

SN tool ATCE results W04 RAM1 10.0 RAM2 0.01 PTDF0.02 ATC Extraction Results

Nordic RCC

April 19, 2024

Bidding zone lock-in statistics

An area operates at maximum export when the sum of ATC on all exporting directions of that area is less than 1MW.

An area operates at maximum import when the sum of ATC on all importing directions of that area is less than 1MW.

An area operates in lock-in if during the same MTU it is operating at both maximum export and maximum import.

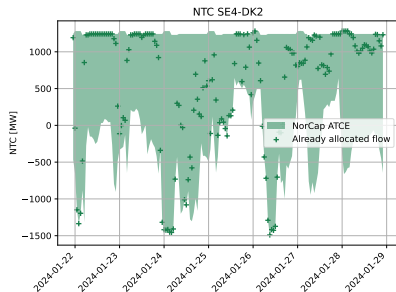
Bidding zone	#MTUs at max Export	#MTUs at max Import	#MTUs at lock-in
DK1	2	0	0
DK2	0	0	0
SE1	35	0	0
SE2	1	0	0
SE3	1	0	0
SE4	2	0	0
NO1	0	8	0
NO2	0	3	0
NO3	0	0	0
NO4	38	0	0
NO5	0	12	0
FI	0	0	0

Border lock-in statistics

A bidding zone border is operating in a lock-in situation, if at a given MTU, the ATC of the bidding zone border is smaller than 1MW in both forward and reverse trading direction.

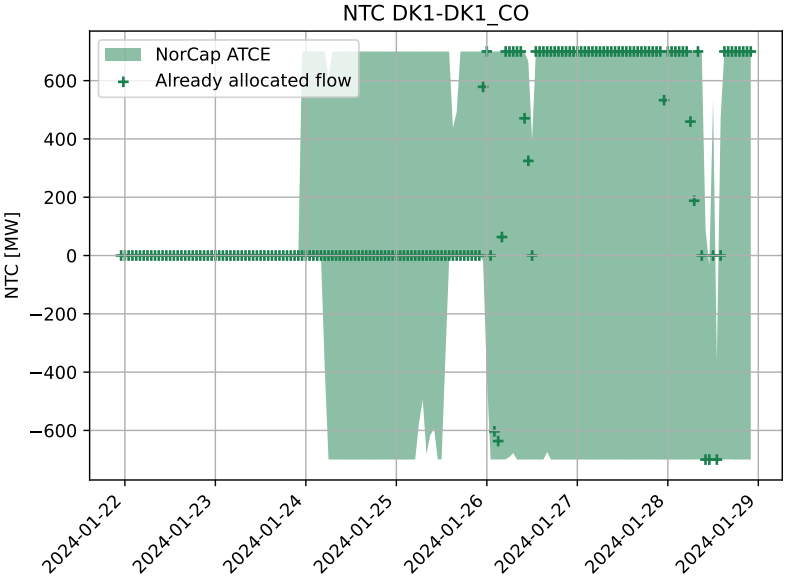
Border	#MTUs at lock-in
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Border NTC plots - Reader's guide

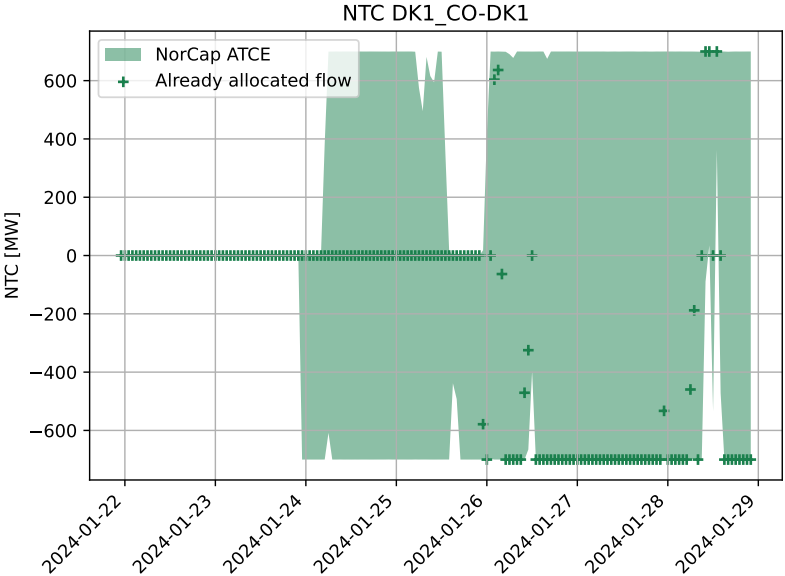


The colored area represents the possible exchange on this border and direction. The cross marks the simulated day ahead market coupling flows. Any colored area above the cross, means that intraday market will be able to increase exchange over the day ahead market coupling flows. Any colored area below the cross means that the intraday market will be able to trade against the day ahead market.

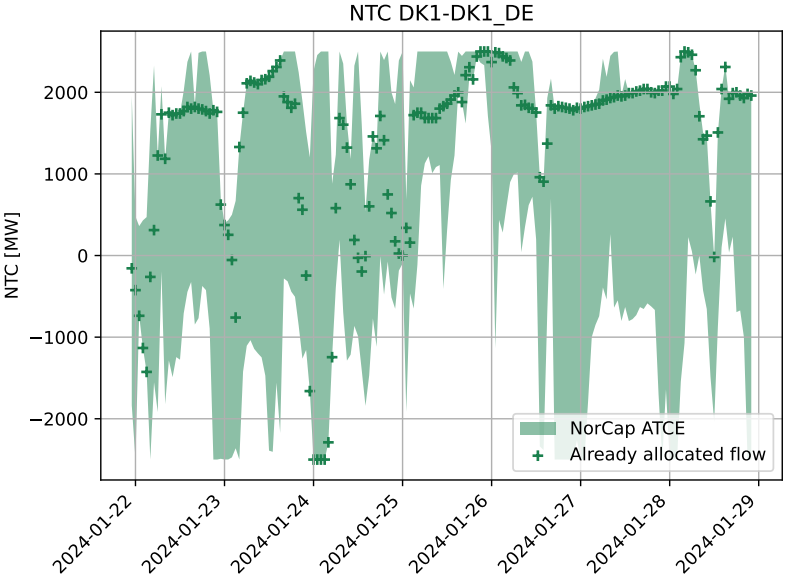
DK1-DK1_CO



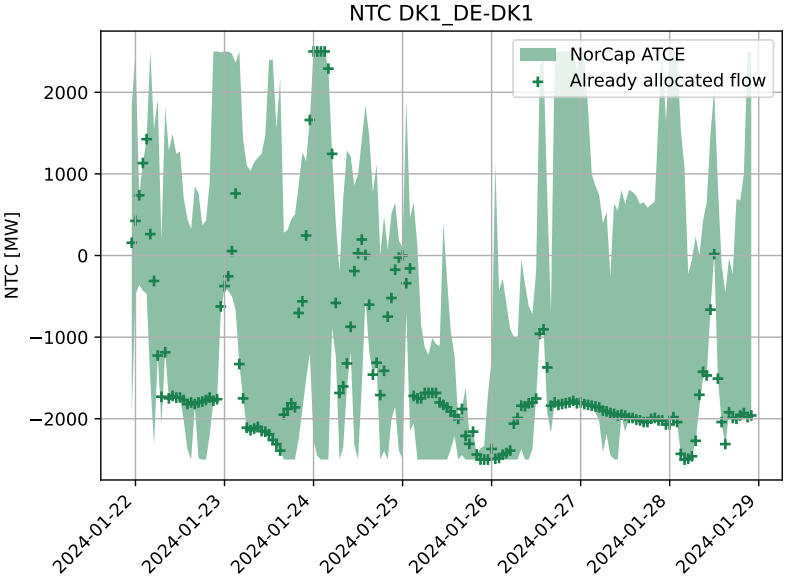
DK1_CO-DK1



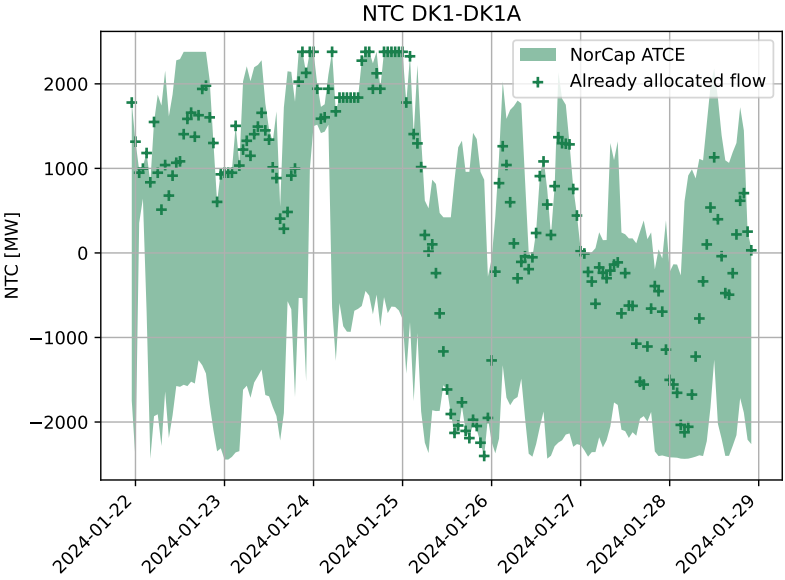
DK1-DK1_DE



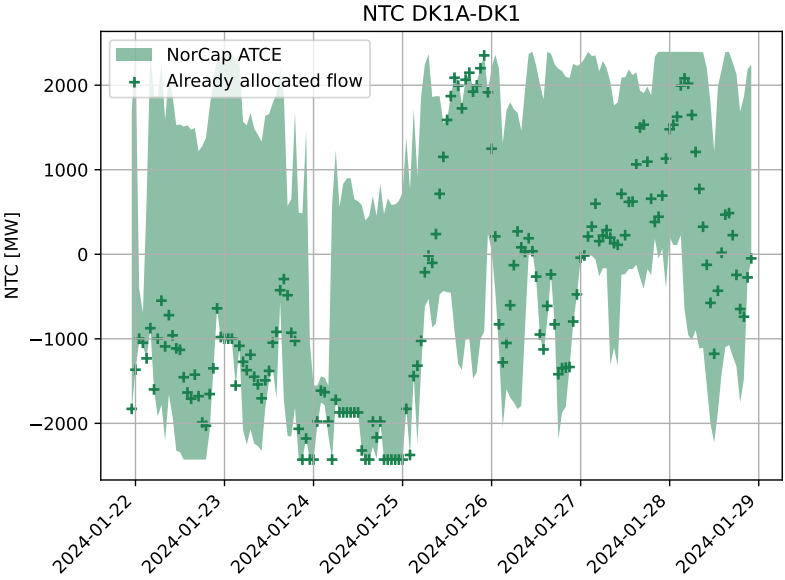
DK1_DE-DK1



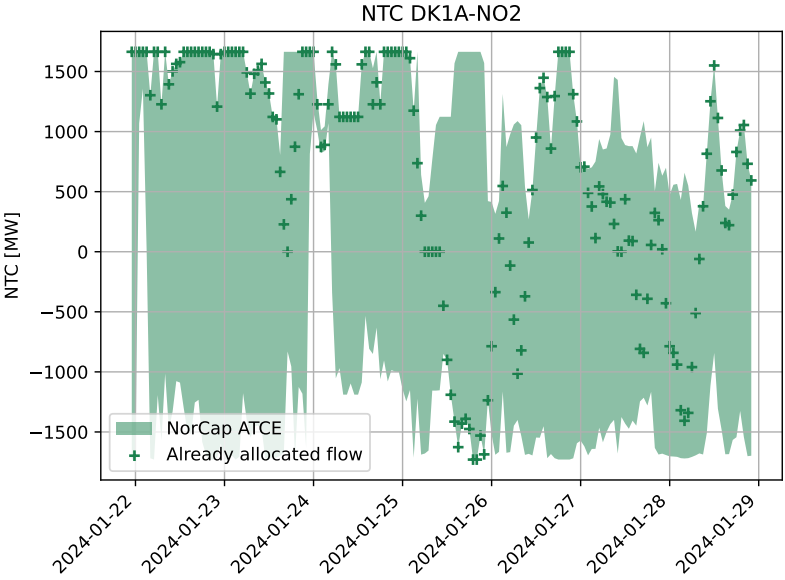
DK1-DK1A



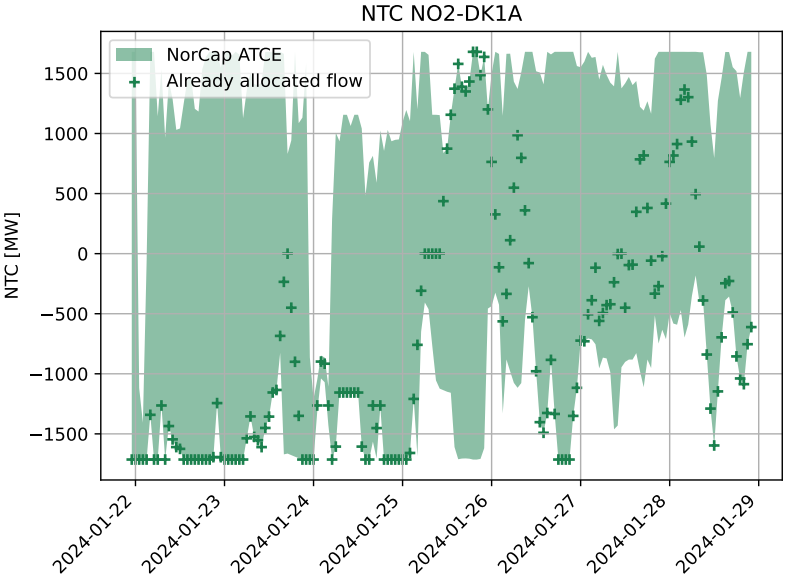
DK1A-DK1



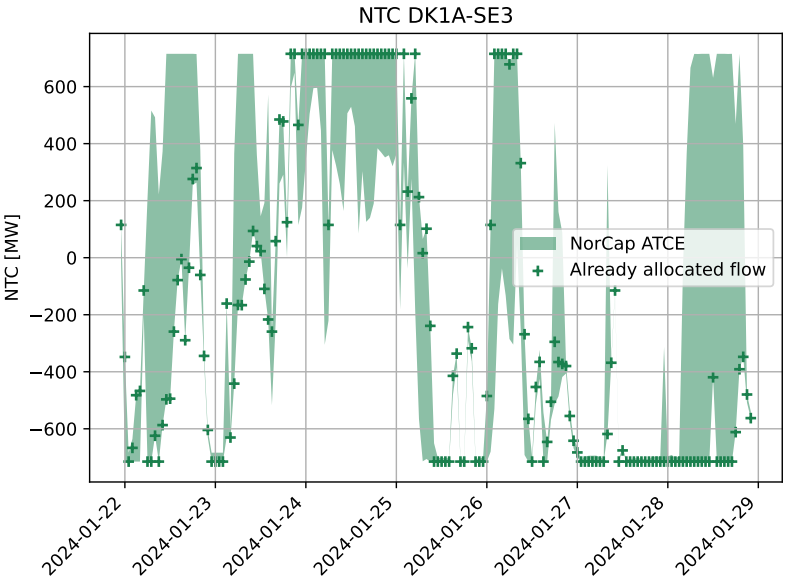
DK1A-NO2



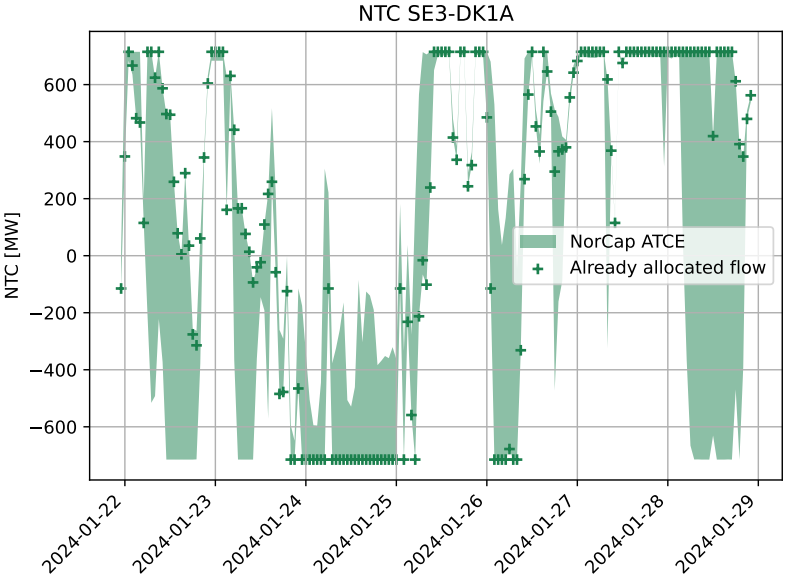
NO2-DK1A



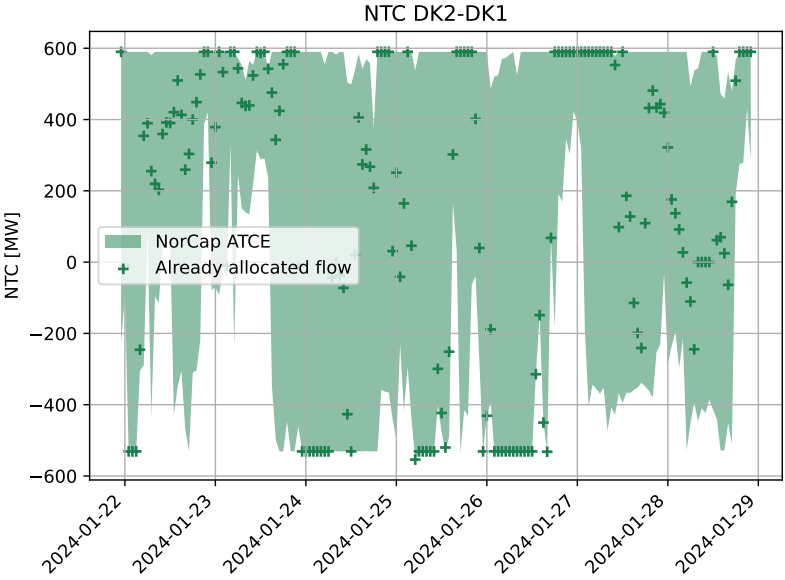
DK1A-SE3



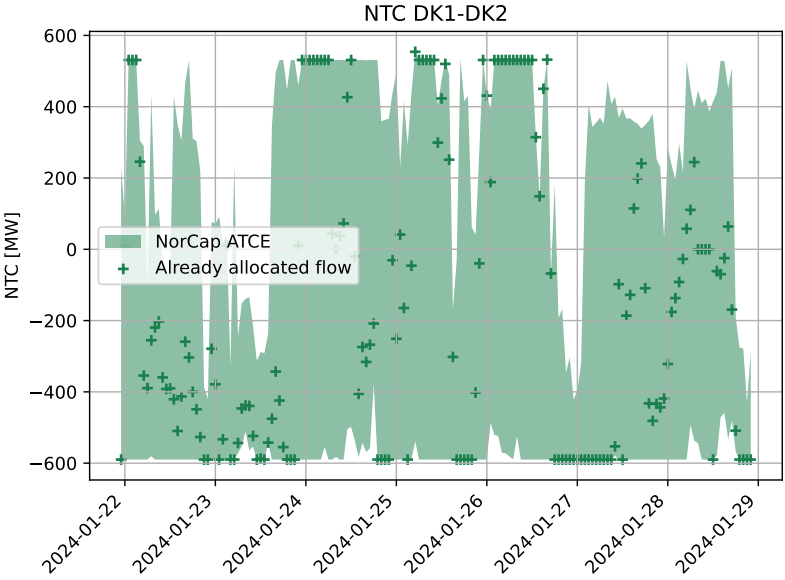
SE3-DK1A



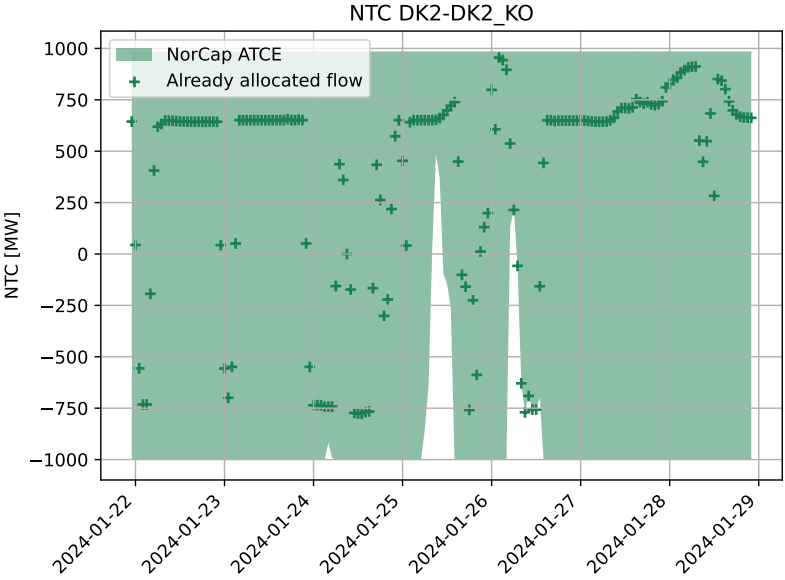
DK2-DK1



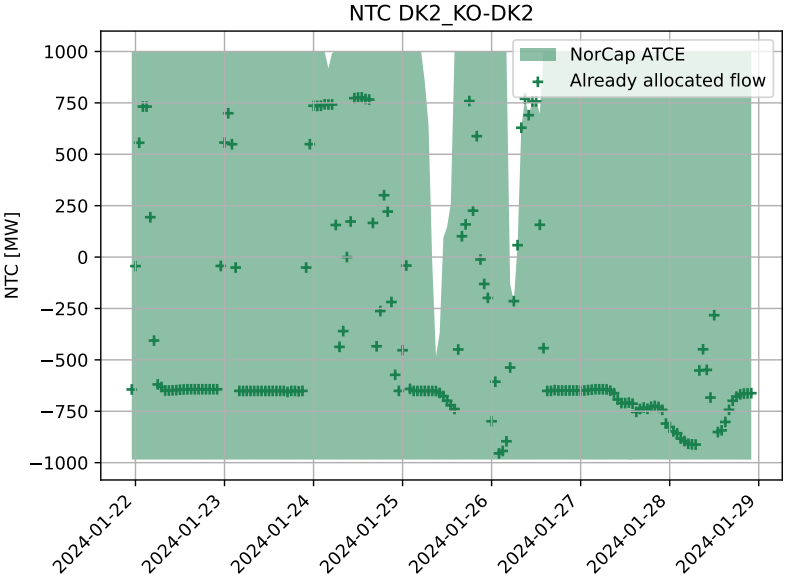
DK1-DK2



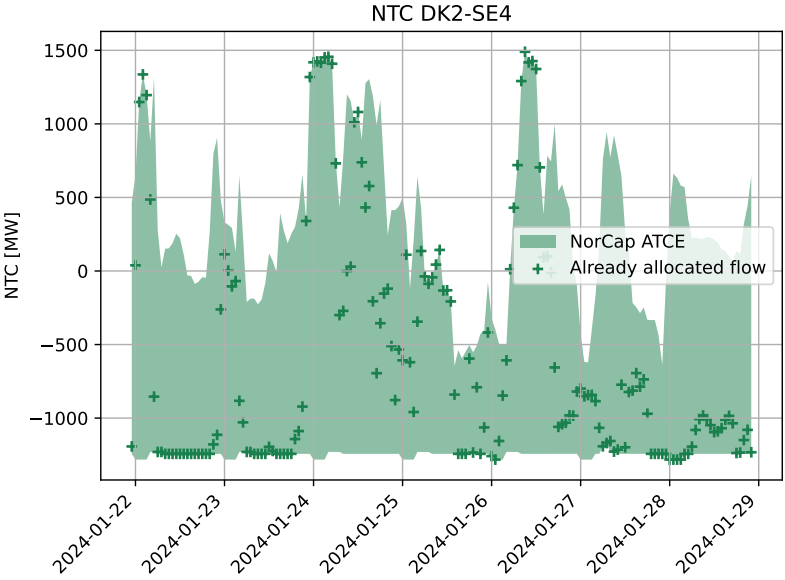
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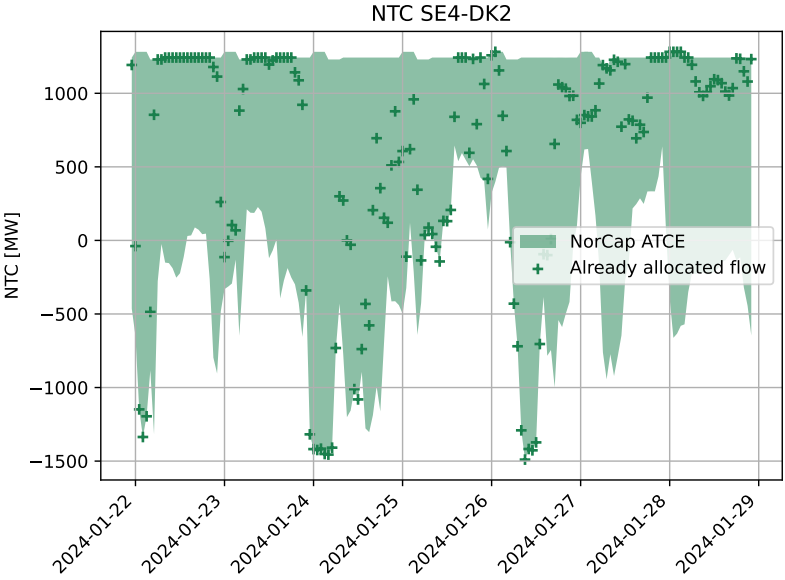
DK2_KO-DK2

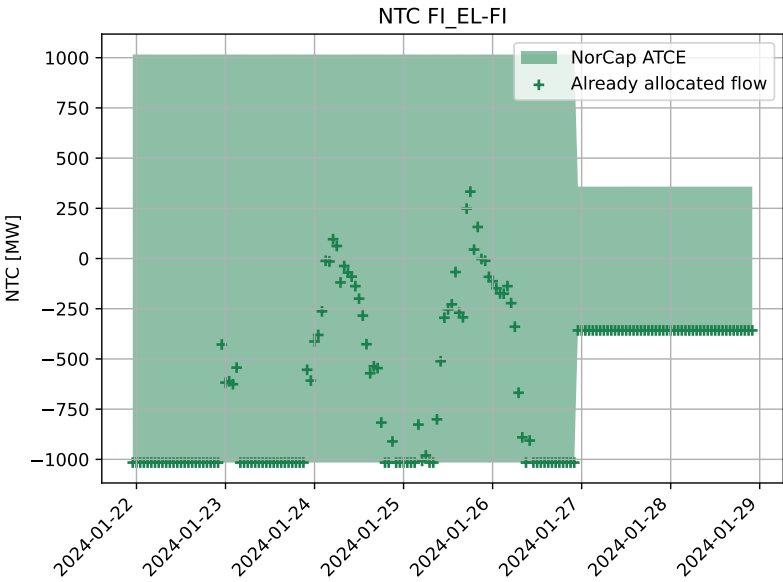


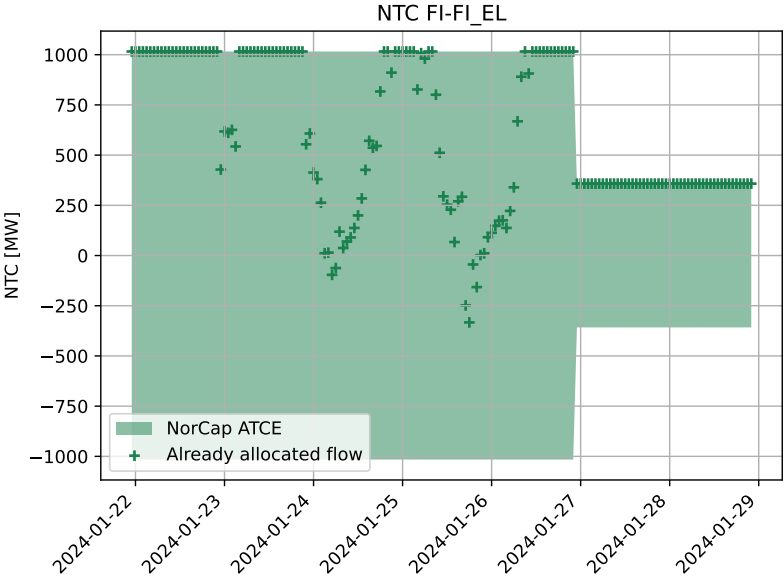
DK2-SE4

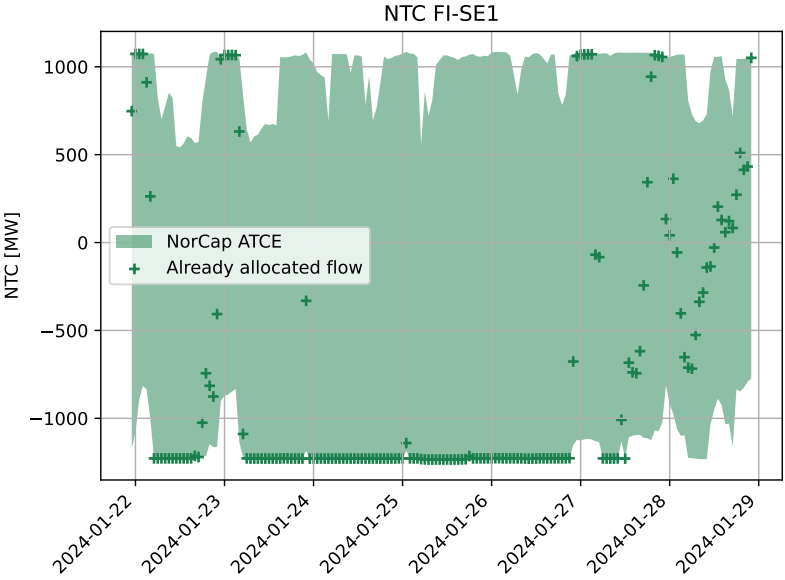


SE4-DK2

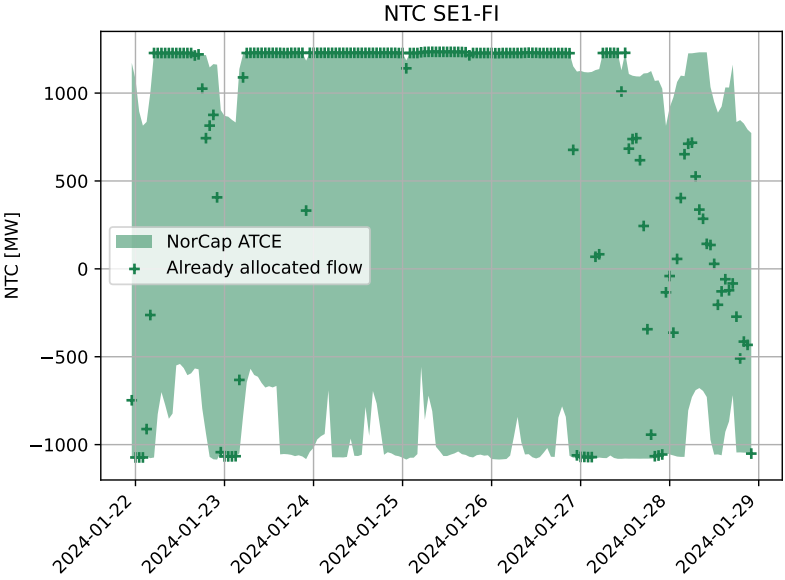


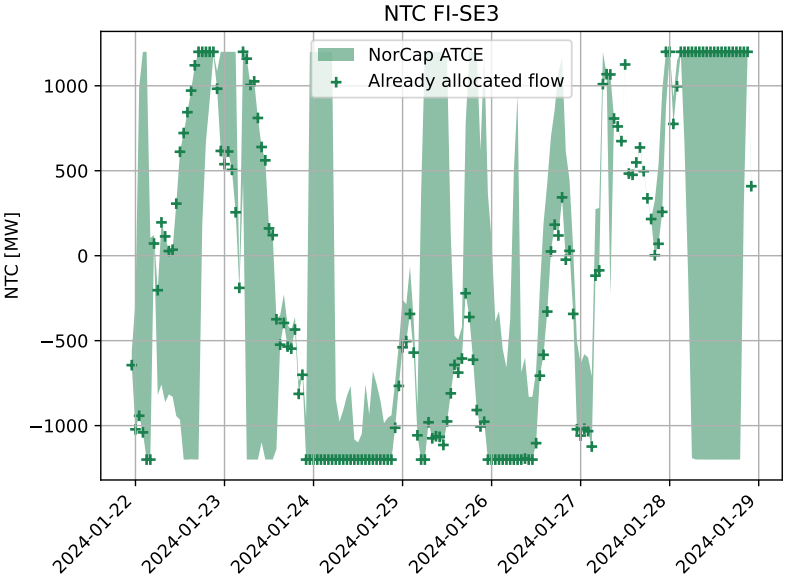


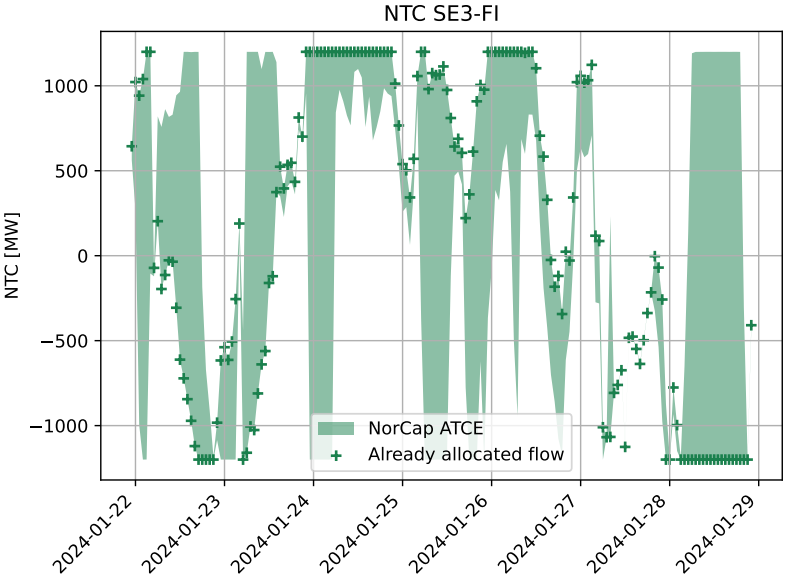




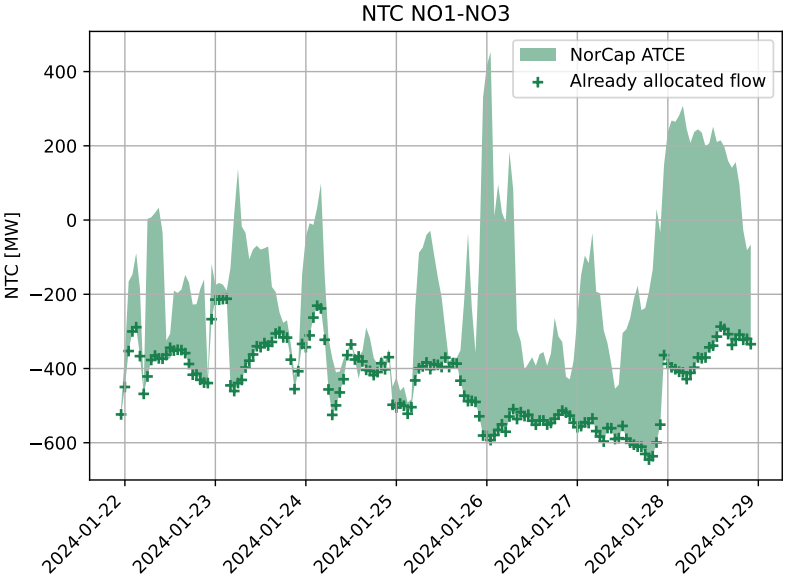
SE1-FI



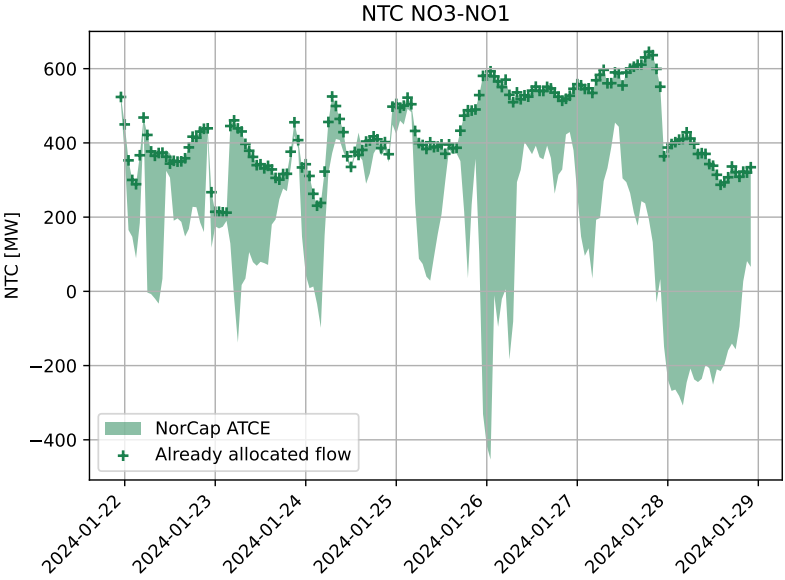




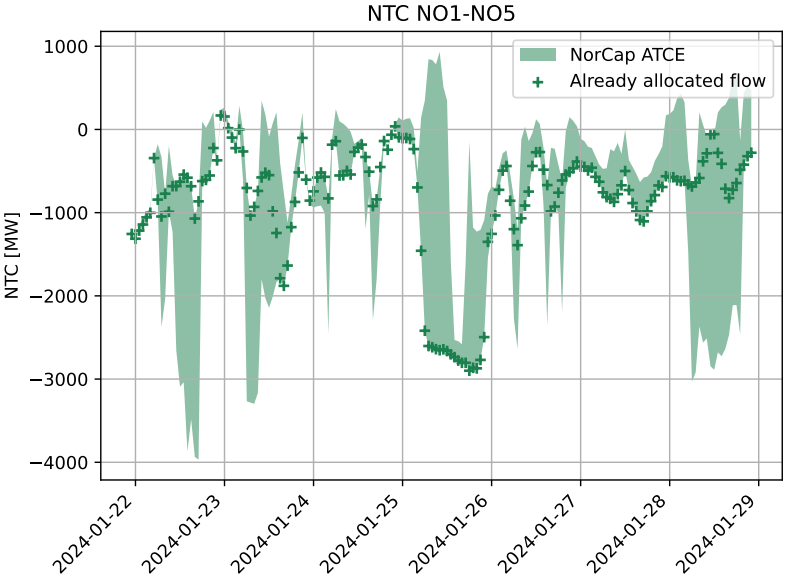
NO1-NO3



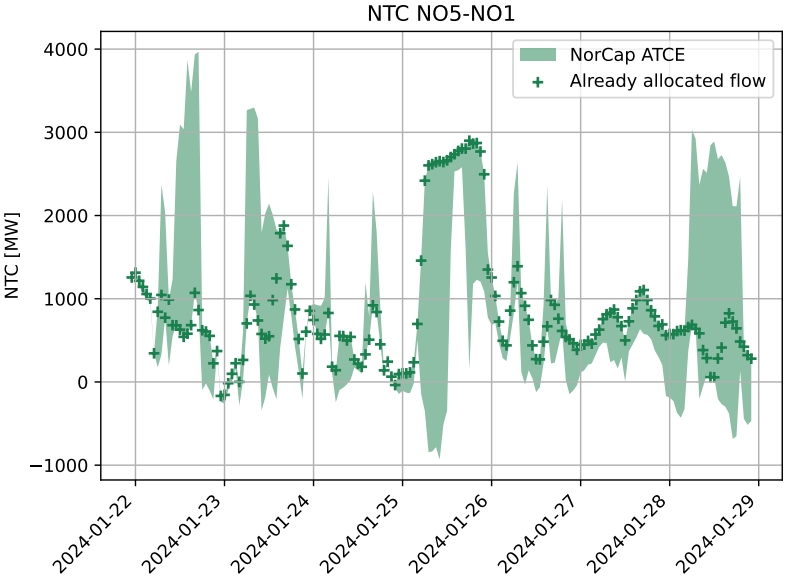
NO3-NO1



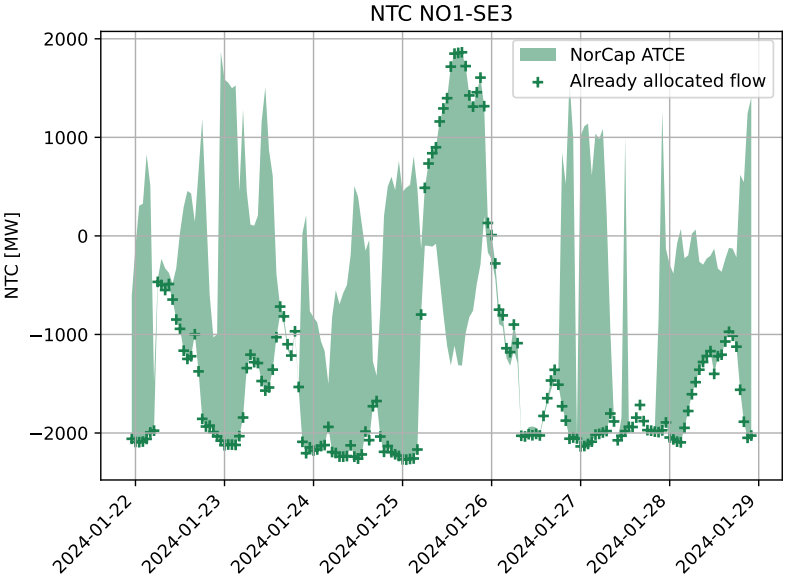
NO1-NO5



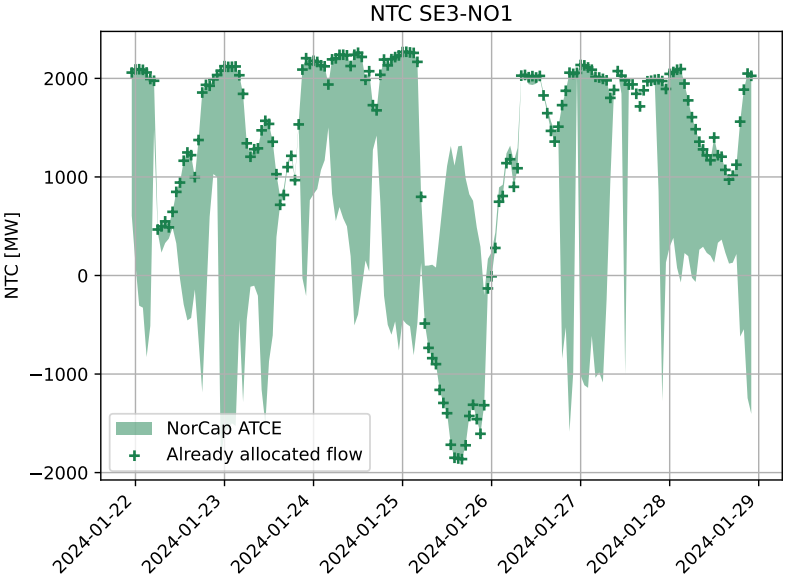
NO5-NO1



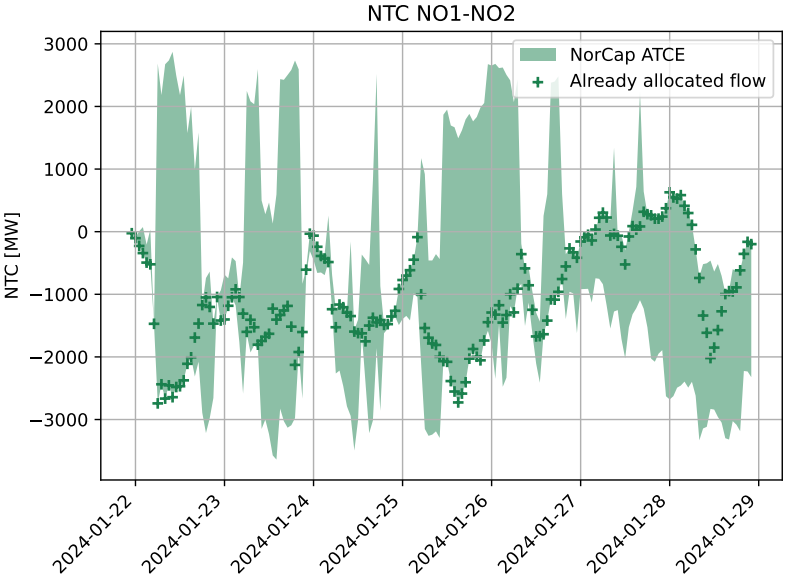
NO1-SE3



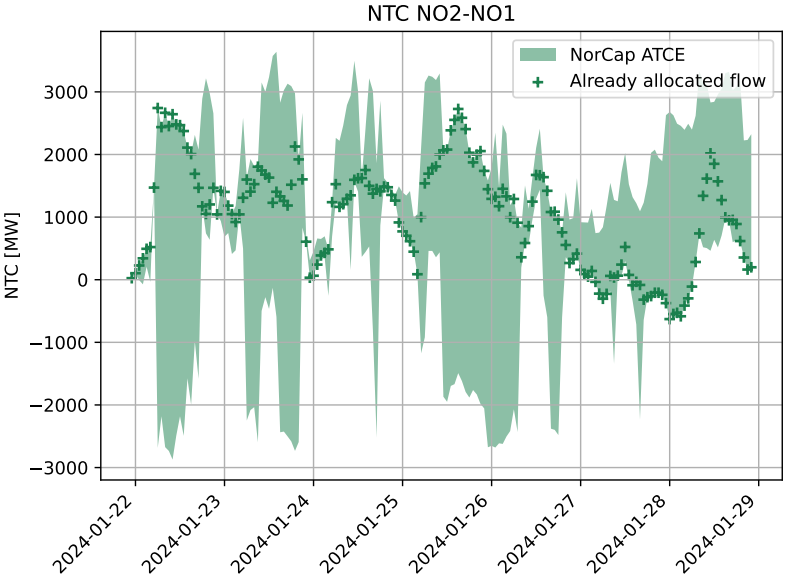
SE3-NO1



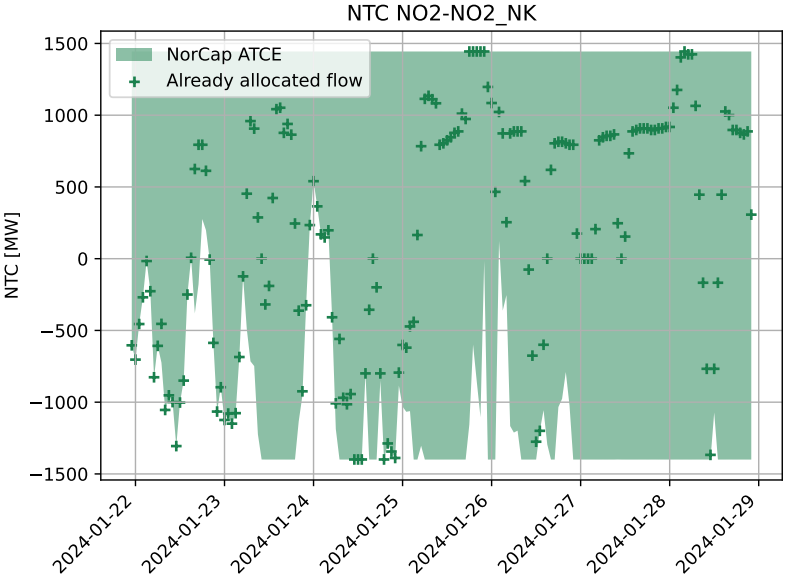
NO1-NO2



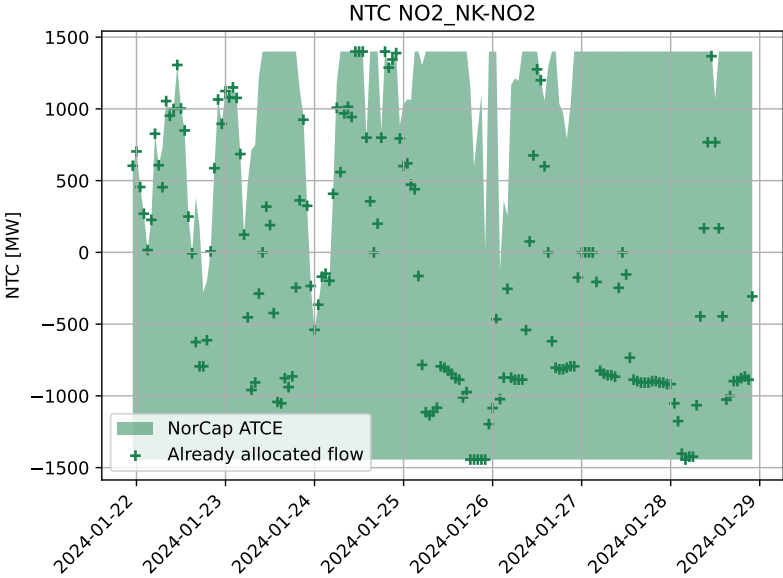
NO2-NO1



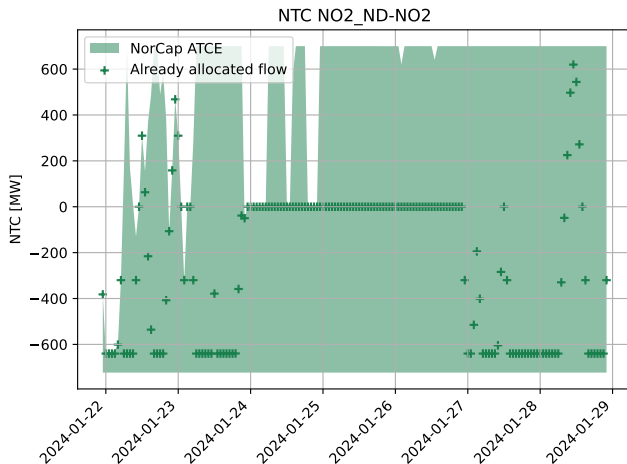
NO2-NO2_NK



NO2_NK-NO2

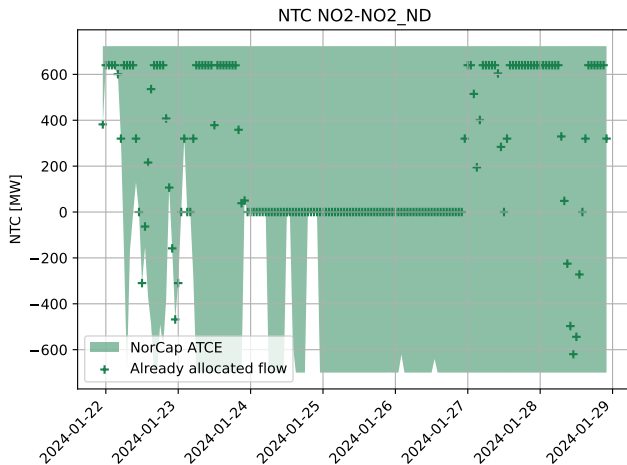


NO2_ND-NO2



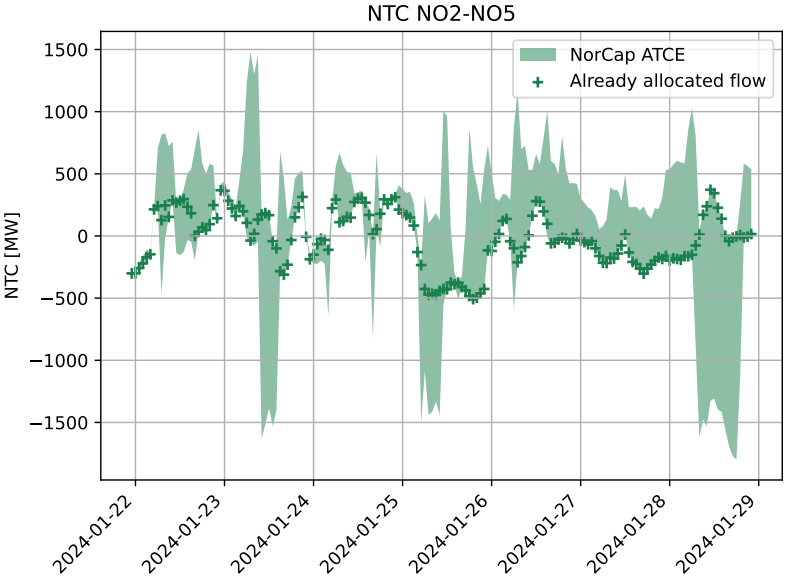
Note: NTC for NorNed includes 3.1% capacity reserved for losses. These will be subtracted in a future revision.

NO2-NO2_ND

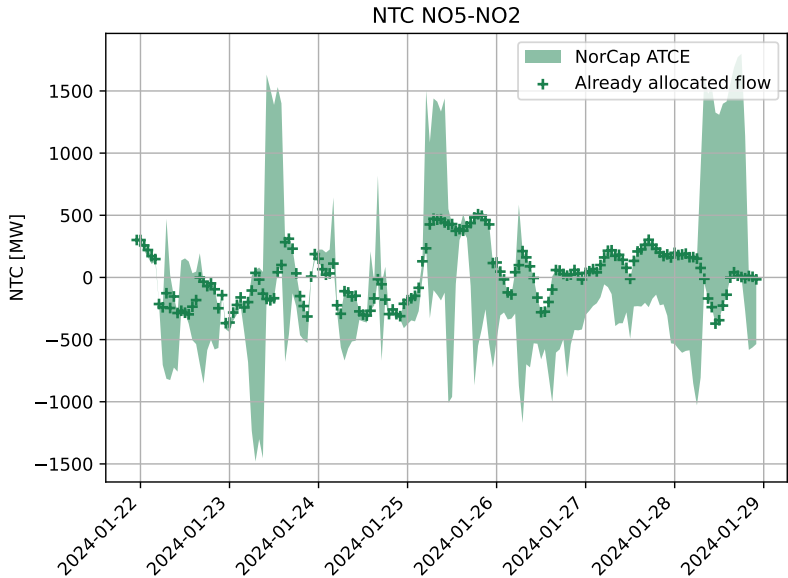


Note: NTC for NorNed includes 3.1% capacity reserved for losses. These will be subtracted in a future revision.

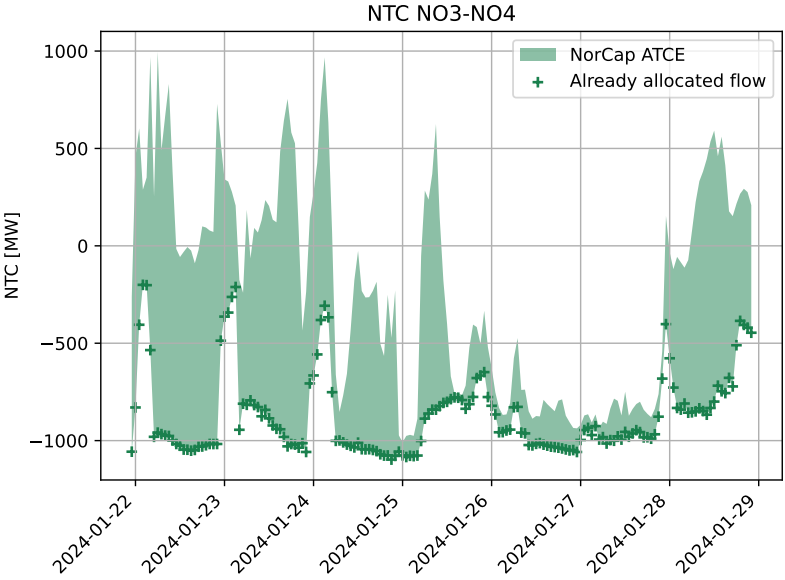
NO2-NO5



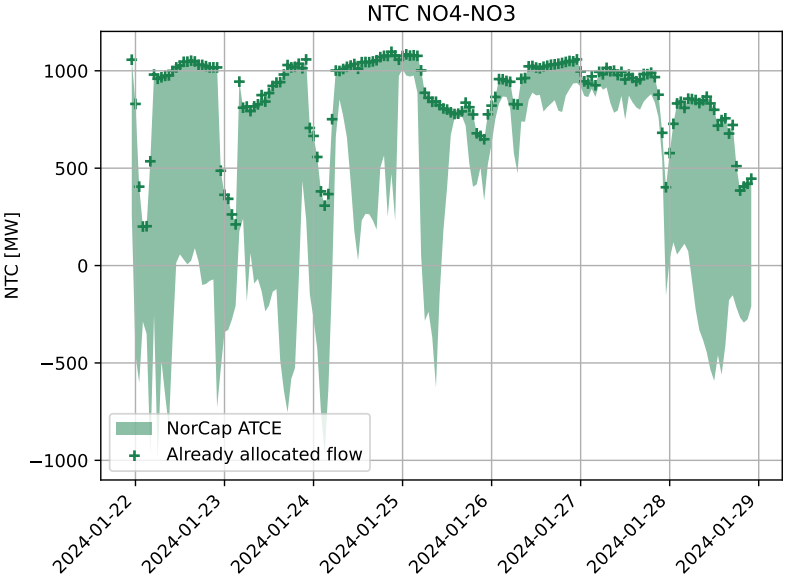
NO5-NO2



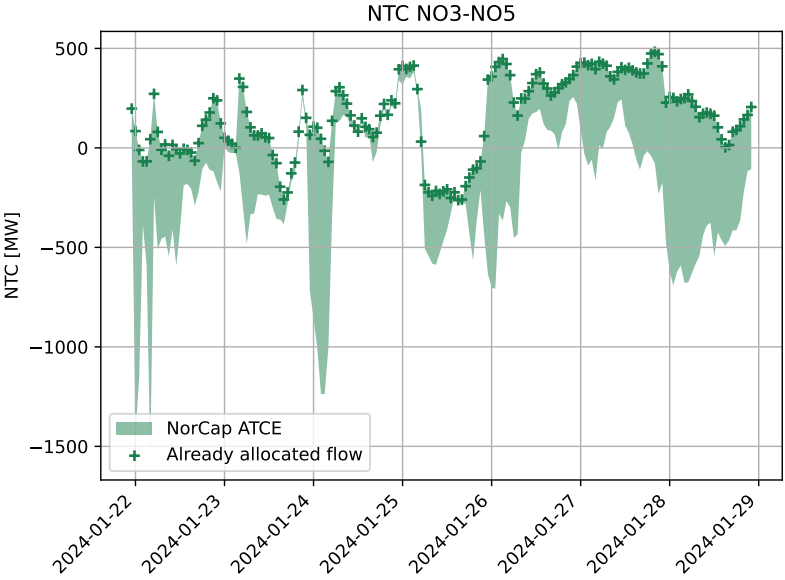
NO3-NO4



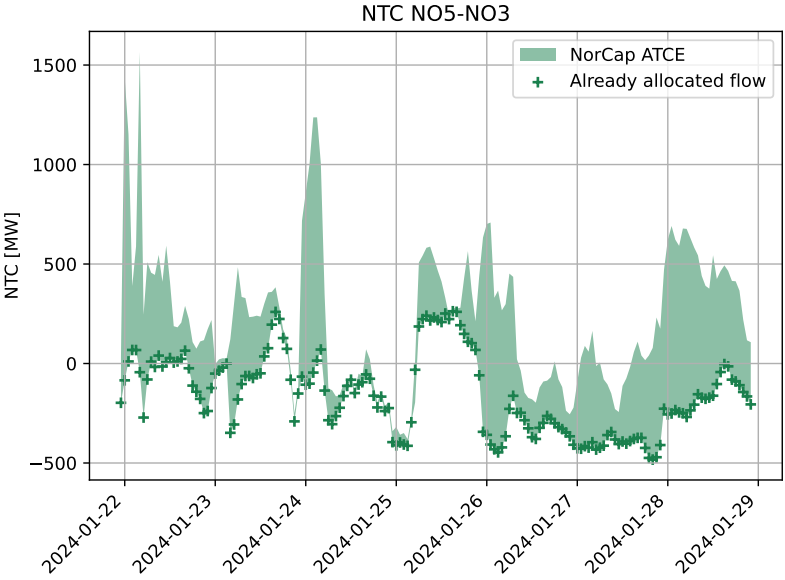
NO4-NO3



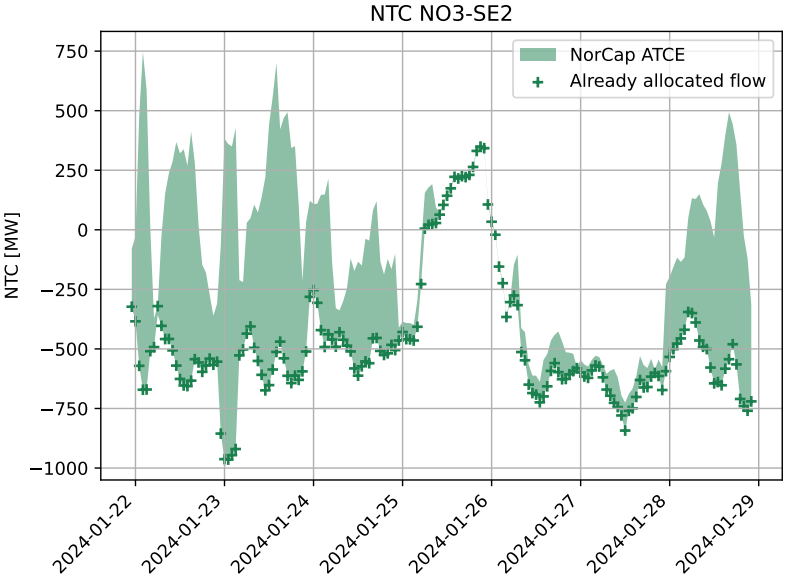
NO3-NO5

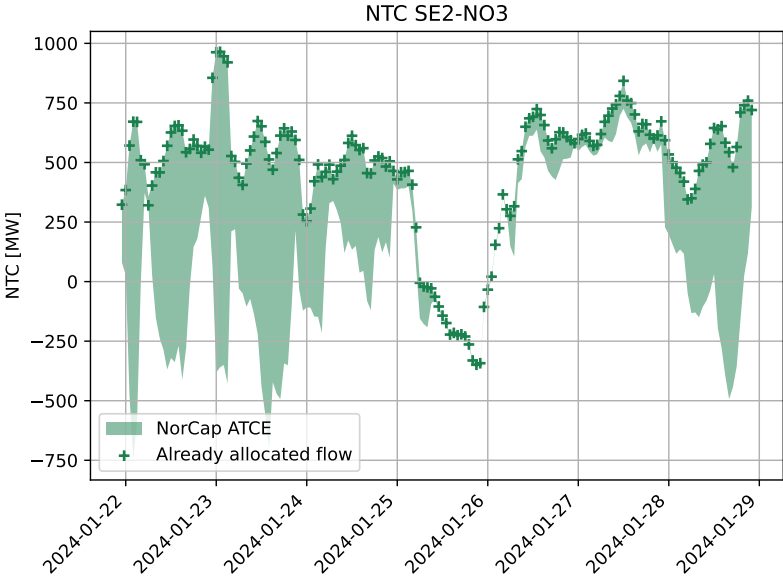


NO5-NO3

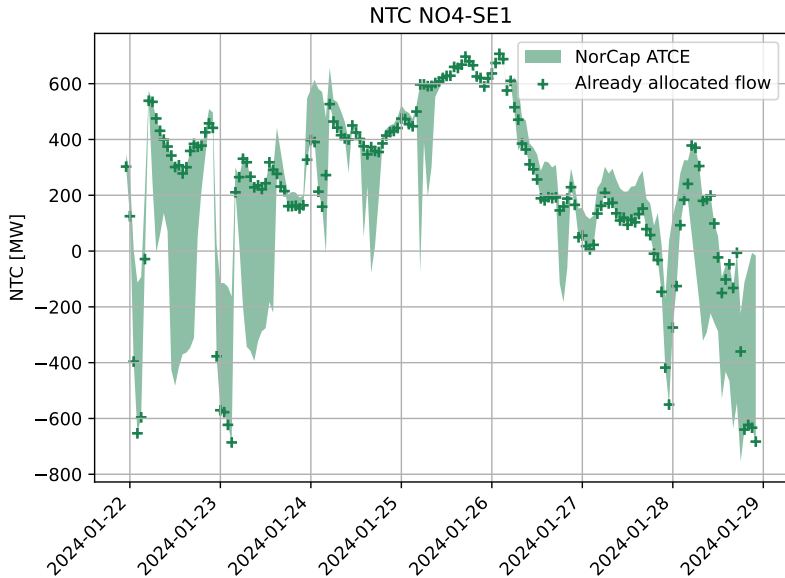


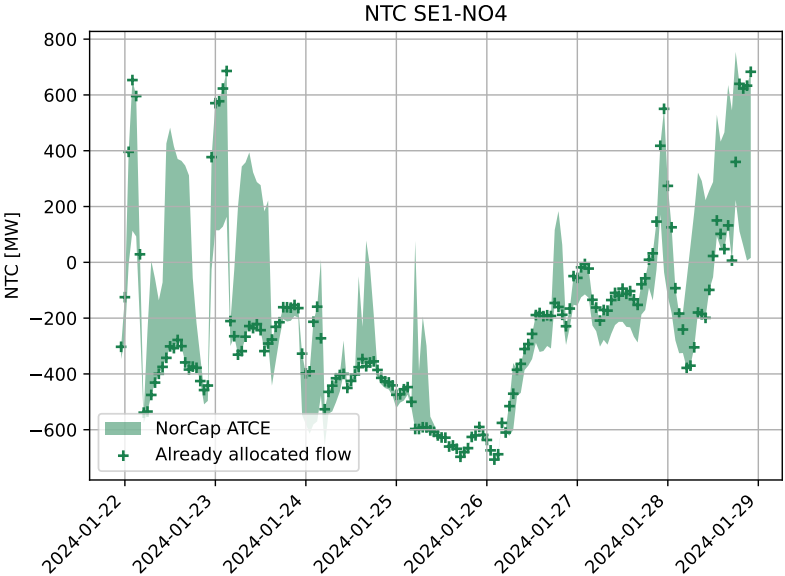
NO3-SE2



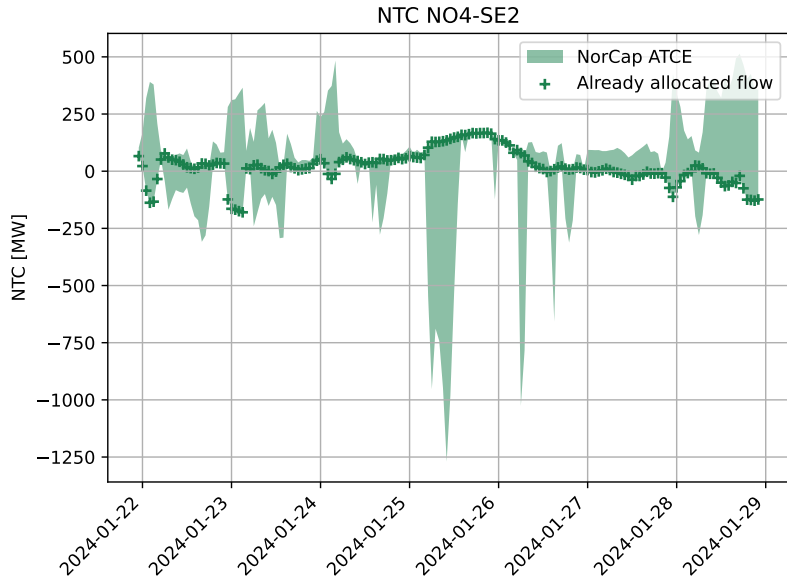


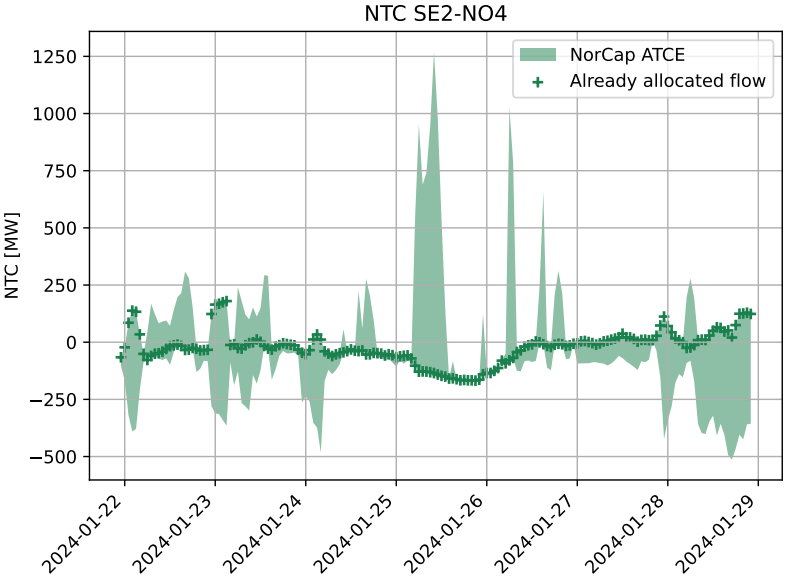
NO4-SE1



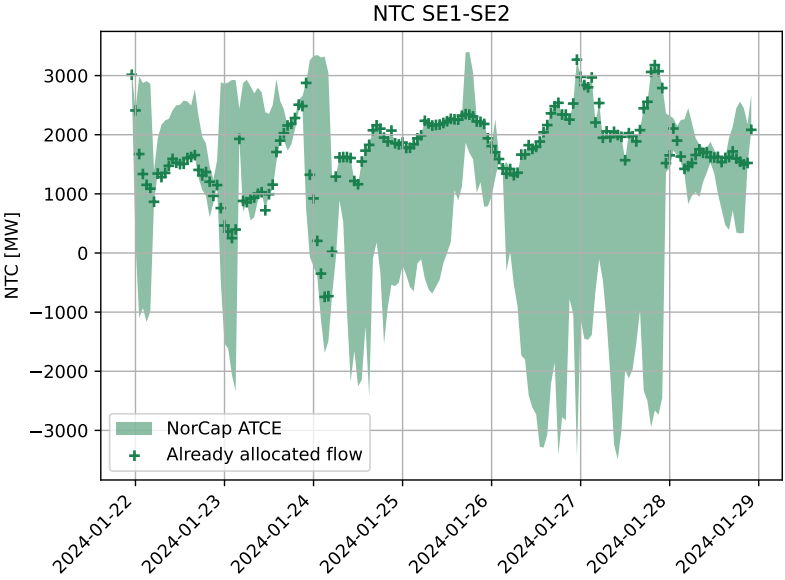


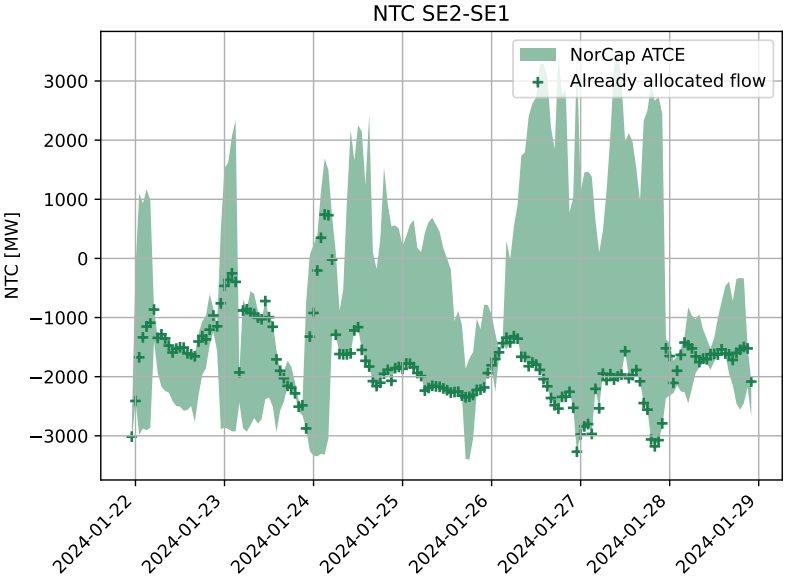
NO4-SE2



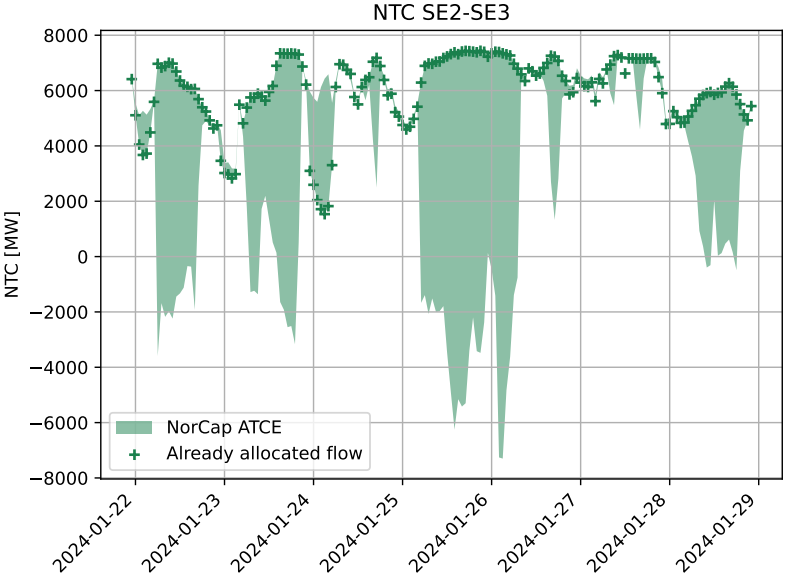


SE1-SE2

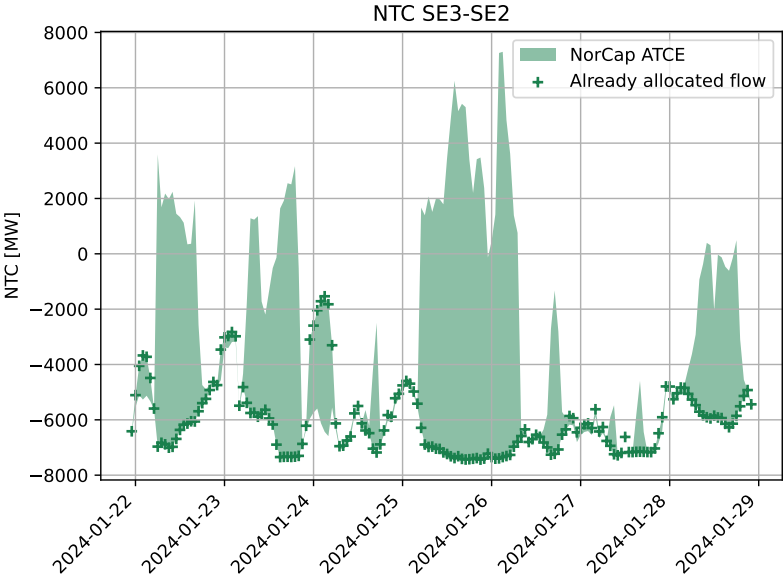




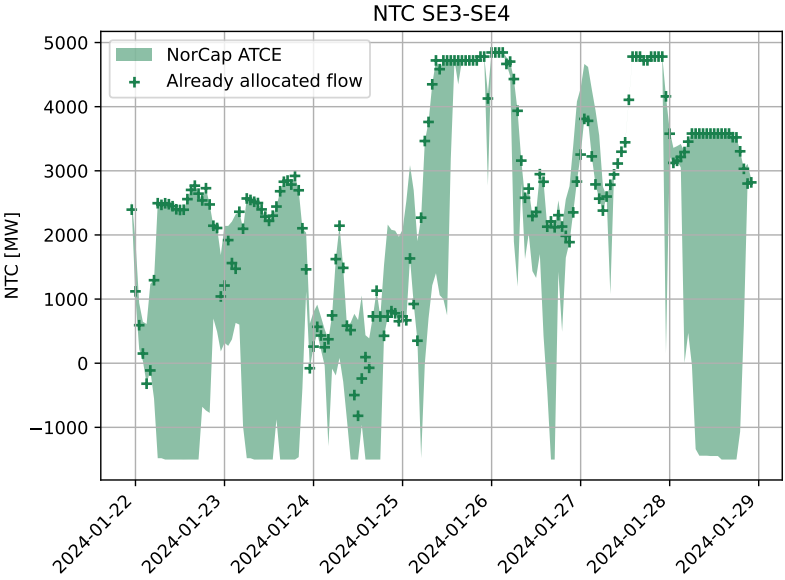
SE2-SE3



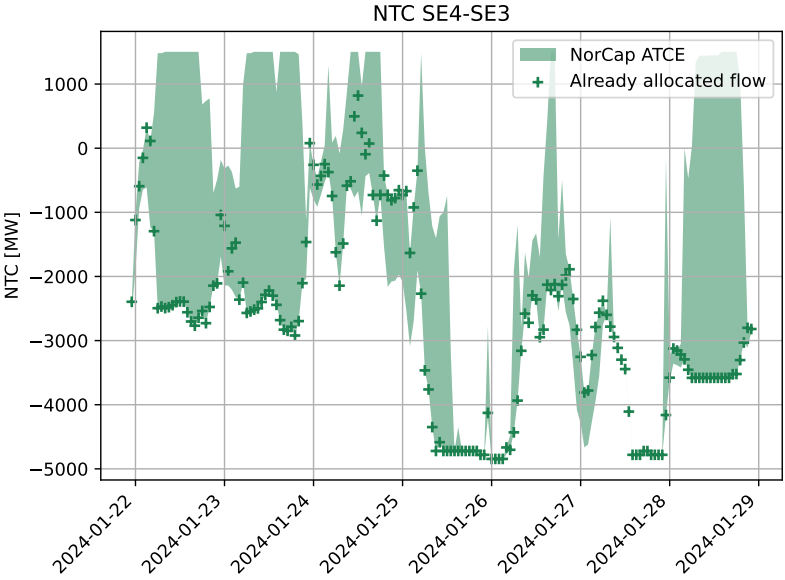
SE3-SE2



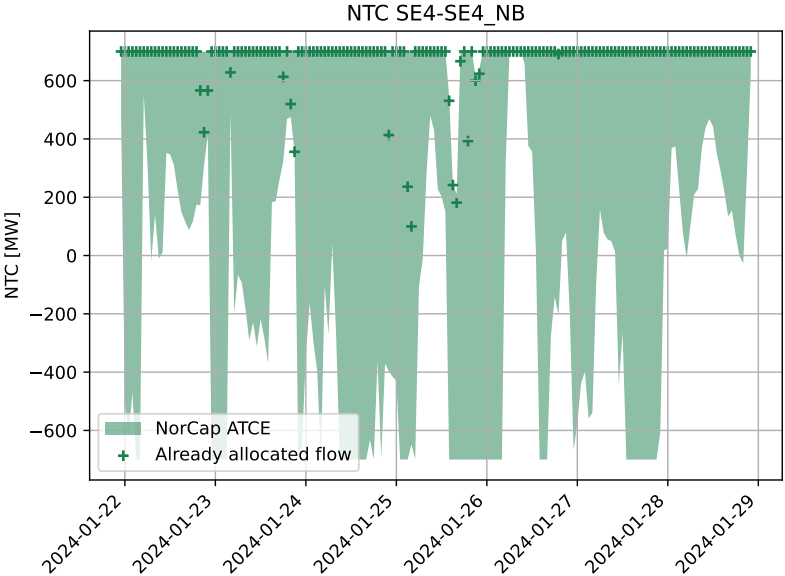
SE3-SE4



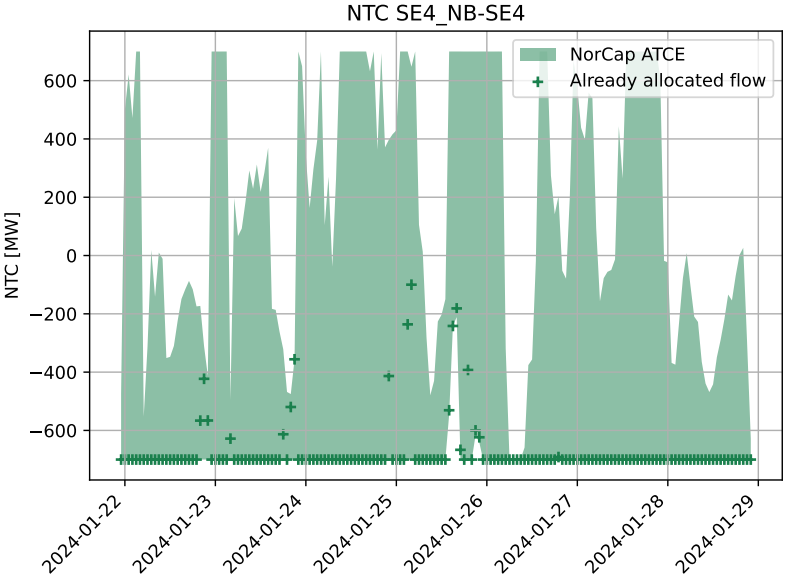
SE4-SE3



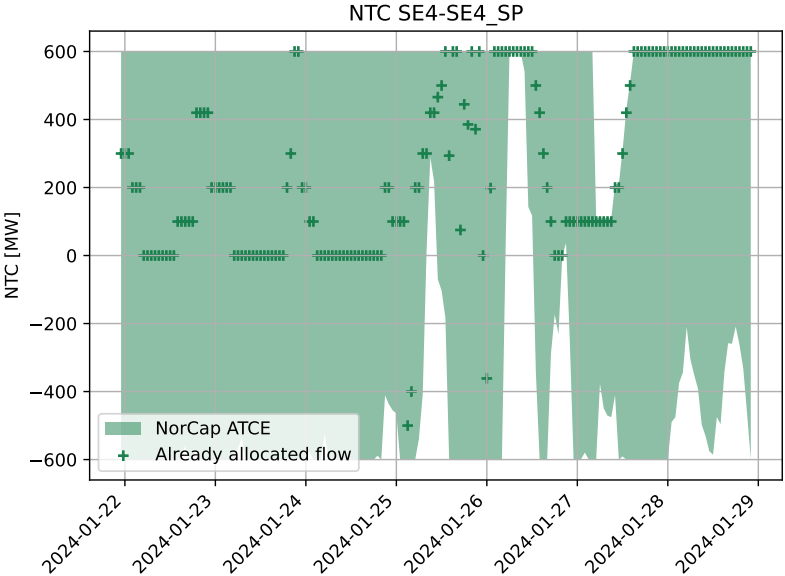
SE4-SE4_NB



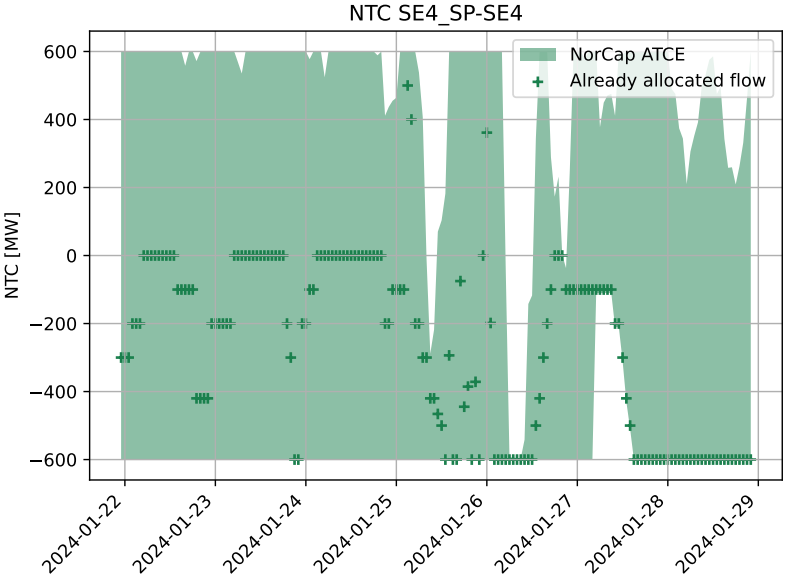
SE4_NB-SE4



SE4-SE4_SP



SE4_SP-SE4

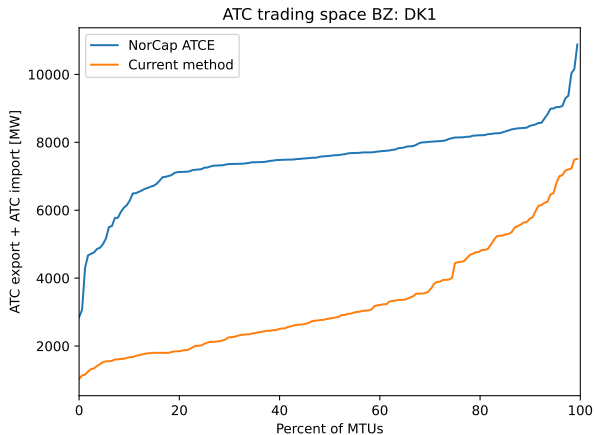


Bidding zone trading space

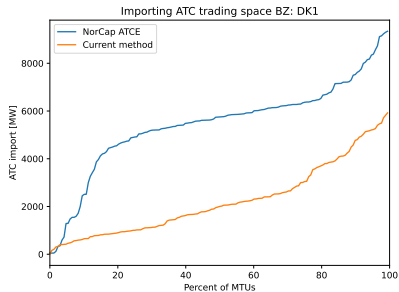
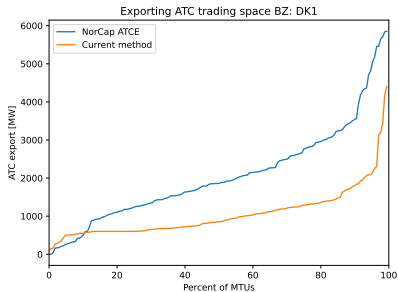
The total trading space of a bidding zone for a given MTU is the sum of export capacity and import capacity on all borders of that bidding zone for that MTU. The directional trading space is the sum of ATC on all borders of a bidding zone in either exporting or importing direction.

Disclaimer: Trading space computed by the reference method (i.e. the current method used in production) are calculated from intra-day offered ATCs collected from ENTSO-e transparency platform. It must be noted that the capacities collected at transparency platform are harmonized capacities including limitations submitted by non-Nordic TSOs and ramping constraints for some HVDCs.

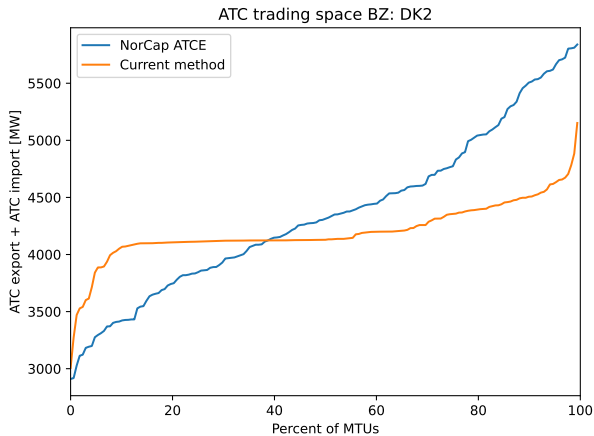
DK1 - Total trading space



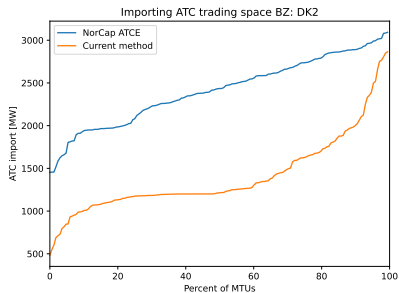
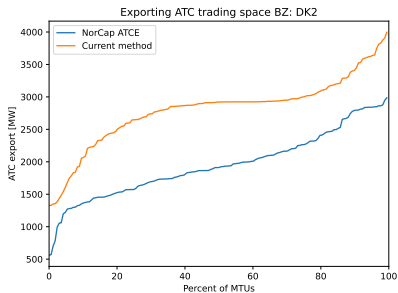
DK1 - Directional trading space



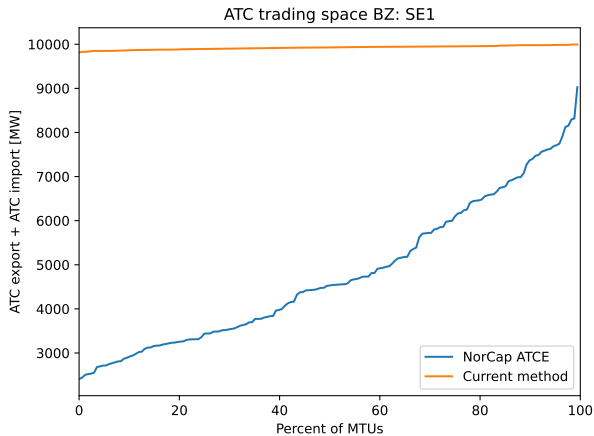
DK2 - Total trading space



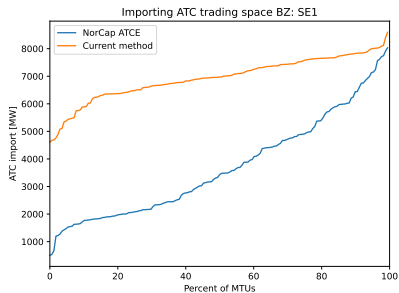
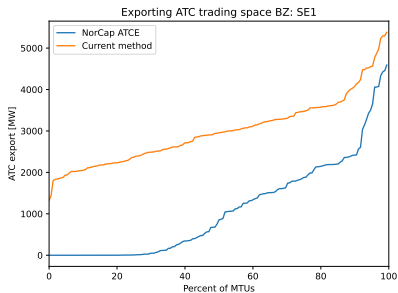
DK2 - Directional trading space



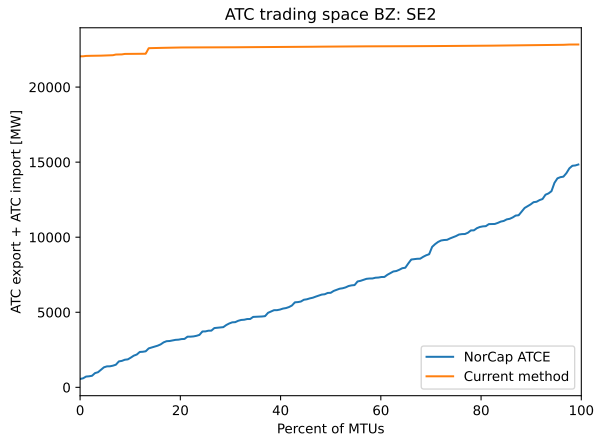
SE1 - Total trading space



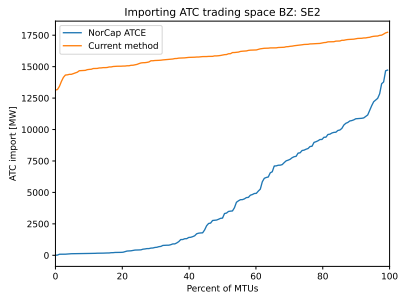
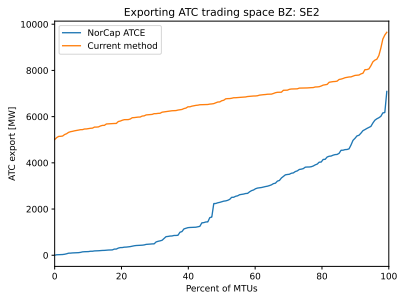
SE1 - Directional trading space



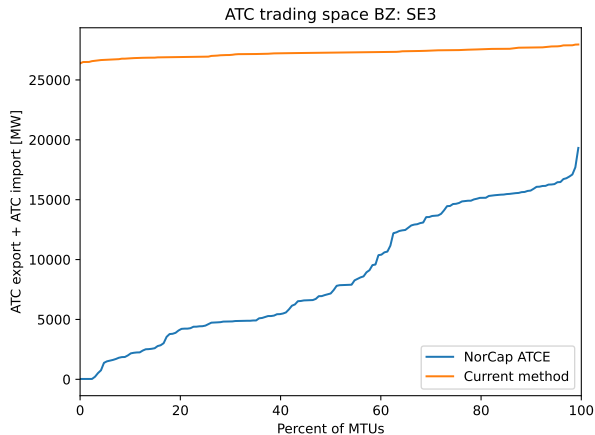
SE2 - Total trading space



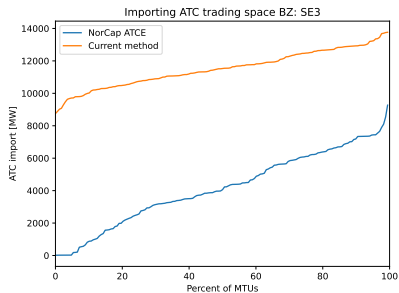
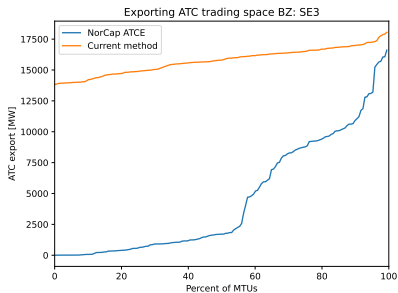
SE2 - Directional trading space



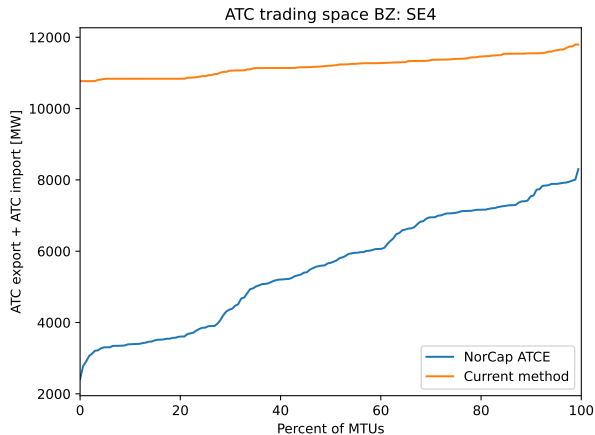
SE3 - Total trading space



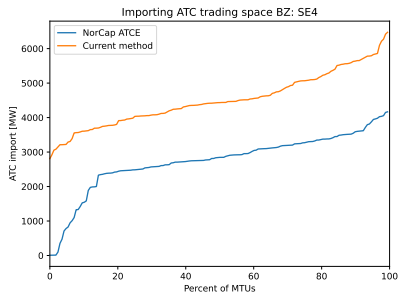
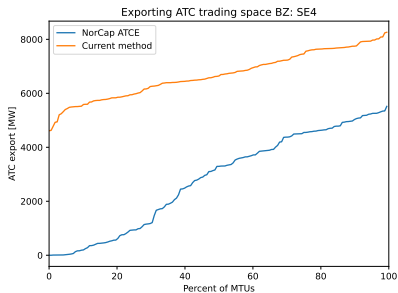
SE3 - Directional trading space



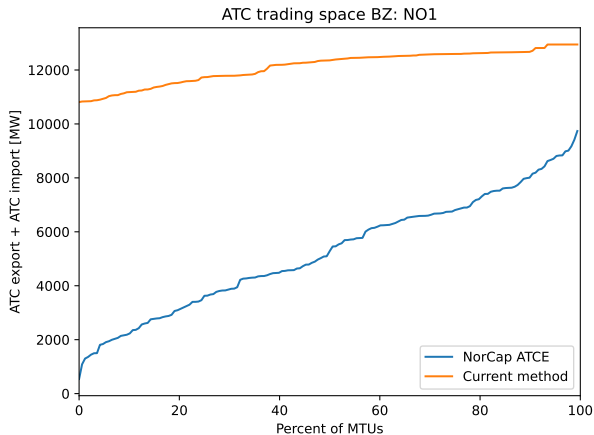
SE4 - Total trading space



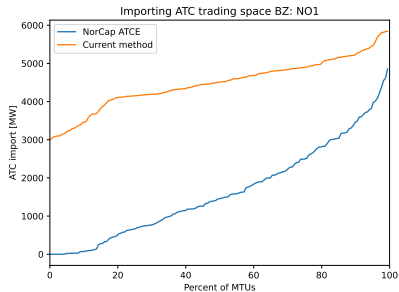
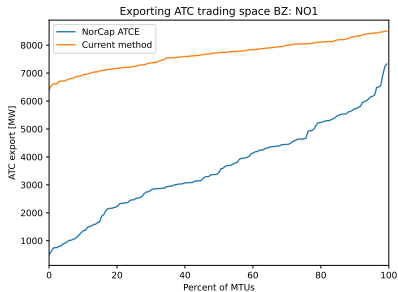
SE4 - Directional trading space



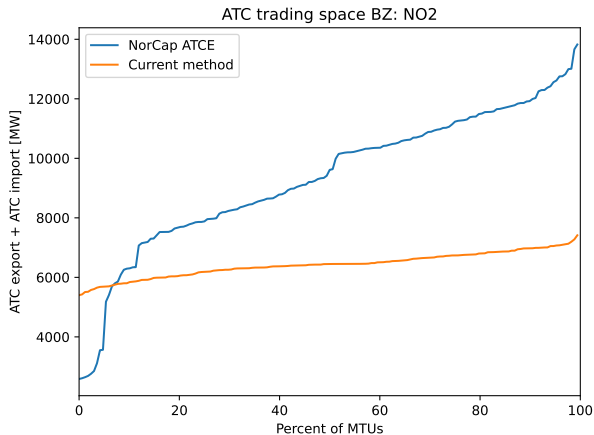
NO1 - Total trading space



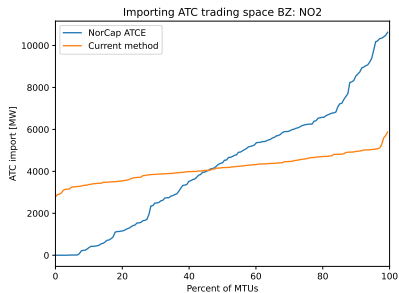
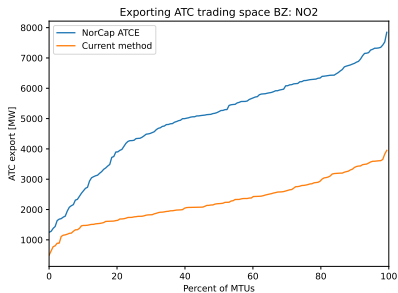
NO1 - Directional trading space



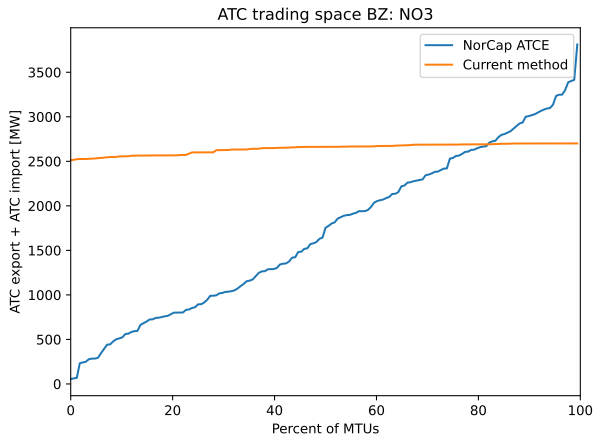
NO2 - Total trading space



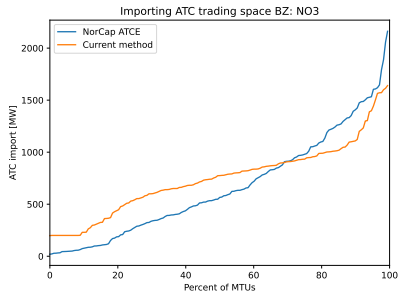
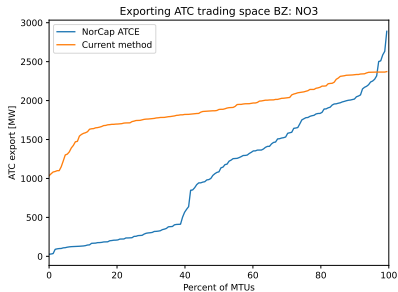
NO2 - Directional trading space



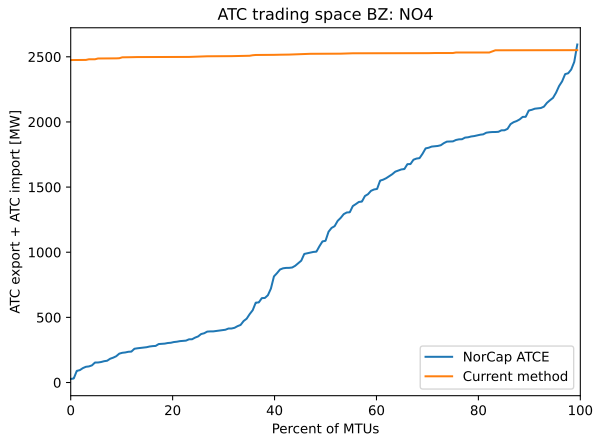
NO3 - Total trading space



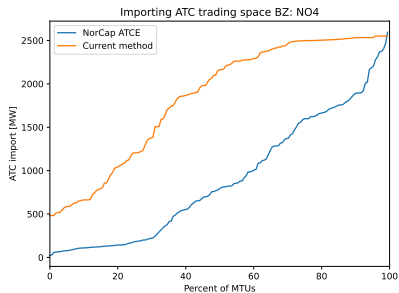
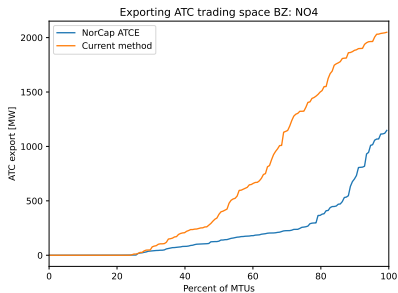
NO3 - Directional trading space



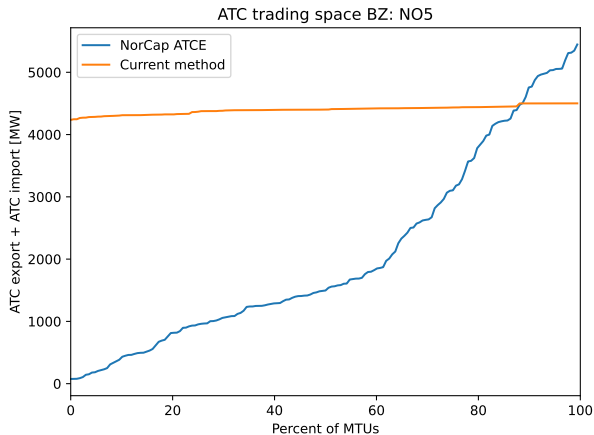
NO4 - Total trading space



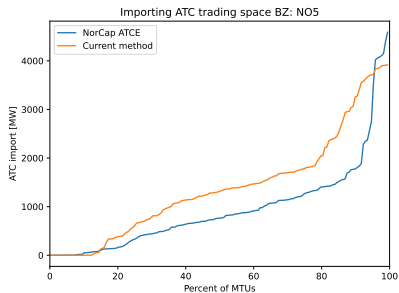
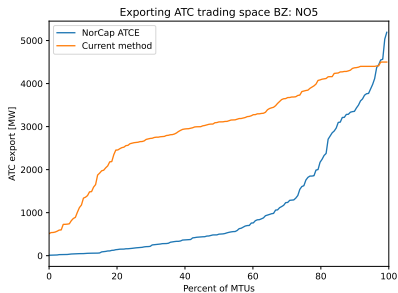
NO4 - Directional trading space



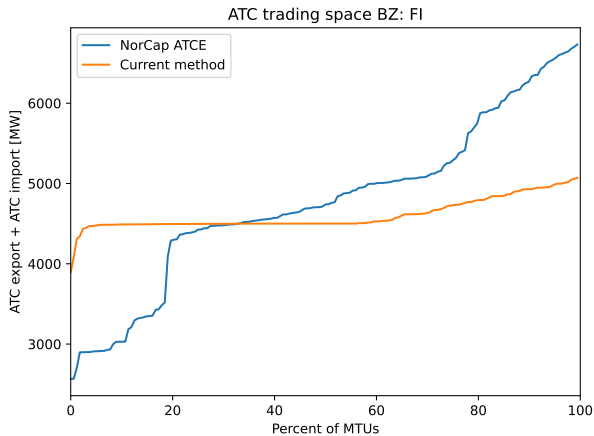
NO5 - Total trading space



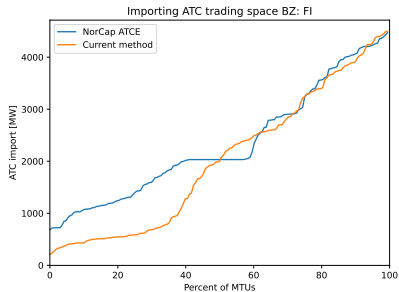
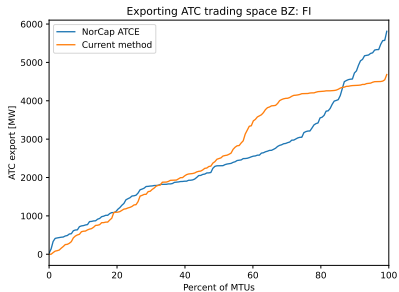
NO5 - Directional trading space



FI - Total trading space

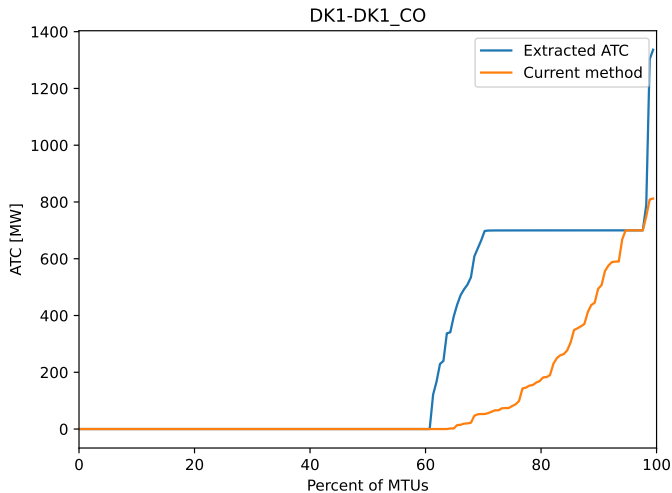


FI - Directional trading space

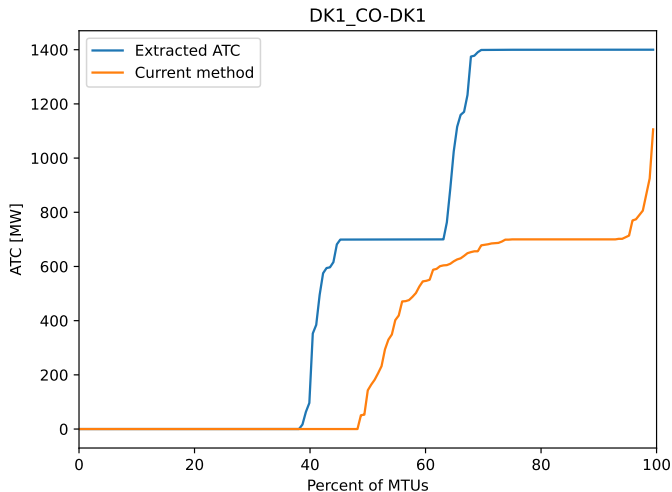


Capacity duration curves

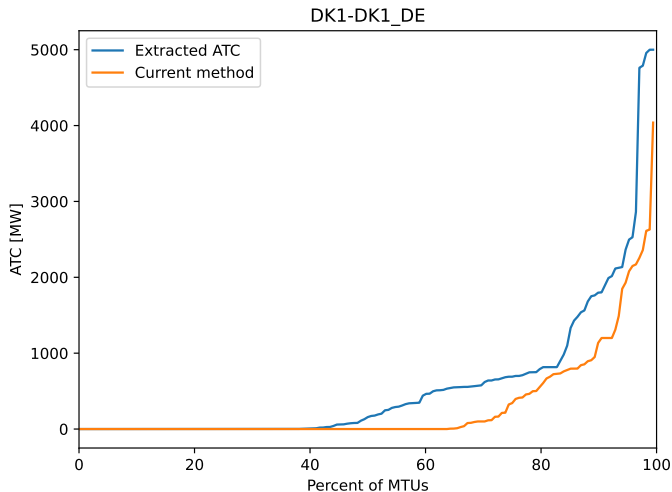
DK1-DK1_CO ATC duration curves



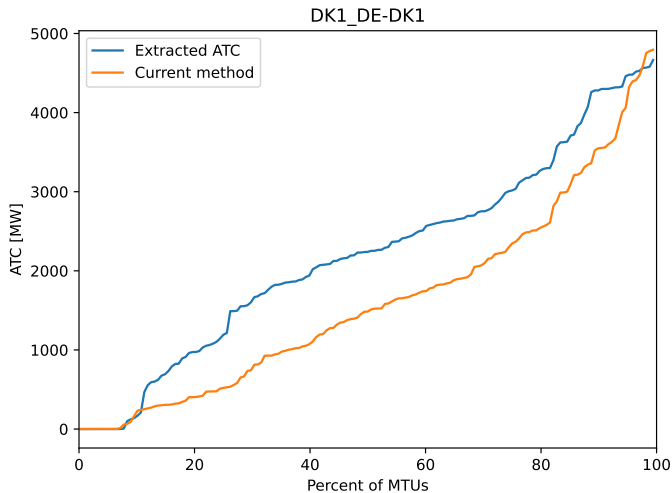
DK1_CO-DK1 ATC duration curves



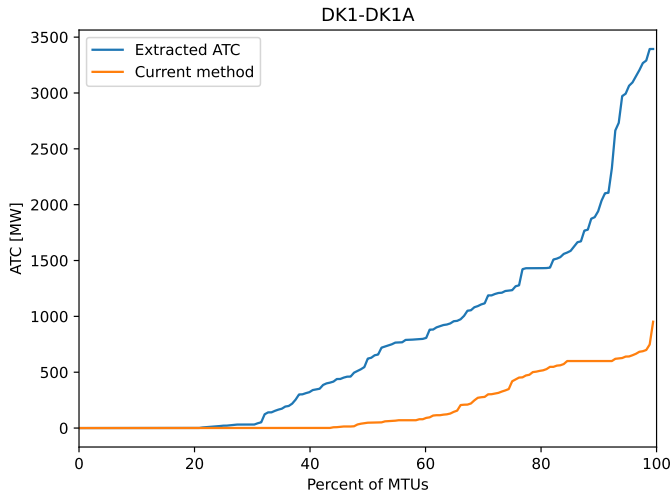
DK1-DK1_DE ATC duration curves



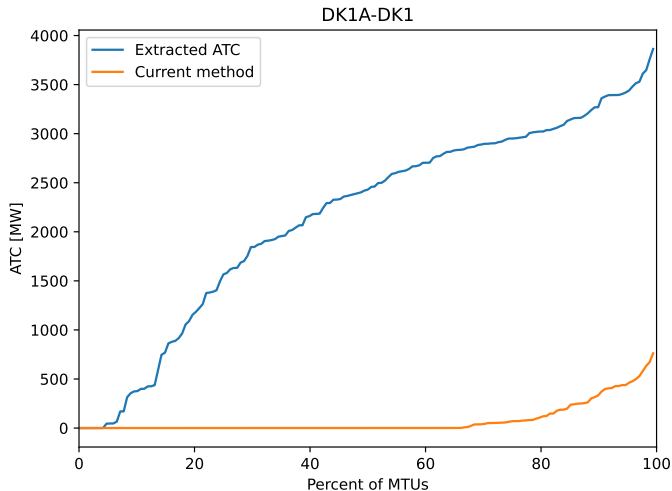
DK1_DE-DK1 ATC duration curves



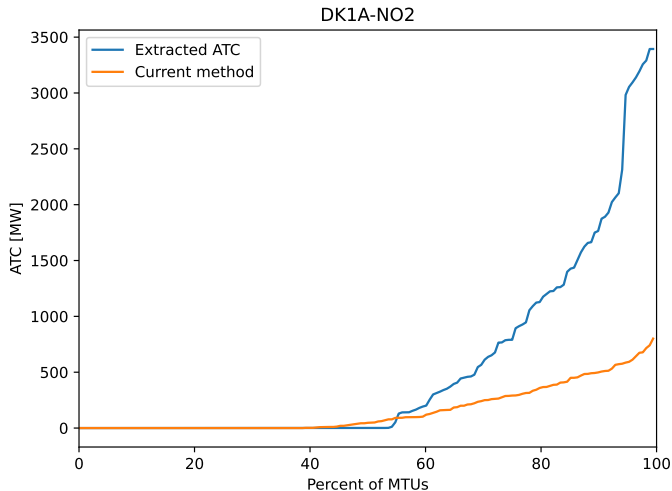
DK1-DK1A ATC duration curves



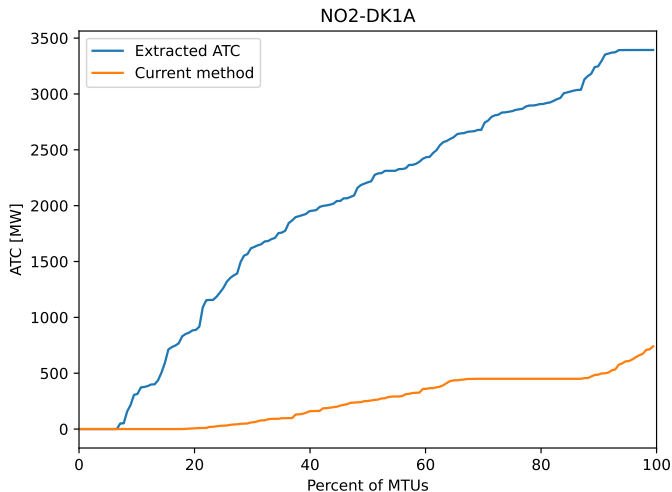
DK1A-DK1 ATC duration curves



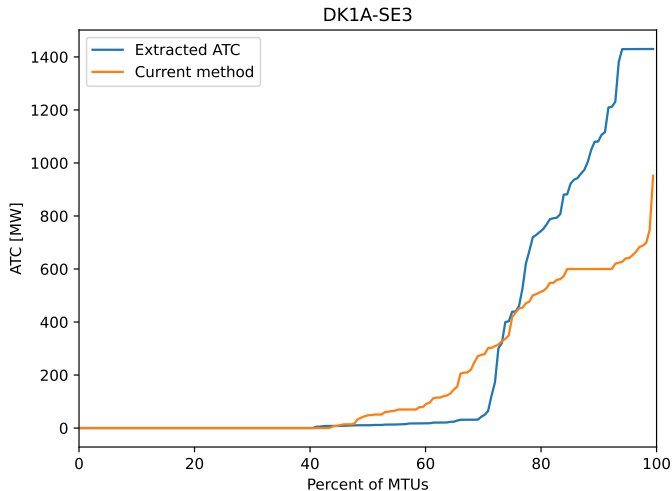
DK1A-NO2 ATC duration curves



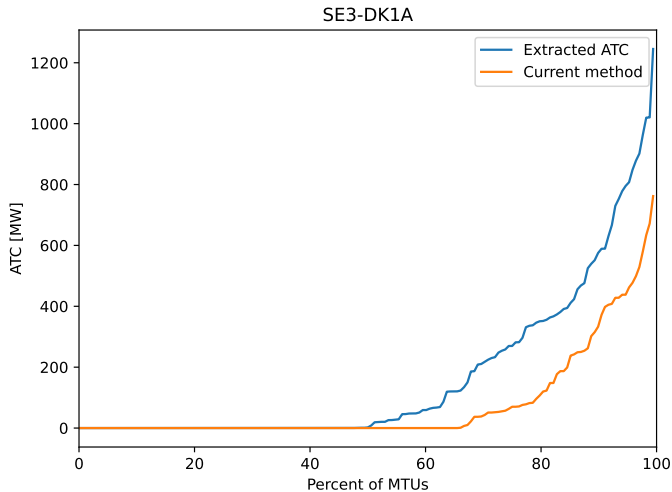
NO2-DK1A ATC duration curves



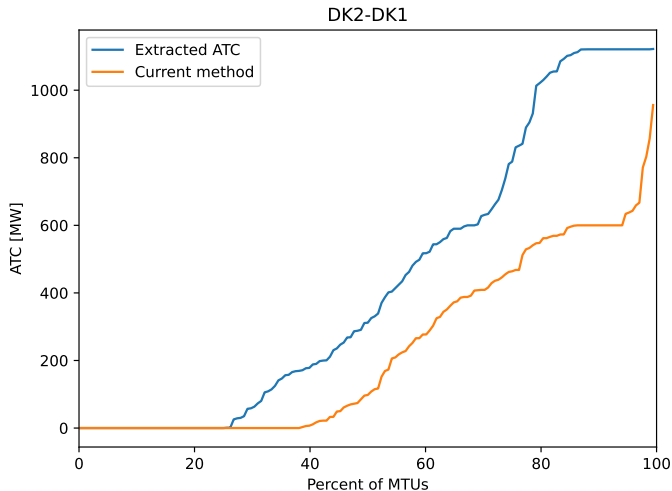
DK1A-SE3 ATC duration curves



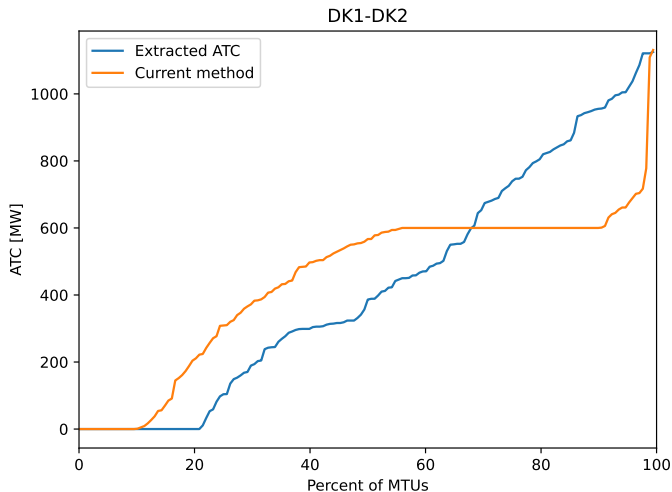
SE3-DK1A ATC duration curves



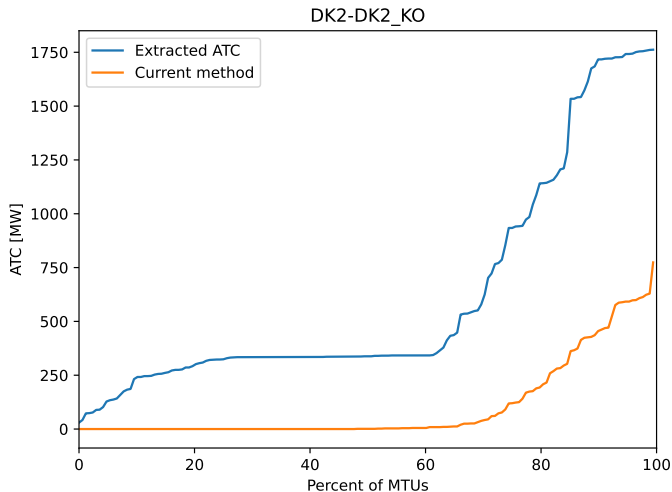
DK2-DK1 ATC duration curves



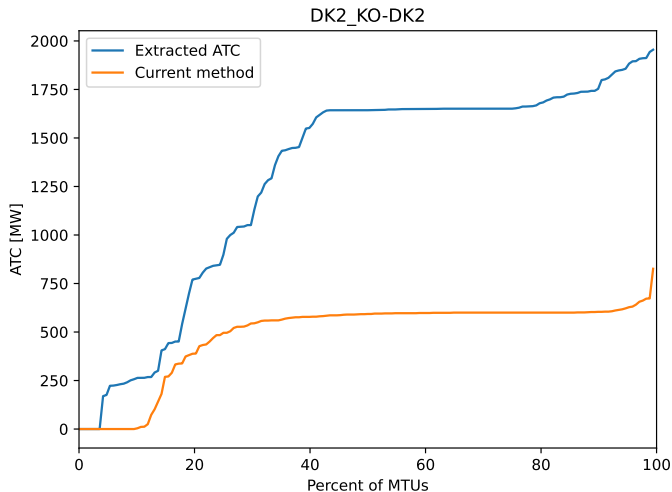
DK1-DK2 ATC duration curves



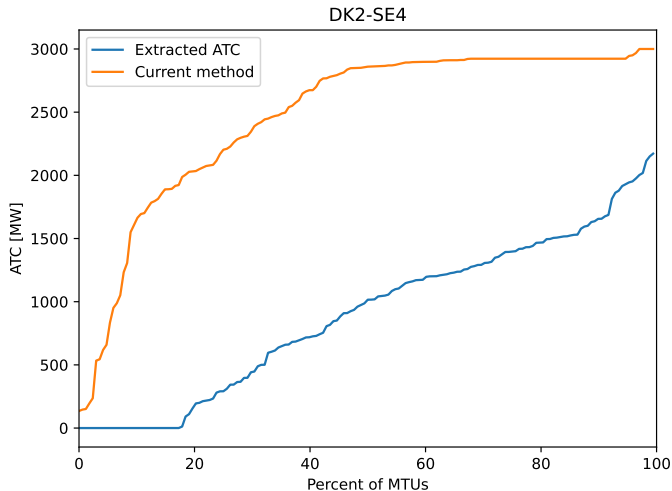
DK2-DK2_KO ATC duration curves



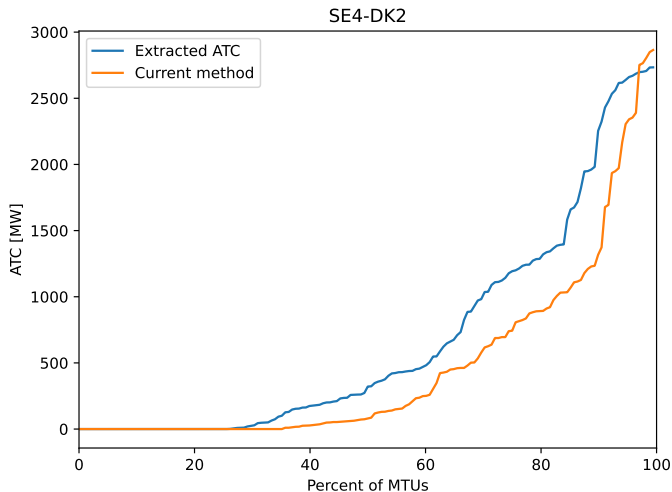
DK2_KO-DK2 ATC duration curves



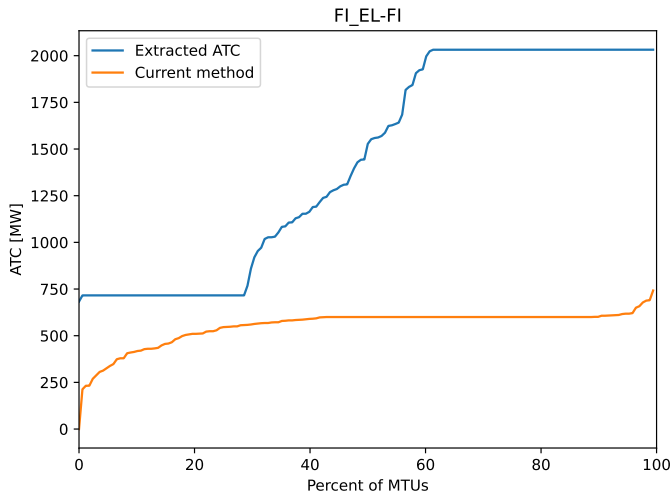
DK2-SE4 ATC duration curves



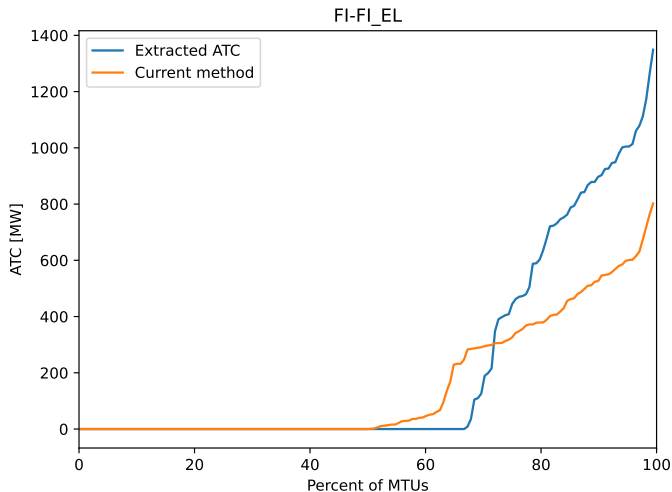
SE4-DK2 ATC duration curves



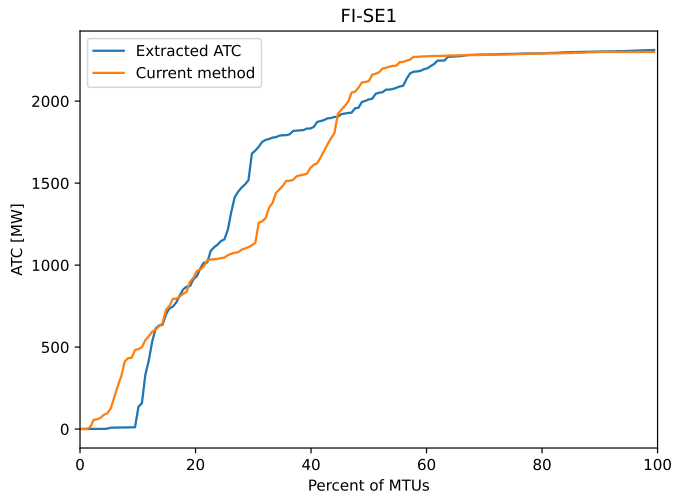
FI_EL-FI ATC duration curves



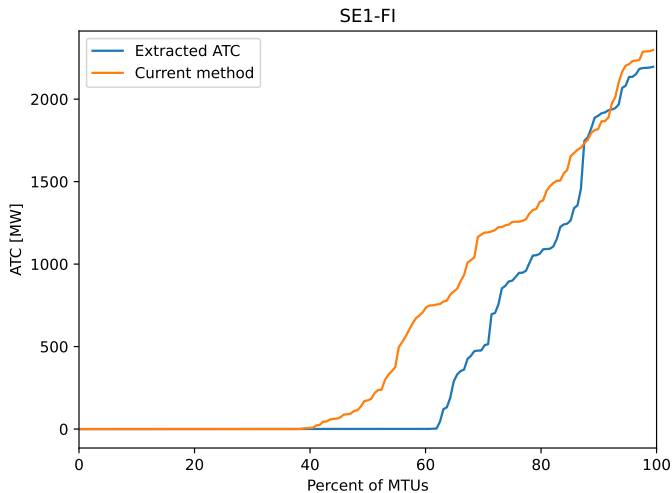
FI-FI_EL ATC duration curves



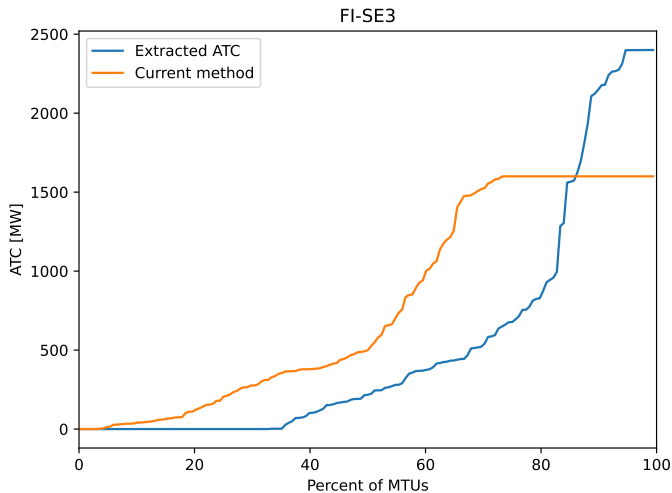
FI-SE1 ATC duration curves



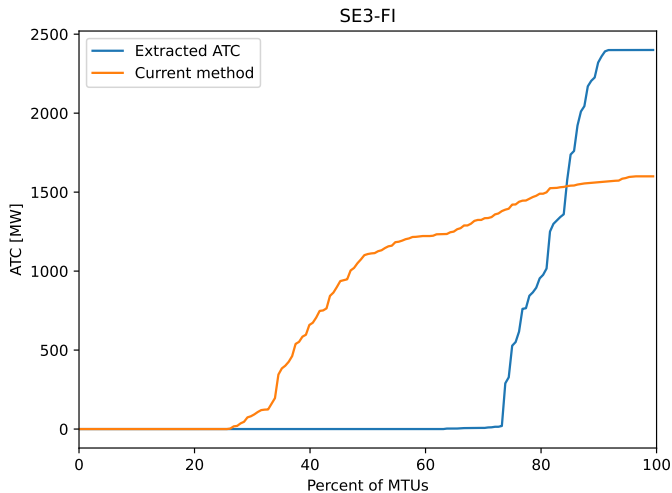
SE1-FI ATC duration curves



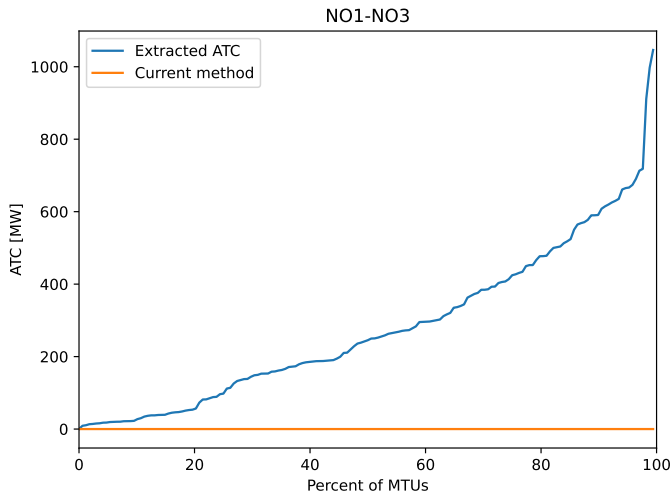
FI-SE3 ATC duration curves



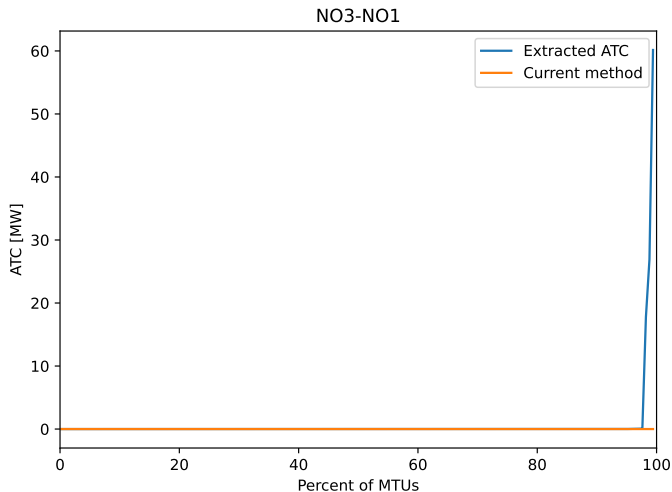
SE3-FI ATC duration curves



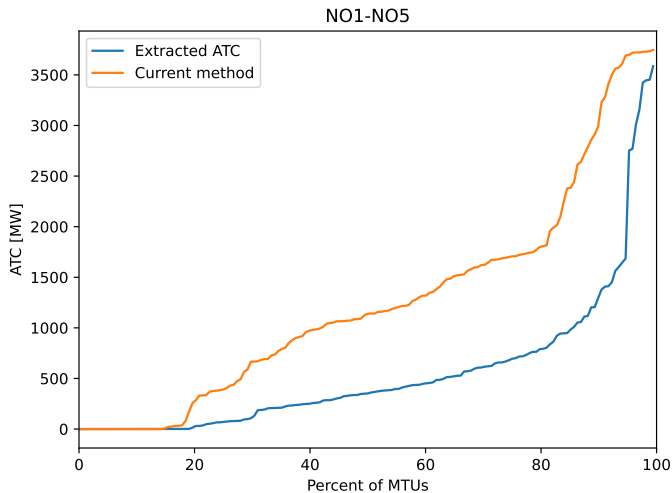
NO1-NO3 ATC duration curves



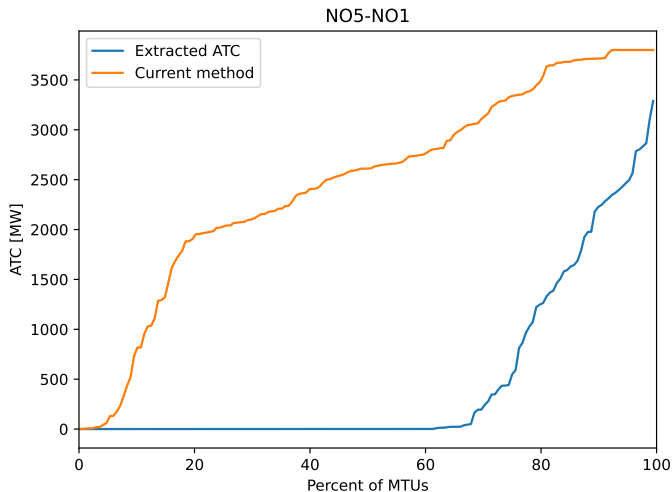
NO3-NO1 ATC duration curves



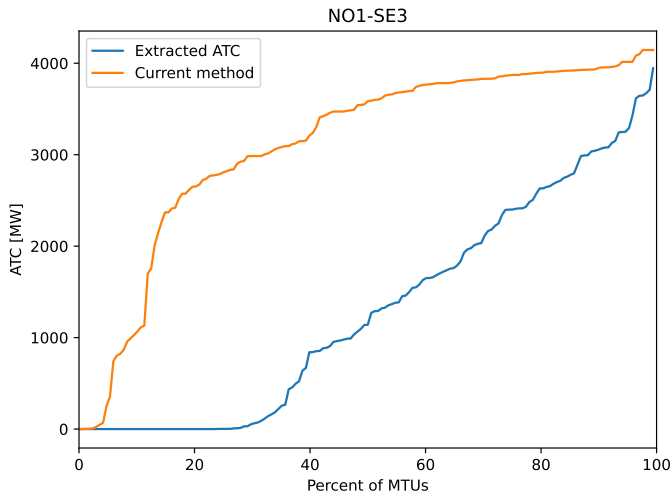
NO1-NO5 ATC duration curves



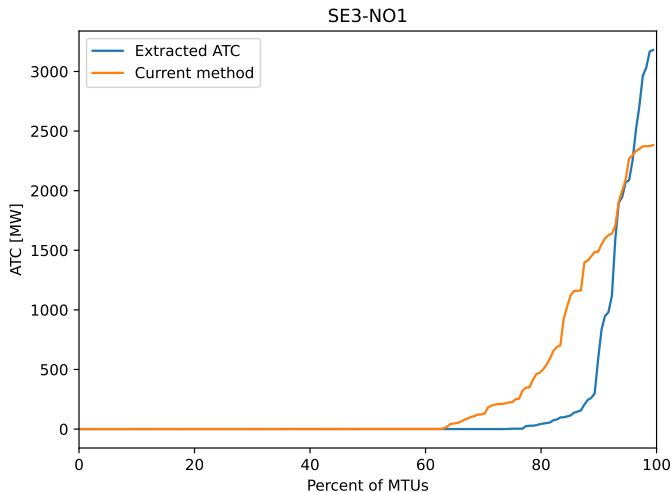
NO5-NO1 ATC duration curves



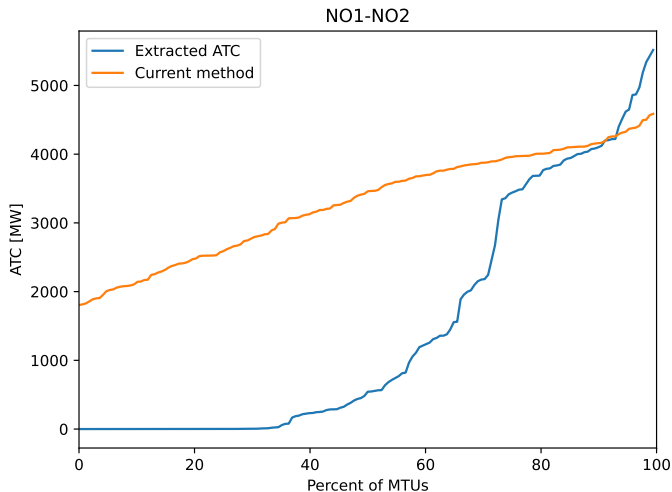
NO1-SE3 ATC duration curves



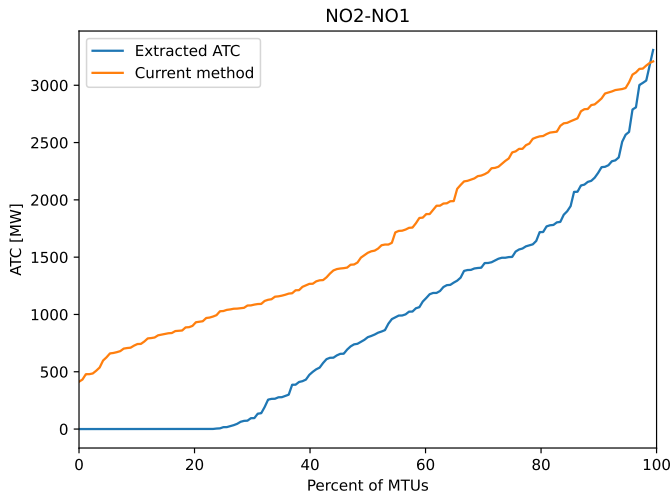
SE3-NO1 ATC duration curves



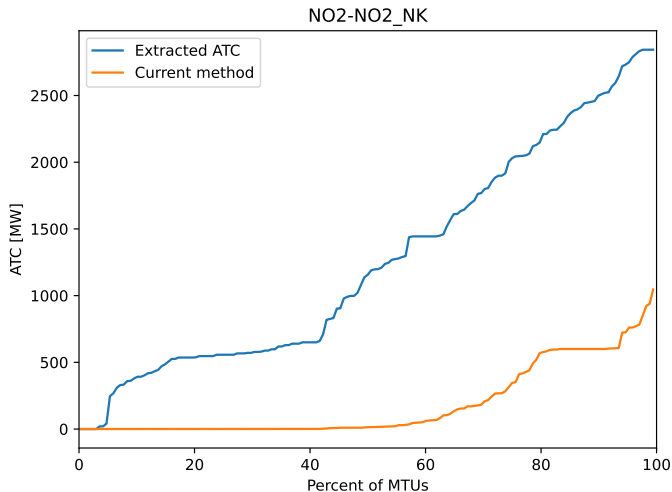
NO1-NO2 ATC duration curves



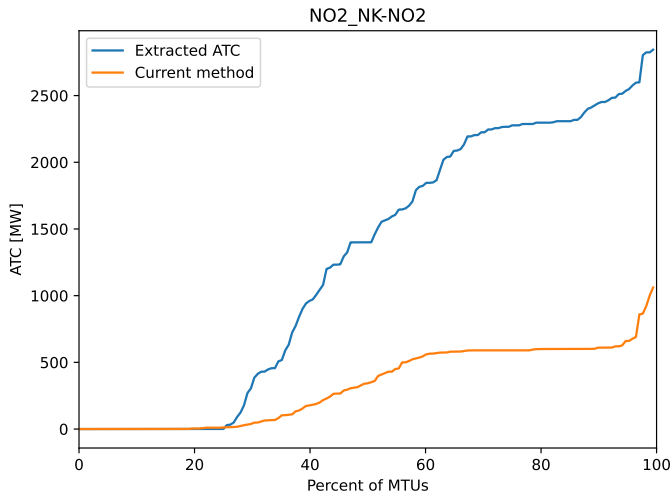
NO2-NO1 ATC duration curves



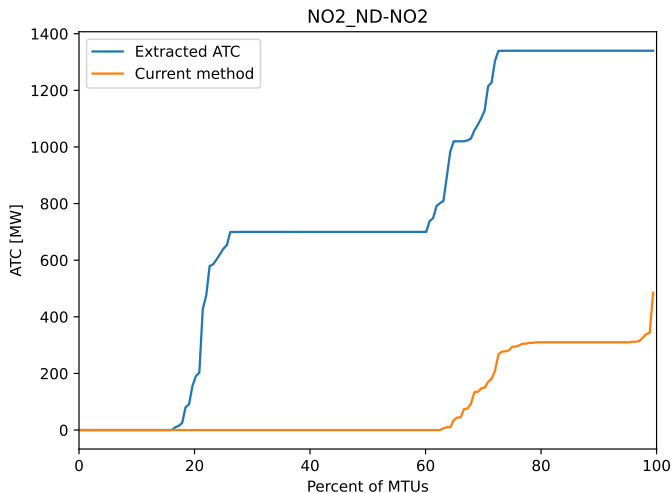
NO2-NO2_NK ATC duration curves



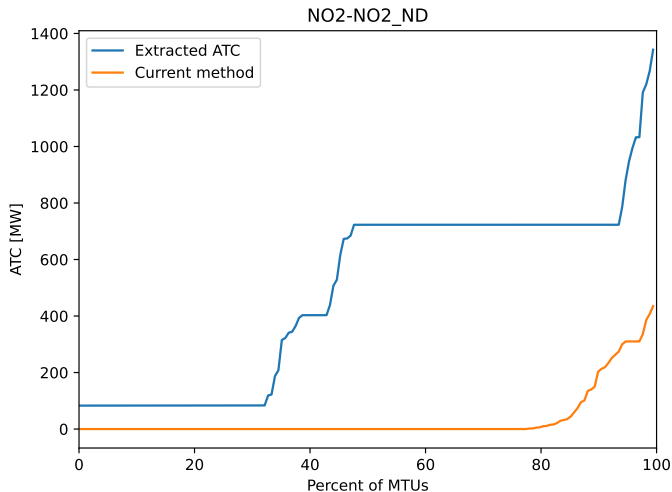
NO2_NK-NO2 ATC duration curves



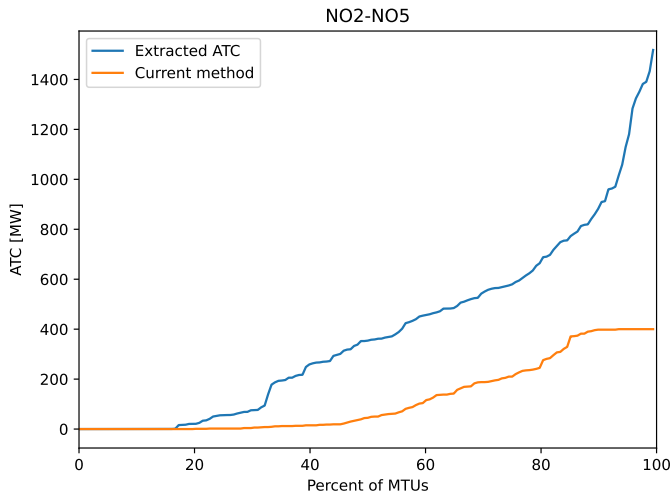
NO2_ND-NO2 ATC duration curves



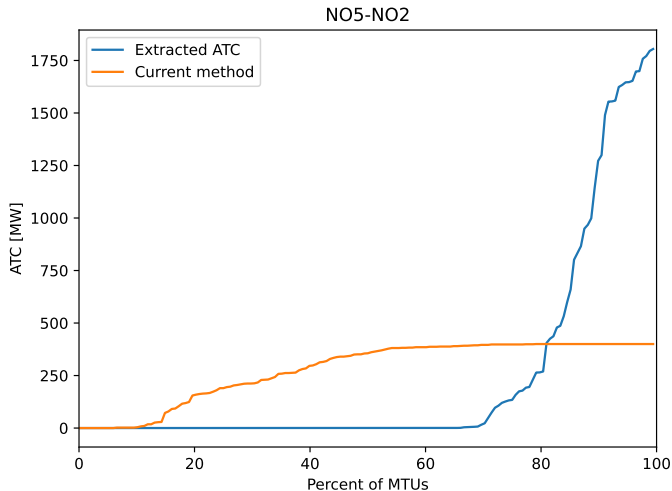
NO2-NO2_ND ATC duration curves



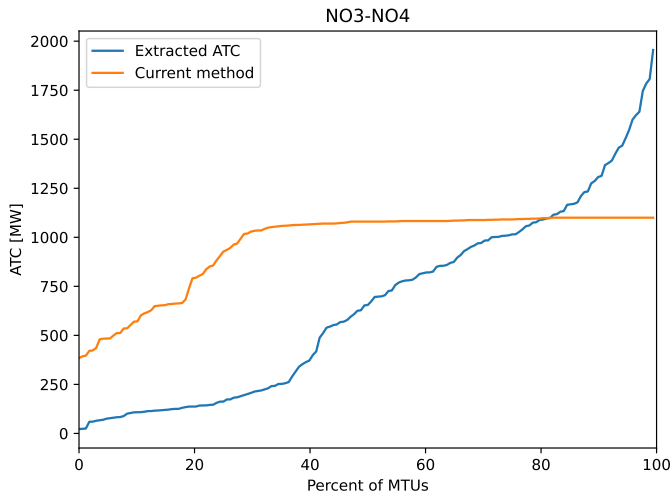
NO2-NO5 ATC duration curves



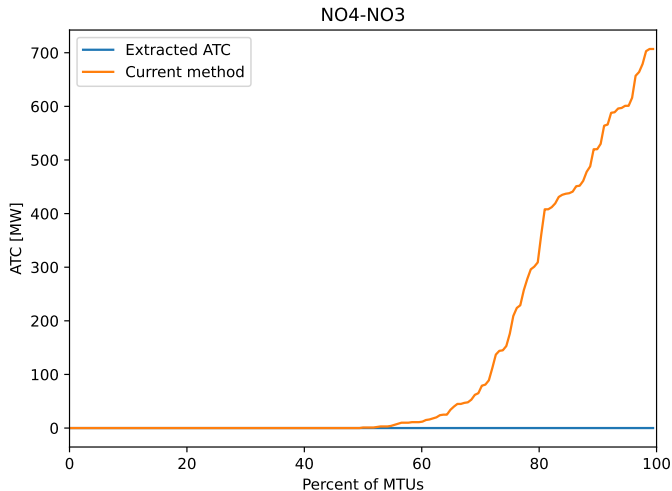
NO5-NO2 ATC duration curves



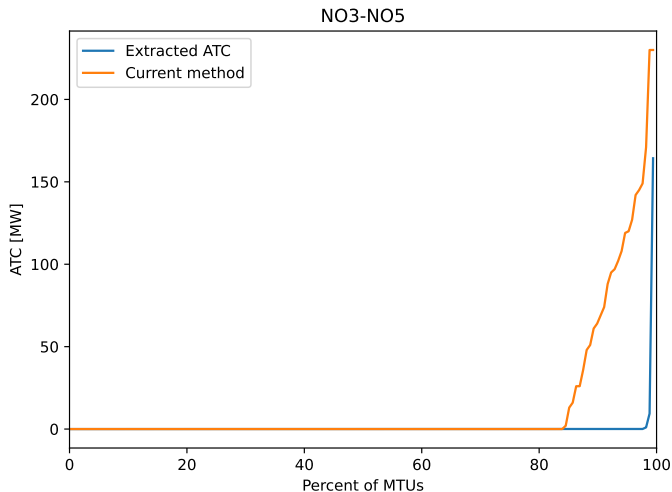
NO3-NO4 ATC duration curves



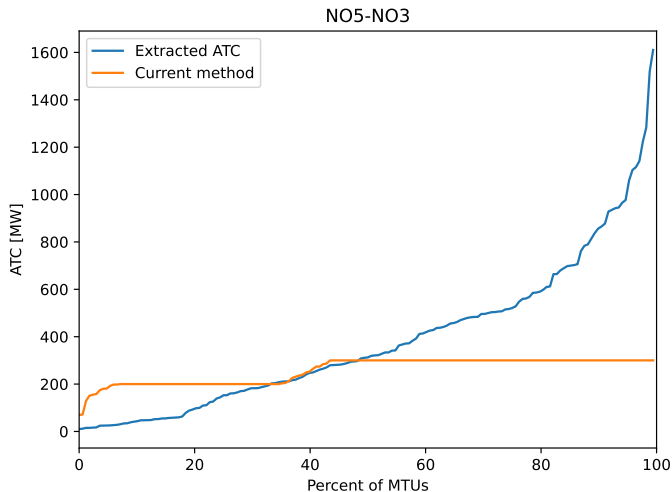
NO4-NO3 ATC duration curves



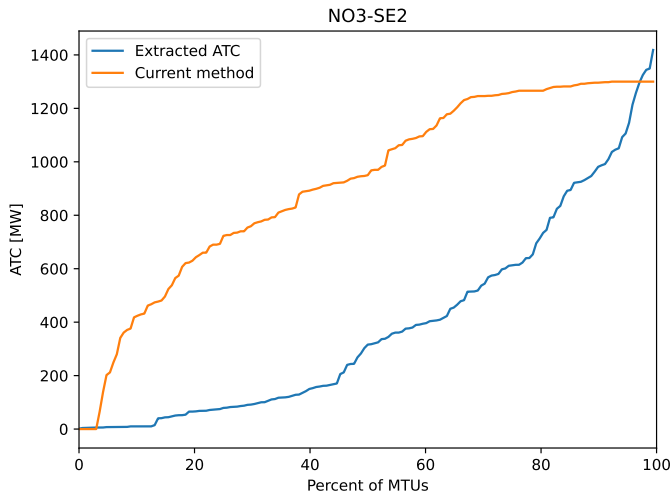
NO3-NO5 ATC duration curves



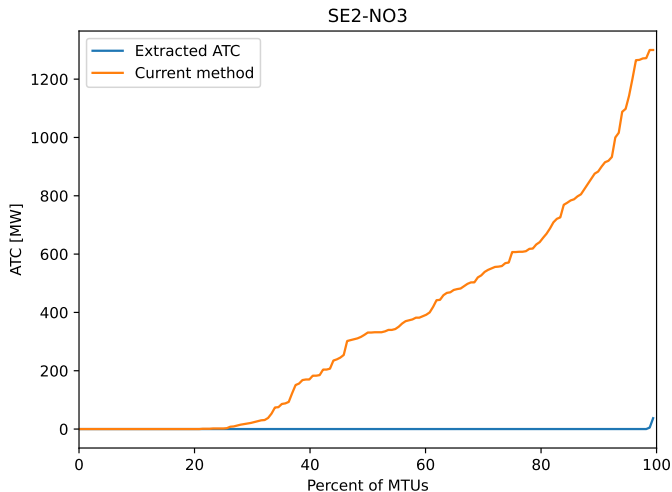
NO5-NO3 ATC duration curves



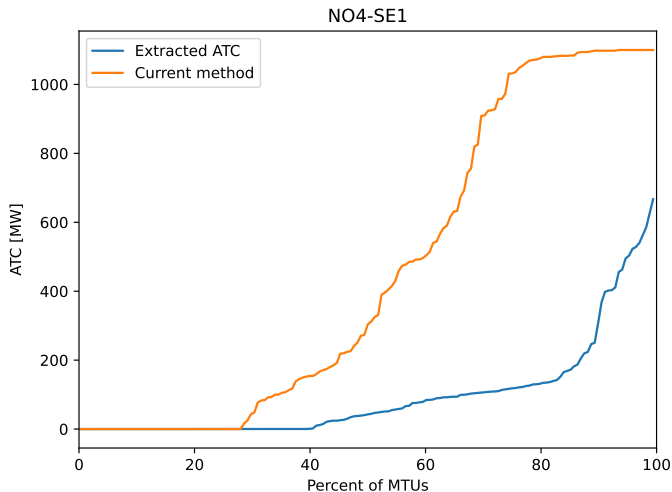
NO3-SE2 ATC duration curves



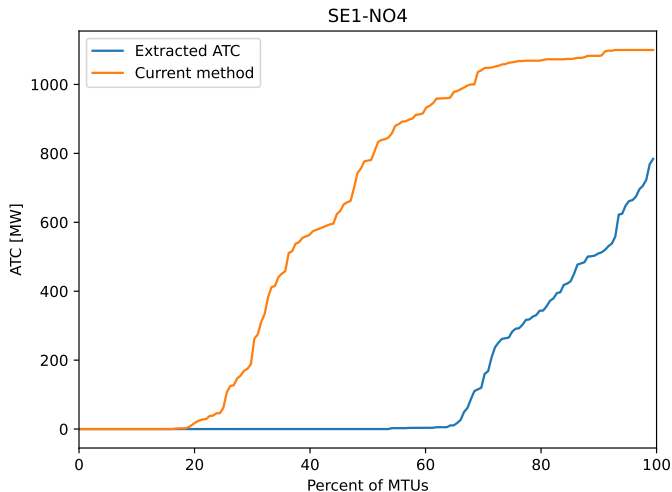
SE2-NO3 ATC duration curves



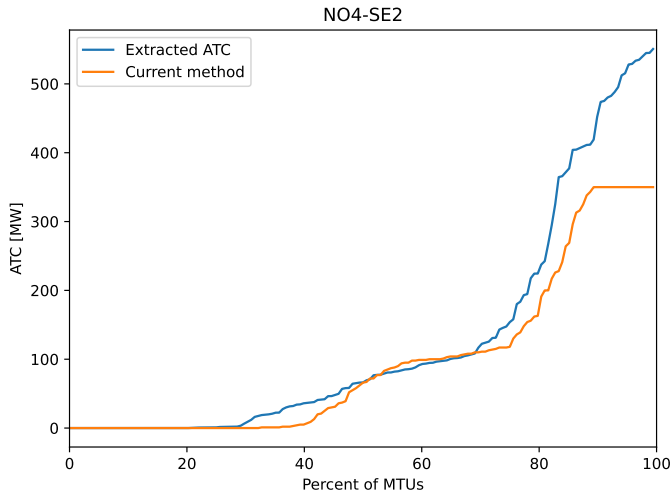
NO4-SE1 ATC duration curves



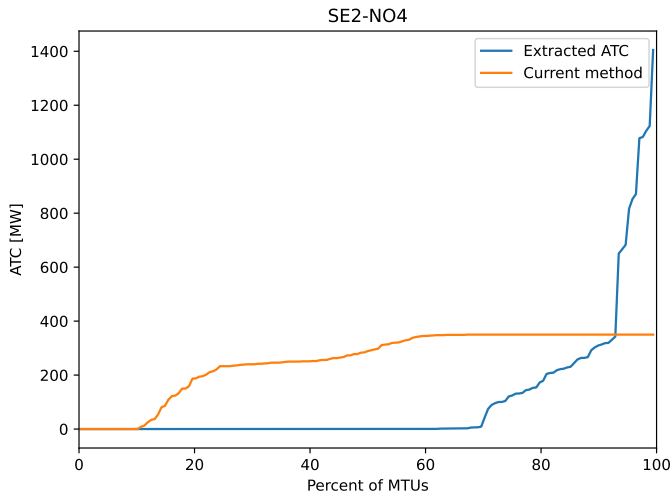
SE1-NO4 ATC duration curves



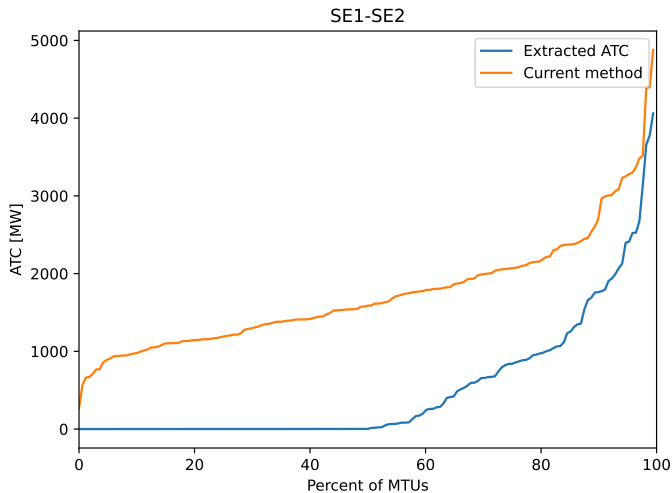
NO4-SE2 ATC duration curves



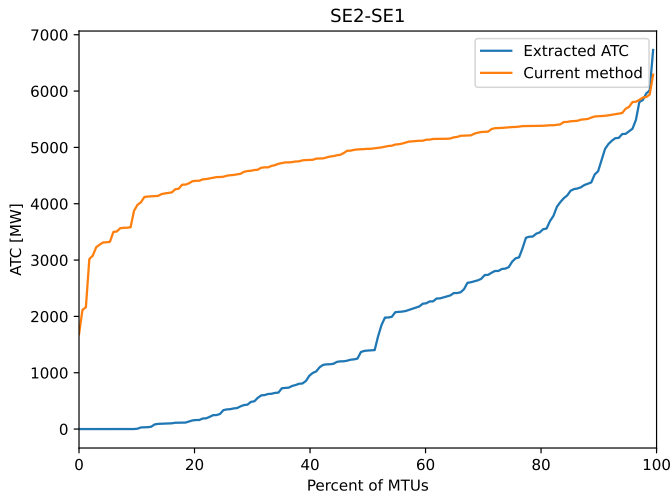
SE2-NO4 ATC duration curves



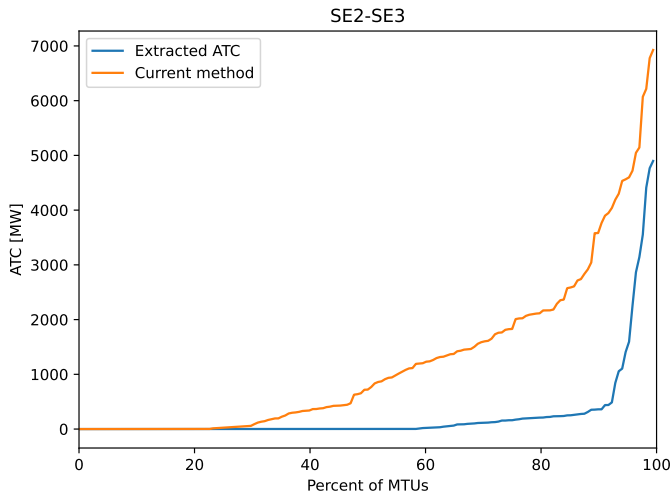
SE1-SE2 ATC duration curves



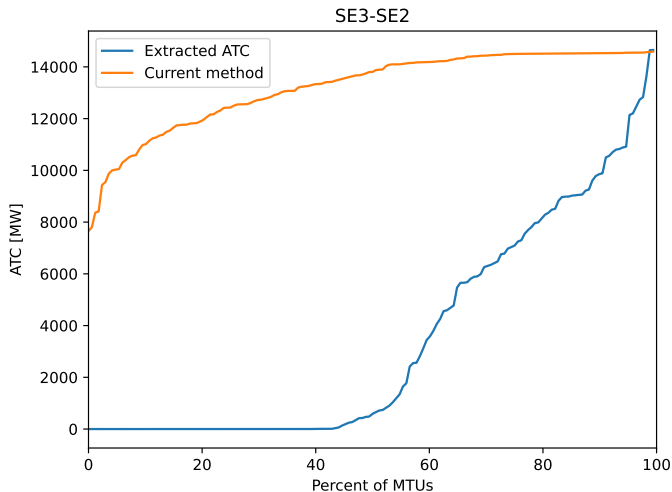
SE2-SE1 ATC duration curves



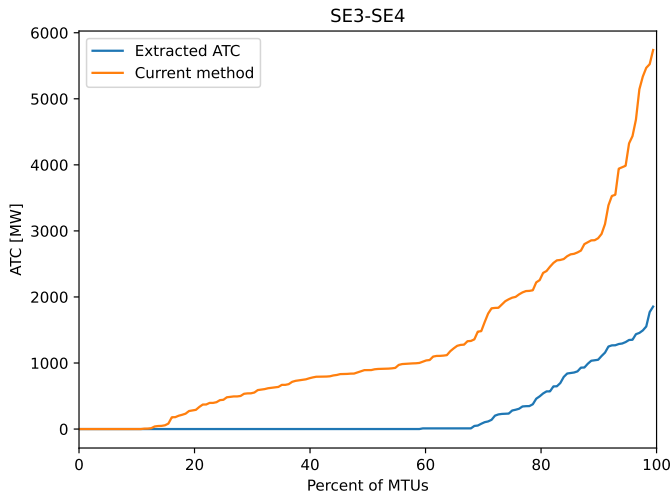
SE2-SE3 ATC duration curves



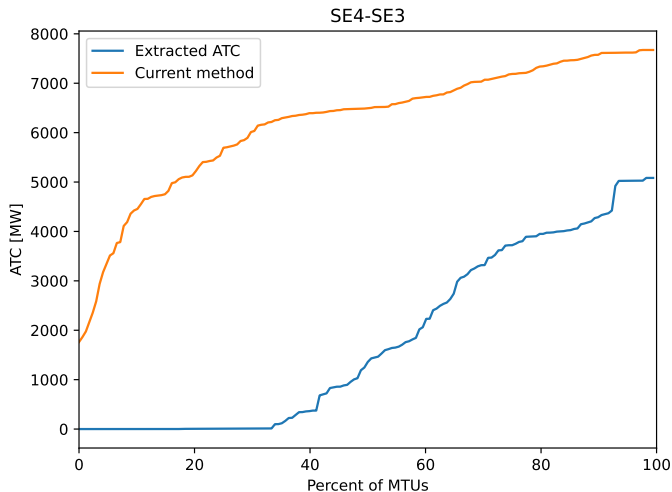
SE3-SE2 ATC duration curves



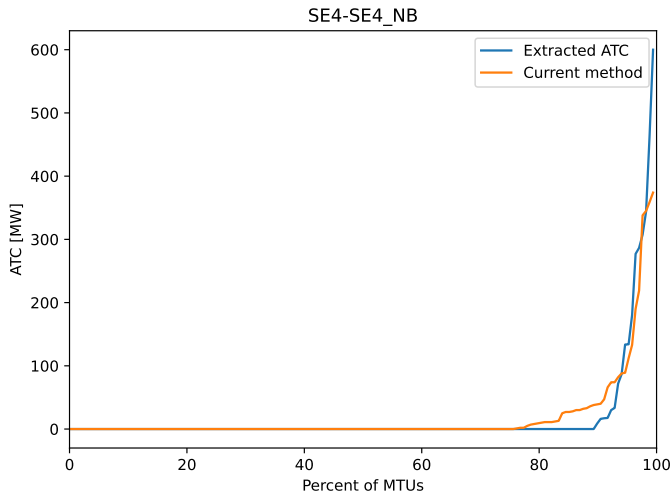
SE3-SE4 ATC duration curves



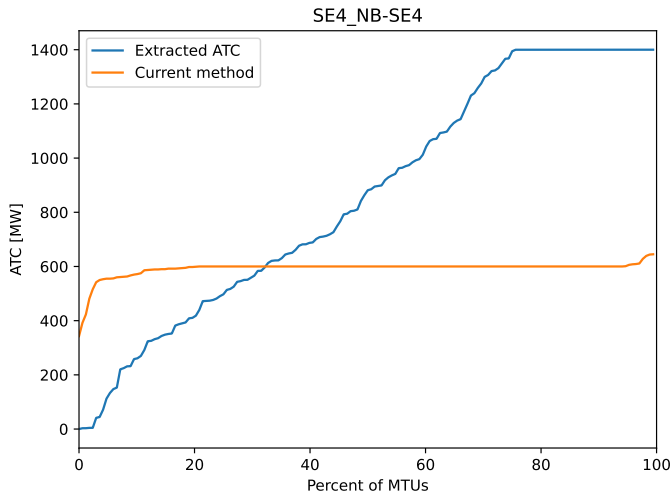
SE4-SE3 ATC duration curves



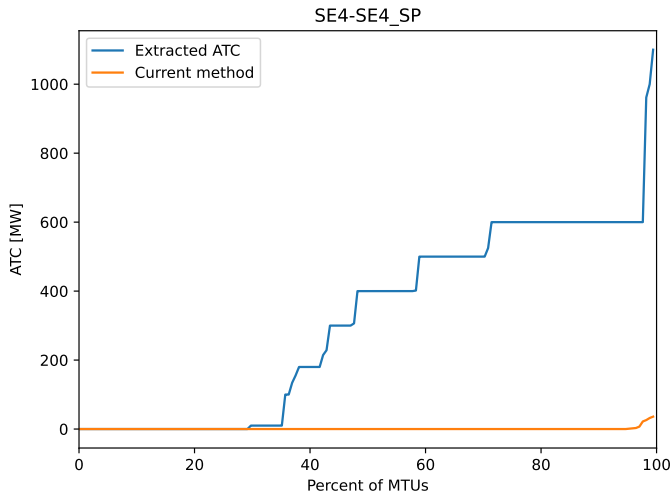
SE4-SE4_NB ATC duration curves



SE4_NB-SE4 ATC duration curves



SE4-SE4_SP ATC duration curves



SE4_SP-SE4 ATC duration curves

