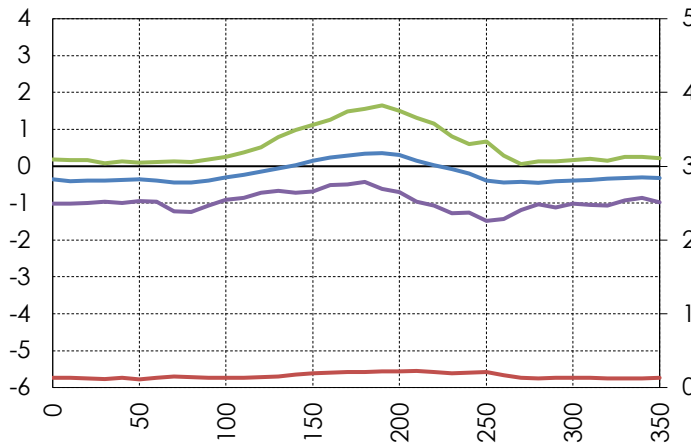
Individual Tap ID: SB04 Port ID: 291



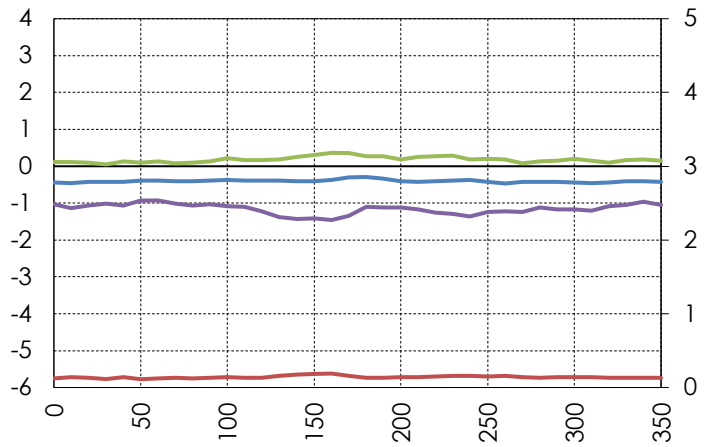
Individual Tap ID: SB05 Port ID: 292



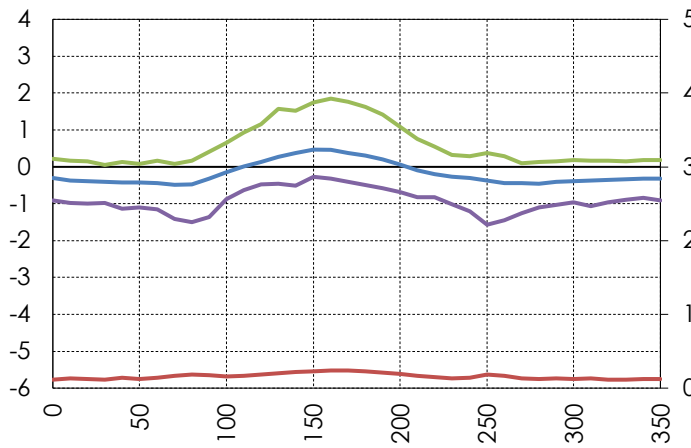
Individual Tap ID: SB06 Port ID: 293



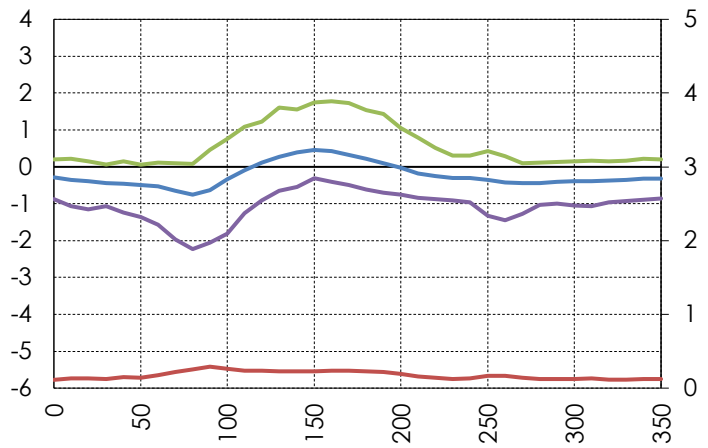
Individual Tap ID: SB07 Port ID: 294



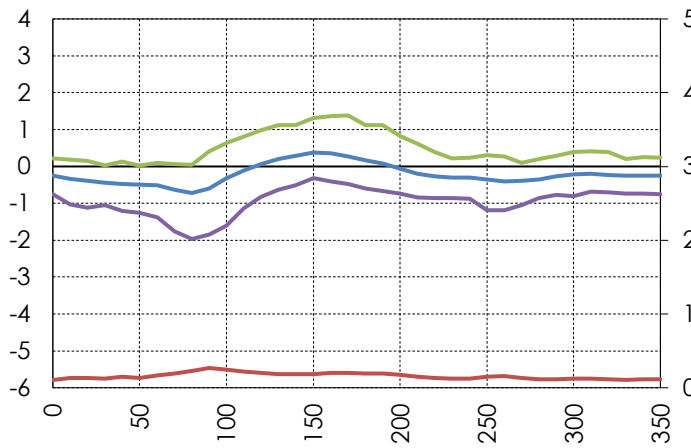
Individual Tap ID: SB08 Port ID: 295



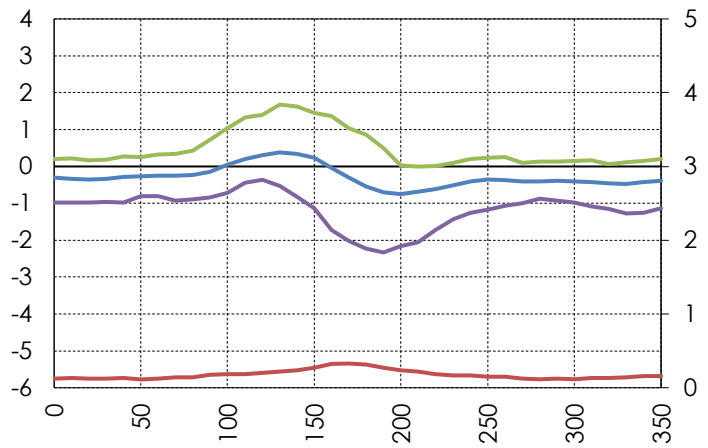
Individual Tap ID: SB09 Port ID: 296



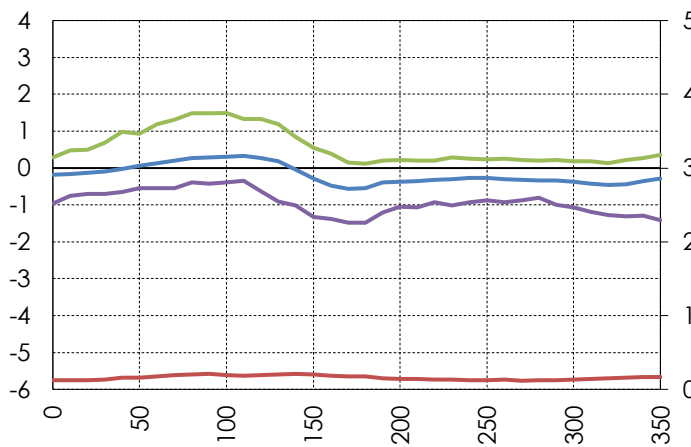
Individual Tap ID: SB10 Port ID: 297



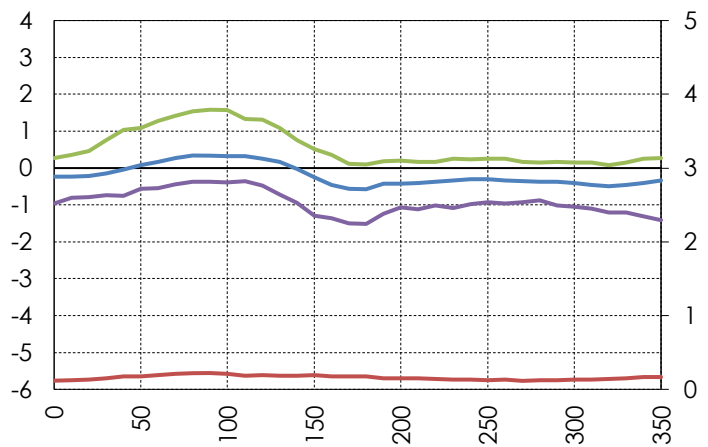
Individual Tap ID: EB01 Port ID: 298



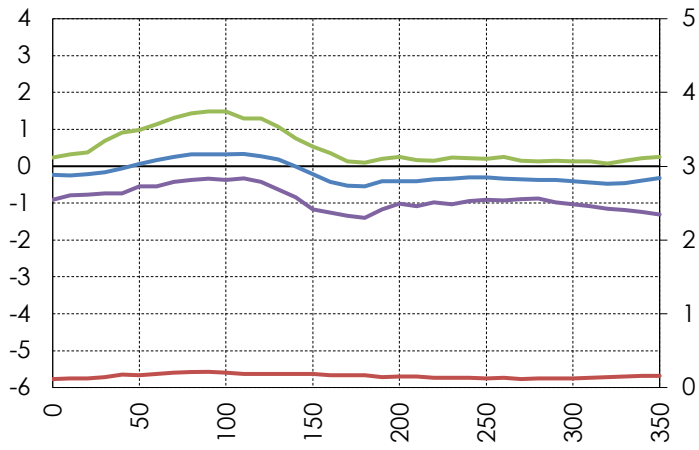
Individual Tap ID: EB02 Port ID: 299



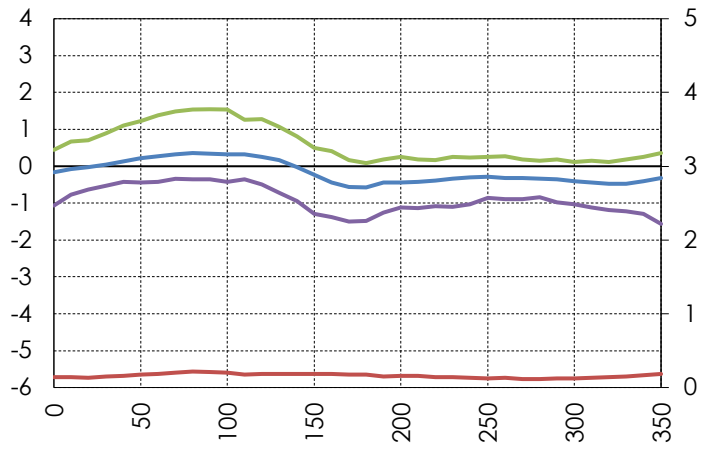
Individual Tap ID: EB03 Port ID: 300



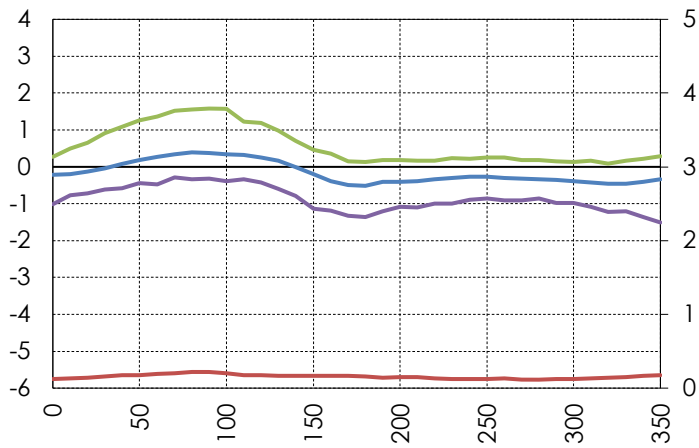
Individual Tap ID: EB04 Port ID: 301



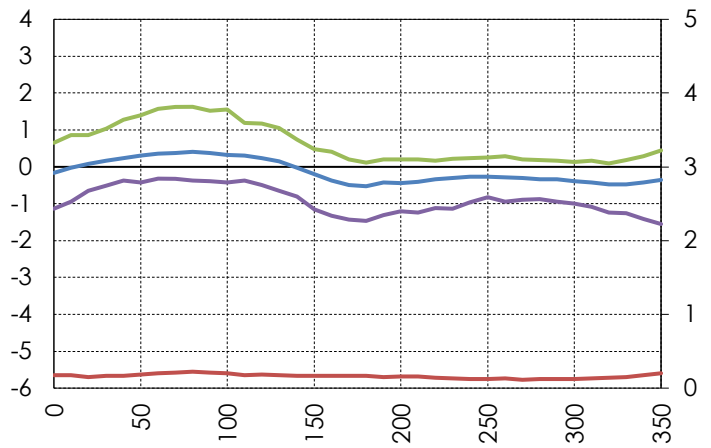
Individual Tap ID: EB05 Port ID: 302



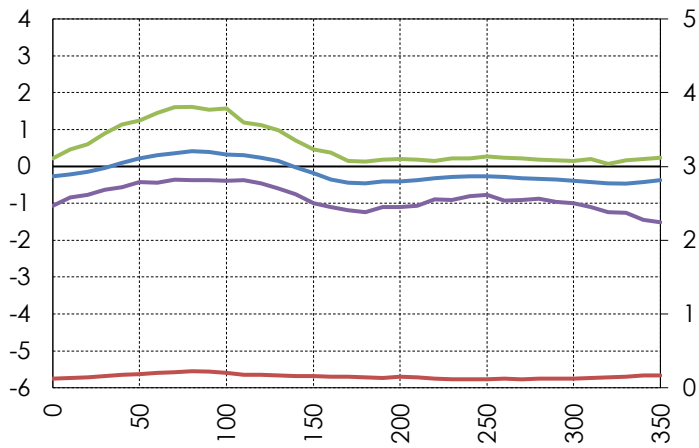
Individual Tap ID: EB06 Port ID: 303



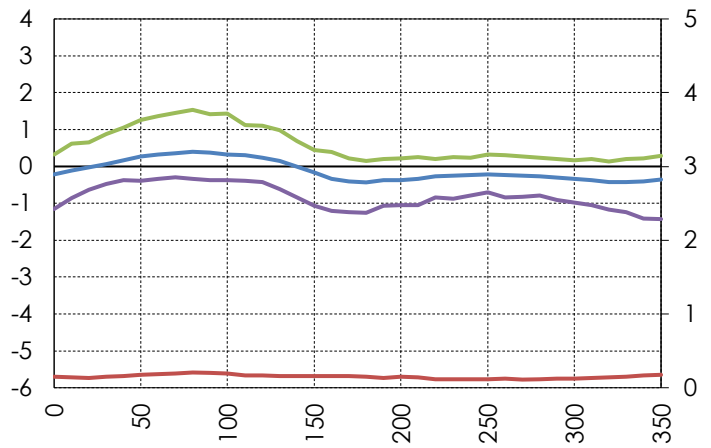
Individual Tap ID: EB07 Port ID: 304



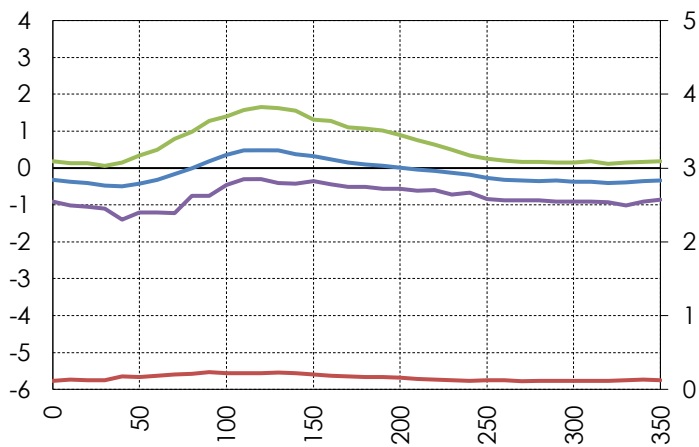
Individual Tap ID: EB08 Port ID: 305



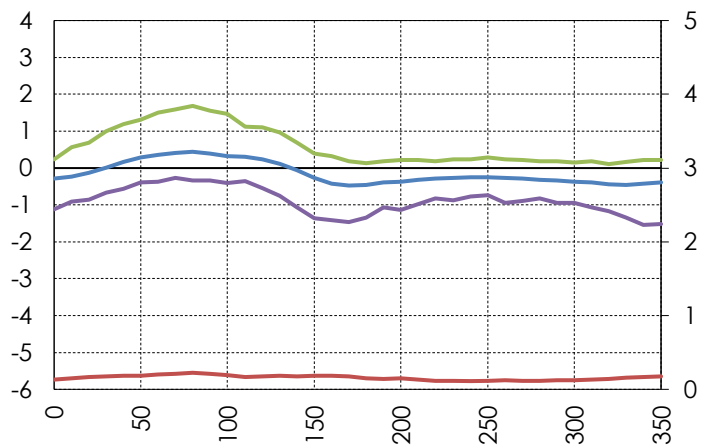
Individual Tap ID: EB09 Port ID: 306



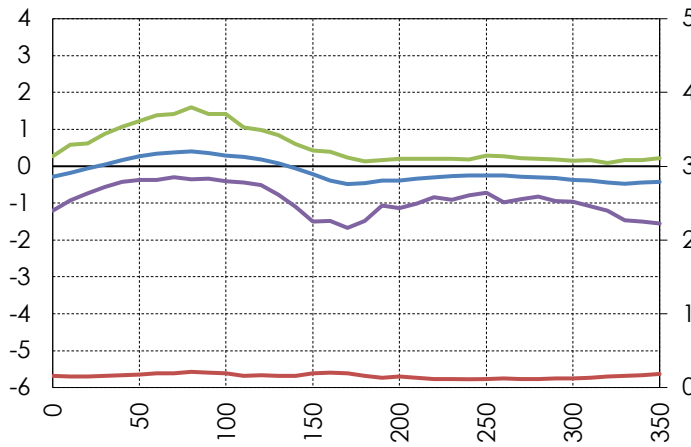
Individual Tap ID: EB10 Port ID: 307



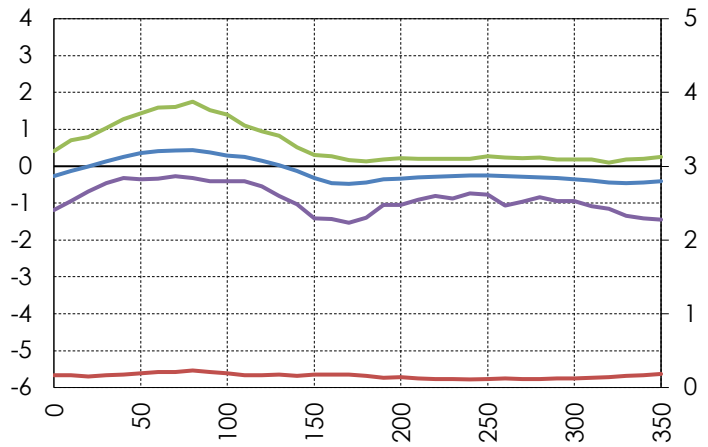
Individual Tap ID: EB11 Port ID: 308



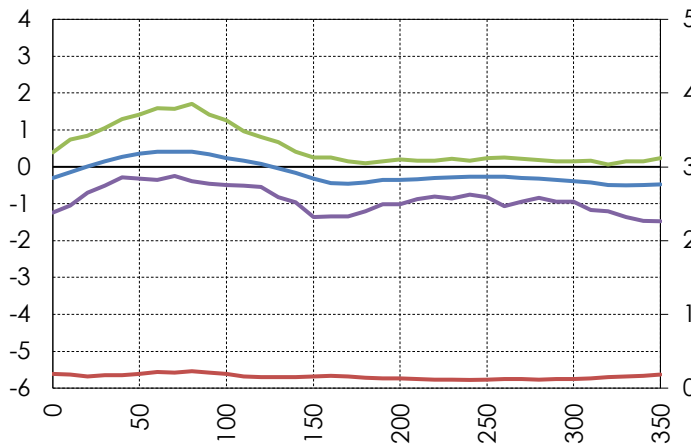
Individual Tap ID: EB12 Port ID: 309



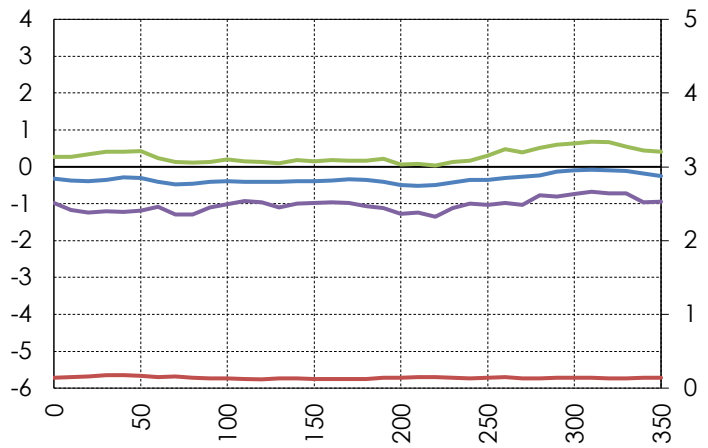
Individual Tap ID: EB13 Port ID: 310



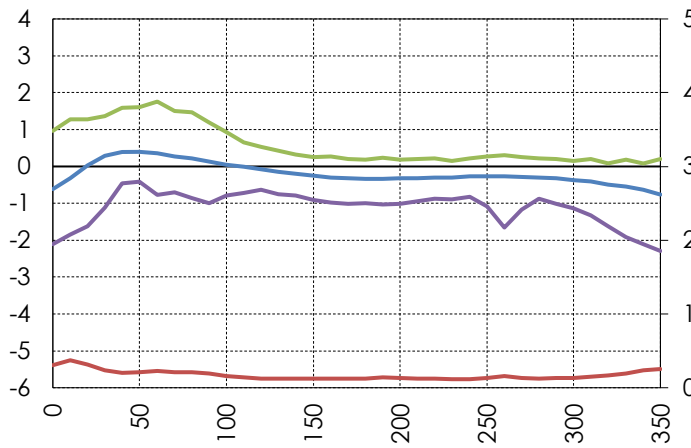
Individual Tap ID: EB14 Port ID: 311



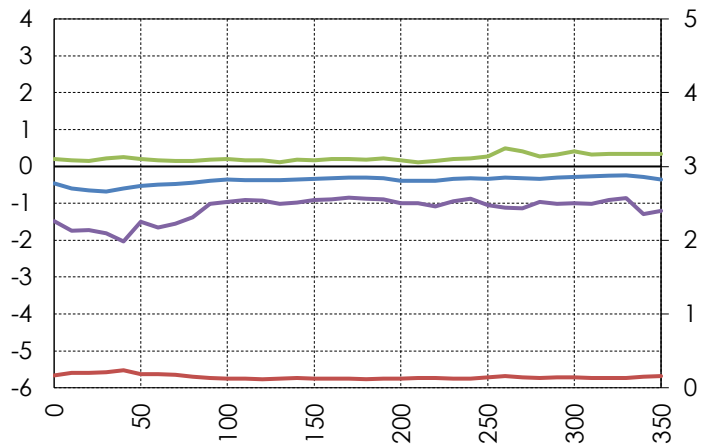
Individual Tap ID: EB15 Port ID: 312



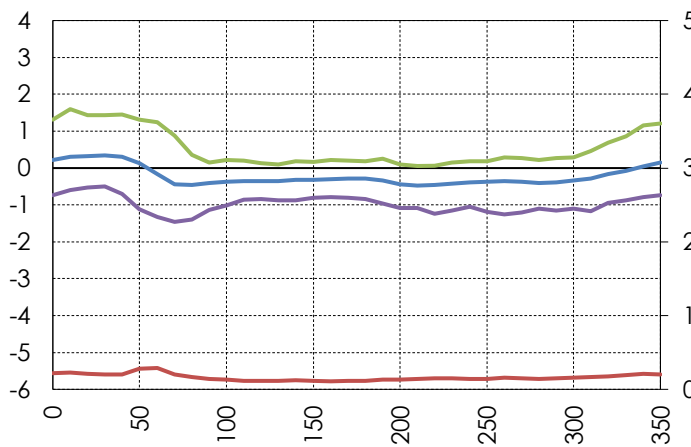
Individual Tap ID: EB16 Port ID: 313



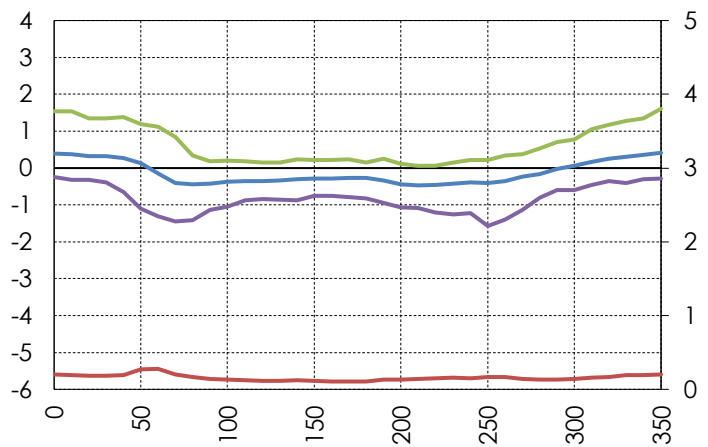
Individual Tap ID: EB17 Port ID: 314



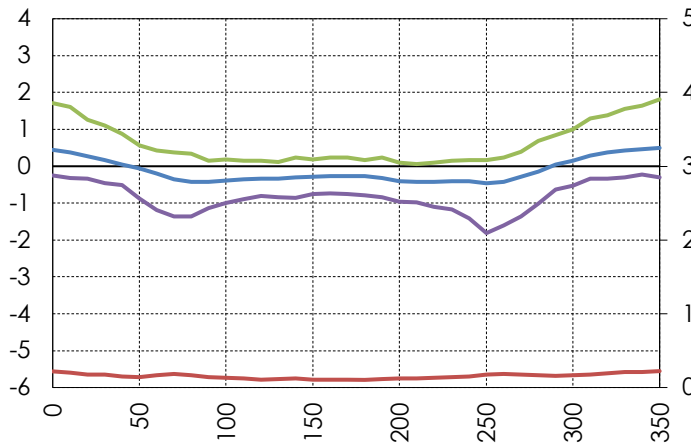
Individual Tap ID: EB18 Port ID: 315



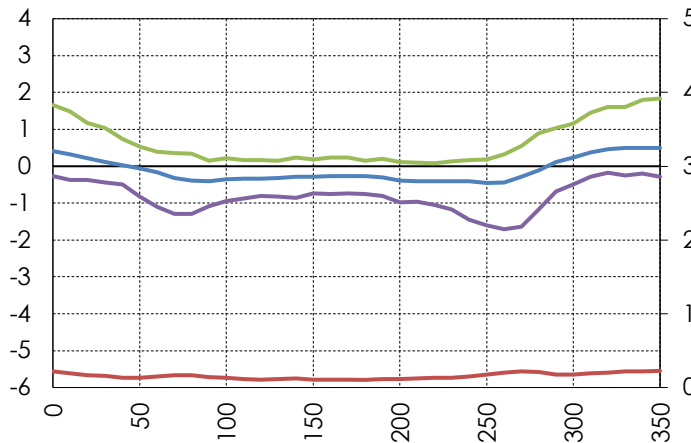
Individual Tap ID: NA01 Port ID: 316



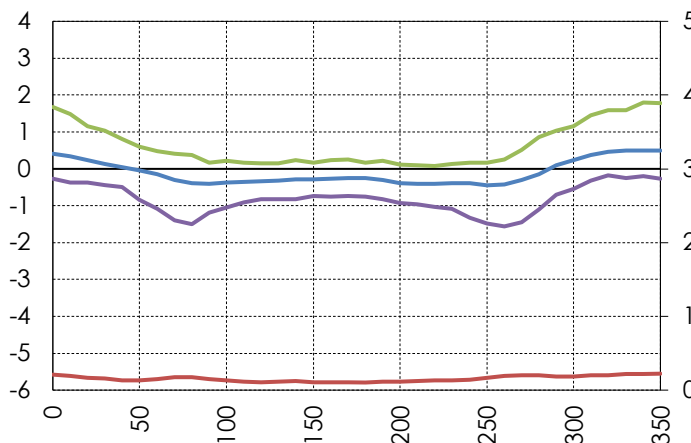
Individual Tap ID: NA03 Port ID: 317



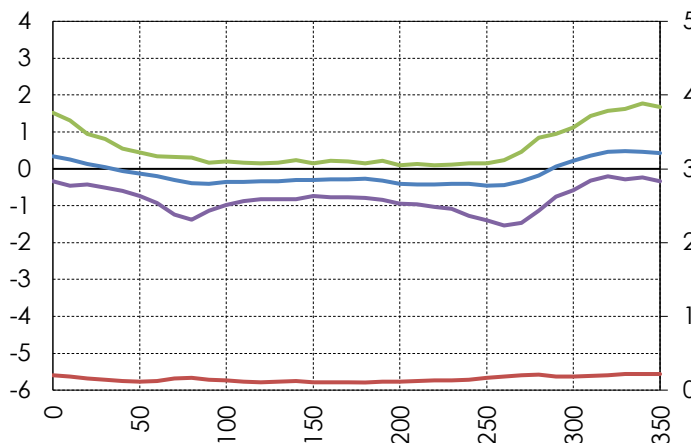
Individual Tap ID: NA04 Port ID: 318



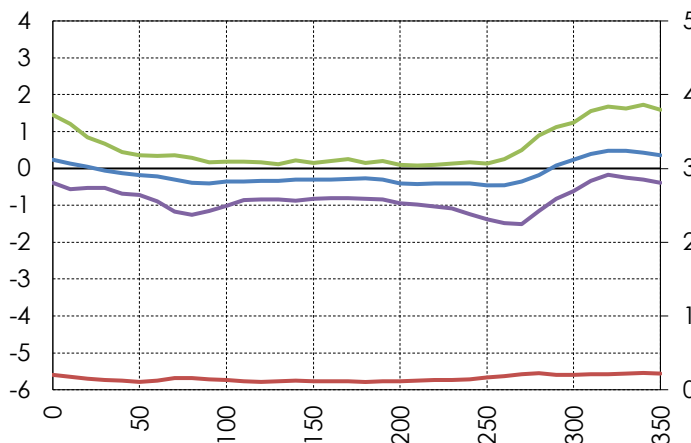
Individual Tap ID: NA05 Port ID: 319



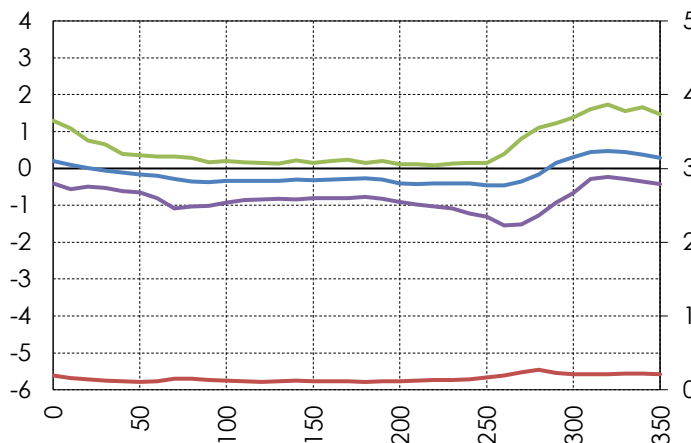
Individual Tap ID: NA06 Port ID: 320



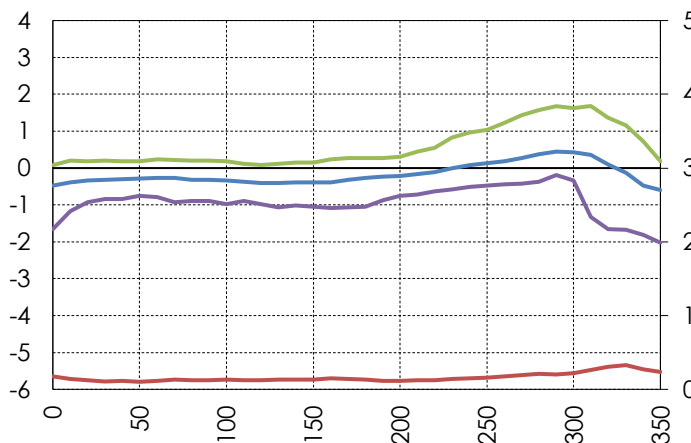
Individual Tap ID: NA07 Port ID: 321



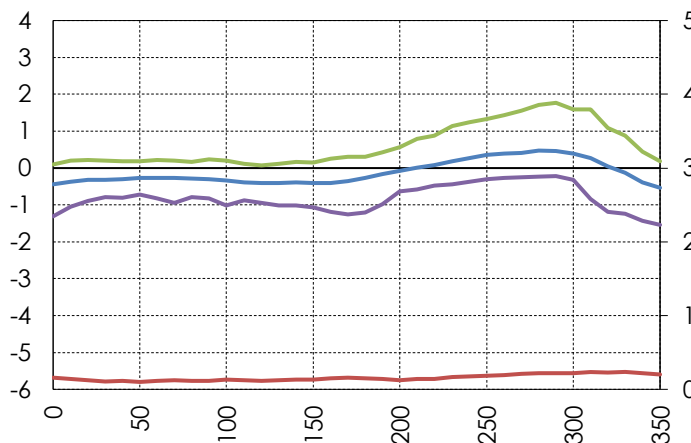
Individual Tap ID: NA08 Port ID: 322



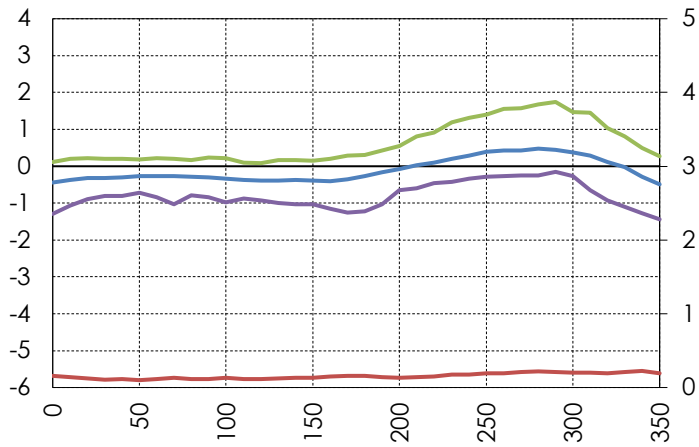
Individual Tap ID: WA01 Port ID: 323



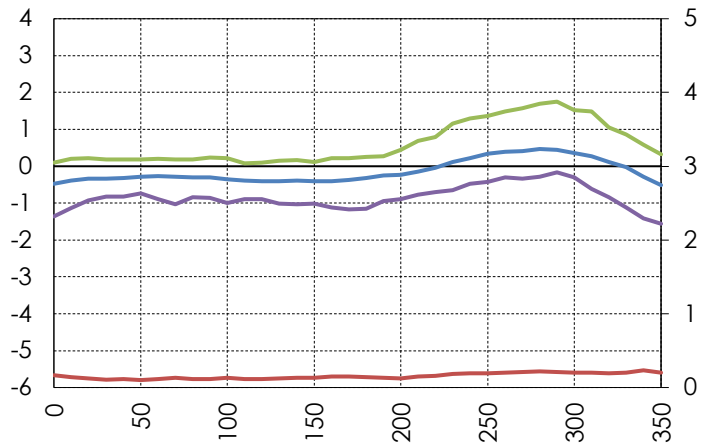
Individual Tap ID: WA02 Port ID: 324



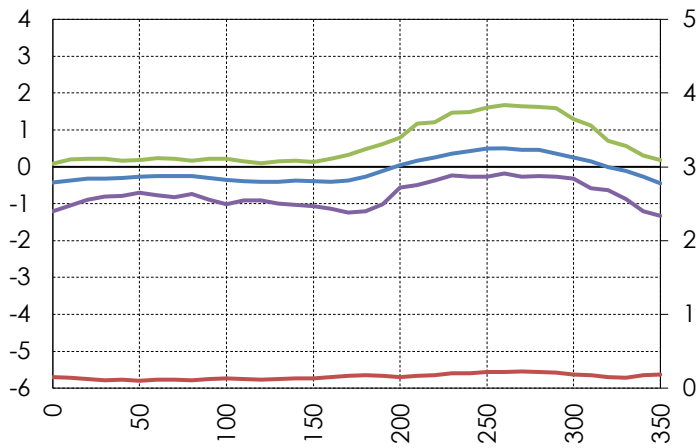
Individual Tap ID: WA03 Port ID: 325



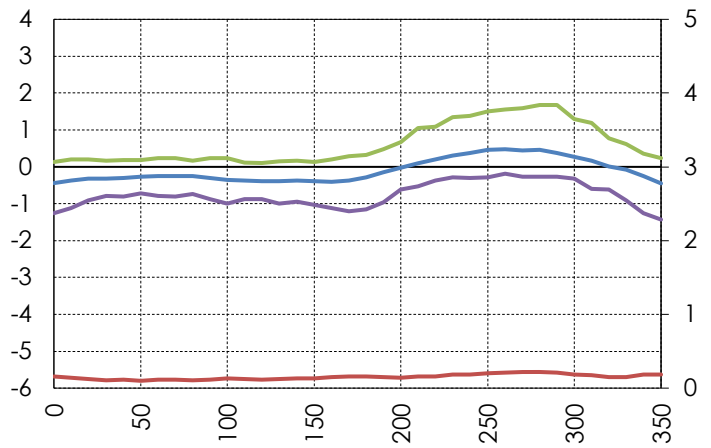
Individual Tap ID: WA04 Port ID: 326



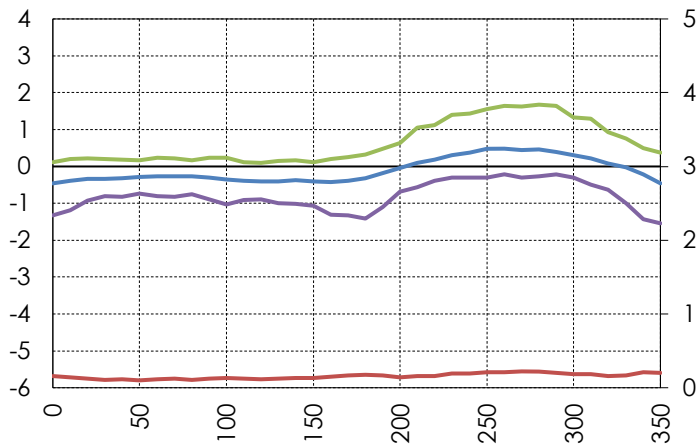
Individual Tap ID: WA05 Port ID: 327



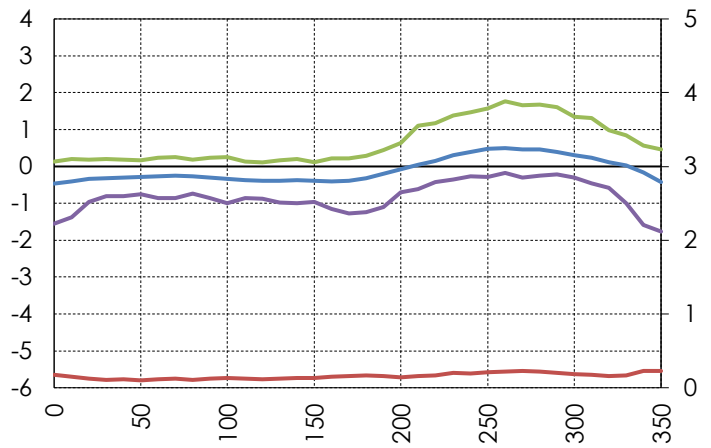
Individual Tap ID: WA06 Port ID: 328



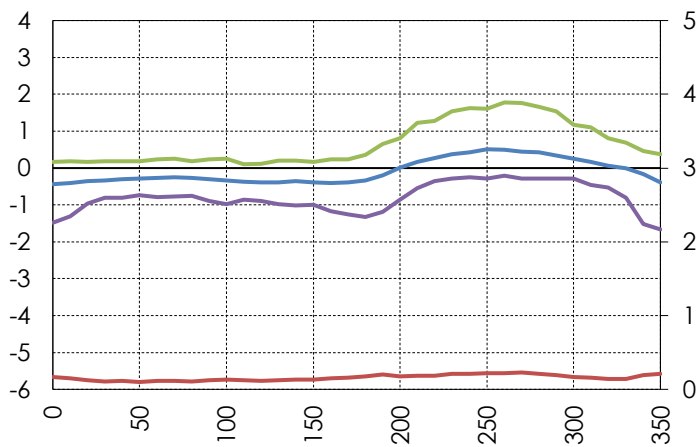
Individual Tap ID: WA07 Port ID: 329



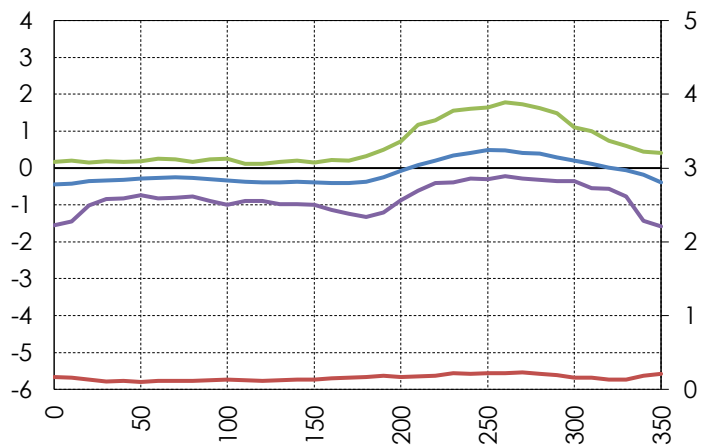
Individual Tap ID: WA08 Port ID: 330



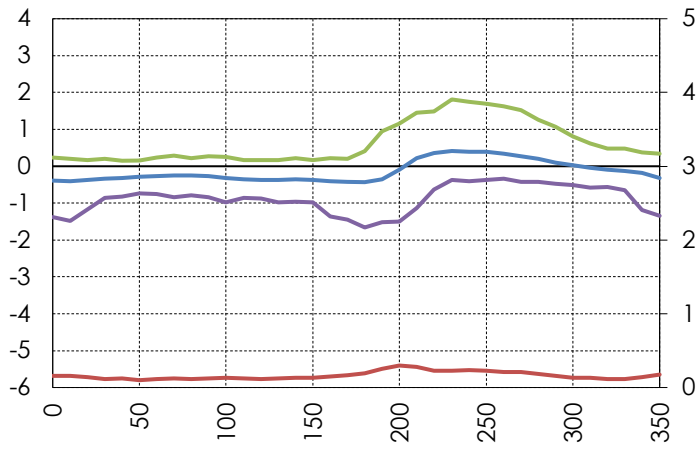
Individual Tap ID: WA09 Port ID: 331



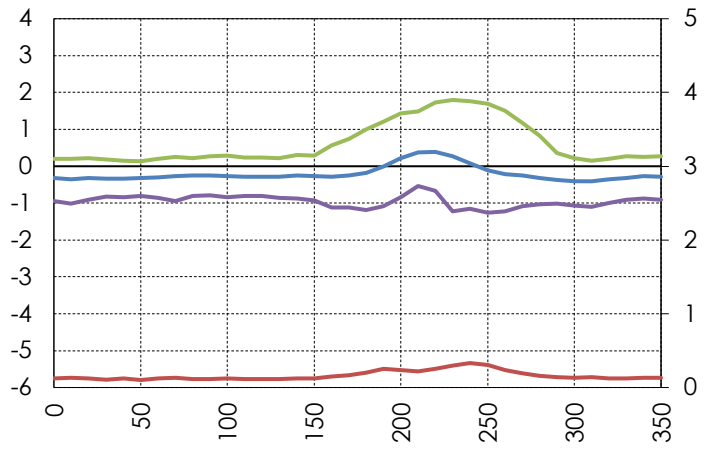
Individual Tap ID: WA10 Port ID: 332



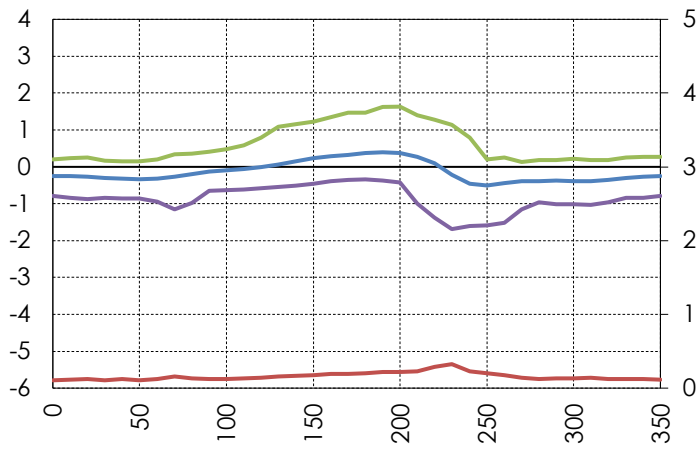
Individual Tap ID: WA11 Port ID: 333



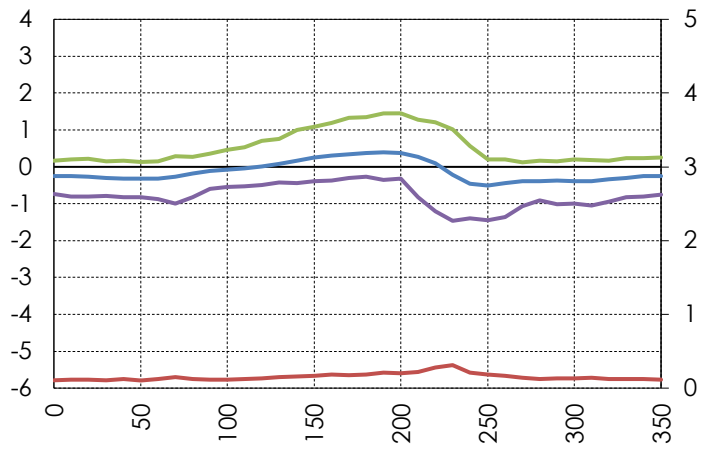
Individual Tap ID: WA12 Port ID: 334



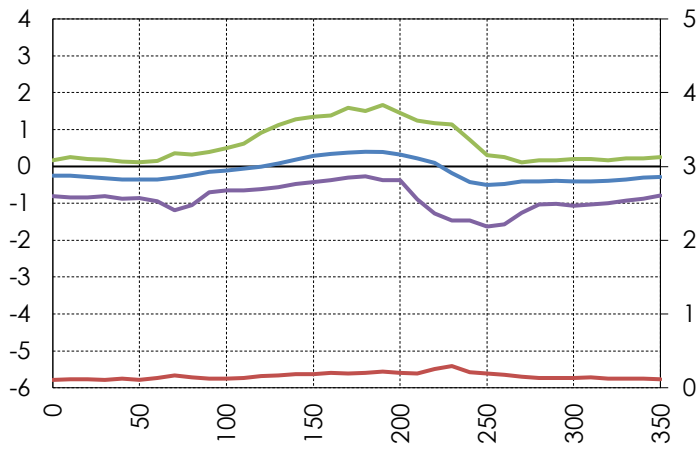
Individual Tap ID: SA02 Port ID: 336



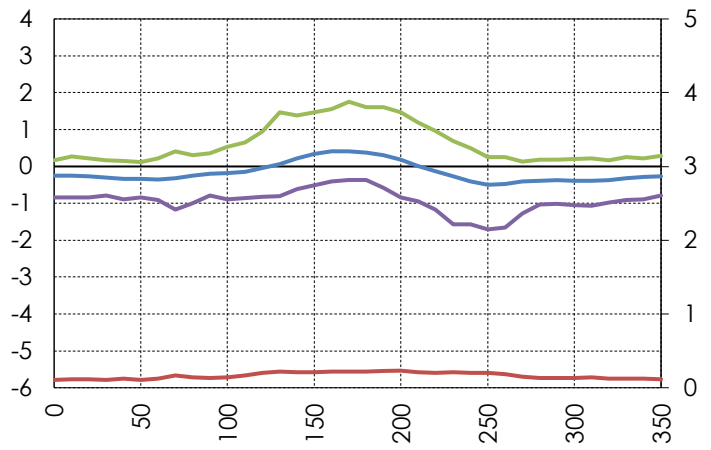
Individual Tap ID: SA03 Port ID: 337



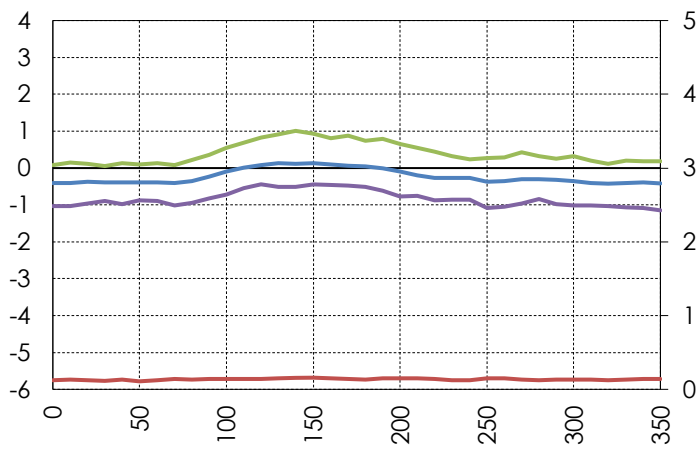
Individual Tap ID: SA04 Port ID: 338



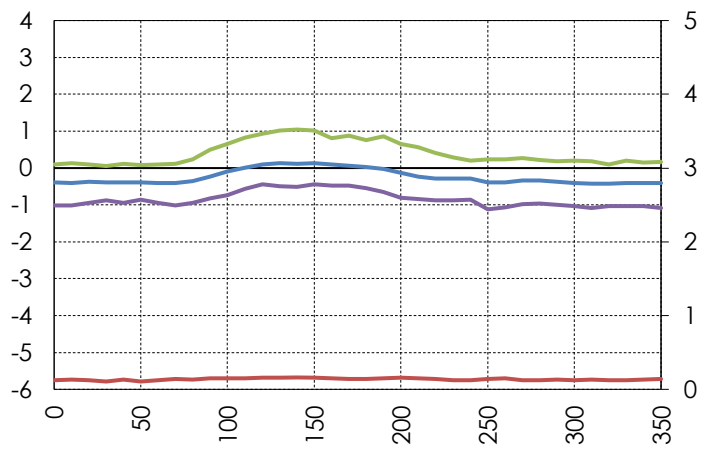
Individual Tap ID: SA05 Port ID: 339



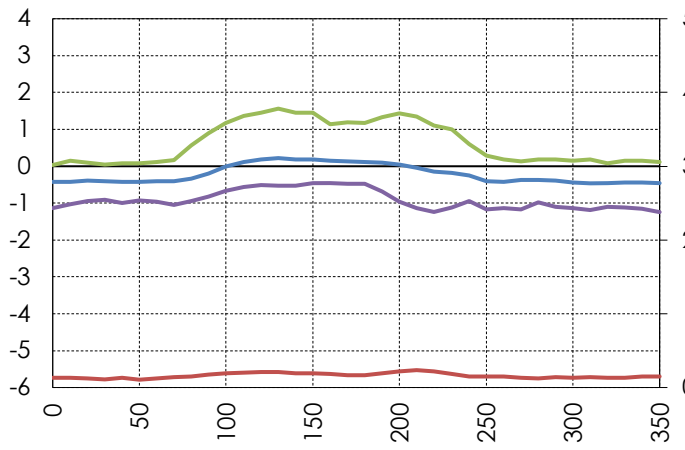
Individual Tap ID: SA06 Port ID: 340



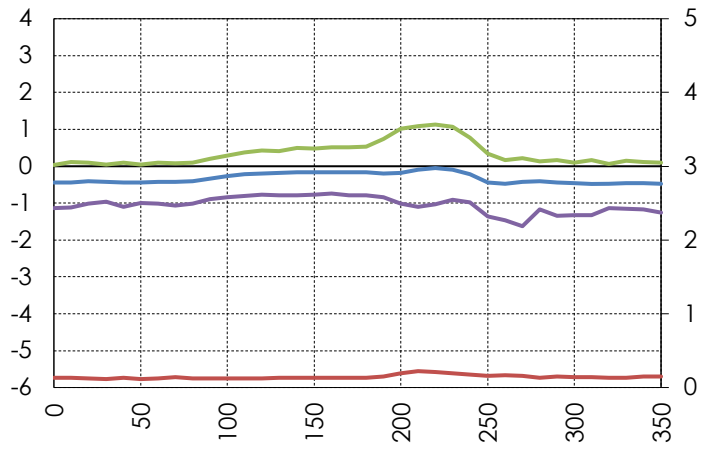
Individual Tap ID: SA07 Port ID: 341



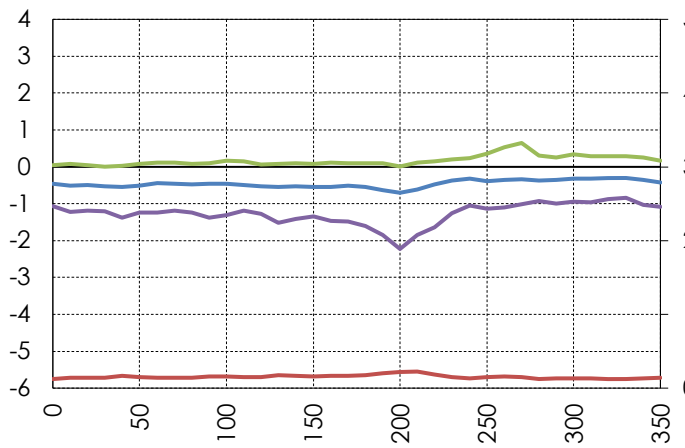
Individual Tap ID: SA08 Port ID: 342



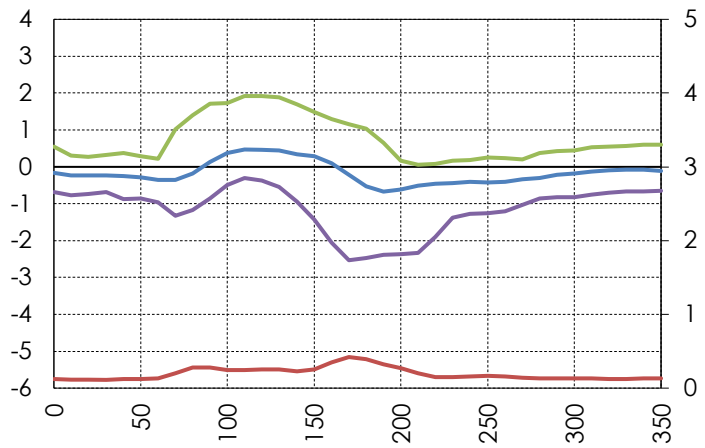
Individual Tap ID: SA09 Port ID: 343



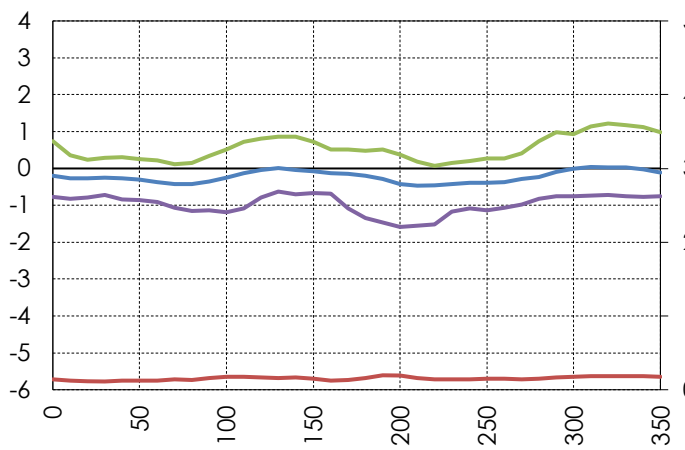
Individual Tap ID: SA10 Port ID: 344



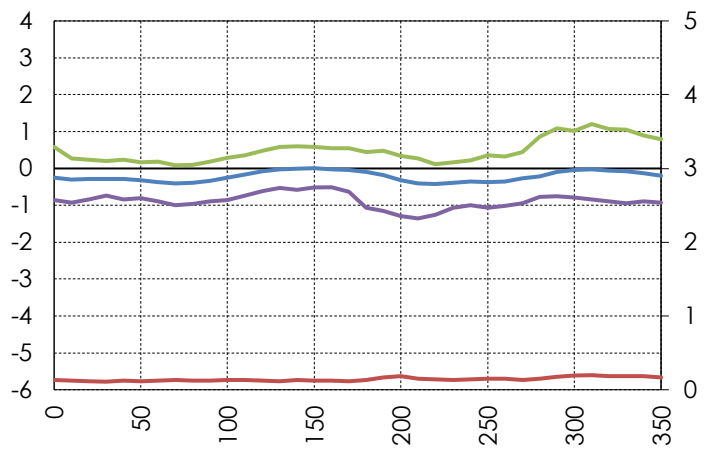
Individual Tap ID: EA01 Port ID: 345



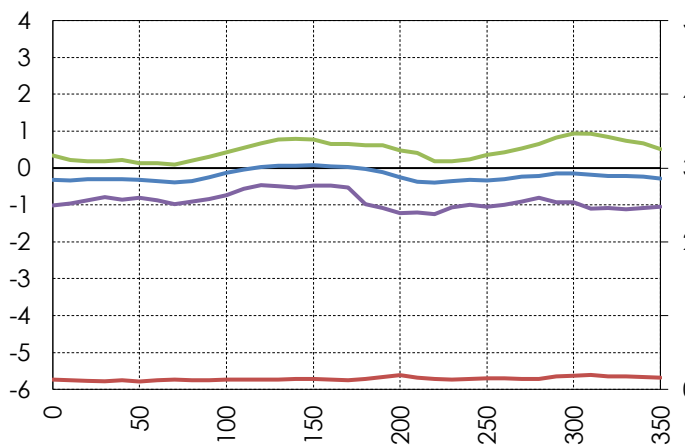
Individual Tap ID: EA02 Port ID: 346



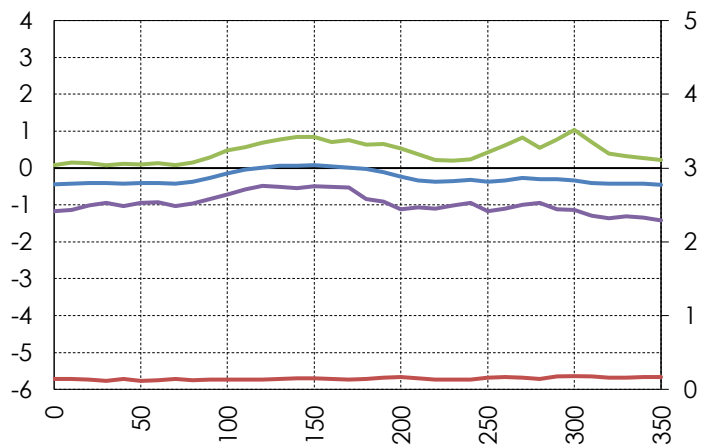
Individual Tap ID: EA03 Port ID: 347



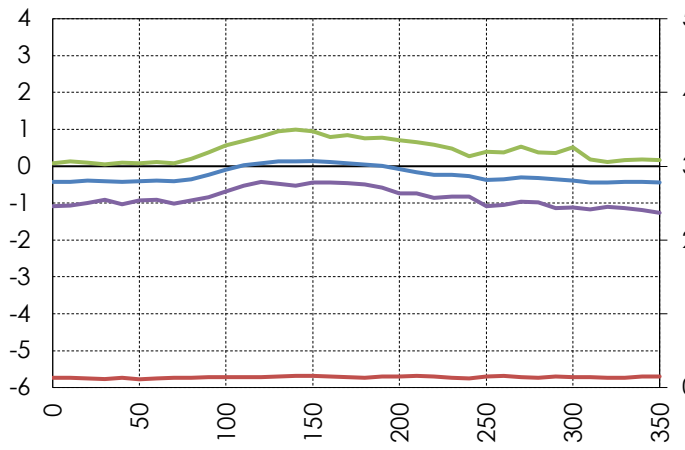
Individual Tap ID: EA04 Port ID: 348



Individual Tap ID: EA05 Port ID: 349



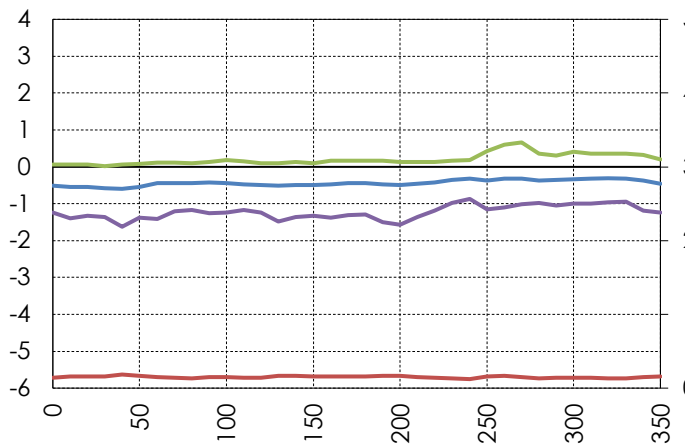
Individual Tap ID: EA06 Port ID: 350



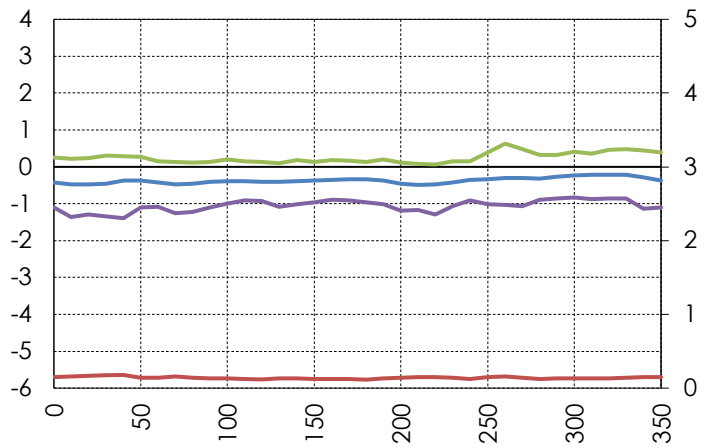
Individual Tap ID: EA07 Port ID: 351



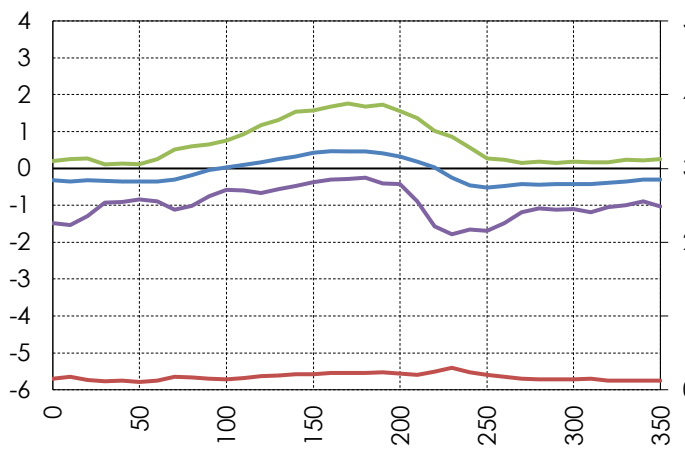
Individual Tap ID: EA08 Port ID: 352



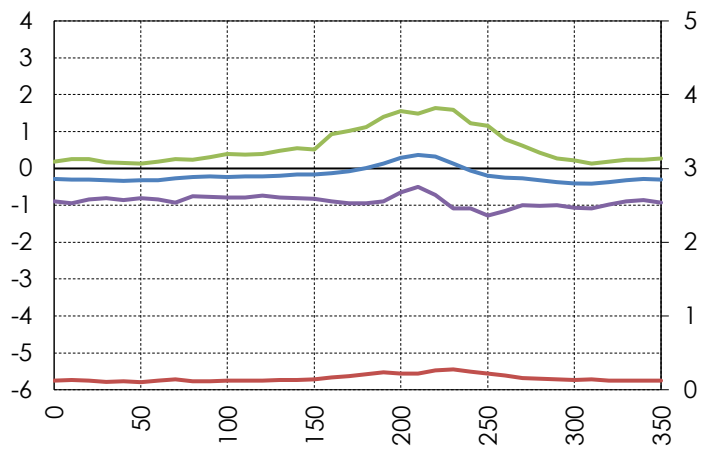
Individual Tap ID: EA09 Port ID: 353



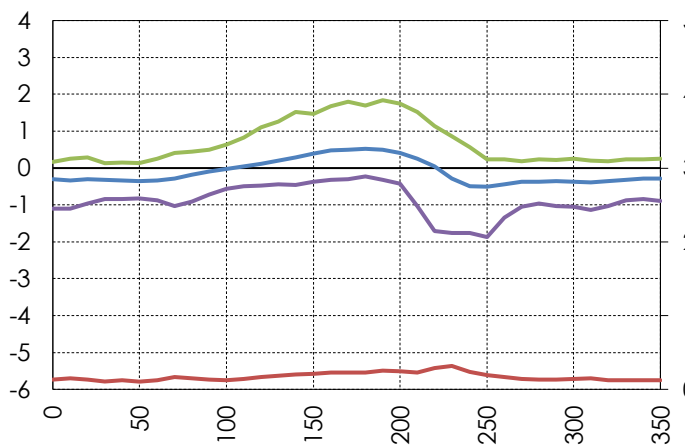
Individual Tap ID: SG04 Port ID: 354



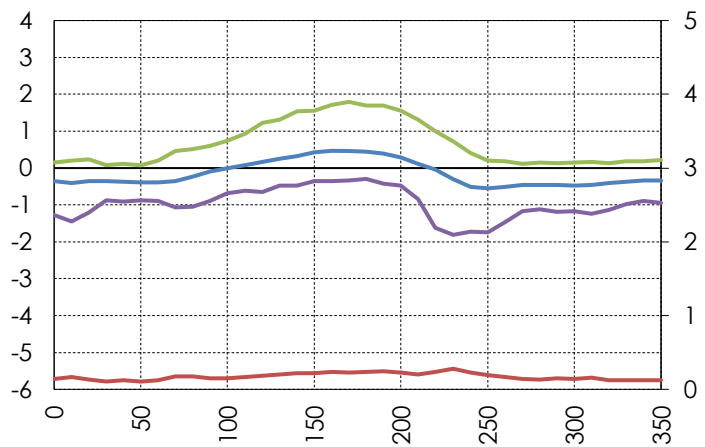
Individual Tap ID: SA01 Port ID: 355



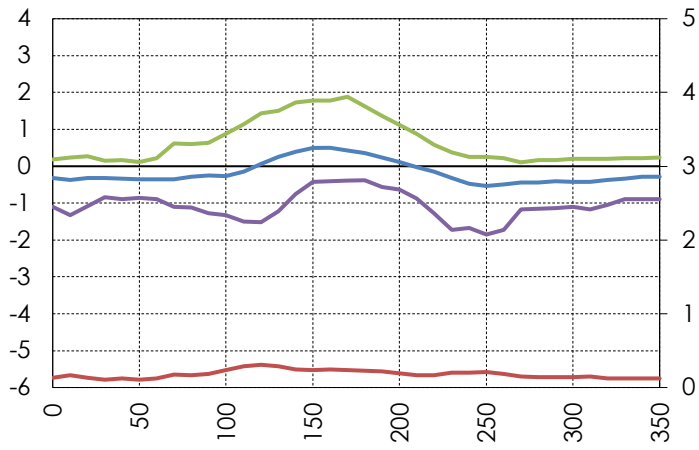
Individual Tap ID: SI03 Port ID: 384



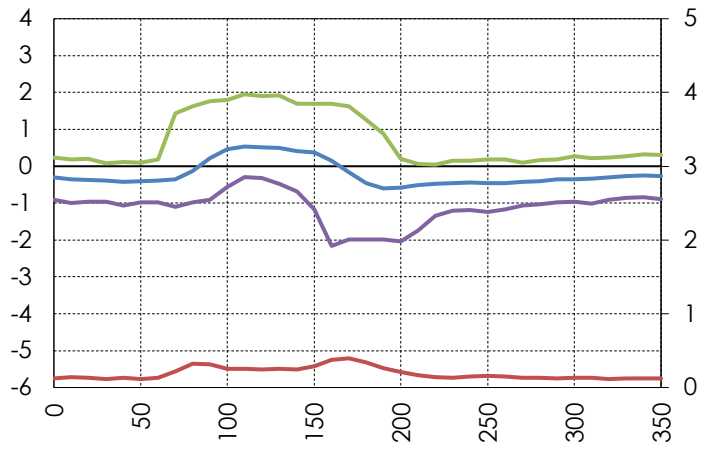
Individual Tap ID: SI04 Port ID: 385



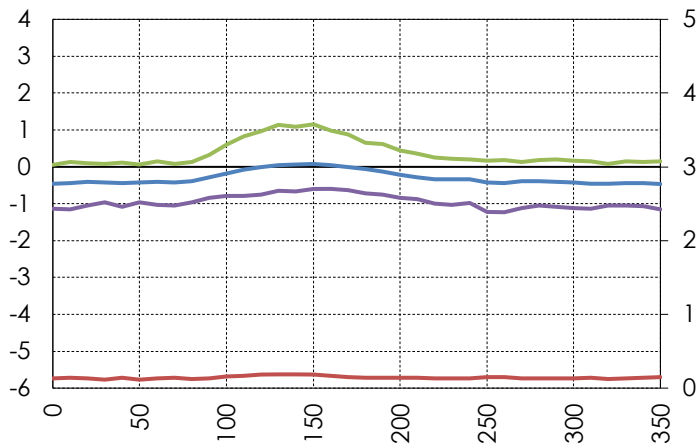
Individual Tap ID: SI05 Port ID: 386



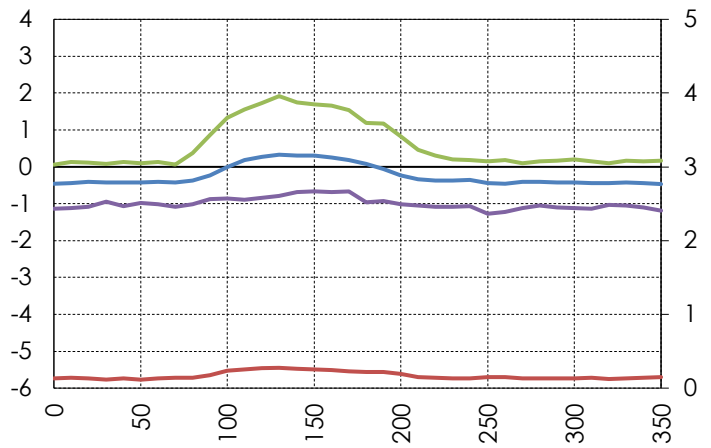
Individual Tap ID: SI06 Port ID: 387



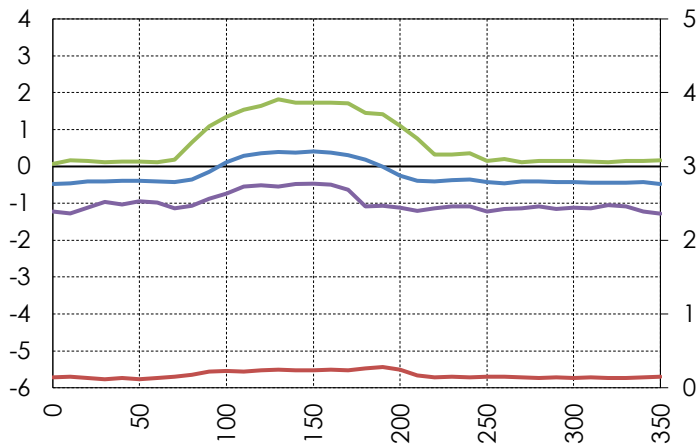
Individual Tap ID: SI07 Port ID: 388



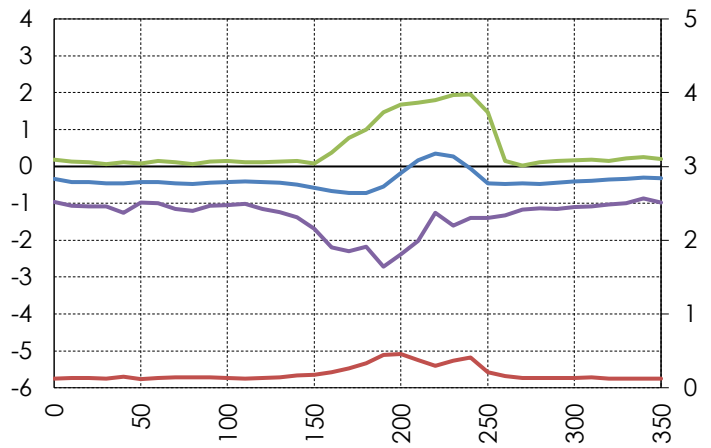
Individual Tap ID: SI08 Port ID: 389



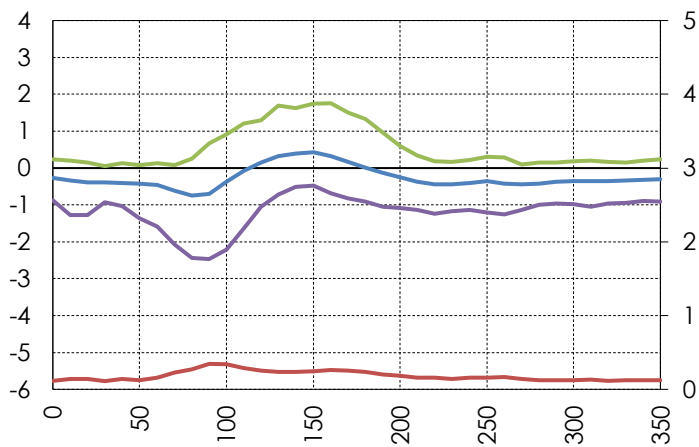
Individual Tap ID: SI09 Port ID: 390



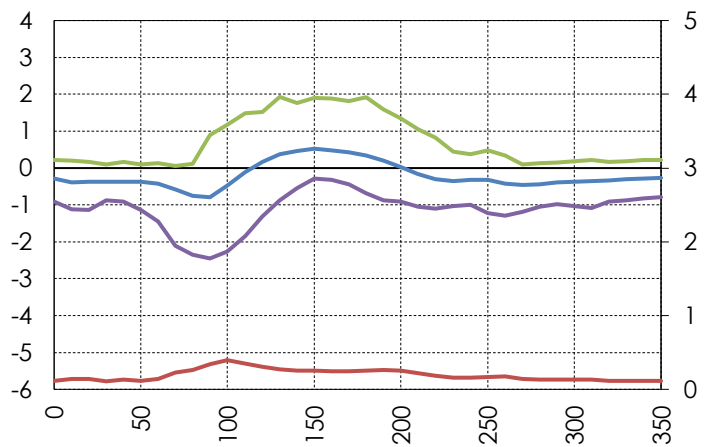
Individual Tap ID: SI10 Port ID: 391



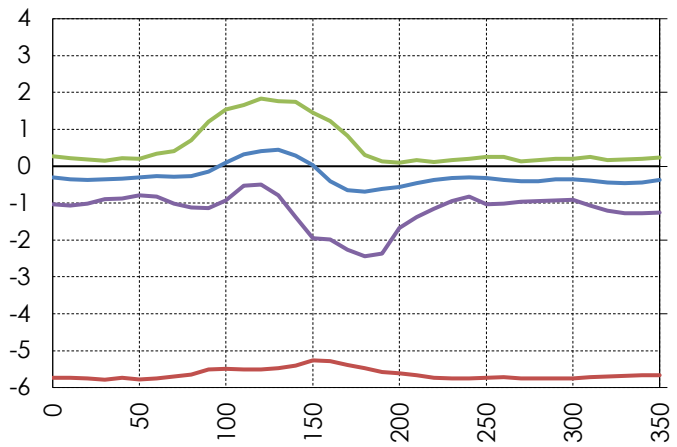
Individual Tap ID: SI11 Port ID: 392



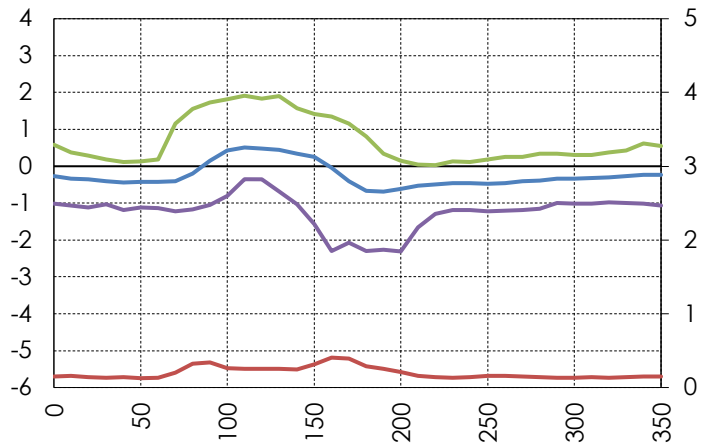
Individual Tap ID: SI12 Port ID: 393



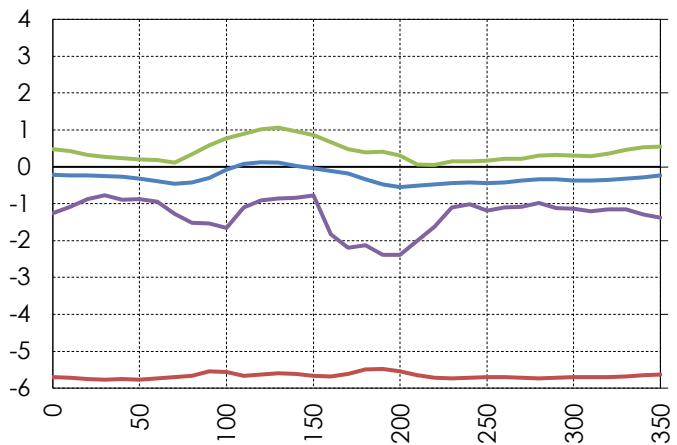
Individual Tap ID: EI01 Port ID: 394



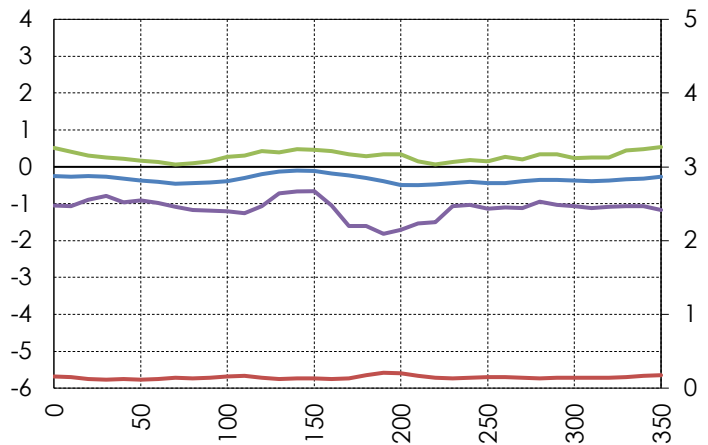
Individual Tap ID: EI02 Port ID: 395



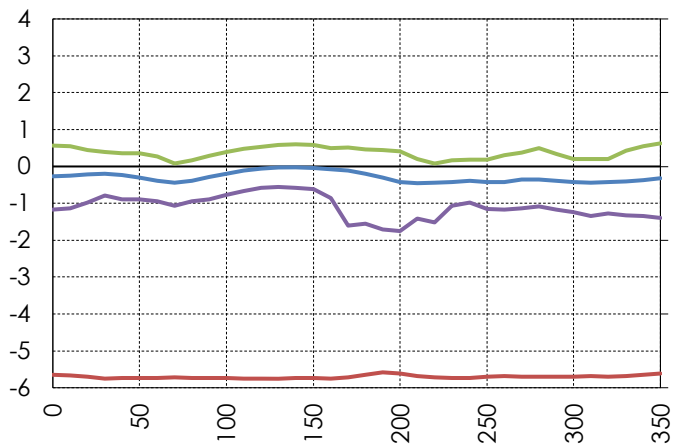
Individual Tap ID: EI03 Port ID: 396



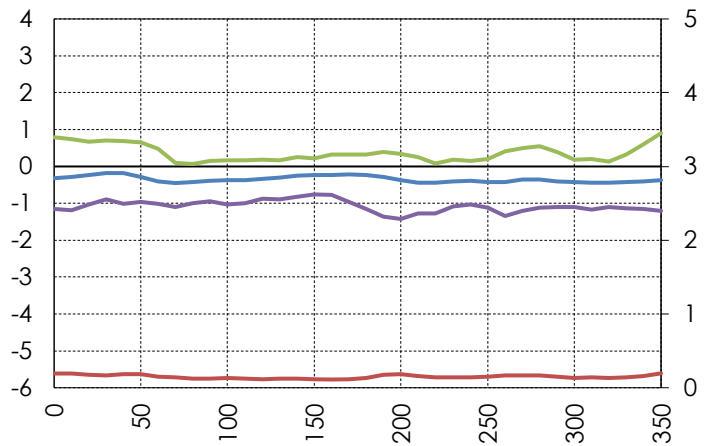
Individual Tap ID: EI04 Port ID: 397



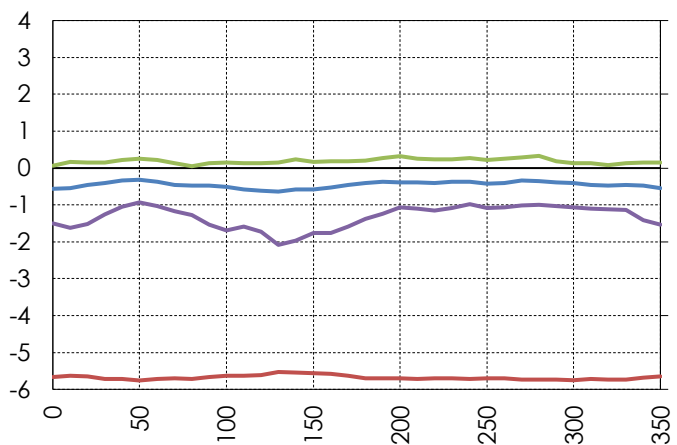
Individual Tap ID: EI05 Port ID: 398



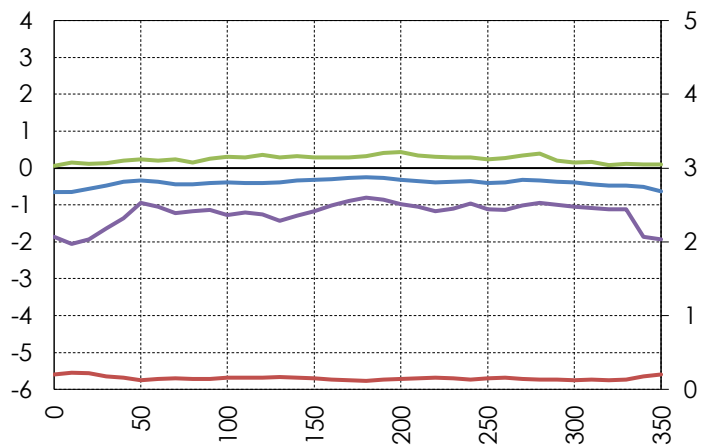
Individual Tap ID: EI06 Port ID: 399



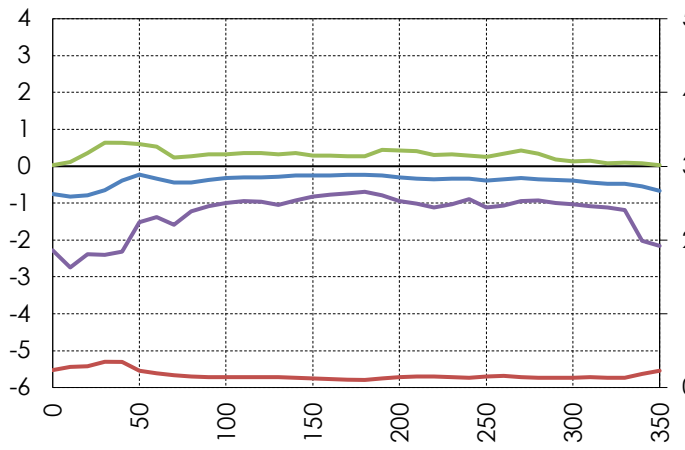
Individual Tap ID: EI07 Port ID: 400



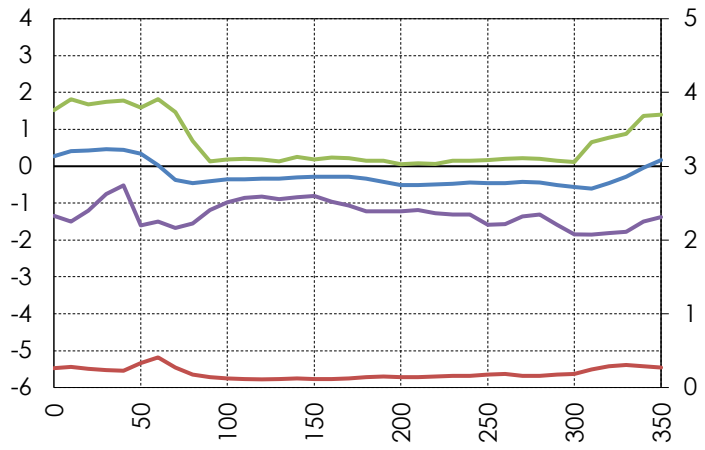
Individual Tap ID: EI08 Port ID: 401



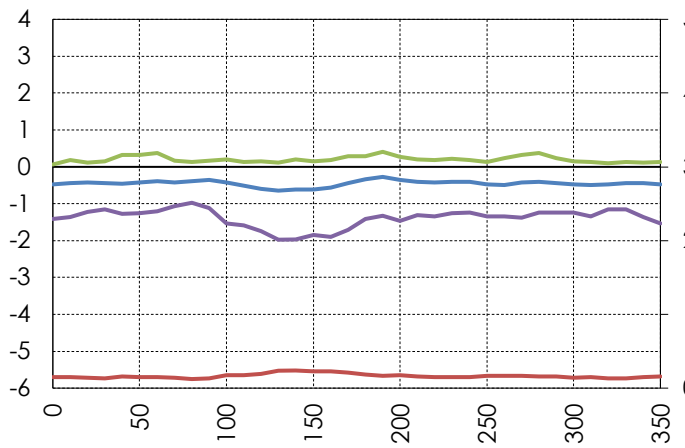
Individual Tap ID: EI10 Port ID: 402



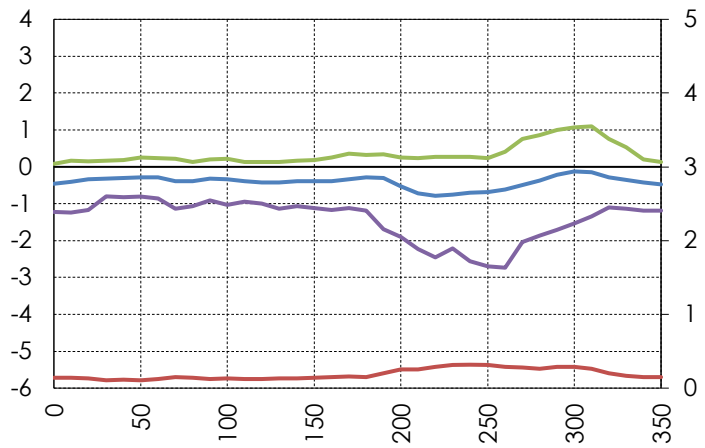
Individual Tap ID: EI11 Port ID: 403



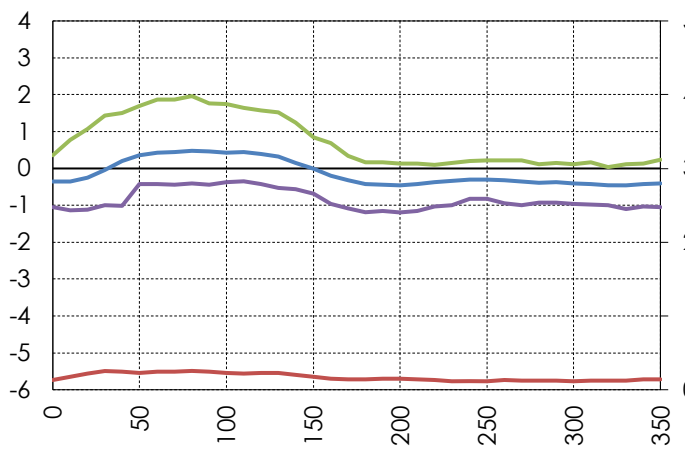
Individual Tap ID: RI01 Port ID: 404



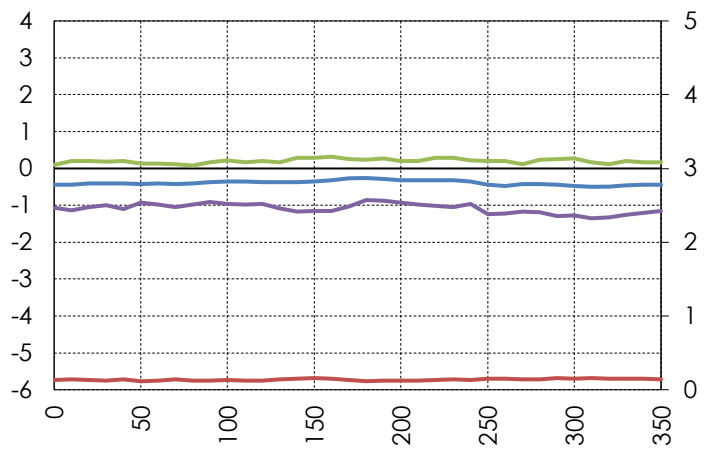
Individual Tap ID: RI02 Port ID: 405



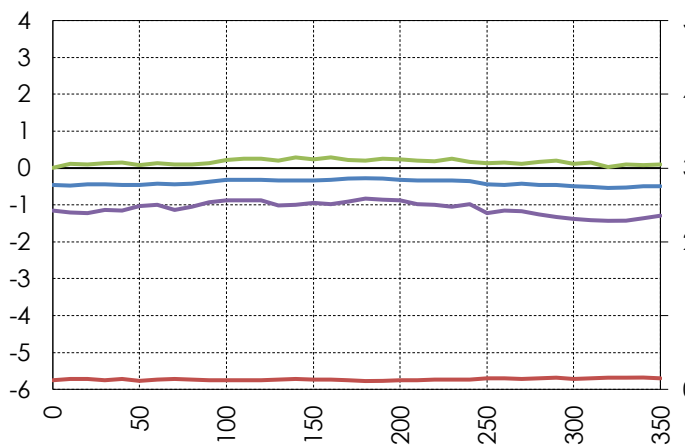
Individual Tap ID: NH01 Port ID: 406



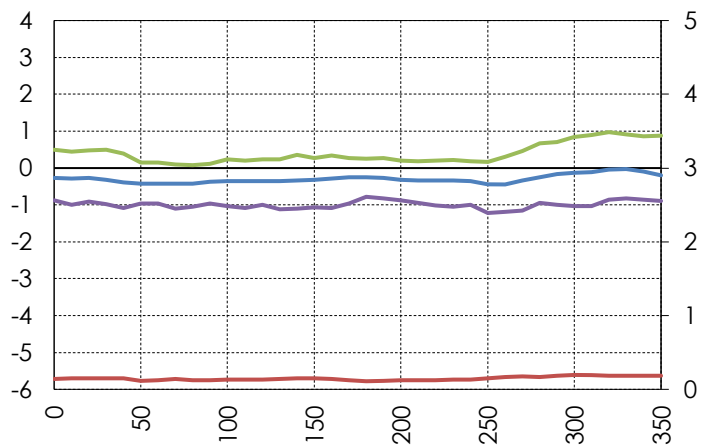
Individual Tap ID: NH02 Port ID: 407



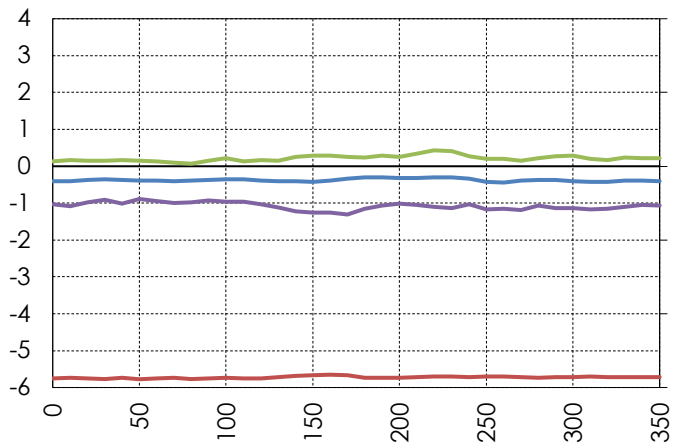
Individual Tap ID: WH01 Port ID: 408



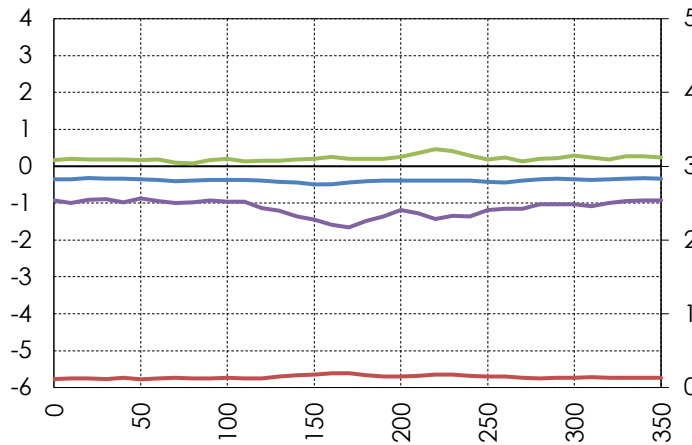
Individual Tap ID: WH02 Port ID: 409



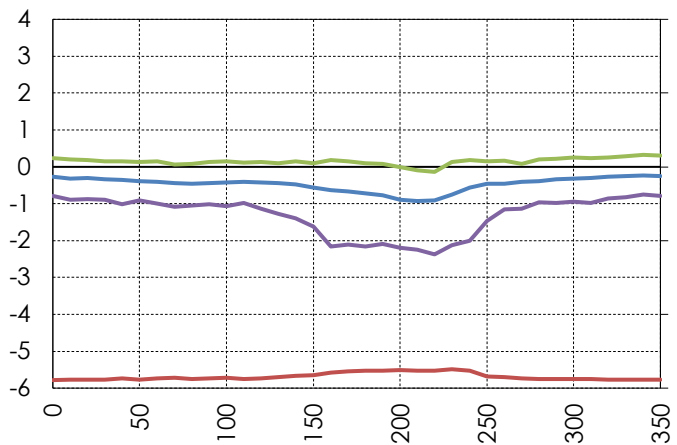
Individual Tap ID: WH03 Port ID: 410



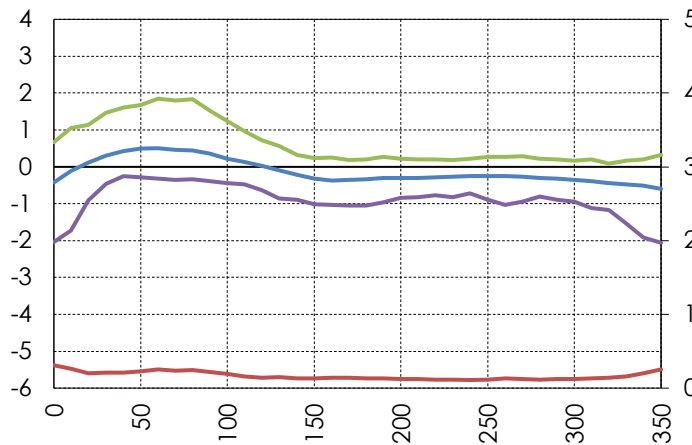
Individual Tap ID: WH04 Port ID: 411



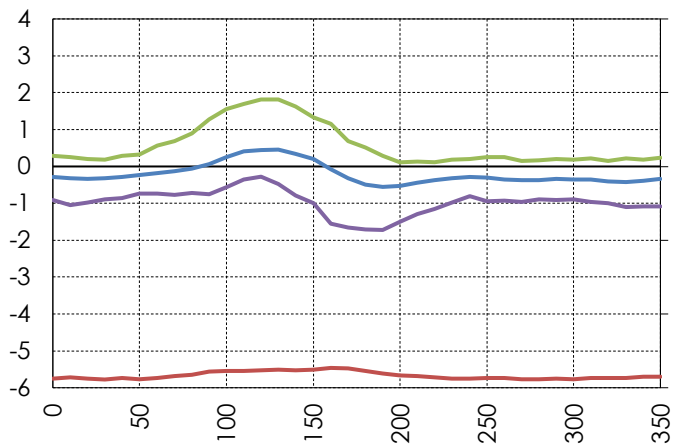
Individual Tap ID: WH05 Port ID: 412



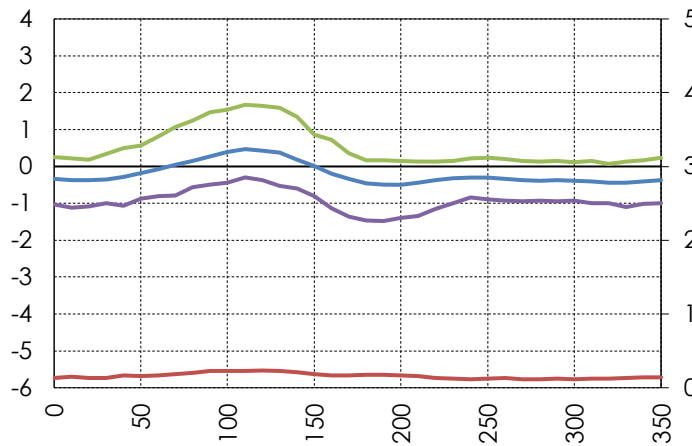
Individual Tap ID: SH01 Port ID: 413



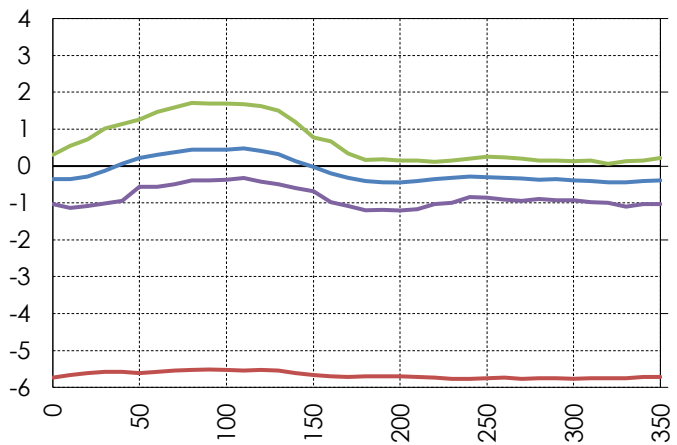
Individual Tap ID: EH01 Port ID: 414



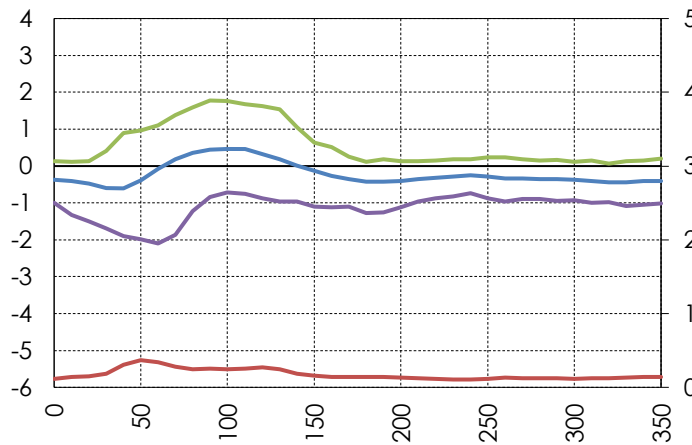
Individual Tap ID: EH02 Port ID: 415



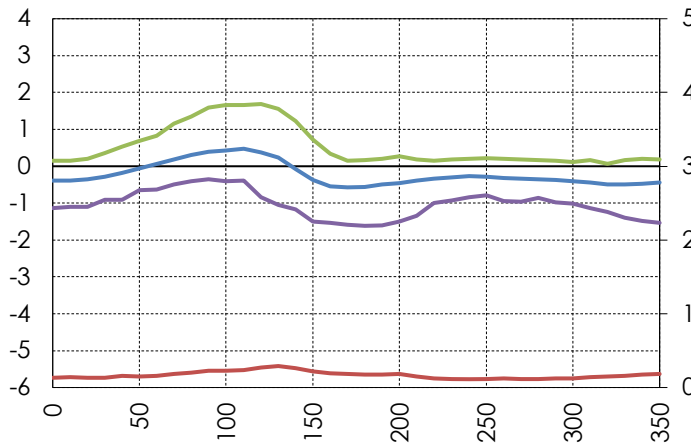
Individual Tap ID: EH03 Port ID: 416



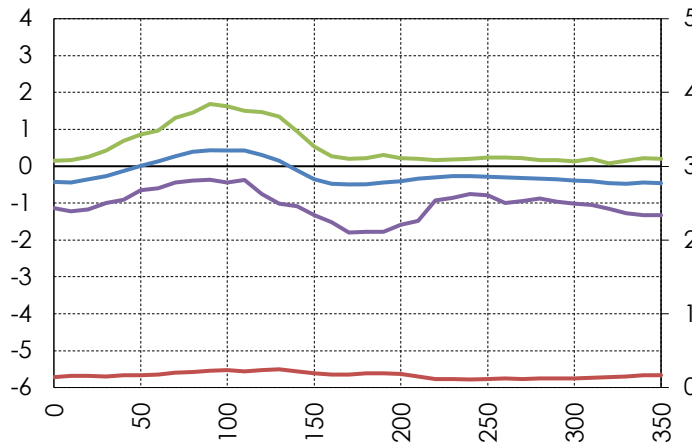
Individual Tap ID: EH04 Port ID: 417



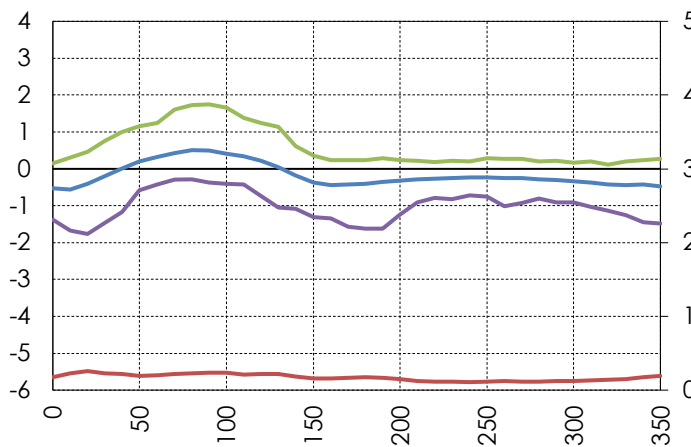
Individual Tap ID: EH05 Port ID: 418



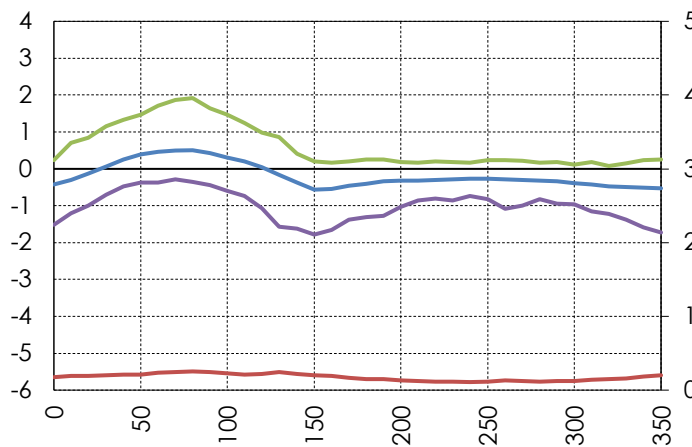
Individual Tap ID: EH06 Port ID: 419



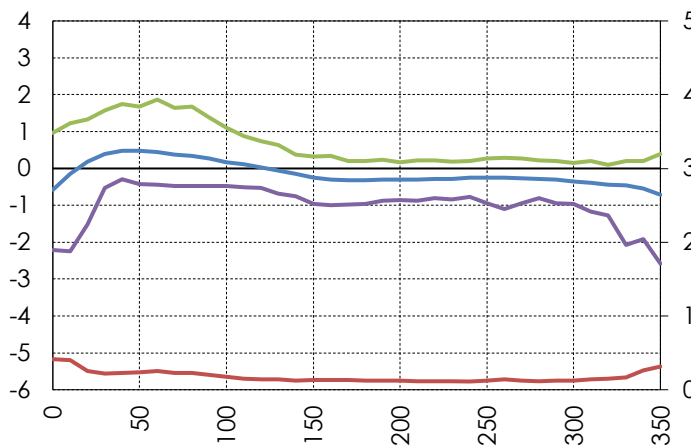
Individual Tap ID: EH07 Port ID: 420



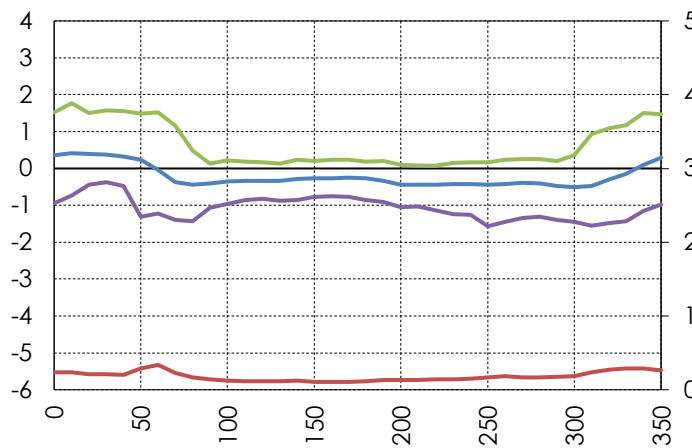
Individual Tap ID: EH08 Port ID: 421



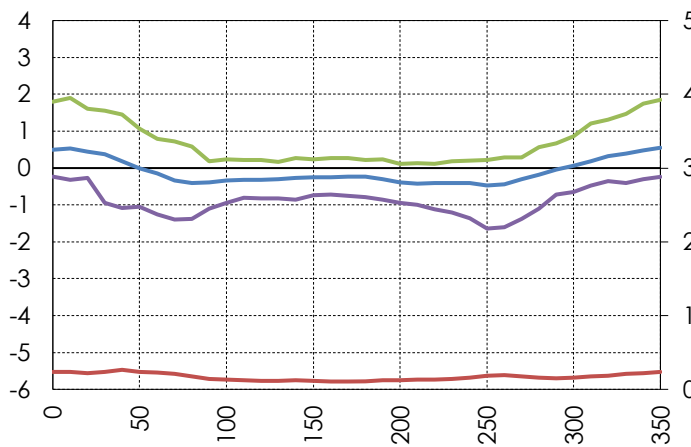
Individual Tap ID: EH09 Port ID: 422



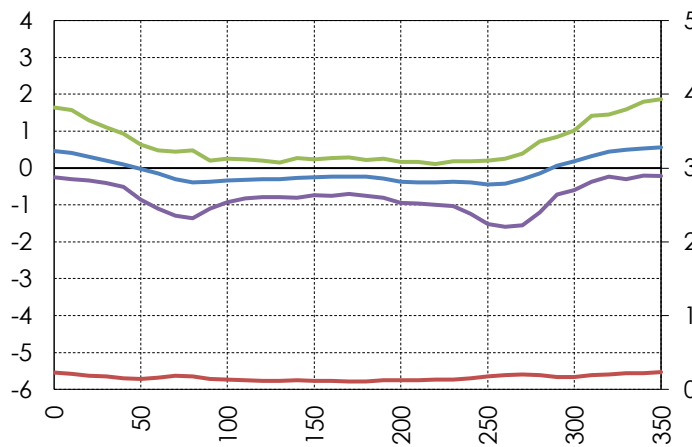
Individual Tap ID: NG01 Port ID: 423



Individual Tap ID: NG02 Port ID: 424



Individual Tap ID: NG03 Port ID: 425



APPENDIX B TABULATED RESULTS OF THE ANNUAL MEDIAN ABSOLUTE MEAN PRESSURES BETWEEN OPENINGS FOR EACH UNIT (FOR WARM CLIMATE)

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
A208	A208_W01	A208_W03	1	0.06
A208	A208_W01	A208_W04	1	1.11
A208	A208_W01	A208_W05	1	1.11
A208	A208_W02	A208_W03	1	0.06
A208	A208_W02	A208_W04	1	1.11
A208	A208_W02	A208_W05	1	1.11
A208	A208_W03	A208_W04	1	0.95
A208	A208_W03	A208_W05	1	0.95
A209	A209_W01	A209_W02	0	0.00
A209	A209_W01	A209_W03	0	0.06
A209	A209_W02	A209_W03	0	0.06
A210	A210_W01	A210_W02	0	0.04
A210	A210_W01	A210_W03	0	0.04
A210	A210_W02	A210_W03	0	0.00
A211	A211_W01	A211_W02	0	0.18
A211	A211_W01	A211_W03	0	0.18
A211	A211_W01	A211_W04	0	0.18
A211	A211_W02	A211_W03	0	0.00
A211	A211_W02	A211_W04	0	0.00
A211	A211_W03	A211_W04	0	0.00
A212	A212_W01	A212_W02	1	0.24
A212	A212_W01	A212_W03	1	0.08
A212	A212_W01	A212_W04	1	0.88
A212	A212_W01	A212_W05	1	1.13
A212	A212_W02	A212_W03	1	0.11
A212	A212_W02	A212_W04	1	0.68
A212	A212_W02	A212_W05	1	1.07
A212	A212_W03	A212_W04	1	0.86
A212	A212_W03	A212_W05	1	1.05
A212	A212_W04	A212_W05	1	0.57
A213	A213_W01	A213_W02	1	1.45

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
A213	A213_W01	A213_W03	1	1.71
A213	A213_W01	A213_W04	1	1.61
A213	A213_W01	A213_W05	1	1.43
A213	A213_W02	A213_W03	1	0.26
A213	A213_W02	A213_W04	1	1.03
A213	A213_W02	A213_W05	1	0.66
A213	A213_W03	A213_W04	1	0.73
A213	A213_W03	A213_W05	1	0.49
A213	A213_W04	A213_W05	1	0.27
A214	A214_W01	A214_W02	0	0.30
A214	A214_W01	A214_W03	0	0.30
A214	A214_W02	A214_W03	0	0.00
A215	A215_W01	A215_W02	1	2.02
A215	A215_W01	A215_W03	1	2.00
A215	A215_W02	A215_W03	1	0.21
A216	A216_W01	A216_W02	0	0.13
A216	A216_W01	A216_W03	0	0.13
A216	A216_W02	A216_W03	0	0.00
B201	B201_W01	B201_W02	0	0.00
B201	B201_W01	B201_W03	0	0.08
B201	B201_W02	B201_W03	0	0.08
B202	B202_W01	B202_W02	0	0.05
B202	B202_W01	B202_W03	0	0.05
B202	B202_W02	B202_W03	0	0.00
B203	B203_W01	B203_W02	1	1.97
B203	B203_W01	B203_W03	1	1.44
B203	B203_W02	B203_W03	1	0.21
B204	B204_W01	B204_W02	0	0.00
B205	B205_W01	B205_W02	0	0.00
B206	B206_W01	B206_W03	1	1.88
B206	B206_W01	B206_W04	1	1.92
B206	B206_W02	B206_W03	1	1.88
B206	B206_W02	B206_W04	1	1.92
B206	B206_W03	B206_W04	1	0.15
B207	B207_W01	B207_W02	1	0.04

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
B207	B207_W01	B207_W03	1	0.36
B207	B207_W01	B207_W04	1	1.39
B207	B207_W01	B207_W05	1	1.39
B207	B207_W02	B207_W03	1	0.32
B207	B207_W02	B207_W04	1	1.37
B207	B207_W02	B207_W05	1	1.37
B207	B207_W03	B207_W04	1	0.89
B207	B207_W03	B207_W05	1	0.89
A308	A308_W01	A308_W02	1	0.06
A308	A308_W01	A308_W03	1	1.11
A308	A308_W01	A308_W04	1	0.13
A308	A308_W01	A308_W05	1	1.26
A308	A308_W02	A308_W03	1	0.95
A308	A308_W02	A308_W04	1	0.20
A308	A308_W02	A308_W05	1	1.10
A308	A308_W03	A308_W04	1	1.03
A308	A308_W03	A308_W05	1	0.16
A308	A308_W04	A308_W05	1	1.17
A309	A309_W01	A309_W02	0	0.00
A309	A309_W01	A309_W03	0	0.10
A309	A309_W02	A309_W03	0	0.10
A310	A310_W01	A310_W02	0	0.31
A310	A310_W01	A310_W03	0	0.31
A310	A310_W02	A310_W03	0	0.00
A311	A311_W01	A311_W02	0	0.34
A311	A311_W01	A311_W03	0	0.34
A311	A311_W01	A311_W04	0	0.34
A311	A311_W02	A311_W03	0	0.00
A311	A311_W02	A311_W04	0	0.00
A311	A311_W03	A311_W04	0	0.00
A312	A312_W01	A312_W03	1	0.11
A312	A312_W01	A312_W04	1	0.86
A312	A312_W02	A312_W03	1	0.11
A312	A312_W02	A312_W04	1	0.86
A312	A312_W03	A312_W04	1	0.68

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
A313	A313_W01	A313_W04	1	0.82
A313	A313_W01	A313_W05	1	0.82
A313	A313_W02	A313_W04	1	0.82
A313	A313_W02	A313_W05	1	0.82
A313	A313_W03	A313_W04	1	0.82
A313	A313_W03	A313_W05	1	0.82
A314	A314_W01	A314_W03	1	0.38
A314	A314_W01	A314_W04	1	0.38
A314	A314_W02	A314_W03	1	0.38
A314	A314_W02	A314_W04	1	0.38
A315	A315_W01	A315_W02	0	0.00
A316	A316_W01	A316_W02	1	2.14
A316	A316_W01	A316_W03	1	2.14
A317	A317_W01	A317_W02	0	0.00
A317	A317_W01	A317_W03	0	0.13
A317	A317_W01	A317_W04	0	0.13
A317	A317_W02	A317_W03	0	0.13
A317	A317_W02	A317_W04	0	0.13
A317	A317_W03	A317_W04	0	0.00
B301	B301_W01	B301_W02	0	0.00
B301	B301_W01	B301_W03	0	0.11
B301	B301_W02	B301_W03	0	0.11
B302	B302_W01	B302_W02	0	0.07
B302	B302_W01	B302_W03	0	0.07
B302	B302_W02	B302_W03	0	0.00
B303	B303_W01	B303_W02	1	2.06
B303	B303_W01	B303_W03	1	1.60
B303	B303_W02	B303_W03	1	0.46
B304	B304_W01	B304_W02	0	0.00
B304	B304_W01	B304_W03	0	0.47
B304	B304_W02	B304_W03	0	0.47
B305	B305_W01	B305_W03	1	0.24
B305	B305_W01	B305_W04	1	0.24
B305	B305_W02	B305_W03	1	0.24
B305	B305_W02	B305_W04	1	0.24

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
B306	B306_W01	B306_W03	1	1.54
B306	B306_W01	B306_W04	1	1.54
B306	B306_W02	B306_W03	1	1.54
B306	B306_W02	B306_W04	1	1.54
B307	B307_W01	B307_W02	1	0.10
B307	B307_W01	B307_W03	1	0.32
B307	B307_W01	B307_W04	1	1.54
B307	B307_W01	B307_W05	1	1.54
B307	B307_W02	B307_W03	1	0.28
B307	B307_W02	B307_W04	1	1.42
B307	B307_W02	B307_W05	1	1.42
B307	B307_W03	B307_W04	1	0.94
B307	B307_W03	B307_W05	1	0.94
C318	C318_W01	C318_W02	1	0.81
C318	C318_W01	C318_W03	1	2.07
C318	C318_W01	C318_W04	1	2.07
C318	C318_W02	C318_W03	1	1.79
C318	C318_W02	C318_W04	1	1.79
C319	C319_W01	C319_W03	1	0.99
C319	C319_W02	C319_W03	1	0.99
C320	C320_W01	C320_W02	0	0.55
C320	C320_W01	C320_W03	0	1.73
C320	C320_W02	C320_W03	0	2.24
C321	C321_W01	C321_W02	1	0.62
C321	C321_W01	C321_W03	1	0.69
C321	C321_W02	C321_W03	1	0.13
C322	C322_W01	C322_W02	1	1.52
C322	C322_W01	C322_W03	1	1.52
C323	C323_W01	C323_W02	1	0.15
C323	C323_W01	C323_W03	1	0.15
C323	C323_W01	C323_W04	1	0.15
C324	C324_W01	C324_W02	1	1.23
C324	C324_W01	C324_W03	1	1.23
C324	C324_W01	C324_W04	1	1.57
C324	C324_W01	C324_W05	1	1.51

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
C324	C324_W01	C324_W06	1	1.23
C324	C324_W02	C324_W04	1	2.45
C324	C324_W02	C324_W05	1	2.36
C324	C324_W03	C324_W04	1	2.45
C324	C324_W03	C324_W05	1	2.36
C324	C324_W04	C324_W05	1	0.23
C324	C324_W04	C324_W06	1	2.45
C324	C324_W05	C324_W06	1	2.36
C325	C325_W01	C325_W02	1	2.19
C325	C325_W01	C325_W05	1	0.36
C325	C325_W01	C325_W06	1	2.28
C325	C325_W02	C325_W03	1	2.19
C325	C325_W02	C325_W04	1	2.19
C325	C325_W02	C325_W05	1	2.26
C325	C325_W02	C325_W06	1	0.28
C325	C325_W03	C325_W05	1	0.36
C325	C325_W03	C325_W06	1	2.28
C325	C325_W04	C325_W05	1	0.36
C325	C325_W04	C325_W06	1	2.28
C325	C325_W05	C325_W06	1	2.32
C326	C326_W01	C326_W02	1	2.38
C326	C326_W01	C326_W05	1	0.13
C326	C326_W01	C326_W06	1	2.24
C326	C326_W02	C326_W03	1	2.38
C326	C326_W02	C326_W04	1	2.38
C326	C326_W02	C326_W05	1	2.81
C326	C326_W02	C326_W06	1	0.28
C326	C326_W03	C326_W05	1	0.13
C326	C326_W03	C326_W06	1	2.24
C326	C326_W04	C326_W05	1	0.13
C326	C326_W04	C326_W06	1	2.24
C326	C326_W05	C326_W06	1	2.61
C327	C327_W01	C327_W02	1	2.10
C327	C327_W01	C327_W05	1	0.29
C327	C327_W01	C327_W06	1	1.82

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
C327	C327_W02	C327_W03	1	2.10
C327	C327_W02	C327_W04	1	2.10
C327	C327_W02	C327_W05	1	2.46
C327	C327_W02	C327_W06	1	0.39
C327	C327_W03	C327_W05	1	0.29
C327	C327_W03	C327_W06	1	1.82
C327	C327_W04	C327_W05	1	0.29
C327	C327_W04	C327_W06	1	1.82
C327	C327_W05	C327_W06	1	2.24
C328	C328_W01	C328_W02	1	1.67
C328	C328_W01	C328_W05	1	0.29
C328	C328_W01	C328_W06	1	1.83
C328	C328_W02	C328_W03	1	1.67
C328	C328_W02	C328_W04	1	1.67
C328	C328_W02	C328_W05	1	1.71
C328	C328_W02	C328_W06	1	0.70
C328	C328_W03	C328_W05	1	0.29
C328	C328_W03	C328_W06	1	1.83
C328	C328_W04	C328_W05	1	0.29
C328	C328_W04	C328_W06	1	1.83
C328	C328_W05	C328_W06	1	1.93
D329	D329_W01	D329_W02	1	1.40
D329	D329_W01	D329_W03	1	1.40
D329	D329_W01	D329_W04	1	2.72
D329	D329_W02	D329_W04	1	1.17
D329	D329_W03	D329_W04	1	1.17
D330	D330_W01	D330_W04	1	0.56
D330	D330_W01	D330_W05	1	0.74
D330	D330_W01	D330_W06	1	1.01
D330	D330_W02	D330_W04	1	0.56
D330	D330_W02	D330_W05	1	0.74
D330	D330_W02	D330_W06	1	1.01
D330	D330_W03	D330_W04	1	0.56
D330	D330_W03	D330_W05	1	0.74
D330	D330_W03	D330_W06	1	1.01

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
D330	D330_W04	D330_W05	1	0.42
D330	D330_W04	D330_W06	1	0.37
D330	D330_W05	D330_W06	1	0.13
D331	D331_W01	D331_W02	0	0.00
D331	D331_W01	D331_W03	0	0.00
D331	D331_W02	D331_W03	0	0.00
D332	D332_W01	D332_W03	1	1.47
D332	D332_W01	D332_W04	1	1.47
D332	D332_W02	D332_W03	1	1.47
D332	D332_W02	D332_W04	1	1.47
D333	D333_W01	D333_W02	1	0.60
D333	D333_W01	D333_W03	1	1.74
D333	D333_W02	D333_W03	1	2.07
A408	A408_W01	A408_W02	1	0.08
A408	A408_W01	A408_W03	1	0.49
A408	A408_W01	A408_W04	1	0.40
A408	A408_W01	A408_W05	1	1.08
A408	A408_W02	A408_W03	1	0.50
A408	A408_W02	A408_W04	1	0.39
A408	A408_W02	A408_W05	1	1.03
A408	A408_W03	A408_W04	1	0.12
A408	A408_W03	A408_W05	1	0.51
A408	A408_W04	A408_W05	1	0.60
A409	A409_W01	A409_W02	0	0.00
A409	A409_W01	A409_W03	0	0.10
A409	A409_W02	A409_W03	0	0.10
A410	A410_W01	A410_W02	0	0.31
A410	A410_W01	A410_W03	0	0.31
A410	A410_W02	A410_W03	0	0.00
A411	A411_W01	A411_W02	0	0.00
A411	A411_W01	A411_W03	0	0.39
A411	A411_W02	A411_W03	0	0.39
A412	A412_W01	A412_W02	1	0.38
A412	A412_W01	A412_W03	1	1.25
A412	A412_W01	A412_W04	1	1.27

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
A412	A412_W02	A412_W03	1	0.73
A412	A412_W02	A412_W04	1	0.82
A412	A412_W03	A412_W04	1	0.24
A413	A413_W01	A413_W02	1	0.15
A413	A413_W01	A413_W03	1	0.15
A413	A413_W01	A413_W04	1	0.82
A413	A413_W01	A413_W05	1	0.82
A413	A413_W02	A413_W04	1	0.78
A413	A413_W02	A413_W05	1	0.78
A413	A413_W03	A413_W04	1	0.78
A413	A413_W03	A413_W05	1	0.78
A414	A414_W01	A414_W03	1	0.51
A414	A414_W01	A414_W04	1	0.51
A414	A414_W02	A414_W03	1	0.51
A414	A414_W02	A414_W04	1	0.51
A415	A415_W01	A415_W02	0	0.08
A416	A416_W01	A416_W02	1	2.20
A416	A416_W01	A416_W03	1	2.09
A416	A416_W02	A416_W03	1	0.16
A417	A417_W01	A417_W02	0	0.24
A417	A417_W01	A417_W03	0	0.29
A417	A417_W02	A417_W03	0	0.09
B401	B401_W01	B401_W02	0	0.00
B401	B401_W01	B401_W03	0	0.11
B401	B401_W02	B401_W03	0	0.11
B402	B402_W01	B402_W02	0	0.07
B402	B402_W01	B402_W03	0	0.07
B402	B402_W02	B402_W03	0	0.00
B403	B403_W01	B403_W02	1	2.11
B403	B403_W01	B403_W03	1	2.11
B404	B404_W01	B404_W02	0	0.00
B404	B404_W01	B404_W03	0	0.69
B404	B404_W02	B404_W03	0	0.69
B405	B405_W01	B405_W03	1	0.47
B405	B405_W01	B405_W04	1	0.47

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
B405	B405_W02	B405_W03	1	0.47
B405	B405_W02	B405_W04	1	0.47
B406	B406_W01	B406_W03	1	1.35
B406	B406_W01	B406_W04	1	1.33
B406	B406_W02	B406_W03	1	1.35
B406	B406_W02	B406_W04	1	1.33
B406	B406_W03	B406_W04	1	0.21
B407	B407_W01	B407_W02	1	0.10
B407	B407_W01	B407_W03	1	0.32
B407	B407_W01	B407_W04	1	1.54
B407	B407_W01	B407_W05	1	1.54
B407	B407_W02	B407_W03	1	0.28
B407	B407_W02	B407_W04	1	1.42
B407	B407_W02	B407_W05	1	1.42
B407	B407_W03	B407_W04	1	0.94
B407	B407_W03	B407_W05	1	0.94
C418	C418_W01	C418_W02	1	0.53
C418	C418_W01	C418_W03	1	1.03
C418	C418_W01	C418_W04	1	1.03
C418	C418_W02	C418_W03	1	1.46
C418	C418_W02	C418_W04	1	1.46
C419	C419_W01	C419_W03	1	0.31
C419	C419_W02	C419_W03	1	0.31
C420	C420_W01	C420_W02	0	0.34
C420	C420_W01	C420_W03	0	0.46
C420	C420_W01	C420_W04	0	0.46
C420	C420_W02	C420_W03	0	0.30
C420	C420_W02	C420_W04	0	0.30
C420	C420_W03	C420_W04	0	0.00
C421	C421_W01	C421_W02	1	0.40
C421	C421_W01	C421_W03	1	0.40
C421	C421_W01	C421_W04	1	0.38
C421	C421_W02	C421_W04	1	0.18
C421	C421_W03	C421_W04	1	0.18
C422	C422_W01	C422_W02	1	1.93

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
C422	C422_W01	C422_W03	1	1.93
C422	C422_W01	C422_W04	1	0.65
C422	C422_W02	C422_W04	1	2.07
C422	C422_W03	C422_W04	1	2.07
C423	C423_W01	C423_W02	1	0.23
C423	C423_W01	C423_W03	1	0.23
C423	C423_W01	C423_W04	1	0.23
D424	D424_W01	D424_W02	1	0.35
D424	D424_W01	D424_W03	1	0.78
D424	D424_W01	D424_W04	1	0.78
D424	D424_W01	D424_W05	1	1.30
D424	D424_W02	D424_W03	1	0.94
D424	D424_W02	D424_W04	1	1.09
D424	D424_W02	D424_W05	1	1.51
D424	D424_W03	D424_W04	1	0.42
D424	D424_W03	D424_W05	1	0.51
D424	D424_W04	D424_W05	1	0.57
D425	D425_W01	D425_W03	1	0.58
D425	D425_W02	D425_W03	1	0.58
D426	D426_W01	D426_W02	1	0.20
D426	D426_W01	D426_W03	1	0.20
D426	D426_W01	D426_W04	1	0.28
D426	D426_W01	D426_W05	1	0.28
D426	D426_W01	D426_W06	1	0.28
D426	D426_W02	D426_W04	1	0.21
D426	D426_W02	D426_W05	1	0.21
D426	D426_W02	D426_W06	1	0.21
D426	D426_W03	D426_W04	1	0.21
D426	D426_W03	D426_W05	1	0.21
D426	D426_W03	D426_W06	1	0.21
D427	D427_W01	D427_W03	1	0.08
D427	D427_W01	D427_W04	1	0.08
D427	D427_W02	D427_W03	1	0.08
D427	D427_W02	D427_W04	1	0.08
D428	D428_W01	D428_W02	1	0.28

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
D428	D428_W01	D428_W03	1	1.56
D428	D428_W01	D428_W04	1	1.56
D428	D428_W02	D428_W03	1	1.03
D428	D428_W02	D428_W04	1	1.03
A508	A508_W01	A508_W02	1	0.25
A508	A508_W01	A508_W03	1	0.50
A508	A508_W01	A508_W04	1	0.41
A508	A508_W01	A508_W05	1	1.08
A508	A508_W02	A508_W03	1	0.46
A508	A508_W02	A508_W04	1	0.33
A508	A508_W02	A508_W05	1	1.15
A508	A508_W03	A508_W04	1	0.12
A508	A508_W03	A508_W05	1	0.51
A508	A508_W04	A508_W05	1	0.60
A509	A509_W01	A509_W02	0	0.00
A509	A509_W01	A509_W03	0	0.10
A509	A509_W02	A509_W03	0	0.10
A510	A510_W01	A510_W02	0	0.31
A510	A510_W01	A510_W03	0	0.31
A510	A510_W02	A510_W03	0	0.00
A511	A511_W01	A511_W02	0	0.39
A511	A511_W01	A511_W03	0	0.39
A511	A511_W02	A511_W03	0	0.00
A512	A512_W01	A512_W03	1	0.38
A512	A512_W01	A512_W04	1	1.25
A512	A512_W01	A512_W05	1	1.27
A512	A512_W02	A512_W03	1	0.38
A512	A512_W02	A512_W04	1	1.25
A512	A512_W02	A512_W05	1	1.27
A512	A512_W03	A512_W04	1	0.73
A512	A512_W03	A512_W05	1	0.82
A512	A512_W04	A512_W05	1	0.24
A513	A513_W01	A513_W02	1	0.15
A513	A513_W01	A513_W03	1	0.15
A513	A513_W01	A513_W04	1	0.15

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
A513	A513_W01	A513_W05	1	0.82
A513	A513_W02	A513_W05	1	0.78
A513	A513_W03	A513_W05	1	0.78
A513	A513_W04	A513_W05	1	0.78
A514	A514_W01	A514_W03	1	0.38
A514	A514_W01	A514_W04	1	0.38
A514	A514_W02	A514_W03	1	0.38
A514	A514_W02	A514_W04	1	0.38
A515	A515_W01	A515_W02	0	0.00
A515	A515_W01	A515_W03	0	0.00
A515	A515_W02	A515_W03	0	0.00
A516	A516_W01	A516_W02	1	1.92
A516	A516_W01	A516_W03	1	2.01
A516	A516_W02	A516_W03	1	0.14
A517	A517_W01	A517_W02	0	0.18
A517	A517_W01	A517_W03	0	0.18
A517	A517_W02	A517_W03	0	0.00
B501	B501_W01	B501_W02	0	0.00
B501	B501_W01	B501_W03	0	0.09
B501	B501_W02	B501_W03	0	0.09
B502	B502_W01	B502_W02	0	0.15
B502	B502_W01	B502_W03	0	0.15
B502	B502_W02	B502_W03	0	0.00
B503	B503_W01	B503_W02	1	2.17
B503	B503_W01	B503_W03	1	2.17
B504	B504_W01	B504_W02	0	0.00
B504	B504_W01	B504_W03	0	0.23
B504	B504_W02	B504_W03	0	0.23
B505	B505_W01	B505_W03	1	0.37
B505	B505_W02	B505_W03	1	0.37
B506	B506_W01	B506_W03	1	0.93
B506	B506_W02	B506_W03	1	0.93
B507	B507_W01	B507_W02	1	0.25
B507	B507_W01	B507_W03	1	0.31
B507	B507_W01	B507_W04	1	1.31

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
B507	B507_W01	B507_W05	1	1.31
B507	B507_W02	B507_W03	1	0.30
B507	B507_W02	B507_W04	1	1.38
B507	B507_W02	B507_W05	1	1.38
B507	B507_W03	B507_W04	1	0.92
B507	B507_W03	B507_W05	1	0.92
C518	C518_W01	C518_W02	0	0.00
C518	C518_W01	C518_W03	0	0.24
C518	C518_W01	C518_W04	0	0.24
C518	C518_W02	C518_W03	0	0.24
C518	C518_W02	C518_W04	0	0.24
C518	C518_W03	C518_W04	0	0.00
C519	C519_W01	C519_W03	1	1.58
C519	C519_W01	C519_W04	1	1.46
C519	C519_W02	C519_W03	1	1.58
C519	C519_W02	C519_W04	1	1.46
C519	C519_W03	C519_W04	1	0.60
C520	C520_W01	C520_W02	0	0.31
C521	C521_W01	C521_W02	0	0.46
C521	C521_W01	C521_W03	0	0.46
C521	C521_W02	C521_W03	0	0.00
C522	C522_W01	C522_W02	1	0.40
C522	C522_W01	C522_W03	1	0.38
C522	C522_W01	C522_W04	1	0.38
C522	C522_W01	C522_W05	1	0.52
C522	C522_W01	C522_W06	1	3.80
C522	C522_W02	C522_W03	1	0.18
C522	C522_W02	C522_W04	1	0.18
C522	C522_W02	C522_W05	1	0.39
C522	C522_W02	C522_W06	1	2.44
C522	C522_W03	C522_W05	1	0.58
C522	C522_W03	C522_W06	1	2.67
C522	C522_W04	C522_W05	1	0.58
C522	C522_W04	C522_W06	1	2.67
C522	C522_W05	C522_W06	1	1.93

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
C523	C523_W01	C523_W02	1	0.19
C523	C523_W01	C523_W03	1	0.19
C523	C523_W01	C523_W04	1	0.19
D524	D524_W01	D524_W03	1	2.01
D524	D524_W02	D524_W03	1	2.01
D525	D525_W01	D525_W02	1	1.53
D525	D525_W01	D525_W03	1	1.51
D525	D525_W02	D525_W03	1	0.28
D526	D526_W01	D526_W02	1	0.26
D526	D526_W01	D526_W03	1	0.26
D526	D526_W01	D526_W04	1	0.20
D526	D526_W01	D526_W05	1	0.20
D526	D526_W02	D526_W04	1	0.21
D526	D526_W02	D526_W05	1	0.21
D526	D526_W03	D526_W04	1	0.21
D526	D526_W03	D526_W05	1	0.21
D527	D527_W01	D527_W02	0	0.00
D527	D527_W01	D527_W03	0	0.08
D527	D527_W01	D527_W04	0	0.08
D527	D527_W02	D527_W03	0	0.08
D527	D527_W02	D527_W04	0	0.08
D527	D527_W03	D527_W04	0	0.00
D528	D528_W01	D528_W02	1	0.28
D528	D528_W01	D528_W03	1	0.28
D529	D529_W01	D529_W02	0	0.00
D529	D529_W01	D529_W03	0	0.31
D529	D529_W01	D529_W04	0	0.61
D529	D529_W02	D529_W03	0	0.31
D529	D529_W02	D529_W04	0	0.61
D529	D529_W03	D529_W04	0	0.50
A608	A608_W01	A608_W02	1	0.25
A608	A608_W01	A608_W03	1	0.48
A608	A608_W01	A608_W04	1	0.31
A608	A608_W01	A608_W05	1	1.38
A608	A608_W02	A608_W03	1	0.51

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
A608	A608_W02	A608_W04	1	0.31
A608	A608_W02	A608_W05	1	1.47
A608	A608_W03	A608_W04	1	0.22
A608	A608_W03	A608_W05	1	0.50
A608	A608_W04	A608_W05	1	0.82
A609	A609_W01	A609_W02	0	0.00
A609	A609_W01	A609_W03	0	0.07
A609	A609_W02	A609_W03	0	0.07
A610	A610_W01	A610_W02	0	0.08
A610	A610_W01	A610_W03	0	0.08
A610	A610_W02	A610_W03	0	0.00
A611	A611_W01	A611_W03	1	0.37
A611	A611_W01	A611_W04	1	0.98
A611	A611_W02	A611_W03	1	0.37
A611	A611_W02	A611_W04	1	0.98
A611	A611_W03	A611_W04	1	0.75
A612	A612_W01	A612_W02	1	0.52
A612	A612_W01	A612_W03	1	0.90
A612	A612_W01	A612_W04	1	0.86
A612	A612_W02	A612_W03	1	0.57
A612	A612_W02	A612_W04	1	0.61
A612	A612_W03	A612_W04	1	0.13
A613	A613_W01	A613_W02	0	0.00
A614	A614_W01	A614_W02	1	1.92
A614	A614_W01	A614_W03	1	2.01
A614	A614_W02	A614_W03	1	0.14
A615	A615_W01	A615_W02	0	0.18
A615	A615_W01	A615_W03	0	0.18
A615	A615_W02	A615_W03	0	0.00
B601	B601_W01	B601_W02	0	0.00
B601	B601_W01	B601_W03	0	0.09
B601	B601_W02	B601_W03	0	0.09
B602	B602_W01	B602_W02	0	0.15
B602	B602_W01	B602_W03	0	0.15
B602	B602_W02	B602_W03	0	0.00

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
B603	B603_W01	B603_W02	1	0.40
B603	B603_W01	B603_W03	1	1.64
B603	B603_W02	B603_W03	1	1.64
B604	B604_W01	B604_W02	0	0.00
B604	B604_W01	B604_W03	0	0.23
B604	B604_W02	B604_W03	0	0.23
B605	B605_W01	B605_W03	1	0.37
B605	B605_W01	B605_W04	1	0.37
B605	B605_W02	B605_W03	1	0.37
B605	B605_W02	B605_W04	1	0.37
B606	B606_W01	B606_W02	1	0.93
B606	B606_W01	B606_W03	1	1.04
B606	B606_W02	B606_W03	1	0.15
B607	B607_W01	B607_W02	1	0.25
B607	B607_W01	B607_W03	1	0.31
B607	B607_W01	B607_W04	1	1.31
B607	B607_W01	B607_W05	1	1.31
B607	B607_W02	B607_W03	1	0.30
B607	B607_W02	B607_W04	1	1.38
B607	B607_W02	B607_W05	1	1.38
B607	B607_W03	B607_W04	1	0.92
B607	B607_W03	B607_W05	1	0.92
C616	C616_W01	C616_W02	0	0.25
C616	C616_W01	C616_W03	0	0.24
C616	C616_W01	C616_W04	0	0.24
C616	C616_W02	C616_W03	0	0.35
C616	C616_W02	C616_W04	0	0.35
C616	C616_W03	C616_W04	0	0.00
C617	C617_W01	C617_W02	1	0.53
C617	C617_W01	C617_W03	1	1.58
C617	C617_W01	C617_W04	1	1.58
C617	C617_W02	C617_W03	1	1.17
C617	C617_W02	C617_W04	1	1.17
C618	C618_W01	C618_W02	0	0.00
C618	C618_W01	C618_W03	0	0.00

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
C618	C618_W01	C618_W04	0	0.50
C618	C618_W02	C618_W03	0	0.00
C618	C618_W02	C618_W04	0	0.50
C618	C618_W03	C618_W04	0	0.50
C619	C619_W01	C619_W02	0	0.34
C619	C619_W01	C619_W03	0	0.46
C619	C619_W02	C619_W03	0	0.30
C620	C620_W01	C620_W02	1	1.32
C620	C620_W01	C620_W03	1	1.32
C620	C620_W01	C620_W04	1	1.29
C620	C620_W02	C620_W04	1	0.18
C620	C620_W03	C620_W04	1	0.18
C621	C621_W01	C621_W02	1	0.19
C621	C621_W01	C621_W03	1	0.19
C621	C621_W01	C621_W04	1	0.19
C621	C621_W01	C621_W05	1	0.55
C621	C621_W02	C621_W05	1	0.30
C621	C621_W03	C621_W05	1	0.30
C621	C621_W04	C621_W05	1	0.30
D622	D622_W01	D622_W03	1	0.24
D622	D622_W01	D622_W04	1	0.24
D622	D622_W02	D622_W03	1	0.24
D622	D622_W02	D622_W04	1	0.24
D623	D623_W01	D623_W02	1	0.76
D624	D624_W01	D624_W02	1	0.26
D624	D624_W01	D624_W03	1	0.26
D624	D624_W01	D624_W04	1	0.20
D624	D624_W02	D624_W04	1	0.21
D624	D624_W03	D624_W04	1	0.21
D625	D625_W01	D625_W02	0	0.00
D625	D625_W01	D625_W03	0	0.08
D625	D625_W01	D625_W04	0	0.28
D625	D625_W02	D625_W03	0	0.08
D625	D625_W02	D625_W04	0	0.28
D625	D625_W03	D625_W04	0	0.20

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
D626	D626_W01	D626_W02	1	0.28
D626	D626_W01	D626_W03	1	1.56
D626	D626_W01	D626_W04	1	1.56
D626	D626_W02	D626_W03	1	1.03
D626	D626_W02	D626_W04	1	1.03
D627	D627_W01	D627_W02	0	0.04
D627	D627_W01	D627_W03	0	0.32
D627	D627_W02	D627_W03	0	0.21
A708	A708_W01	A708_W03	1	0.46
A708	A708_W01	A708_W04	1	0.30
A708	A708_W01	A708_W05	1	1.06
A708	A708_W02	A708_W03	1	0.46
A708	A708_W02	A708_W04	1	0.30
A708	A708_W02	A708_W05	1	1.06
A708	A708_W03	A708_W04	1	0.10
A708	A708_W03	A708_W05	1	0.56
A708	A708_W04	A708_W05	1	0.75
A709	A709_W01	A709_W02	0	0.22
A709	A709_W01	A709_W03	0	0.50
A709	A709_W02	A709_W03	0	0.82
A710	A710_W01	A710_W02	0	0.00
A710	A710_W01	A710_W03	0	0.07
A710	A710_W02	A710_W03	0	0.07
A711	A711_W01	A711_W03	1	0.37
A711	A711_W01	A711_W04	1	0.98
A711	A711_W02	A711_W03	1	0.37
A711	A711_W02	A711_W04	1	0.98
A711	A711_W03	A711_W04	1	0.75
A712	A712_W01	A712_W02	1	0.52
A712	A712_W01	A712_W03	1	0.90
A712	A712_W01	A712_W04	1	0.86
A712	A712_W02	A712_W03	1	0.57
A712	A712_W02	A712_W04	1	0.61
A712	A712_W03	A712_W04	1	0.13
A713	A713_W01	A713_W02	0	0.00

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
A714	A714_W01	A714_W02	1	1.92
A714	A714_W01	A714_W03	1	1.92
A715	A715_W01	A715_W02	0	0.13
A715	A715_W01	A715_W03	0	0.28
A715	A715_W02	A715_W03	0	0.27
B701	B701_W01	B701_W02	0	0.00
B701	B701_W01	B701_W03	0	0.13
B701	B701_W02	B701_W03	0	0.13
B702	B702_W01	B702_W02	0	0.11
B702	B702_W01	B702_W03	0	0.11
B702	B702_W02	B702_W03	0	0.00
B703	B703_W01	B703_W02	1	3.04
B703	B703_W01	B703_W03	1	3.04
B704	B704_W01	B704_W02	0	0.00
B704	B704_W01	B704_W03	0	0.31
B704	B704_W02	B704_W03	0	0.31
B705	B705_W01	B705_W03	1	0.28
B705	B705_W01	B705_W04	1	0.28
B705	B705_W02	B705_W03	1	0.28
B705	B705_W02	B705_W04	1	0.28
B706	B706_W01	B706_W03	1	0.80
B706	B706_W01	B706_W04	1	0.97
B706	B706_W02	B706_W03	1	0.80
B706	B706_W02	B706_W04	1	0.97
B706	B706_W03	B706_W04	1	0.38
B707	B707_W01	B707_W02	1	0.19
B707	B707_W01	B707_W03	1	0.74
B707	B707_W01	B707_W04	1	1.73
B707	B707_W01	B707_W05	1	1.73
B707	B707_W02	B707_W03	1	0.56
B707	B707_W02	B707_W04	1	1.53
B707	B707_W02	B707_W05	1	1.53
B707	B707_W03	B707_W04	1	0.69
B707	B707_W03	B707_W05	1	0.69
C716	C716_W01	C716_W02	0	0.00

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
C716	C716_W01	C716_W03	0	0.44
C716	C716_W01	C716_W04	0	0.44
C716	C716_W02	C716_W03	0	0.44
C716	C716_W02	C716_W04	0	0.44
C716	C716_W03	C716_W04	0	0.00
C717	C717_W01	C717_W02	1	0.72
C717	C717_W01	C717_W03	1	0.70
C717	C717_W01	C717_W04	1	0.70
C717	C717_W02	C717_W03	1	0.91
C717	C717_W02	C717_W04	1	0.91
C718	C718_W01	C718_W02	0	0.31
C718	C718_W01	C718_W03	0	0.96
C718	C718_W02	C718_W03	0	0.72
C719	C719_W01	C719_W02	0	0.18
C719	C719_W01	C719_W03	0	0.33
C719	C719_W01	C719_W04	0	0.33
C719	C719_W02	C719_W03	0	0.30
C719	C719_W02	C719_W04	0	0.30
C719	C719_W03	C719_W04	0	0.00
C720	C720_W01	C720_W02	1	0.35
C720	C720_W01	C720_W03	1	0.35
C720	C720_W01	C720_W04	1	0.46
C720	C720_W01	C720_W05	1	0.81
C720	C720_W01	C720_W06	1	3.20
C720	C720_W02	C720_W04	1	0.11
C720	C720_W02	C720_W05	1	0.38
C720	C720_W02	C720_W06	1	2.26
C720	C720_W03	C720_W04	1	0.11
C720	C720_W03	C720_W05	1	0.38
C720	C720_W03	C720_W06	1	2.26
C720	C720_W04	C720_W05	1	0.34
C720	C720_W04	C720_W06	1	2.36
C720	C720_W05	C720_W06	1	1.67
C721	C721_W01	C721_W02	1	0.54
C721	C721_W01	C721_W03	1	0.54

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
C721	C721_W01	C721_W04	1	0.54
C721	C721_W01	C721_W05	1	0.54
C721	C721_W01	C721_W06	1	1.13
C721	C721_W02	C721_W06	1	0.69
C721	C721_W03	C721_W06	1	0.69
C721	C721_W04	C721_W06	1	0.69
C721	C721_W05	C721_W06	1	0.69
D722	D722_W01	D722_W03	1	1.32
D722	D722_W01	D722_W04	1	0.71
D722	D722_W02	D722_W03	1	1.32
D722	D722_W02	D722_W04	1	0.71
D722	D722_W03	D722_W04	1	3.19
D723	D723_W01	D723_W02	1	0.27
D723	D723_W01	D723_W03	1	0.63
D723	D723_W02	D723_W03	1	0.50
D724	D724_W01	D724_W02	1	0.19
D724	D724_W01	D724_W03	1	0.19
D724	D724_W01	D724_W04	1	0.65
D724	D724_W01	D724_W05	1	0.65
D724	D724_W02	D724_W04	1	0.50
D724	D724_W02	D724_W05	1	0.50
D724	D724_W03	D724_W04	1	0.50
D724	D724_W03	D724_W05	1	0.50
D725	D725_W01	D725_W02	0	0.00
D725	D725_W01	D725_W03	0	0.23
D725	D725_W01	D725_W04	0	0.40
D725	D725_W02	D725_W03	0	0.23
D725	D725_W02	D725_W04	0	0.40
D725	D725_W03	D725_W04	0	0.15
D726	D726_W01	D726_W02	1	0.26
D726	D726_W01	D726_W03	1	1.91
D726	D726_W01	D726_W04	1	1.91
D726	D726_W02	D726_W03	1	1.35
D726	D726_W02	D726_W04	1	1.35
D727	D727_W01	D727_W02	0	0.21

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
D727	D727_W01	D727_W03	0	0.41
D727	D727_W01	D727_W04	0	0.41
D727	D727_W02	D727_W03	0	0.62
D727	D727_W02	D727_W04	0	0.62
D727	D727_W03	D727_W04	0	0.00
A807	A807_W01	A807_W02	1	0.12
A807	A807_W01	A807_W03	1	0.38
A807	A807_W01	A807_W04	1	0.26
A807	A807_W01	A807_W05	1	1.08
A807	A807_W02	A807_W03	1	0.46
A807	A807_W02	A807_W04	1	0.30
A807	A807_W02	A807_W05	1	1.06
A807	A807_W03	A807_W04	1	0.10
A807	A807_W03	A807_W05	1	0.56
A807	A807_W04	A807_W05	1	0.75
A808	A808_W01	A808_W02	0	0.00
A808	A808_W01	A808_W03	0	0.27
A808	A808_W02	A808_W03	0	0.27
A809	A809_W01	A809_W02	0	0.11
A809	A809_W01	A809_W03	0	0.11
A809	A809_W02	A809_W03	0	0.00
A810	A810_W01	A810_W03	1	0.37
A810	A810_W01	A810_W04	1	0.26
A810	A810_W01	A810_W05	1	0.68
A810	A810_W01	A810_W06	1	1.12
A810	A810_W02	A810_W03	1	0.37
A810	A810_W02	A810_W04	1	0.26
A810	A810_W02	A810_W05	1	0.68
A810	A810_W02	A810_W06	1	1.12
A810	A810_W03	A810_W04	1	0.16
A810	A810_W03	A810_W05	1	0.95
A810	A810_W03	A810_W06	1	0.91
A810	A810_W04	A810_W05	1	0.80
A810	A810_W04	A810_W06	1	0.99
A810	A810_W05	A810_W06	1	0.33

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
A811	A811_W01	A811_W02	1	0.40
A811	A811_W01	A811_W03	1	0.79
A811	A811_W01	A811_W04	1	0.90
A811	A811_W02	A811_W03	1	0.71
A811	A811_W02	A811_W04	1	0.76
A811	A811_W03	A811_W04	1	0.17
A812	A812_W01	A812_W02	0	0.00
A813	A813_W01	A813_W02	1	0.13
A813	A813_W01	A813_W03	1	0.28
A813	A813_W02	A813_W03	1	0.27
C814	C814_W01	C814_W02	0	0.00
C814	C814_W01	C814_W03	0	0.44
C814	C814_W01	C814_W04	0	0.44
C814	C814_W02	C814_W03	0	0.44
C814	C814_W02	C814_W04	0	0.44
C814	C814_W03	C814_W04	0	0.00
C815	C815_W01	C815_W02	1	0.72
C815	C815_W01	C815_W03	1	1.14
C815	C815_W01	C815_W04	1	1.35
C815	C815_W02	C815_W03	1	1.52
C815	C815_W02	C815_W04	1	1.51
C815	C815_W03	C815_W04	1	0.43
C816	C816_W01	C816_W02	0	0.00
C816	C816_W01	C816_W03	0	0.96
C816	C816_W02	C816_W03	0	0.96
C817	C817_W01	C817_W02	0	0.18
C817	C817_W01	C817_W03	0	3.02
C817	C817_W01	C817_W04	0	3.02
C817	C817_W02	C817_W03	0	3.42
C817	C817_W02	C817_W04	0	3.42
C817	C817_W03	C817_W04	0	0.00
C818	C818_W01	C818_W02	1	0.38
C818	C818_W01	C818_W03	1	0.38
C818	C818_W01	C818_W04	1	0.48
C818	C818_W01	C818_W05	1	0.78

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
C818	C818_W01	C818_W06	1	3.51
C818	C818_W02	C818_W04	1	0.11
C818	C818_W02	C818_W05	1	0.38
C818	C818_W02	C818_W06	1	2.26
C818	C818_W03	C818_W04	1	0.11
C818	C818_W03	C818_W05	1	0.38
C818	C818_W03	C818_W06	1	2.26
C818	C818_W04	C818_W05	1	0.34
C818	C818_W04	C818_W06	1	2.36
C818	C818_W05	C818_W06	1	1.67
C819	C819_W01	C819_W02	1	0.54
C819	C819_W01	C819_W03	1	0.54
C819	C819_W01	C819_W04	1	0.54
C819	C819_W01	C819_W05	1	0.54
C819	C819_W01	C819_W06	1	1.13
C819	C819_W02	C819_W06	1	0.69
C819	C819_W03	C819_W06	1	0.69
C819	C819_W04	C819_W06	1	0.69
C819	C819_W05	C819_W06	1	0.69
D820	D820_W01	D820_W03	1	1.32
D820	D820_W01	D820_W04	1	1.60
D820	D820_W02	D820_W03	1	1.32
D820	D820_W02	D820_W04	1	1.60
D820	D820_W03	D820_W04	1	0.73
D821	D821_W01	D821_W02	1	0.27
D821	D821_W01	D821_W03	1	0.63
D821	D821_W02	D821_W03	1	0.50
D822	D822_W01	D822_W02	1	0.29
D822	D822_W01	D822_W03	1	0.97
D822	D822_W01	D822_W04	1	0.58
D822	D822_W01	D822_W05	1	0.58
D822	D822_W02	D822_W03	1	0.87
D822	D822_W02	D822_W04	1	0.63
D822	D822_W02	D822_W05	1	0.63
D822	D822_W03	D822_W04	1	0.47

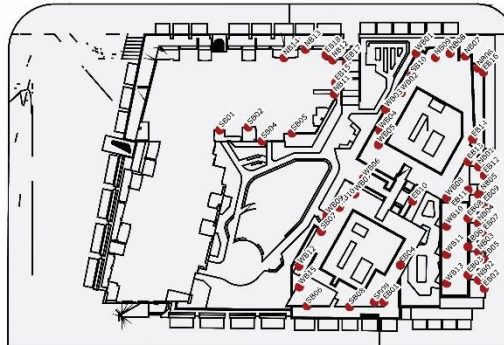
Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
D822	D822_W03	D822_W05	1	0.47
D823	D823_W01	D823_W02	0	0.00
D823	D823_W01	D823_W03	0	0.31
D823	D823_W01	D823_W04	0	0.31
D823	D823_W02	D823_W03	0	0.31
D823	D823_W02	D823_W04	0	0.31
D823	D823_W03	D823_W04	0	0.00
D824	D824_W01	D824_W02	1	0.20
D824	D824_W01	D824_W03	1	1.86
D824	D824_W01	D824_W04	1	1.86
D824	D824_W02	D824_W03	1	1.35
D824	D824_W02	D824_W04	1	1.35
D825	D825_W01	D825_W02	0	0.90
D825	D825_W01	D825_W03	0	1.38
D825	D825_W01	D825_W04	0	1.39
D825	D825_W02	D825_W03	0	0.21
D825	D825_W02	D825_W04	0	0.41
D825	D825_W03	D825_W04	0	0.62
C914	C914_W01	C914_W03	1	0.44
C914	C914_W01	C914_W04	1	0.44
C914	C914_W02	C914_W03	1	0.44
C914	C914_W02	C914_W04	1	0.44
C914	C914_W03	C914_W05	1	0.44
C914	C914_W04	C914_W05	1	0.44
C915	C915_W01	C915_W03	1	0.95
C915	C915_W02	C915_W03	1	0.95
C916	C916_W01	C916_W02	0	0.00
C916	C916_W01	C916_W03	0	0.18
C916	C916_W01	C916_W04	0	0.33
C916	C916_W01	C916_W05	0	0.33
C916	C916_W02	C916_W03	0	0.18
C916	C916_W02	C916_W04	0	0.33
C916	C916_W02	C916_W05	0	0.33
C916	C916_W03	C916_W04	0	0.30
C916	C916_W03	C916_W05	0	0.30

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
C916	C916_W04	C916_W05	0	0.00
C917	C917_W01	C917_W02	1	0.38
C917	C917_W01	C917_W03	1	0.48
C917	C917_W01	C917_W04	1	0.78
C917	C917_W01	C917_W05	1	3.51
C917	C917_W01	C917_W06	1	3.51
C917	C917_W02	C917_W03	1	0.11
C917	C917_W02	C917_W04	1	0.38
C917	C917_W02	C917_W05	1	2.26
C917	C917_W02	C917_W06	1	2.26
C917	C917_W03	C917_W04	1	0.34
C917	C917_W03	C917_W05	1	2.36
C917	C917_W03	C917_W06	1	2.36
C917	C917_W04	C917_W05	1	1.67
C917	C917_W04	C917_W06	1	1.67
C918	C918_W01	C918_W06	1	0.66
C918	C918_W02	C918_W06	1	0.66
C918	C918_W03	C918_W06	1	0.66
C918	C918_W04	C918_W06	1	0.66
C918	C918_W05	C918_W06	1	0.66
D919	D919_W01	D919_W03	1	1.32
D919	D919_W01	D919_W04	1	1.33
D919	D919_W02	D919_W03	1	1.32
D919	D919_W02	D919_W04	1	1.33
D919	D919_W03	D919_W04	1	0.18
D920	D920_W01	D920_W02	1	0.28
D920	D920_W01	D920_W03	1	0.47
D920	D920_W01	D920_W04	1	0.90
D920	D920_W01	D920_W05	1	0.95
D920	D920_W01	D920_W06	1	1.03
D920	D920_W02	D920_W03	1	0.27
D920	D920_W02	D920_W04	1	0.63
D920	D920_W02	D920_W05	1	0.71
D920	D920_W02	D920_W06	1	0.55
D920	D920_W03	D920_W04	1	0.50

Apartment	Opening 1	Opening 2	ADG DTS	ΔP (Pa)
D920	D920_W03	D920_W05	1	0.55
D920	D920_W03	D920_W06	1	0.57
D920	D920_W04	D920_W05	1	0.18
D920	D920_W04	D920_W06	1	0.43
D920	D920_W05	D920_W06	1	0.29
D921	D921_W01	D921_W02	0	0.87
D921	D921_W01	D921_W03	0	0.87
D921	D921_W01	D921_W04	0	0.52
D921	D921_W01	D921_W05	0	0.63
D921	D921_W02	D921_W03	0	0.00
D921	D921_W02	D921_W04	0	0.45
D921	D921_W02	D921_W05	0	0.47
D921	D921_W03	D921_W04	0	0.45
D921	D921_W03	D921_W05	0	0.47
D921	D921_W04	D921_W05	0	0.06
D922	D922_W01	D922_W02	1	0.23
D922	D922_W01	D922_W03	1	0.23
D922	D922_W01	D922_W04	1	1.15
D922	D922_W02	D922_W04	1	1.44
D922	D922_W03	D922_W04	1	1.44
D923	D923_W01	D923_W02	1	3.02
D923	D923_W01	D923_W03	1	3.46
D923	D923_W01	D923_W04	1	2.71
D923	D923_W01	D923_W05	1	2.71
D923	D923_W02	D923_W03	1	0.21
D923	D923_W02	D923_W04	1	0.41
D923	D923_W02	D923_W05	1	0.41
D923	D923_W03	D923_W04	1	0.62
D923	D923_W03	D923_W05	1	0.62

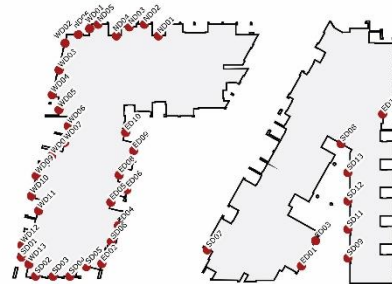
APPENDIX C LAYOUT OF PRESSURE SENSORS AND OPENING LOCATIONS

C.1 Layout of Pressure Sensors



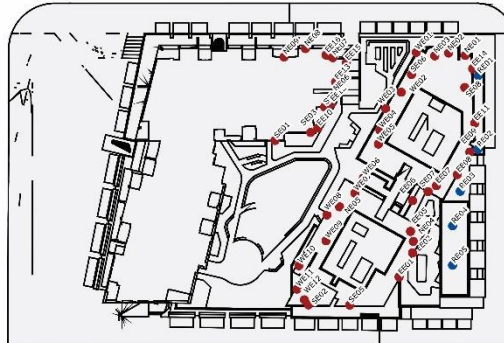
- Pressure sensor located on the front-side of a wall or vertical fin/screen

Figure C.1.6: Layout of Pressure Sensors – Level 3 Plan



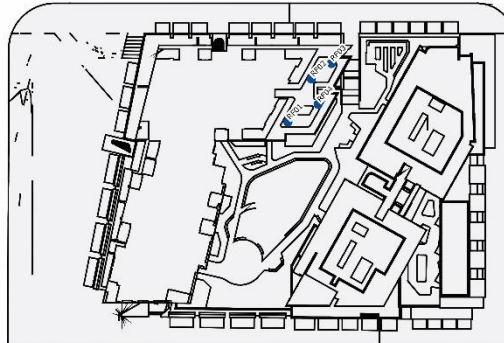
- Pressure sensor located on the front-side of a wall or vertical fin/screen

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May 9, 2022



- Legend
- Pressure sensor located on the front-side of a wall or vertical fin/screen
 - Pressure sensor located on the top-side of a horizontal surface.

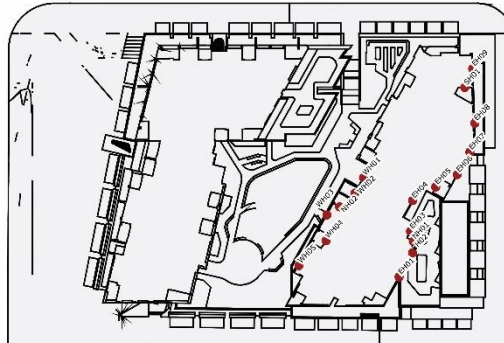
Figure C.1.8: Layout of Pressure Sensors – Level 5 Plan



Legend

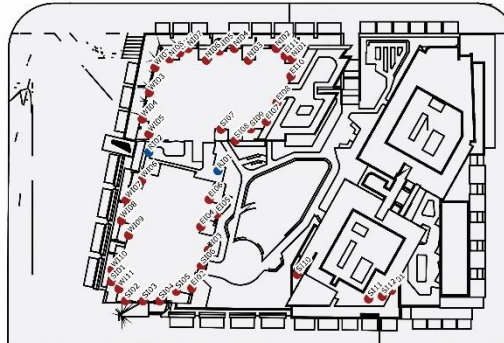
- Pressure sensor located on the top-side of a horizontal surface.

Figure C.1.9: Layout of Pressure Sensors – Level 6 Plan



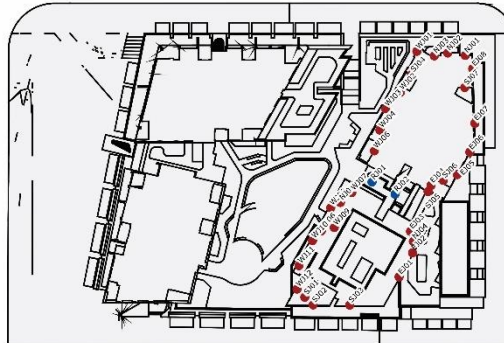
Legend
• Pressure sensor located on the front-side of a wall or vertical fin/screen

Figure C.1.10: Layout of Pressure Sensors – Level 7 Plan



- Legend
- Pressure sensor located on the front-side of a wall or vertical fin/screen
 - Pressure sensor located on the top-side of a horizontal surface.

Figure C.1.11: Layout of Pressure Sensors – Level 8 Plan



Legend

- Pressure sensor located on the front-side of a wall or vertical fin/screen
- Pressure sensor located on the top-side of a horizontal surface.

Figure C.1.12: Layout of Pressure Sensors – Level 9 Plan

C.2 Opening Locations and Notations



Figure C.2. 2: Opening Locations and Notations – Level 03



Figure C.2. 3: Opening Locations and Notations – Level 04



Figure C.2. 4: Opening Locations and Notations – Level 05



Figure C.2. 5: Opening Locations and Notations – Level 06



Figure C.2. 6: Opening Locations and Notations – Level 07



Figure C.2. 7: Opening Locations and Notations – Level 08



Figure C.2. 8: Opening Locations and Notations – Level 09

APPENDIX D FLOW PERFORMANCE THROUGH A TYPICAL APARTMENT

Table D.1: Table of Relative Flow Performance through a Typical Apartment

Flow Path through Typical Apartment	Description	Comparative Pressure Loss	Comparative Flow Rate
Door to A	Door to 1 Sliding Window	1	1
Door to B	Door to 2 Sliding Windows	0.25	1.99
Door to C	Door to 1 Awning Window	0.25	1.99
Door to D	Door to 4 Awning Windows	0.11	2.97
Door to E	Door to Highlight Awning Window (125mm Open)	0.17	2.40
Door to F	Door to Highlight Awning Window (30° Open)	0.04	4.84
Door to G	Door to internal louvre + plenum duct + external louvre	0.86	1.08
Door to H	Door to internal louvre + external louvre only	0.74	1.16

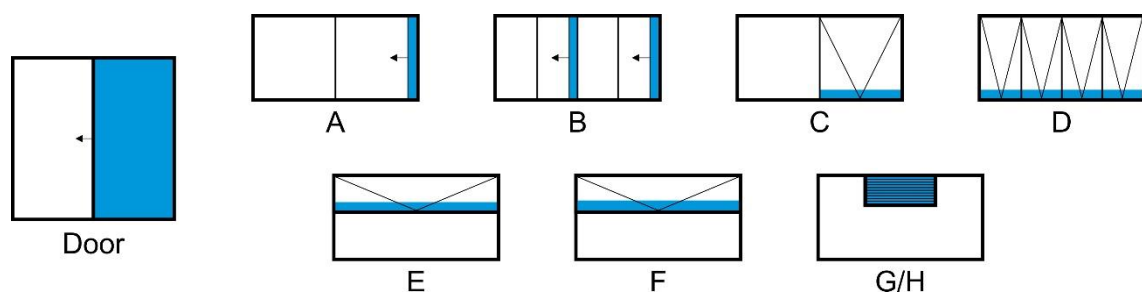


Figure D.1: Typical Balcony Door Frame Size of 2.4m x 2.4m Frame Size (Door) and Typical 2nd Opening Types for a 2.4m x 1.2m Overall Frame Size (A-H)

Door: Sliding door leading to a balcony (1.2m wide opening size)

A: Single sliding window with child safety device (125mm maximum opening size)

B: Double sliding windows with child safety devices (125mm maximum opening size each)

C: Single awning window with child safety device (125mm maximum opening size)

D: Four awning windows with child safety devices (125mm maximum opening size each)

E: Highlight awning window 500mm high opened out 125mm

F: Highlight awning window 500mm high opened out 30° (approx. 260mm)

G: 0.4m×1.0m internal louvre, 0.4m×1.0m plenum duct and 0.4m×1.0m external louvre

H: 0.4m×1.0m internal louvre and 0.4m×1.0m external louvre

The natural ventilation performance summarised in Table C.1 was determined for openings in series, and can be calculated from the following:

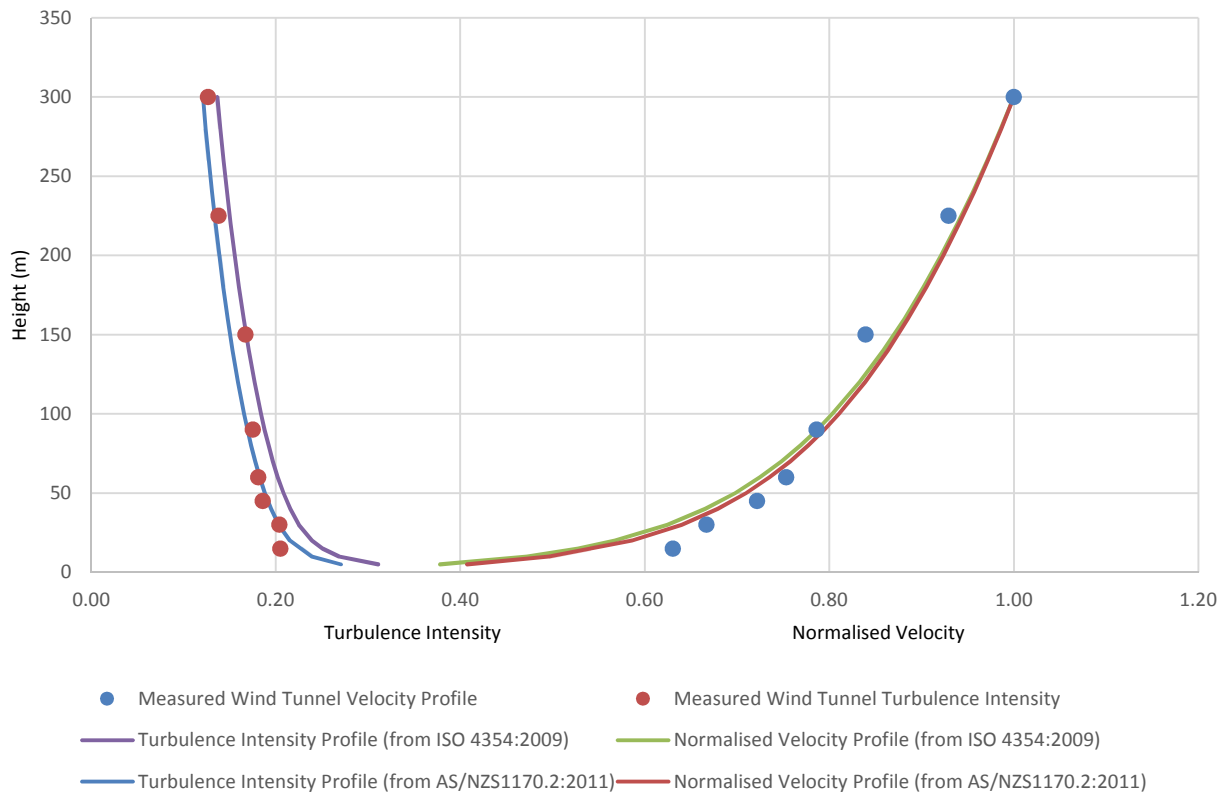
$$Q = \left[\frac{(C_{p_1} - C_{p_{n+1}}) v_h^2}{\frac{1}{C_{d_1}^2 A_1^2} + \frac{1}{C_{d_2}^2 A_2^2} + \frac{1}{C_{d_3}^2 A_3^2} + \dots + \frac{1}{C_{d_n}^2 A_n^2}} \right]^{\frac{1}{2}} \quad (5.6)$$

C_{p_1}	mean pressure coefficient at Opening 1	v_h	reference mean wind speed at building height, h (m/s)
C_d	discharge coefficient of the opening	A	openable area of the opening (m ²)
Q	volumetric flow rate along the flow path through the unit (m ³ /s)	v_1	average air speed at Opening 1 (m/s)

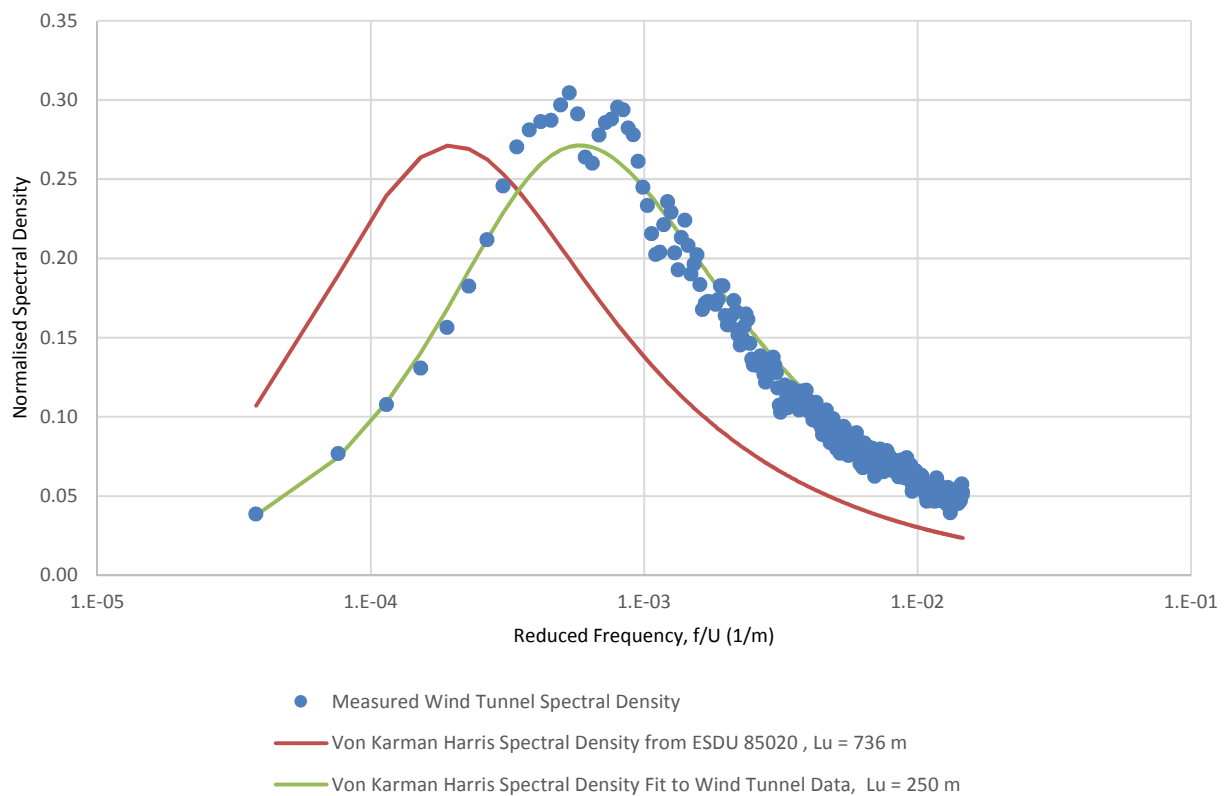
The discharge coefficient of the openings have been based on the typical opening sizes. These range from 0.7 for the balcony door and plenum duct, 0.65 for the windows, and 0.4 for the louvres.

APPENDIX E VELOCITY AND TURBULENCE INTENSITY PROFILES

Mean Velocity and Turbulence Intensity for Suburban/Forest Terrain ($0.2\text{m} < z_0 < 0.3\text{m}$) (TC3) at a 1:300 Scale



Longitudinal Spectra Density for Suburban/Forest Terrain ($0.2\text{m} < z_0 < 0.3\text{m}$) (TC3) at a 1:300 Scale



APPENDIX F METHODOLOGY

F.1 Wind Tunnel Data Acquisition

Wind pressures acting on the model of the development are monitored in the wind tunnel from 16 wind directions at 22.5 degree intervals. The phase lag between the various channels where data is acquired simultaneously is within 10% of a typical pressure cycle. A sample rate of 1,024Hz is used, which is more than adequate for the given frequency band. The signal is low-pass filtered at 500Hz and then digital filtering is applied over this range to provide an unbiased response from the pressure measurement system (A.W. Rofail, 2004). This corresponds to a full-scale frequency range of approximately 0 to 4 Hz.

Based on the results of the analysis of the boundary layer wind profiles at the site, and incorporating the regional wind model, the data sampling length of the wind tunnel test for each wind direction corresponds to a full-scale sample length of at least 30 minutes. Research by A.W. Rofail and K.C.S. Kwok (1991) has shown that the mean wind is stable for sample lengths of 30 minutes or more (full-scale).

Mean external pressure coefficients are obtained from the wind tunnel measurements for each individual pressure sensor for each wind direction tested. The application of wind tunnel testing for the modelling of natural ventilation has been reported previously by Rofail and Aurelius (2004) and Peddie and Rofail (2010 and 2011).

F.2 Calculation of the Pressure Coefficients

The mean external pressure coefficients obtained from the wind tunnel are referenced to the mean velocity pressure at the building reference height. The external pressure coefficients are defined as follows:

$$C_{p,mean} = \frac{\bar{p} - p_0}{\frac{1}{2} \rho \bar{V}_{BH}^2} \quad E.1$$

Definitions of the terms above are described as follows:

$C_{p,mean}$	mean pressure coefficient	$\bar{p}$	mean pressure
ρ	air density (1.2kg/m ³)	p_0	reference static pressure
$\bar{V}_{BH}$	mean velocity at the building reference height		

Table A1 in Appendix A presents the maximum and minimum mean and peak external pressure coefficients based on the most critical values for the range of wind directions tested, for each pressure sensor location. The corresponding wind direction that each critical value occurred at is also shown in Table A1 of Appendix A. The directional results of these coefficients are plotted in Appendix C of this report. All coefficient data presented in this report is referenced to the mean velocity pressure at the study reference height defined in Section 3.

F.3 Calculation of the Full-Scale Results

To calculate the full-scale mean hourly external pressures at the openings, the wind tunnel coefficient measurements need to be combined with information about the local wind climate. The aim of combining the wind tunnel measurements with wind climate information is to determine the expected pressure level that will occur for a given return period (mean recurrence interval). As the return period of a pressure level is directly related to the hourly probability of occurrence of this pressure level, this process may also be considered to be the determination of the pressure level for a given probability of occurrence.

The local wind climate is normally described using a statistical model, which relates wind speed to a probability of occurrence. A feature of this process is to include the impact of wind directionality which includes any local variations in wind speed or frequency with wind direction. This is important as the natural ventilation performance of a building may be highly dependent on the prevailing wind direction, and that the highest wind speed event in a given return period may not necessarily produce the highest pressure differential in the same return period.

The contribution to the probability of occurrence of a pressure level is calculated for each wind direction. These contributions are then summed over all wind directions to calculate the total probability of occurrence of this level. The pressure level is selected such that the summed probability of occurrence for this level equals the hourly probability of exceedance. A detailed description of the calculation of the pressure level and a justification for the choice of probability distribution is given by J.D. Holmes (1990).

The reference pressure is related to the reference mean wind speed by the following equation;

$$\text{Reference Pressure (Pa)} = \frac{1}{2} \rho V^2 \quad (3.1)$$

where the air density ρ is taken to be 1.2 kg/m³, which is typical for sea-level atmospheric conditions.

F.4 References

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