

Tier 1 Unn Appendix 3P1 - Detailed Breakdown ("Without Barrier" Scenario)

Results for terminal emissions and	Flight Path												
	Pollutant	N1 and N2				N3 and N4				SW1 and SW2			
		SO2		SO2		SO2		SO2		SO2			
		Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	500	NaN	NaN	500	NaN	NaN	NaN
319	ACU1_a	(44,33)	6.2	112	0%	0%	100%	112	0%	100%	112	0%	0%
320	ACU1_b	(44,33)	50.0	112	0%	0%	100%	112	0%	100%	112	0%	0%
321	ACU1_c	(44,33)	100.0	144	0%	51%	49%	144	0%	51%	144	0%	49%
322	ACU2_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%
323	ACU2_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
324	ACU2_c	(44,33)	100.0	149	0%	53%	47%	149	0%	53%	47%	149	0%
325	ACU3_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%
326	ACU3_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
327	ACU3_c	(44,33)	100.0	152	0%	54%	46%	152	0%	54%	46%	152	0%
328	ACU4_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%
329	ACU4_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
330	ACU4_c	(44,33)	100.0	154	0%	54%	46%	154	0%	54%	46%	154	0%
331	ACU5_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%
332	ACU5_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
333	ACU5_c	(44,33)	100.0	154	0%	54%	46%	154	0%	54%	46%	154	0%
334	ACU6_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%
335	ACU6_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
336	ACU6_c	(44,33)	100.0	153	0%	54%	46%	153	0%	54%	46%	153	0%
337	ACU7_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%
338	ACU7_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
339	ACU7_c	(44,33)	100.0	151	0%	53%	47%	151	0%	53%	47%	151	0%
340	ACU8_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%
341	ACU8_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
342	ACU8_c	(44,33)	100.0	157	0%	55%	45%	157	0%	55%	45%	157	0%
343	ACU9_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%
344	ACU9_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
345	ACU9_c	(44,33)	100.0	159	0%	56%	44%	159	0%	56%	44%	159	0%
346	ACU10_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%
347	ACU10_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
348	ACU10_c	(44,33)	100.0	149	0%	53%	47%	149	0%	53%	47%	149	0%
349	ACU11_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%
350	ACU11_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
351	ACU11_c	(44,33)	100.0	134	0%	47%	53%	134	0%	47%	53%	134	0%
352	ACU12_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%
353	ACU12_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
354	ACU12_c	(44,33)	100.0	139	0%	50%	50%	139	0%	50%	50%	139	0%
355	ACU13_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%
356	ACU13_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
357	ACU13_c	(44,33)	100.0	156	0%	55%	45%	156	0%	55%	45%	156	0%
358	ACU14_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%
359	ACU14_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
360	ACU14_c	(44,33)	100.0	141	0%	50%	50%	141	0%	50%	50%	141	0%
361	ACU15_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%
362	ACU15_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
363	ACU15_c	(44,33)	100.0	155	0%	55%	45%	155	0%	55%	45%	155	0%
364	ACU16_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%
365	ACU16_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
366	ACU16_c	(44,33)	100.0	159	0%	56%	44%	159	0%	56%	44%	159	0%
367	ACU17_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%
368	ACU17_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
369	ACU17_c	(44,33)	100.0	154	0%	54%	46%	154	0%	54%	46%	154	0%
292	ADM1_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%
293	ADM1_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
294	ADM1_c	(44,33)	100.0	122	0%	39%	61%	122	0%	39%	61%	122	0%
295	ADM2_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
296	ADM2_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
297	ADM2_c	(44,33)	100.0	121	0%	42%	58%	121	0%	42%	58%	121	0%
298	ADM3_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
299	ADM3_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
300	ADM3_c	(44,33)	100.0	130	0%	46%	54%	130	0%	46%	54%	130	0%
301	ADM4_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
302	ADM4_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%
303	ADM4_c	(44,33)	100.0	127	0%	45%	55%	127	0%	45%	55%	127	0%

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Results for terminal emissions and	Flight Path													
	Pollutant	N1 and N2				N3 and N4				SW1 and SW2				
		SO2		SO2		SO2		SO2		SO2				
		Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	500	NaN	NaN	500	NaN	NaN	NaN	
304	ADMS_a	(44,33)	5.9	112	0%	0%	100%	112	0%	100%	112	0%	100%	
305	ADMS_b	(44,33)	50.0	112	0%	0%	100%	112	0%	100%	112	0%	100%	
306	ADMS_c	(44,33)	100.0	123	0%	43%	57%	123	0%	43%	123	0%	57%	
307	ADM6_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
308	ADM6_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
309	ADM6_c	(44,33)	100.0	125	0%	41%	59%	125	0%	41%	59%	125	0%	59%
310	ADM7_a	(44,33)	5.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
311	ADM7_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
312	ADM7_c	(44,33)	100.0	130	0%	43%	57%	130	0%	43%	57%	130	0%	57%
313	ADM8_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
314	ADM8_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
315	ADM8_c	(44,33)	100.0	126	0%	41%	59%	126	0%	41%	59%	126	0%	59%
316	ADM9_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
317	ADM9_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
318	ADM9_c	(44,33)	100.0	121	0%	39%	61%	121	0%	39%	61%	121	0%	61%
253	EDU1_a	(43,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
254	EDU1_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
255	EDU1_c	(43,33)	100.0	138	0%	62%	38%	138	0%	62%	38%	138	0%	38%
256	EDU2_a	(43,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
257	EDU2_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
258	EDU2_c	(43,33)	100.0	137	0%	62%	38%	137	0%	62%	38%	137	0%	38%
259	EDU3_a	(43,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
260	EDU3_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
261	EDU3_c	(43,33)	100.0	137	0%	62%	38%	137	0%	62%	38%	137	0%	38%
262	EDU4_a	(43,33)	6.3	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
263	EDU4_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
264	EDU4_c	(43,33)	100.0	138	0%	62%	38%	138	0%	62%	38%	138	0%	38%
265	EDU5_a	(44,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
266	EDU5_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
267	EDU5_c	(44,33)	100.0	128	0%	42%	58%	128	0%	42%	58%	128	0%	58%
268	EDU6_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
269	EDU6_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
270	EDU6_c	(43,33)	100.0	139	0%	62%	38%	139	0%	62%	38%	139	0%	38%
271	EDU7_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
272	EDU7_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
273	EDU7_c	(43,33)	100.0	141	0%	63%	37%	141	0%	63%	37%	141	0%	37%
274	EDU8_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
275	EDU8_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
276	EDU8_c	(43,33)	100.0	141	0%	63%	37%	141	0%	63%	37%	141	0%	37%
277	EDU9_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
278	EDU9_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
279	EDU9_c	(43,33)	100.0	141	0%	63%	37%	141	0%	63%	37%	141	0%	37%
280	EDU10_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
281	EDU10_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
282	EDU10_c	(43,33)	100.0	140	0%	63%	37%	140	0%	63%	37%	140	0%	37%
283	EDU11_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
284	EDU11_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
285	EDU11_c	(43,33)	100.0	140	0%	63%	37%	140	0%	63%	37%	140	0%	37%
286	EDU12_a	(43,33)	6.3	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
287	EDU12_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
288	EDU12_c	(43,33)	100.0	139	0%	62%	38%	139	0%	62%	38%	139	0%	38%
289	EDU13_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
290	EDU13_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
291	EDU13_c	(43,33)	100.0	140	0%	63%	37%	140	0%	63%	37%	140	0%	37%
292	ONC1_a	(43,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
293	ONC1_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
294	ONC1_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
295	ONC2_a	(43,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
296	ONC2_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
297	ONC2_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
298	ONC3_a	(43,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
299	ONC3_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%
300	ONC3_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	100%

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Results for terminal emissions and	Flight Path														
	Pollutant	N1 and N2				N3 and N4				SW1 and SW2					
		SO2		SO2		SO2		SO2		SO2					
		Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	500	NaN	NaN	500	NaN	NaN	NaN		
		Max for all ASRs	215	10.6%	68.0%	100.0%	215	0.0%	68.0%	100.0%	215	1.5%	68.0%	100.0%	
		Min for all ASRs	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	
No. of ASR	ASR ID	PATH Grid	Assessment Level (mPD)	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution
235	ONC4_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
236	ONC4_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
237	ONC4_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
238	ONC5_a	(43,33)	6.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
239	ONC5_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
240	ONC5_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
241	ONC6_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
242	ONC6_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
243	ONC6_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
244	ONC7_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
245	ONC7_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
246	ONC7_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
247	ONC8_a	(43,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
248	ONC8_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
249	ONC8_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
250	ONC9_a	(43,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
251	ONC9_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
252	ONC9_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
199	SOP1_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
200	SOP1_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
201	SOP1_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
202	SOP2_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
203	SOP2_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
204	SOP2_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
205	SOP3_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
206	SOP3_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
207	SOP3_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
208	SOP4_a	(43,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
209	SOP4_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
210	SOP4_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
211	SOP5_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
212	SOP5_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
213	SOP5_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
214	SOP6_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
215	SOP6_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
216	SOP6_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
217	SOP7_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
218	SOP7_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
219	SOP7_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
220	SOP8_a	(43,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
221	SOP8_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
222	SOP8_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
223	SOP9_a	(43,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
224	SOP9_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
225	SOP9_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
001	ASR1_a	(44,33)	7.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
002	ASR1_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
003	ASR1_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
004	ASR2_a	(44,33)	7.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
005	ASR2_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
006	ASR2_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
007	ASR3_a	(44,33)	8.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
008	ASR3_b	(44,33)	22.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
009	ASR3_c	(44,33)	45.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
010	ASR51_a	(44,33)	8.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
011	ASR51_b	(44,33)	22.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
012	ASR51_c	(44,33)	45.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
013	ASR52_a	(44,33)	8.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
014	ASR52_b	(44,33)	22.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
015	ASR52_c	(44,33)	45.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
016	ASR4_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
017	ASR4_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
018	ASR4_c	(44,33)	100.0	133	0%	47%	53%	133	0%	47%	53%	133	0%	47%	53%

Tier 1 Unn Appendix 3P1 - Detailed Breakdown ("Without Barrier" Scenario)

Results for terminal emissions and	Helicopter and Cruise														
	Flight Path		N1 and N2				N3 and N4				SW1 and SW2				
	Pollutant		SO2		SO2		SO2		SO2		SO2		SO2		
	Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	500	NaN	NaN	NaN	500	NaN	NaN	NaN		
Max for all ASRs	215	10.6%	68.0%	100.0%	215	0.0%	68.0%	100.0%	215	1.5%	68.0%	100.0%			
Min for all ASRs	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%			
No. of ASR	ASR ID	PATH Grid	Assessment Level (mPD)	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution
019	ASR53_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
020	ASR53_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
021	ASR53_c	(44,33)	100.0	120	0%	41%	59%	120	0%	41%	59%	120	0%	41%	59%
022	ASR54_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
023	ASR54_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
024	ASR54_c	(44,33)	100.0	120	0%	41%	59%	120	0%	41%	59%	120	0%	41%	59%
025	ASR55_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
026	ASR55_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
027	ASR55_c	(44,33)	100.0	132	0%	47%	53%	132	0%	47%	53%	132	0%	47%	53%
028	ASR6_a	(44,33)	5.7	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
029	ASR6_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
030	ASR6_c	(44,33)	100.0	148	0%	52%	48%	148	0%	52%	48%	148	0%	52%	48%
031	ASR70_a	(44,33)	4.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
032	ASR70_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
033	ASR70_c	(44,33)	100.0	140	0%	50%	50%	140	0%	50%	50%	140	0%	50%	50%
034	ASR71_a	(44,33)	4.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
035	ASR71_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
036	ASR71_c	(44,33)	100.0	139	0%	50%	50%	139	0%	50%	50%	139	0%	50%	50%
037	ASR72_a	(44,33)	4.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
038	ASR72_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
039	ASR72_c	(44,33)	100.0	146	0%	52%	48%	146	0%	52%	48%	146	0%	52%	48%
040	ASR7_a	(44,33)	5.7	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
041	ASR7_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
042	ASR7_c	(44,33)	100.0	160	0%	56%	44%	160	0%	56%	44%	160	0%	56%	44%
043	ASR64_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
044	ASR64_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
045	ASR64_c	(44,33)	100.0	149	0%	53%	47%	149	0%	53%	47%	149	0%	53%	47%
046	ASR65_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
047	ASR65_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
048	ASR65_c	(44,33)	100.0	152	0%	54%	46%	152	0%	54%	46%	152	0%	54%	46%
049	ASR66_a	(44,33)	5.6	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
050	ASR66_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
051	ASR66_c	(44,33)	100.0	163	0%	57%	43%	163	0%	57%	43%	163	0%	57%	43%
061	ASR9_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
062	ASR9_b	(43,33)	55.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
063	ASR9_c	(43,33)	110.0	155	0%	49%	51%	155	0%	49%	51%	155	0%	49%	51%
064	ASR10_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
065	ASR10_b	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
066	ASR10_c	(43,33)	120.0	134	0%	41%	59%	134	0%	41%	59%	134	0%	41%	59%
067	ASR11_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
068	ASR11_b	(43,33)	55.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
069	ASR11_c	(43,33)	110.0	184	0%	57%	43%	184	0%	57%	43%	184	0%	57%	43%
070	ASR12_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
071	ASR12_b	(43,33)	47.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
072	ASR12_c	(43,33)	95.0	215	0%	65%	35%	215	0%	65%	35%	215	0%	65%	35%
073	ASR15_a	(44,33)	6.3	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
074	ASR15_b	(44,33)	85.0	124	0%	58%	42%	124	0%	58%	42%	124	0%	58%	42%
075	ASR15_c	(44,33)	170.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
076	ASR16_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
077	ASR16_b	(44,33)	85.0	121	0%	42%	58%	121	0%	42%	58%	121	0%	42%	58%
078	ASR16_c	(44,33)	170.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
079	ASR17_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
080	ASR17_b	(44,33)	85.0	119	0%	41%	59%	119	0%	41%	59%	119	0%	41%	59%
081	ASR17_c	(44,33)	170.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
082	ASR18_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
083	ASR18_b	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
084	ASR18_c	(44,33)	120.0	120	11%	31%	59%	122	0%	0%	100%	112	1%	33%	66%
085	ASR19_a	(44,33)	5.6	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
086	ASR19_b	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
087	ASR19_c	(44,33)	120.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
088	ASR20_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
089	ASR20_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
090	ASR20_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%

Tier 1 Unn Appendix 3P1 - Detailed Breakdown ("Without Barrier" Scenario)

Results for terminal emissions and	Tier 1 Unn Appendix 3P1 - Detailed Breakdown ("Without Barrier" Scenario)														
	Flight Path			N1 and N2			N3 and N4			SW1 and SW2					
	Pollutant	SO2		Pollutant	SO2		Pollutant	SO2		Pollutant	SO2				
	Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	NaN	500	NaN	NaN	500	NaN	NaN			
Max for all ASRs	215	10.6%	68.0%	100.0%	215	0.0%	68.0%	100.0%	215	1.5%	68.0%	100.0%			
Min for all ASRs	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%			
No. of ASR	ASR ID	PATH Grid	Assessment Level (mPD)	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration			
091	ASR21_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
092	ASR21_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
093	ASR21_c	(44,33)	100.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
094	ASR22_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
095	ASR22_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
096	ASR22_c	(44,33)	100.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
097	ASR23_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
098	ASR23_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
099	ASR23_c	(44,33)	100.0	123	0%	52%	48%	123	0%	52%	48%	123	0%	52%	48%
100	ASR24_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
101	ASR24_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
102	ASR24_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
103	ASR25_a	(44,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
104	ASR25_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
105	ASR25_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
106	ASR28_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
107	ASR28_b	(44,33)	85.0	119	0%	41%	59%	119	0%	41%	59%	119	0%	41%	59%
108	ASR28_c	(44,33)	170.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
109	ASR29_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
110	ASR29_b	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
111	ASR29_c	(44,33)	120.0	125	9%	34%	56%	133	0%	38%	62%	135	2%	37%	61%
112	ASR30_a	(44,33)	6.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
113	ASR30_b	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
114	ASR30_c	(44,33)	120.0	115	5%	34%	61%	112	0%	0%	100%	112	1%	35%	64%
115	ASR31_a	(44,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
116	ASR31_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
117	ASR31_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
118	ASR32_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
119	ASR32_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
120	ASR32_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
121	ASR33_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
122	ASR33_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
123	ASR33_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
124	ASR34_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
125	ASR34_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
126	ASR34_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
127	ASR35_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
128	ASR35_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
129	ASR35_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
130	ASR36_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
131	ASR36_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
132	ASR36_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
133	ASR37_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
134	ASR37_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
135	ASR37_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
136	ASR38_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
137	ASR38_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
138	ASR38_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
139	ASR39_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
140	ASR39_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
141	ASR39_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
142	ASR40_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
143	ASR40_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
144	ASR40_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
145	ASR41_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
146	ASR41_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
147	ASR41_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
148	ASR42_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
149	ASR42_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
150	ASR42_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
151	ASR43_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
152	ASR43_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
153	ASR43_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%

Tier 1 Unn Appendix 3P1 - Detailed Breakdown ("Without Barrier" Scenario)

Results for terminal emissions and	Flight Path														
	Pollutant	N1 and N2				N3 and N4				SW1 and SW2					
		SO2		SO2		SO2		SO2		SO2					
		Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	500	NaN	NaN	NaN	500	NaN	NaN		
		Max for all ASRs	215	10.6%	68.0%	100.0%	215	0.0%	68.0%	100.0%	215	1.5%	68.0%		
		Min for all ASRs	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	112	0.0%	0.0%		
No. of ASR	ASR ID	PATH Grid	Assessment Level (mPD)	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution
154	ASR44_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
155	ASR44_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
156	ASR44_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
157	ASR45_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
158	ASR45_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
159	ASR45_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
160	ASR46_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
161	ASR46_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
162	ASR46_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
163	ASR47_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
164	ASR47_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
165	ASR47_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
166	ASR48_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
167	ASR48_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
168	ASR48_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
169	ASR49_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
170	ASR49_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
171	ASR49_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
172	ASR50_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
173	ASR50_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
174	ASR50_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
175	ASR56_a	(44,33)	6.7	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
176	ASR56_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
177	ASR56_c	(44,33)	100.0	112	0%	68%	32%	112	0%	68%	32%	112	0%	68%	32%
178	ASR57_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
179	ASR57_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
180	ASR57_c	(44,33)	100.0	117	0%	40%	60%	117	0%	40%	60%	117	0%	40%	60%
181	ASR58_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
182	ASR58_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
183	ASR58_c	(44,33)	100.0	131	0%	46%	54%	131	0%	46%	54%	131	0%	46%	54%
184	ASR59_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
185	ASR59_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
186	ASR59_c	(44,33)	100.0	123	0%	43%	57%	123	0%	43%	57%	123	0%	43%	57%
187	ASR60_a	(44,33)	5.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
188	ASR60_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
189	ASR60_c	(44,33)	100.0	139	0%	49%	51%	139	0%	49%	51%	139	0%	49%	51%
190	ASR61_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
191	ASR61_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
192	ASR61_c	(44,33)	100.0	137	0%	49%	51%	137	0%	49%	51%	137	0%	49%	51%
193	ASR62_a	(44,33)	5.6	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
194	ASR62_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
195	ASR62_c	(44,33)	100.0	146	0%	52%	48%	146	0%	52%	48%	146	0%	52%	48%
196	ASR63_a	(44,33)	5.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
197	ASR63_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
198	ASR63_c	(44,33)	100.0	147	0%	52%	48%	147	0%	52%	48%	147	0%	52%	48%
052	ASR67_a	(44,33)	5.6	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
053	ASR67_b	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
054	ASR67_c	(44,33)	80.0	122	0%	42%	58%	122	0%	42%	58%	122	0%	42%	58%
055	ASR68_a	(44,33)	5.7	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
056	ASR68_b	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
057	ASR68_c	(44,33)	80.0	118	0%	40%	60%	118	0%	40%	60%	118	0%	40%	60%
058	ASR69_a	(44,33)	5.6	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
059	ASR69_b	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
060	ASR69_c	(44,33)	80.0	118	0%	40%	60%	118	0%	40%	60%	118	0%	40%	60%

Notes: All values are in $\mu\text{g}/\text{m}^3$

Tier 1 Unn Appendix 3P2 - Detailed Breakdown ("With Barrier" Scenario)

Results for terminal emissions and	Flight Path														
	Pollutant	N1 and N2				N3 and N4				SW1 and SW2					
		SO2		SO2		SO2		SO2		SO2		SO2			
Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	500	NaN	NaN	NaN	500	NaN	NaN	NaN			
Max for all ASRs	215	1.1%	68.0%	100.0%	215	0.0%	68.0%	100.0%	215	0.4%	68.0%	100.0%			
Min for all ASRs	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%			
No. of ASR	ASR ID	PATH Grid	Assessment Level (mPD)	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration			
319	ACU1_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
320	ACU1_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
321	ACU1_c	(44,33)	100.0	144	0%	51%	49%	144	0%	51%	49%	144	0%	51%	49%
322	ACU2_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
323	ACU2_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
324	ACU2_c	(44,33)	100.0	149	0%	53%	47%	149	0%	53%	47%	149	0%	53%	47%
325	ACU3_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
326	ACU3_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
327	ACU3_c	(44,33)	100.0	152	0%	54%	46%	152	0%	54%	46%	152	0%	54%	46%
328	ACU4_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
329	ACU4_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
330	ACU4_c	(44,33)	100.0	154	0%	54%	46%	154	0%	54%	46%	154	0%	54%	46%
331	ACU5_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
332	ACU5_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
333	ACU5_c	(44,33)	100.0	154	0%	54%	46%	154	0%	54%	46%	154	0%	54%	46%
334	ACU6_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
335	ACU6_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
336	ACU6_c	(44,33)	100.0	153	0%	54%	46%	153	0%	54%	46%	153	0%	54%	46%
337	ACU7_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
338	ACU7_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
339	ACU7_c	(44,33)	100.0	151	0%	53%	47%	151	0%	53%	47%	151	0%	53%	47%
340	ACU8_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
341	ACU8_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
342	ACU8_c	(44,33)	100.0	157	0%	55%	45%	157	0%	55%	45%	157	0%	55%	45%
343	ACU9_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
344	ACU9_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
345	ACU9_c	(44,33)	100.0	159	0%	56%	44%	159	0%	56%	44%	159	0%	56%	44%
346	ACU10_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
347	ACU10_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
348	ACU10_c	(44,33)	100.0	149	0%	53%	47%	149	0%	53%	47%	149	0%	53%	47%
349	ACU11_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
350	ACU11_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
351	ACU11_c	(44,33)	100.0	134	0%	47%	53%	134	0%	47%	53%	134	0%	47%	53%
352	ACU12_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
353	ACU12_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
354	ACU12_c	(44,33)	100.0	139	0%	50%	50%	139	0%	50%	50%	139	0%	50%	50%
355	ACU13_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
356	ACU13_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
357	ACU13_c	(44,33)	100.0	156	0%	55%	45%	156	0%	55%	45%	156	0%	55%	45%
358	ACU14_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
359	ACU14_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
360	ACU14_c	(44,33)	100.0	141	0%	50%	50%	141	0%	50%	50%	141	0%	50%	50%
361	ACU15_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
362	ACU15_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
363	ACU15_c	(44,33)	100.0	155	0%	55%	45%	155	0%	55%	45%	155	0%	55%	45%
364	ACU16_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
365	ACU16_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
366	ACU16_c	(44,33)	100.0	159	0%	56%	44%	159	0%	56%	44%	159	0%	56%	44%
367	ACU17_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
368	ACU17_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
369	ACU17_c	(44,33)	100.0	154	0%	54%	46%	154	0%	54%	46%	154	0%	54%	46%
292	ADM1_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
293	ADM1_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
294	ADM1_c	(44,33)	100.0	122	0%	39%	61%	122	0%	39%	61%	122	0%	39%	61%
295	ADM2_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
296	ADM2_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
297	ADM2_c	(44,33)	100.0	121	0%	42%	58%	121	0%	42%	58%	121	0%	42%	58%
298	ADM3_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
299	ADM3_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
300	ADM3_c	(44,33)	100.0	130	0%	46%	54%	130	0%	46%	54%	130	0%	46%	54%
301	ADM4_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
302	ADM4_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
303	ADM4_c	(44,33)	100.0	127	0%	45%	55%	127	0%	45%	55%	127	0%	45%	55%

Tier 1 Unn Appendix 3P2 - Detailed Breakdown ("With Barrier" Scenario)

Results for terminal emissions and	Flight Path														
	Pollutant	N1 and N2				N3 and N4				SW1 and SW2					
		SO2		SO2		SO2		SO2							
		Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	500	NaN	NaN	500	NaN	NaN	NaN		
		Max for all ASRs	215	1.1%	68.0%	100.0%	215	0.0%	68.0%	100.0%	215	0.4%	68.0%	100.0%	
		Min for all ASRs	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	
No. of ASR	ASR ID	PATH Grid	Assessment Level (mPD)	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution
304	ADMS_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
305	ADMS_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
306	ADMS_c	(44,33)	100.0	123	0%	43%	57%	123	0%	43%	57%	123	0%	43%	57%
307	ADM6_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
308	ADM6_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
309	ADM6_c	(44,33)	100.0	125	0%	41%	59%	125	0%	41%	59%	125	0%	41%	59%
310	ADM7_a	(44,33)	5.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
311	ADM7_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
312	ADM7_c	(44,33)	100.0	130	0%	43%	57%	130	0%	43%	57%	130	0%	43%	57%
313	ADM8_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
314	ADM8_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
315	ADM8_c	(44,33)	100.0	126	0%	41%	59%	126	0%	41%	59%	126	0%	41%	59%
316	ADM9_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
317	ADM9_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
318	ADM9_c	(44,33)	100.0	121	0%	39%	61%	121	0%	39%	61%	121	0%	39%	61%
253	EDU1_a	(43,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
254	EDU1_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
255	EDU1_c	(43,33)	100.0	138	0%	62%	38%	138	0%	62%	38%	138	0%	62%	38%
256	EDU2_a	(43,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
257	EDU2_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
258	EDU2_c	(43,33)	100.0	137	0%	62%	38%	137	0%	62%	38%	137	0%	62%	38%
259	EDU3_a	(43,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
260	EDU3_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
261	EDU3_c	(43,33)	100.0	137	0%	62%	38%	137	0%	62%	38%	137	0%	62%	38%
262	EDU4_a	(43,33)	6.3	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
263	EDU4_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
264	EDU4_c	(43,33)	100.0	138	0%	62%	38%	138	0%	62%	38%	138	0%	62%	38%
265	EDU5_a	(44,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
266	EDU5_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
267	EDU5_c	(44,33)	100.0	128	0%	42%	58%	128	0%	42%	58%	128	0%	42%	58%
268	EDU6_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
269	EDU6_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
270	EDU6_c	(43,33)	100.0	139	0%	62%	38%	139	0%	62%	38%	139	0%	62%	38%
271	EDU7_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
272	EDU7_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
273	EDU7_c	(43,33)	100.0	141	0%	63%	37%	141	0%	63%	37%	141	0%	63%	37%
274	EDU8_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
275	EDU8_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
276	EDU8_c	(43,33)	100.0	141	0%	63%	37%	141	0%	63%	37%	141	0%	63%	37%
277	EDU9_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
278	EDU9_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
279	EDU9_c	(43,33)	100.0	141	0%	63%	37%	141	0%	63%	37%	141	0%	63%	37%
280	EDU10_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
281	EDU10_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
282	EDU10_c	(43,33)	100.0	140	0%	63%	37%	140	0%	63%	37%	140	0%	63%	37%
283	EDU11_a	(43,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
284	EDU11_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
285	EDU11_c	(43,33)	100.0	140	0%	63%	37%	140	0%	63%	37%	140	0%	63%	37%
286	EDU12_a	(43,33)	6.3	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
287	EDU12_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
288	EDU12_c	(43,33)	100.0	139	0%	62%	38%	139	0%	62%	38%	139	0%	62%	38%
289	EDU13_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
290	EDU13_b	(43,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
291	EDU13_c	(43,33)	100.0	140	0%	63%	37%	140	0%	63%	37%	140	0%	63%	37%
292	ONC1_a	(43,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
293	ONC1_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
294	ONC1_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
295	ONC2_a	(43,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
296	ONC2_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
297	ONC2_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
298	ONC3_a	(43,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
299	ONC3_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
300	ONC3_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%

Tier 1 Unn Appendix 3P2 - Detailed Breakdown ("With Barrier" Scenario)

Results for terminal emissions and	Flight Path														
	Pollutant	N1 and N2				N3 and N4				SW1 and SW2					
		SO2		SO2		SO2		SO2		SO2					
		Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	500	NaN	NaN	500	NaN	NaN	NaN		
		Max for all ASRs	215	1.1%	68.0%	100.0%	215	0.0%	68.0%	100.0%	215	0.4%	68.0%	100.0%	
		Min for all ASRs	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	
No. of ASR	ASR ID	PATH Grid	Assessment Level (mPD)	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution
235	ONC4_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
236	ONC4_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
237	ONC4_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
238	ONC5_a	(43,33)	6.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
239	ONC5_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
240	ONC5_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
241	ONC6_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
242	ONC6_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
243	ONC6_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
244	ONC7_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
245	ONC7_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
246	ONC7_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
247	ONC8_a	(43,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
248	ONC8_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
249	ONC8_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
250	ONC9_a	(43,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
251	ONC9_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
252	ONC9_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
199	SOP1_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
200	SOP1_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
201	SOP1_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
202	SOP2_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
203	SOP2_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
204	SOP2_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
205	SOP3_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
206	SOP3_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
207	SOP3_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
208	SOP4_a	(43,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
209	SOP4_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
210	SOP4_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
211	SOP5_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
212	SOP5_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
213	SOP5_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
214	SOP6_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
215	SOP6_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
216	SOP6_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
217	SOP7_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
218	SOP7_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
219	SOP7_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
220	SOP8_a	(43,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
221	SOP8_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
222	SOP8_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
223	SOP9_a	(43,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
224	SOP9_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
225	SOP9_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
001	ASR1_a	(44,33)	7.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
002	ASR1_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
003	ASR1_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
004	ASR2_a	(44,33)	7.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
005	ASR2_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
006	ASR2_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
007	ASR3_a	(44,33)	8.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
008	ASR3_b	(44,33)	22.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
009	ASR3_c	(44,33)	45.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
010	ASR51_a	(44,33)	8.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
011	ASR51_b	(44,33)	22.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
012	ASR51_c	(44,33)	45.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
013	ASR52_a	(44,33)	8.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
014	ASR52_b	(44,33)	22.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
015	ASR52_c	(44,33)	45.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
016	ASR4_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
017	ASR4_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
018	ASR4_c	(44,33)	100.0	133	0%	47%	53%	133	0%	47%	53%	133	0%	47%	53%

Tier 1 Unn Appendix 3P2 - Detailed Breakdown ("With Barrier" Scenario)

Results for terminal emissions and	Flight Path														
	Pollutant	N1 and N2				N3 and N4				SW1 and SW2					
		SO2		SO2		SO2		SO2							
		Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	500	NaN	NaN	500	NaN	NaN	NaN		
		Max for all ASRs	215	1.1%	68.0%	100.0%	215	0.0%	68.0%	100.0%	215	0.4%	68.0%	100.0%	
		Min for all ASRs	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	
No. of ASR	ASR ID	PATH Grid	Assessment Level (mPD)	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution
019	ASR53_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
020	ASR53_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
021	ASR53_c	(44,33)	100.0	120	0%	41%	59%	120	0%	41%	59%	120	0%	41%	59%
022	ASR54_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
023	ASR54_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
024	ASR54_c	(44,33)	100.0	120	0%	41%	59%	120	0%	41%	59%	120	0%	41%	59%
025	ASR55_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
026	ASR55_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
027	ASR55_c	(44,33)	100.0	132	0%	47%	53%	132	0%	47%	53%	132	0%	47%	53%
028	ASR6_a	(44,33)	5.7	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
029	ASR6_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
030	ASR6_c	(44,33)	100.0	148	0%	52%	48%	148	0%	52%	48%	148	0%	52%	48%
031	ASR70_a	(44,33)	4.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
032	ASR70_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
033	ASR70_c	(44,33)	100.0	140	0%	50%	50%	140	0%	50%	50%	140	0%	50%	50%
034	ASR71_a	(44,33)	4.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
035	ASR71_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
036	ASR71_c	(44,33)	100.0	139	0%	50%	50%	139	0%	50%	50%	139	0%	50%	50%
037	ASR72_a	(44,33)	4.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
038	ASR72_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
039	ASR72_c	(44,33)	100.0	146	0%	52%	48%	146	0%	52%	48%	146	0%	52%	48%
040	ASR7_a	(44,33)	5.7	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
041	ASR7_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
042	ASR7_c	(44,33)	100.0	160	0%	56%	44%	160	0%	56%	44%	160	0%	56%	44%
043	ASR64_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
044	ASR64_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
045	ASR64_c	(44,33)	100.0	149	0%	53%	47%	149	0%	53%	47%	149	0%	53%	47%
046	ASR65_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
047	ASR65_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
048	ASR65_c	(44,33)	100.0	152	0%	54%	46%	152	0%	54%	46%	152	0%	54%	46%
049	ASR66_a	(44,33)	5.6	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
050	ASR66_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
051	ASR66_c	(44,33)	100.0	163	0%	57%	43%	163	0%	57%	43%	163	0%	57%	43%
061	ASR9_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
062	ASR9_b	(43,33)	55.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
063	ASR9_c	(43,33)	110.0	155	0%	49%	51%	155	0%	49%	51%	155	0%	49%	51%
064	ASR10_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
065	ASR10_b	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
066	ASR10_c	(43,33)	120.0	134	0%	41%	59%	134	0%	41%	59%	134	0%	41%	59%
067	ASR11_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
068	ASR11_b	(43,33)	55.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
069	ASR11_c	(43,33)	110.0	184	0%	57%	43%	184	0%	57%	43%	184	0%	57%	43%
070	ASR12_a	(43,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
071	ASR12_b	(43,33)	47.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
072	ASR12_c	(43,33)	95.0	215	0%	65%	35%	215	0%	65%	35%	215	0%	65%	35%
073	ASR15_a	(44,33)	6.3	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
074	ASR15_b	(44,33)	85.0	124	0%	58%	42%	124	0%	58%	42%	124	0%	58%	42%
075	ASR15_c	(44,33)	170.0	112	0%	100%	112	0%	100%	112	0%	100%	112	0%	100%
076	ASR16_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
077	ASR16_b	(44,33)	85.0	121	0%	42%	58%	121	0%	42%	58%	121	0%	42%	58%
078	ASR16_c	(44,33)	170.0	112	0%	100%	112	0%	100%	112	0%	100%	112	0%	100%
079	ASR17_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
080	ASR17_b	(44,33)	85.0	119	0%	41%	59%	119	0%	41%	59%	119	0%	41%	59%
081	ASR17_c	(44,33)	170.0	112	0%	100%	112	0%	100%	112	0%	100%	112	0%	100%
082	ASR18_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
083	ASR18_b	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
084	ASR18_c	(44,33)	120.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
085	ASR19_a	(44,33)	5.6	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
086	ASR19_b	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
087	ASR19_c	(44,33)	120.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
088	ASR20_a	(44,33)	6.1	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
089	ASR20_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
090	ASR20_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%

Tier 1 Unn Appendix 3P2 - Detailed Breakdown ("With Barrier" Scenario)

Results for terminal emissions and	Flight Path														
	Pollutant	N1 and N2				N3 and N4				SW1 and SW2					
		SO2		SO2		SO2		SO2							
		Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	500	NaN	NaN	500	NaN	NaN	NaN		
		Max for all ASRs	215	1.1%	68.0%	100.0%	215	0.0%	68.0%	100.0%	215	0.4%	68.0%	100.0%	
		Min for all ASRs	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	
No. of ASR	ASR ID	PATH Grid	Assessment Level (mPD)	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution
091	ASR21_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
092	ASR21_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
093	ASR21_c	(44,33)	100.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
094	ASR22_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
095	ASR22_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
096	ASR22_c	(44,33)	100.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
097	ASR23_a	(44,33)	6.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
098	ASR23_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
099	ASR23_c	(44,33)	100.0	123	0%	52%	48%	123	0%	52%	48%	123	0%	52%	48%
100	ASR24_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
101	ASR24_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
102	ASR24_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
103	ASR25_a	(44,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
104	ASR25_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
105	ASR25_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
106	ASR28_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
107	ASR28_b	(44,33)	85.0	119	0%	41%	59%	119	0%	41%	59%	119	0%	41%	59%
108	ASR28_c	(44,33)	170.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
109	ASR29_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
110	ASR29_b	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
111	ASR29_c	(44,33)	120.0	114	1%	37%	62%	113	0%	38%	62%	113	0%	37%	62%
112	ASR30_a	(44,33)	6.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
113	ASR30_b	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
114	ASR30_c	(44,33)	120.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
115	ASR31_a	(44,33)	6.4	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
116	ASR31_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
117	ASR31_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
118	ASR32_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
119	ASR32_b	(44,33)	20.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
120	ASR32_c	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
121	ASR33_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
122	ASR33_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
123	ASR33_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
124	ASR34_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
125	ASR34_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
126	ASR34_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
127	ASR35_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
128	ASR35_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
129	ASR35_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
130	ASR36_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
131	ASR36_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
132	ASR36_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
133	ASR37_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
134	ASR37_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
135	ASR37_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
136	ASR38_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
137	ASR38_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
138	ASR38_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
139	ASR39_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
140	ASR39_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
141	ASR39_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
142	ASR40_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
143	ASR40_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
144	ASR40_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
145	ASR41_a	(43,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
146	ASR41_b	(43,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
147	ASR41_c	(43,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
148	ASR42_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
149	ASR42_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
150	ASR42_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
151	ASR43_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
152	ASR43_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
153	ASR43_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%

Tier 1 Unn Appendix 3P2 - Detailed Breakdown ("With Barrier" Scenario)

Results for terminal emissions and	Flight Path														
	Pollutant	N1 and N2				N3 and N4				SW1 and SW2					
		SO2		SO2		SO2		SO2		SO2		SO2			
	Criteria ($\mu\text{g}/\text{m}^3$)	500	NaN	NaN	NaN	500	NaN	NaN	NaN	500	NaN	NaN	NaN		
	Max for all ASRs	215	1.1%	68.0%	100.0%	215	0.0%	68.0%	100.0%	215	0.4%	68.0%	100.0%		
	Min for all ASRs	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%	112	0.0%	0.0%	32.0%		
No. of ASR	ASR ID	PATH Grid	Assessment Level (mPD)	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution	The highest 10-min SO ₂ cumulative concentration	SO2 project contribution	SO2 marine emission contribution	Background contribution
154	ASR44_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
155	ASR44_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
156	ASR44_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
157	ASR45_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
158	ASR45_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
159	ASR45_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
160	ASR46_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
161	ASR46_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
162	ASR46_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
163	ASR47_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
164	ASR47_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
165	ASR47_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
166	ASR48_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
167	ASR48_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
168	ASR48_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
169	ASR49_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
170	ASR49_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
171	ASR49_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
172	ASR50_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
173	ASR50_b	(44,33)	30.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
174	ASR50_c	(44,33)	60.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
175	ASR56_a	(44,33)	6.7	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
176	ASR56_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
177	ASR56_c	(44,33)	100.0	112	0%	68%	32%	112	0%	68%	32%	112	0%	68%	32%
178	ASR57_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
179	ASR57_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
180	ASR57_c	(44,33)	100.0	117	0%	40%	60%	117	0%	40%	60%	117	0%	40%	60%
181	ASR58_a	(44,33)	6.2	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
182	ASR58_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
183	ASR58_c	(44,33)	100.0	131	0%	46%	54%	131	0%	46%	54%	131	0%	46%	54%
184	ASR59_a	(44,33)	5.8	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
185	ASR59_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
186	ASR59_c	(44,33)	100.0	123	0%	43%	57%	123	0%	43%	57%	123	0%	43%	57%
187	ASR60_a	(44,33)	5.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
188	ASR60_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
189	ASR60_c	(44,33)	100.0	139	0%	49%	51%	139	0%	49%	51%	139	0%	49%	51%
190	ASR61_a	(44,33)	5.9	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
191	ASR61_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
192	ASR61_c	(44,33)	100.0	137	0%	49%	51%	137	0%	49%	51%	137	0%	49%	51%
193	ASR62_a	(44,33)	5.6	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
194	ASR62_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
195	ASR62_c	(44,33)	100.0	146	0%	52%	48%	146	0%	52%	48%	146	0%	52%	48%
196	ASR63_a	(44,33)	5.5	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
197	ASR63_b	(44,33)	50.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
198	ASR63_c	(44,33)	100.0	147	0%	52%	48%	147	0%	52%	48%	147	0%	52%	48%
052	ASR68_a	(44,33)	5.6	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
053	ASR67_b	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
054	ASR67_c	(44,33)	80.0	122	0%	42%	58%	122	0%	42%	58%	122	0%	42%	58%
055	ASR68_a	(44,33)	5.7	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
056	ASR68_b	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
057	ASR68_c	(44,33)	80.0	118	0%	40%	60%	118	0%	40%	60%	118	0%	40%	60%
058	ASR69_a	(44,33)	5.6	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
059	ASR69_b	(44,33)	40.0	112	0%	0%	100%	112	0%	0%	100%	112	0%	0%	100%
060	ASR69_c	(44,33)	80.0	118	0%	40%	60%	118	0%	40%	60%	118	0%	40%	60%

Notes: All values are in $\mu\text{g}/\text{m}^3$