



Figure 1. The positions where water for faecal indicator bacteria and pharmaceutical compound analysis was sampled in the City of Cape Town on the 24th of August 2021. Note that the prefix CT is not included in the site numbers for presentation purposes (see Table 1).

Table 1. The positions where water for faecal indicator bacteria and pharmaceutical compound analysis was sampled in the City of Cape Town on the 24th of August 2021. Also included is the water quality rating for the 365 day period up to 21 October 2021 if the site is included in the City of Cape Town shoreline water quality monitoring programme.

Coast	Site	Site description	Latitude	Longitude	Comments	CoCT Water Quality
Atlantic	CT1	Bloubergstrand	-33.78464	18.45001		Good
Atlantic	CT2	Diep River	-33.83357	18.52147	Above Potsdam wastewater treatment works.	
Atlantic	CT3	Milnerton Beach	-33.88133	18.48693		Poor
Atlantic	CT4	Lagoon Beach	-33.88218	18.49017	Near the outflow of Milnerton Lagoon.	Poor
Atlantic	CT5	Salt River mouth	-33.90859	18.47298	Affected by wastewater discharged into the catchment.	
Atlantic	CT6	Black River	-33.95089	18.50838	Downstream of point where Athlone wastewater treatment works discharges wastewater into river.	
Atlantic	CT7	Mouille Point	-33.89918	18.40407	Inshore of Green Point outfall.	Good
Atlantic	CT8	Three Anchor Bay	-33.90608	18.39724	Affected by contaminated stormwater flows.	Poor
Atlantic	CT9	Three Anchor Bay stormwater	-33.90585	18.39779		
Atlantic	CT10	Milton Tidal Pool	-33.91434	18.38605		Good
Atlantic	CT11	Clifton 4 th Beach	-33.94064	18.37431	Inshore of Camps Bay outfall.	Good
Atlantic	CT12	Camps Bay Beach	-33.95090	18.37711	Inshore of Camps Bay outfall.	Excellent
Atlantic	CT13	Oudekraal Resort	-33.98726	18.34976		
Atlantic	CT14	Llandudno Beach	-34.00843	18.34033		Excellent
Atlantic	CT15	Hout Bay River	-34.04200	18.35623	Affected by wastewater from upstream sources, including informal settlements.	
Atlantic	CT16	Hout Bay Beach	-34.04765	18.35987	Inshore of Hout Bay outfall.	Poor
Atlantic	CT17	Kommetjie Long Beach	-34.13431	18.33291		Poor
Atlantic	CT18	Diaz Beach	-34.35523	18.48225	Arguably most remote site.	
False Bay	CT19	Miller's Point	-34.22984	18.47214	Potentially affected by wastewater discharge from the Miller's Point wastewater treatment works.	Sufficient
False Bay	CT20	Simon's Town Long Beach	-34.18719	18.42676	Potentially affected by wastewater discharge from the Simon's Town wastewater treatment works.	Sufficient
False Bay	CT21	Glencairn Beach	-34.15959	18.43220		Excellent
False Bay	CT22	Fish Hoek Beach	-34.14058	18.43330	Affected by contaminated stormwater flows.	Poor
False Bay	CT23	Fish Hoek stormwater	-34.13826	18.43281		
False Bay	CT24	Muizenberg Pavilion	-34.10809	18.47280		Poor
False Bay	CT25	Zandvlei Estuary mouth	-34.10431	18.47517	Affected by wastewater discharged into rivers flowing into the Zandvlei Estuary.	

Coast	Site	Site description	Latitude	Longitude	Comments	CoCT Water Quality
False Bay	CT26	Lifebox23 Beach	-34.09917	18.50234	Affected by wastewater reaching the sea after discharge from the Cape Flats wastewater treatment works.	Poor
False Bay	CT27	Strandfontein	-34.08928	18.54740		Good
False Bay	CT28	Mitchells Plain Beach	-34.07778	18.59804	Affected by wastewater reaching the sea after discharge from the Mitchells Plain wastewater treatment works.	Poor
False Bay	CT29	Monwabisi Beach	-34.07327	18.69011	Affected by wastewater reaching sea after discharge from Zandvliet wastewater treatment works.	Poor
False Bay	CT30	Moddergat Spruit	-34.07536	18.76938	Tributary of Eerste River, above Macassar wastewater treatment works outlet.	
False Bay	CT31	Macassar Beach	-34.08105	18.76189	Affected by wastewater discharged to sea from Macassar wastewater treatment works and other wastewater treatment works in Eerste and Kuils River catchments.	Sufficient
False Bay	CT32	Strand Beach/Lourens River	-34.10152	18.81155		Good
False Bay	CT33	Gordon's Bay canal	-34.14643	18.85282	In the sea near the mouth of a canal that receives wastewater from the Gordon's Bay wastewater treatment works.	Poor
False Bay	CT34	Gordon's Bay Beach	-34.16169	18.86503		Poor
False Bay	CT35	Kogel Bay	-34.23669	18.85030	A remote site.	Excellent

Table 2. Pharmaceutical compounds analysed in this study and their therapeutic classification and use.

Anatomical Therapeutic Classification	Category	Pharmaceutical compound	Therapeutic use
Alimentary Tract and Metabolism	Histamine receptor antagonist	Cimetidine	Histamine receptor antagonist used to treat ulcers; gastroesophageal reflux disease, and inhibit stomach acid production.
Alimentary Tract and Metabolism	Histamine receptor antagonist	Ranitidine	Histamine receptor antagonist used to treat and prevent ulcers in the stomach and intestines, used to decrease stomach acid production.
Anti-infective for Systemic Use	Antibiotic	Tetracycline	Antibiotic used to treat bacterial infections, including acne, cholera, brucellosis, plague, malaria, and syphilis.
Anti-infective for Systemic Use	Antibiotic	Azithromycin	Antibiotic used to treat bacterial infections, including middle ear infections, strep throat, pneumonia, traveller's diarrhoea, and certain other intestinal infections.
Anti-infective for Systemic Use	Antibiotic	Cefalexin	Antibiotic used to treat bacterial infections, such as pneumonia and other chest infections, skin infections and urinary tract infections.
Anti-infective for Systemic Use	Antibiotic	Clarithromycin	Antibiotic used to treat bacterial infections, including strep throat, pneumonia, skin infections, Helicobacter pylori infection, and Lyme disease, among others.
Anti-infective for Systemic Use	Antibiotic	Erythromycin	Antibiotic used to treat bacterial infections, including respiratory tract infections, skin infections, chlamydia infections, pelvic inflammatory disease, and syphilis.
Anti-infective for Systemic Use	Antibiotic	Metronidazole_OH	Hydroxy metronidazole is the main metabolite of metronidazole. Has antibiotic and antiprotozoal activity.
Anti-infective for Systemic Use	Antibiotic	Sulfamethoxazole	Antibiotic used to treat bacterial infections, including ear infections, urinary tract infections, bronchitis, and prostatitis.
Anti-infective for Systemic Use	Antibiotic	Trimethoprim	Antibiotic used mainly in the treatment of respiratory and urinary tract infections, but also middle ear infections and traveller's diarrhoea. Often used in combination with sulfonamides (e.g. sulfamethoxazole).
Blood and Blood Forming Organs	Antiplatelet agent	Clopidogrel	Antiplatelet medication used to reduce the risk of heart disease and stroke in those at high risk.
Cardiovascular System	Analgesic/anti-inflammatory	Ibuprofen	Nonsteroidal anti-inflammatory drug used for treating pain, fever, and inflammation. This includes painful menstrual periods, migraines, and rheumatoid arthritis.
Cardiovascular System	Antihypertensive	Irbesartan	Antihypertensive used to treat high blood pressure, heart failure, and diabetic kidney disease. It is sometimes used in combination with hydrochlorothiazide.
Cardiovascular System	Antihypertensive	Losartan	Antihypertensive used to treat high blood pressure. It is also used to treat diabetic kidney disease, heart failure, and left ventricular enlargement.
Cardiovascular System	Antihypertensive	Valsartan	Antihypertensive used to treat high blood pressure, heart failure, and diabetic kidney disease.

Anatomical Therapeutic Classification	Category	Pharmaceutical compound	Therapeutic use
Cardiovascular System	Calcium channel blocker	Diltiazem	Calcium channel blocker used to treat high blood pressure, angina, and certain heart arrhythmias.
Cardiovascular System	Diuretic	Furosemide	Diuretic used to treat fluid build-up due to heart failure, liver scarring, or kidney disease, but may also be used to treat high blood pressure.
Cardiovascular System	Diuretic	Hydrochlorothiazide	Diuretic used to treat high blood pressure and swelling due to fluid buildup, and decrease the risk of kidney stones.
Cardiovascular System	Lipid regulator/ Cholesterol lowering agent	Atorvastatin	Cholesterol lowering agent used to prevent cardiovascular disease in those at high risk and to treat abnormal lipid levels.
Cardiovascular System	Lipid regulator/ Cholesterol lowering agent	Bezafibrate	Used to lower cholesterol (mainly triglycerides) levels in blood.
Cardiovascular System	Lipid regulator/ Cholesterol lowering agent	Gemfibrozil	Used to treat abnormal blood lipid levels.
Cardiovascular System	Lipid regulator/ Cholesterol lowering agent	Pravastatin	Cholesterol lowering agent used for preventing cardiovascular disease in those at high risk and for treating abnormal lipids.
Cardiovascular System	β-blocker	Atenolol	β-blocker used to treat high blood pressure and heart-associated chest pain, and migraines.
Cardiovascular System	β-blocker	Metoprolol	β-blocker used to treat chest pain (angina), heart failure, and high blood pressure.
Cardiovascular System	β-blocker	Nadolol	β-blocker used to treat high blood pressure, heart pain, and atrial fibrillation.
Cardiovascular System	β-blocker	Propranolol	β-blocker used to treat hypertension, angina, supraventricular and ventricular tachyarrhythmia, acute myocardial infarction, performance anxiety, essential tremors.
Cardiovascular System	β-blocker	Sotalol	β-blocker used to treat and prevent abnormal heart rhythms.
Dermatologicals	Analgesic/anti-inflammatory	Diclofenac	Nonsteroidal anti-inflammatory drug used to relieve pain, swelling (inflammation), and joint stiffness caused by arthritis.
Dermatologicals	Analgesic/anti-inflammatory	Salicylic acid	Analgesic and anti-inflammatory in some anti-acne products used to treat dermatological mycoses. It is a precursor to, and principal metabolite of acetylsalicylic acid (aspirin).
Genito Urinary System and Sex Hormones	Analgesic/anti-inflammatory	Naproxen	Nonsteroidal anti-inflammatory drug used to treat pain, menstrual cramps, inflammatory diseases such as rheumatoid arthritis, and gout and fever.

Anatomical Therapeutic Classification	Category	Pharmaceutical compound	Therapeutic use
Genito Urinary System and Sex Hormones	Antibiotic	Metronidazole	Antibiotic used to treat bacterial infections, including infections of the reproductive system, gastrointestinal tract, respiratory system, skin, bones and joints, and other areas of the body. Metronidazole may also be used to prevent postoperative infections.
Genito Urinary System and Sex Hormones	Prostatic hyperplasia	Tamsulosin	Used to treat symptomatic benign prostatic hyperplasia and chronic prostatitis and to help with the passage of kidney stones.
Musculo-Skeletal System	Analgesic/anti-inflammatory	Ketoprofen	Nonsteroidal anti-inflammatory drug used for treating pain, fever, and inflammation. It is generally prescribed for arthritis-related inflammatory pains or severe toothaches that result in the inflammation of the gums.
Musculo-Skeletal System	Analgesic/anti-inflammatory	Meloxicam	Nonsteroidal anti-inflammatory drug used to treat pain and inflammation in rheumatic diseases and osteoarthritis.
Musculo-Skeletal System	Analgesic/anti-inflammatory	Piroxicam	Nonsteroidal anti-inflammatory drug used to relieve painful inflammatory conditions like arthritis.
Nervous System	Analgesic/anti-pyretic	Acetaminophen	Used to treat fever and mild to moderate pain, such as headaches, muscle aches, minor arthritis pain, toothache, and pain caused by colds and flu.
Nervous System	Analgesic/anti-inflammatory	Indomethacin	Nonsteroidal anti-inflammatory drug used to treat pain, such as headaches and arthritis, and fever and inflammation.
Nervous System	Analgesic/anti-inflammatory	Phenazone	Nonsteroidal anti-inflammatory drug used to treat pain, congestion and swelling caused by acute middle ear infection.
Nervous System	Psychiatric drug	Carbamazepine	Anticonvulsant used primarily in the treatment of epilepsy and neuropathic pain, but also used to treat schizophrenia and bipolar disorder along with other medications.
Nervous System	Psychiatric drug	10,11-Epoxy-carbamazepine	Metabolite of carbamazepine.
Nervous System	Psychiatric drug	2-Hydroxy carbamazepine	Metabolite of carbamazepine.
Nervous System	Psychiatric drug	Acridone	Acridone constitutes the scaffold of some synthetic compounds with diverse pharmacological activities.
Nervous System	Psychiatric drug	Alprazolam	Tranquilizer used to treat anxiety and panic disorders.
Nervous System	Psychiatric drug	Citalopram	Antidepressant used to treat major depressive disorder, obsessive compulsive disorder, panic disorder, and social phobia.
Nervous System	Psychiatric drug	Diazepam (Valium)	Anxiolytic used to treat a range of conditions, including anxiety, seizures, alcohol withdrawal syndrome, benzodiazepine withdrawal syndrome, muscle spasms, insomnia, and restless legs syndrome.

Anatomical Therapeutic Classification	Category	Pharmaceutical compound	Therapeutic use
Nervous System	Psychiatric drug	Fluoxetine	Anti-depressant used to treat major depressive disorder, obsessive–compulsive disorder, bulimia nervosa, panic disorder, and premenstrual dysphoric disorder.
Nervous System	Psychiatric drug	Lorazepam	Anxiolytic used to treat anxiety disorders, trouble sleeping, severe agitation, active seizures including status epilepticus, alcohol withdrawal, and chemotherapy-induced nausea and vomiting.
Nervous System	Psychiatric drug	Norfluoxetine	Anti-depressant used to treat clinical depression (including paediatric depression), obsessive-compulsive disorder, bulimia nervosa, anorexia nervosa, panic disorder and premenstrual dysphoric disorder; metabolite of fluoxetine.
Nervous System	Psychiatric drug	Paroxetine	Anti-depressant used to treat depression, panic attacks, obsessive-compulsive disorder (OCD), anxiety disorders, and post-traumatic stress disorder.
Nervous System	Psychiatric drug	Sertraline	Anti-depressant used to treat depression, panic attacks, obsessive compulsive disorder, post-traumatic stress disorder, social anxiety disorder (social phobia), and premenstrual dysphoric disorder.
Nervous System	Psychiatric drug	Trazodone	Anti-depressant used to treat major depressive disorder, anxiety disorders, and, with other medications, alcohol dependence.
Nervous System	Psychiatric drug	Venlafaxine	Anti-depressant used to treat major depressive disorder, generalized anxiety disorder, panic disorder, and social phobia.
Respiratory System	Analgesic/anti-inflammatory	Codeine	Opioid analgesic and anti-inflammatory used to treat mild to moderate pain that is not relieved by non-opiate analgesics, including post-dental surgical pain, and coughing and diarrhoea.
Respiratory System	Bronchodilator	Salbutamol	A bronchodilator that opens the medium and large airways in the lungs and is used to treat asthma, exercise induced bronchoconstriction, chronic obstructive pulmonary disease.
Respiratory System	Histamine receptor antagonist	Desloratadine	Antihistamine used to relieve allergy symptoms, nasal congestion, and chronic idiopathic urticaria (hives). It may also be used to treat acne.
Sensory Organs, Ophthalmologic	Antibiotic	Ciprofloxacin	Antibiotic used to treat bacterial infections, including bone and joint infections, intra-abdominal infections, certain types of infectious diarrhoea, respiratory tract infections, skin infections, typhoid fever, and urinary tract infections.
Sensory Organs, Ophthalmologic	Antibiotic	Ofloxacin	Antibiotic used to treat bacterial infections, including pneumonia and infections of the skin, bladder, reproductive organs, prostate, eyes, and ears. In South Africa, used to treat multi drug resistant tuberculosis.
Various	X-ray contrast agent	Iopromide	An X-ray contrast agent used during various types of imaging tests, such as angiography and contrast computed tomography (CT) imaging tests.

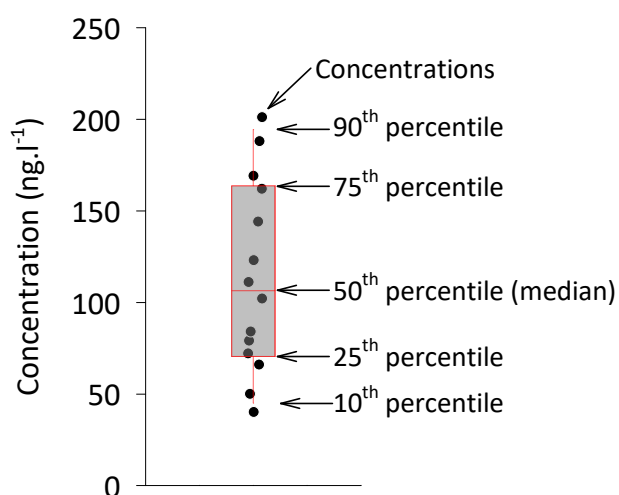


Figure 2. Schematic of a box-and-whisker plot. The box covers the interval between the 25th and 75 percentiles. The horizontal line that divides the box in two is the 50th percentile, or median (middle measurement). The whiskers are the lines outside the box that go from the 10th to the 25th percentile (start of the box) and then from the 75th percentile (end of the box) to the 90th percentile. The concentrations that the box and whisker plot summarises are overlaid on the plot (solid symbols).

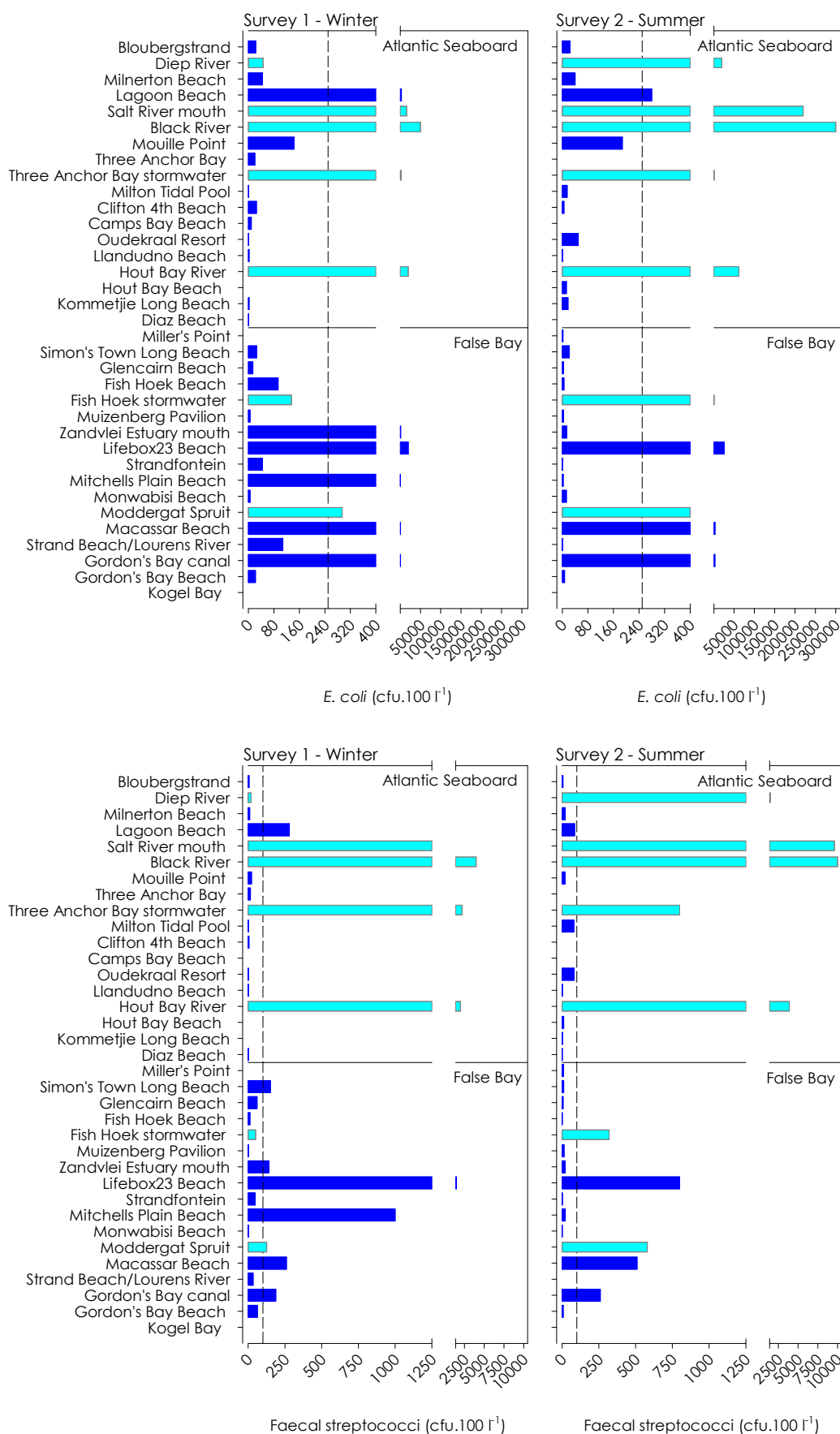


Figure 3. *E. coli* and faecal streptococci bacteria colony forming unit counts in water sampled in the City of Cape Town on the 24th of August and 7th of December 2021. The vertical dashed lines represent the guideline for an excellent water quality rating as per the South African Water Quality Guidelines Coastal Marine Waters: Recreational Use (DEA, 2012).

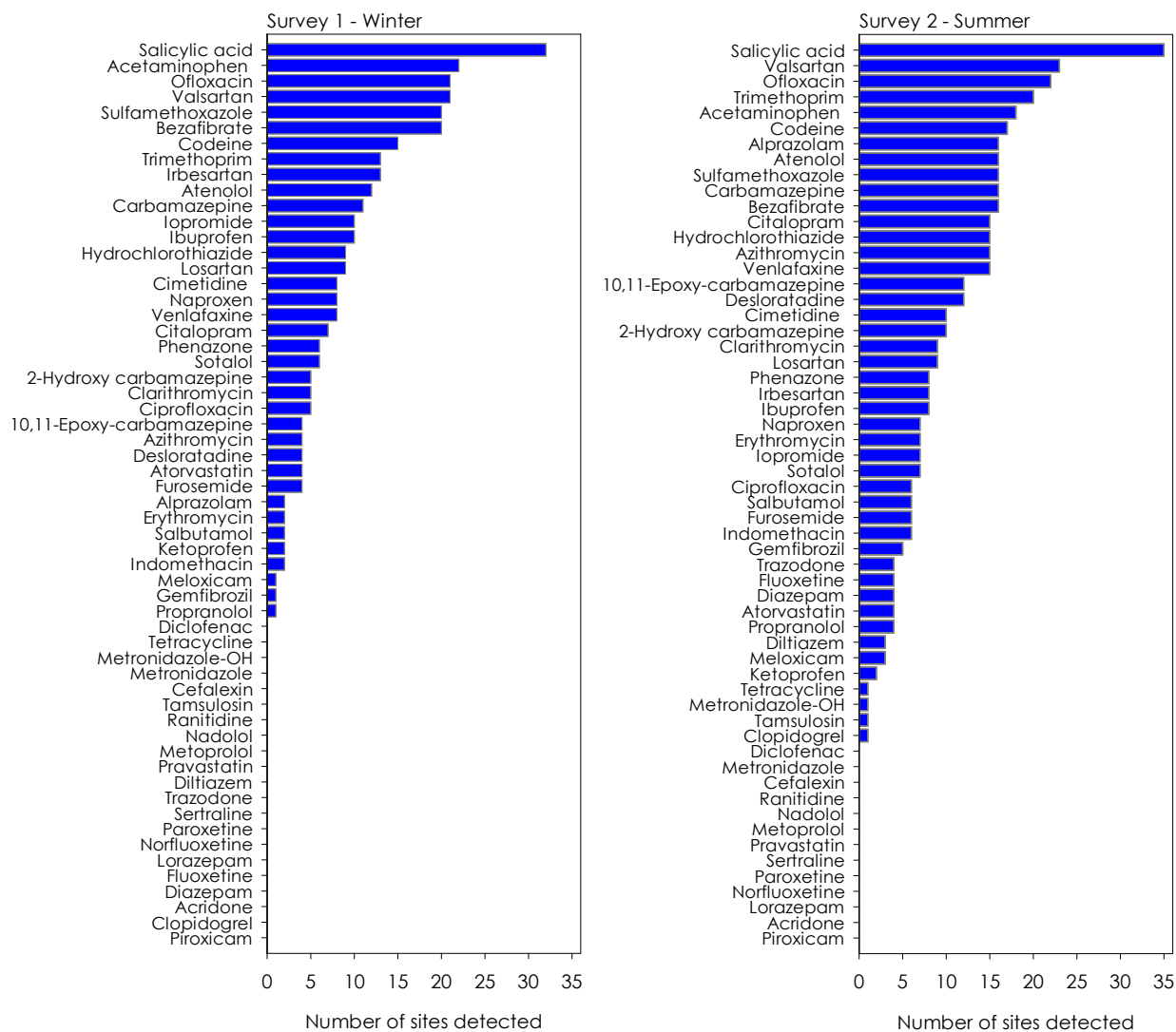


Figure 4. The number of sites at which each pharmaceutical compound was found at a quantifiable concentration in water sampled in the City of Cape Town on the 24th of August and 7th of December 2021.

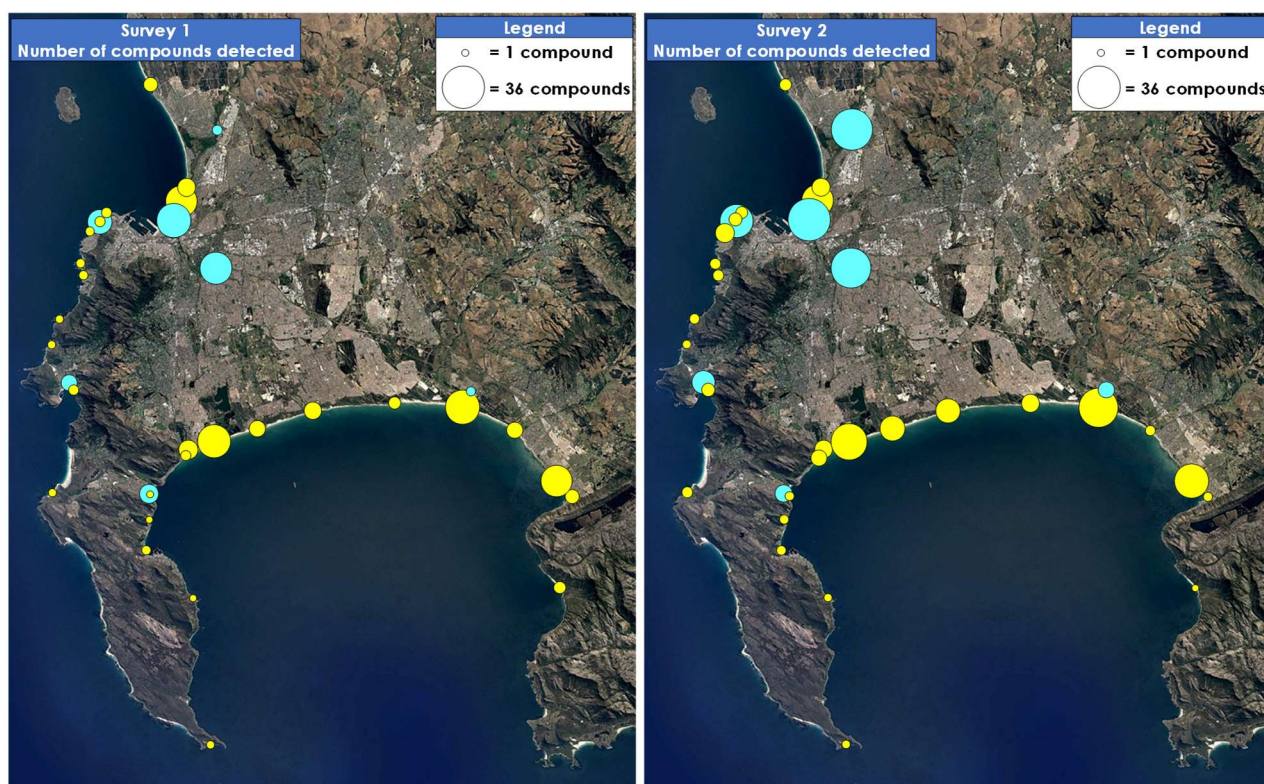
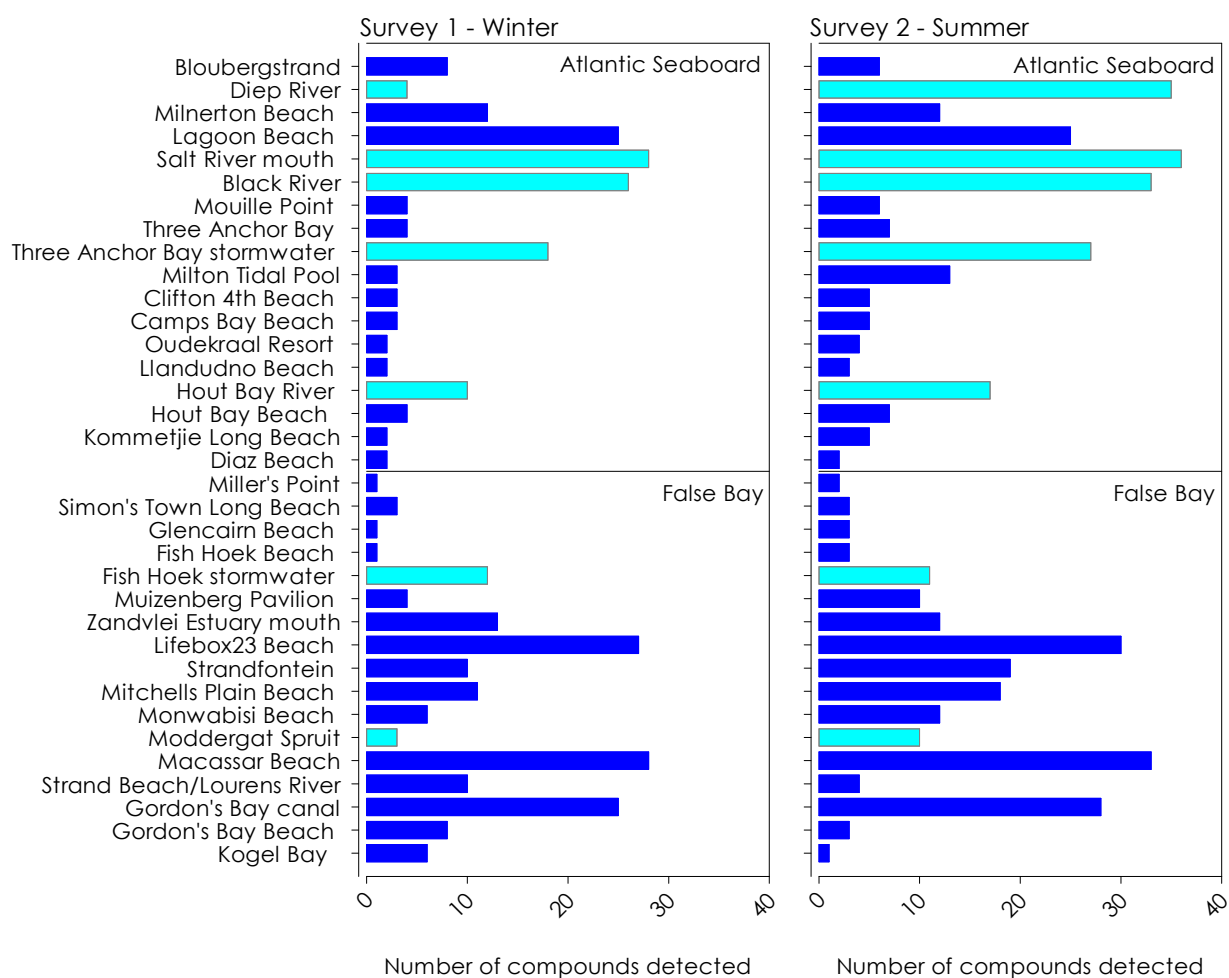


Figure 5. The number of pharmaceutical compounds found at a quantifiable concentration in water sampled in the City of Cape Town on the 24th of August and 7th of December 2021.

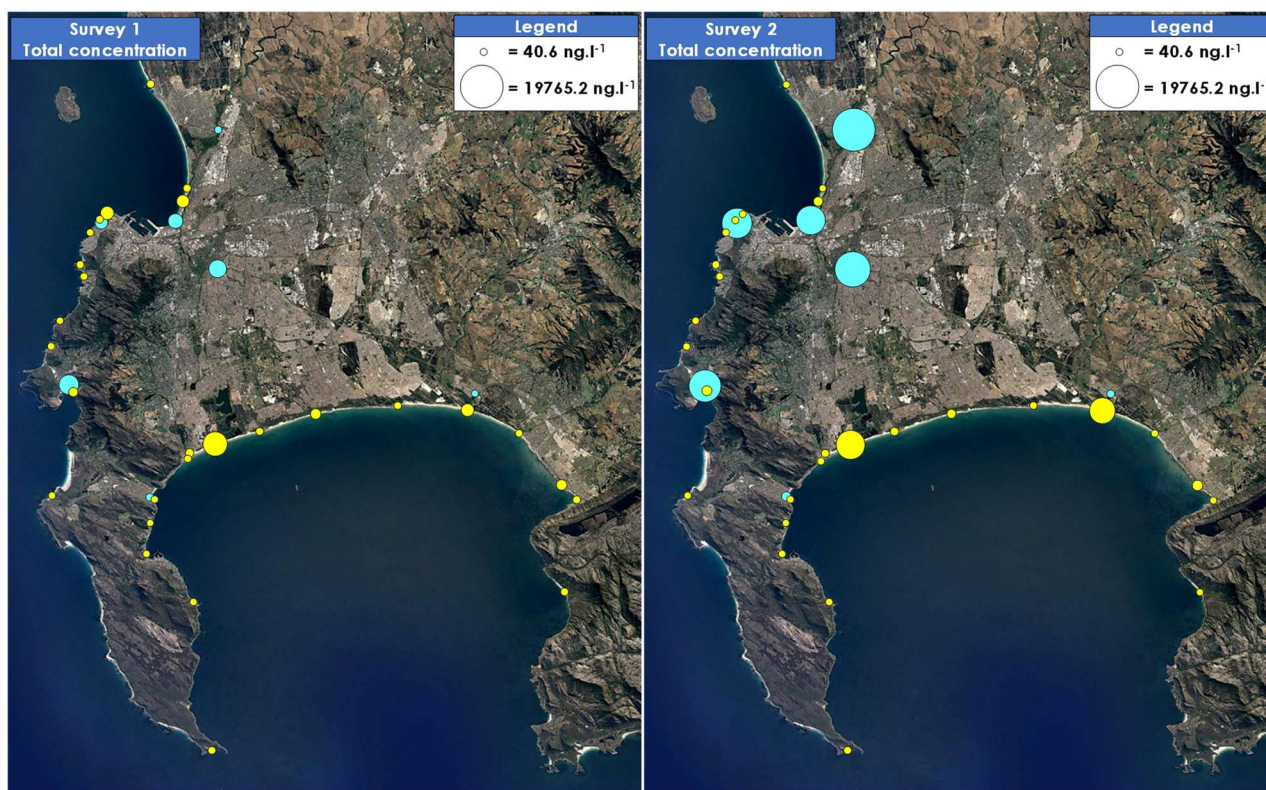
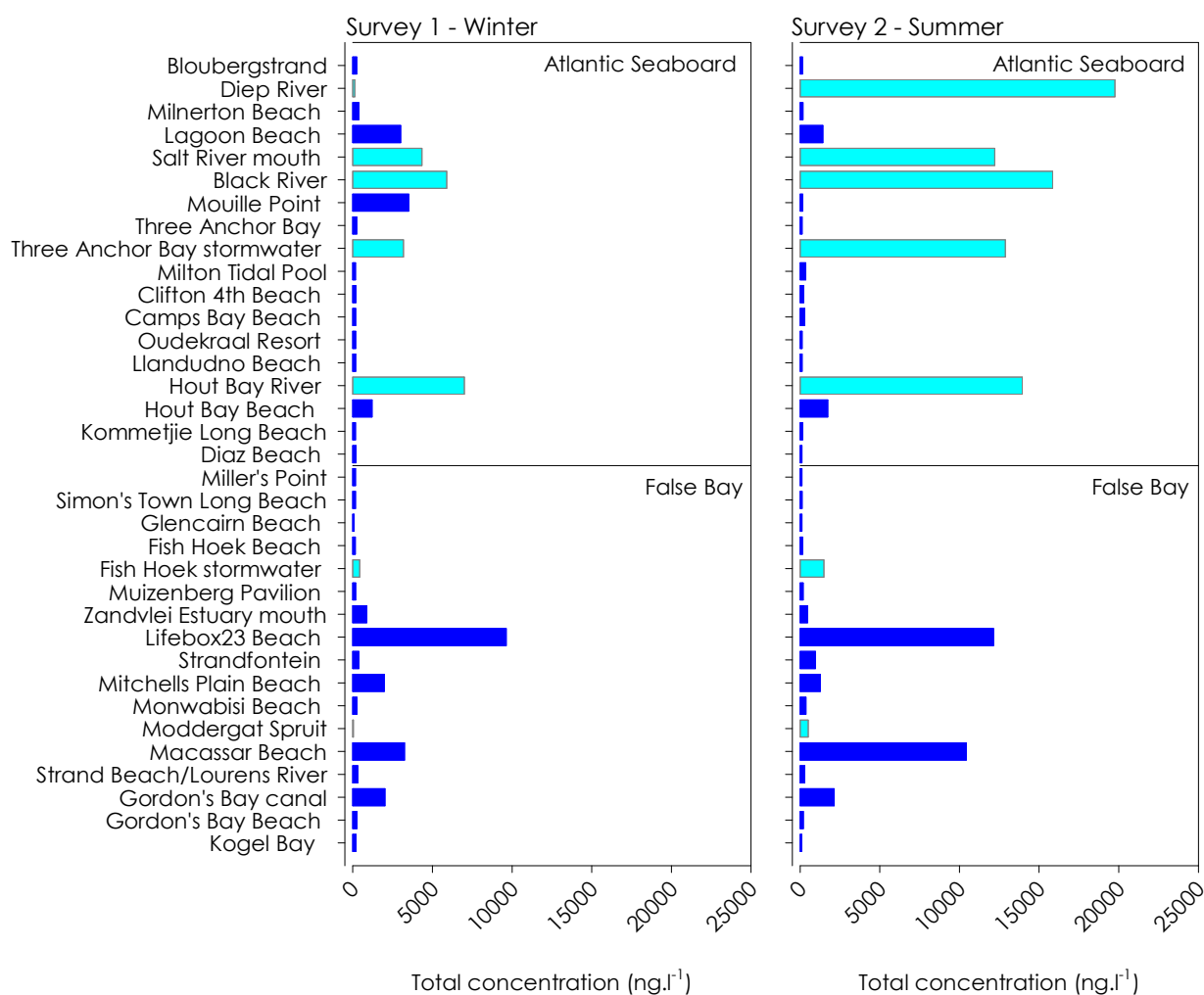


Figure 6. The total concentration of pharmaceutical compounds found at a quantifiable concentration in water sampled in the City of Cape Town on the 24th of August and 7th of December 2021.

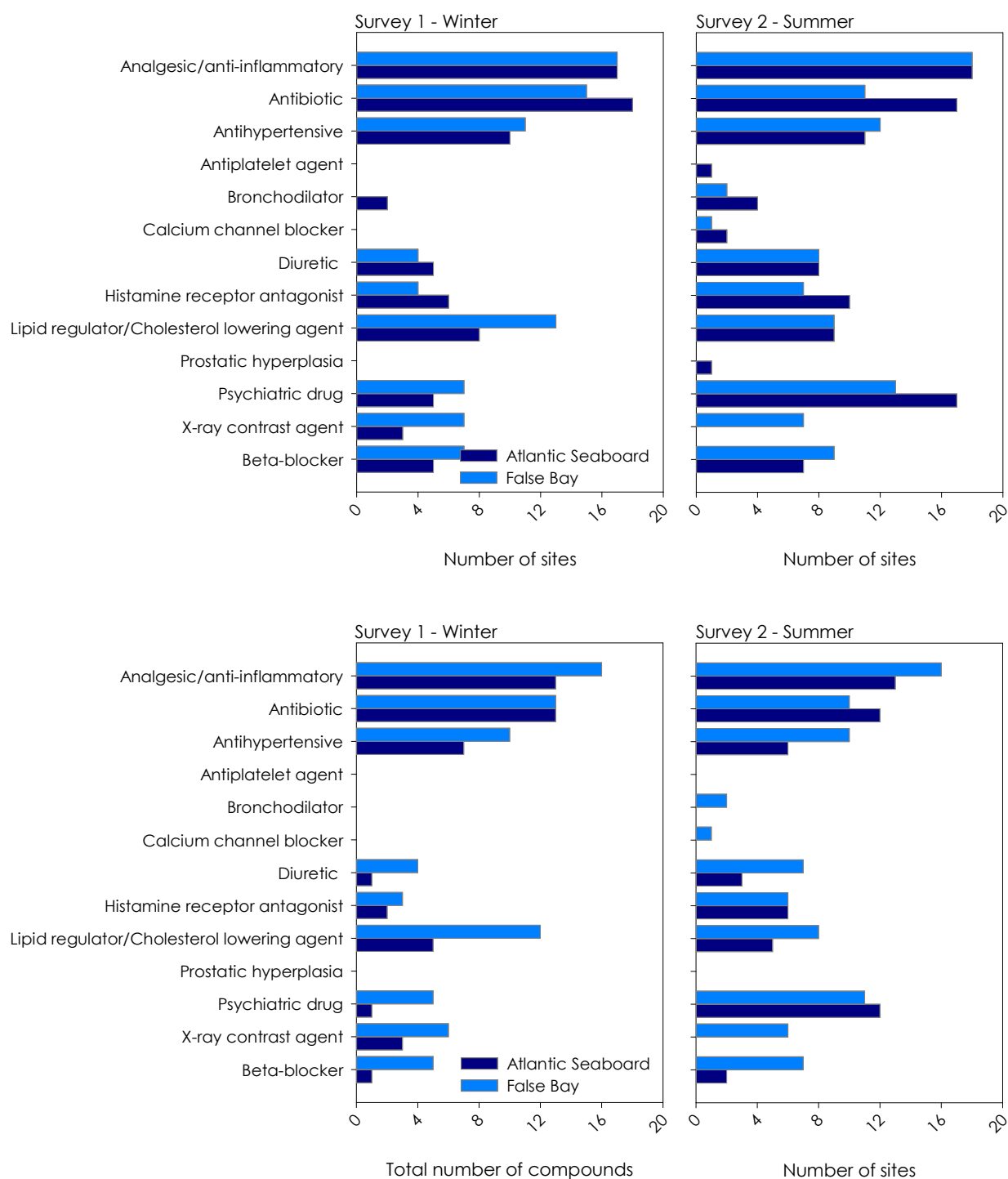


Figure 7. The number sites on the Atlantic Seaboard and False Bay coast at which pharmaceutical compounds falling into different therapeutic use classes were detected, considering all sites (top) and only coastal sites (bottom).

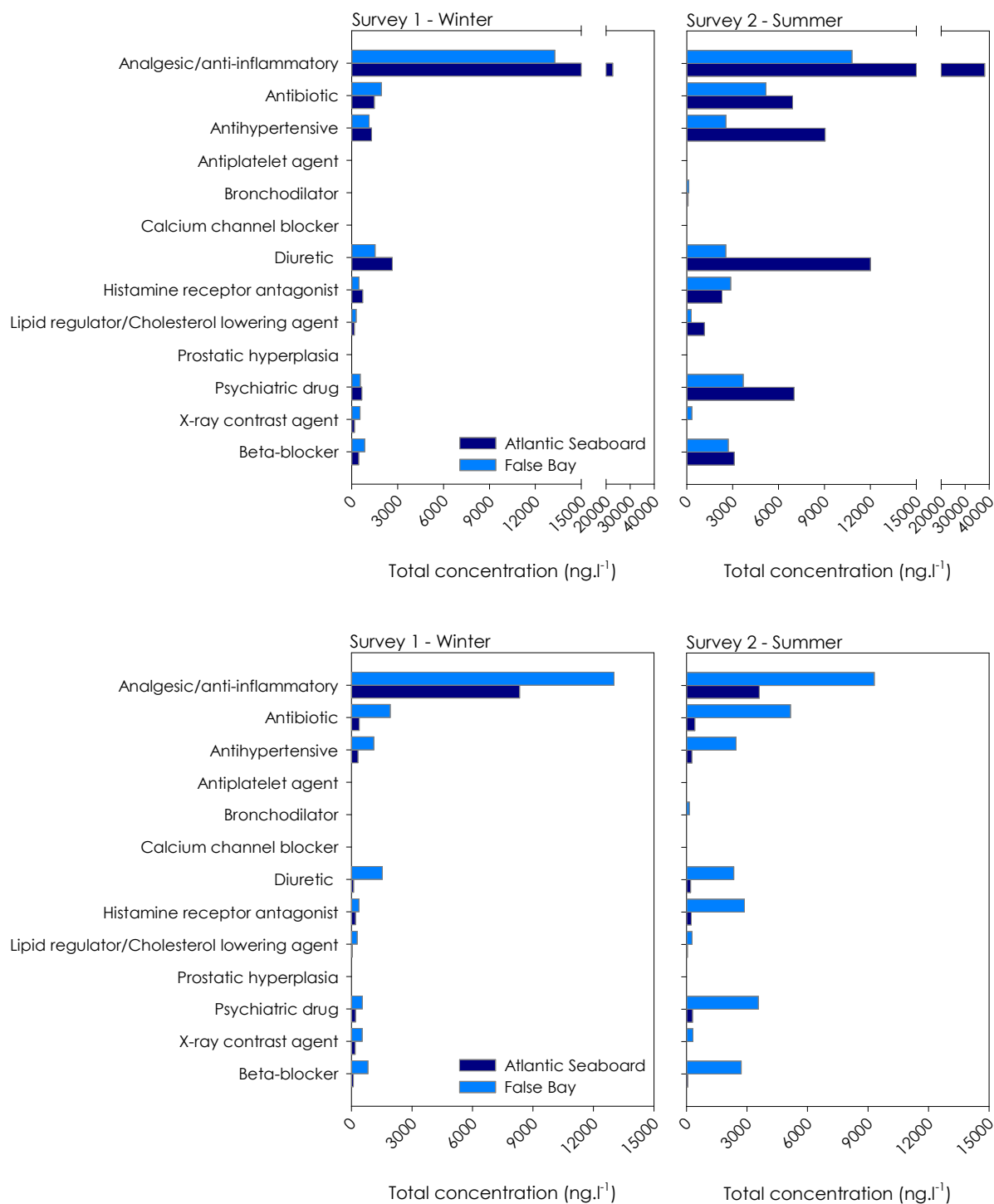
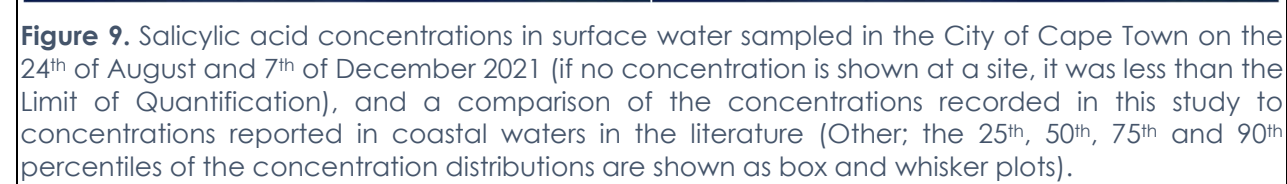
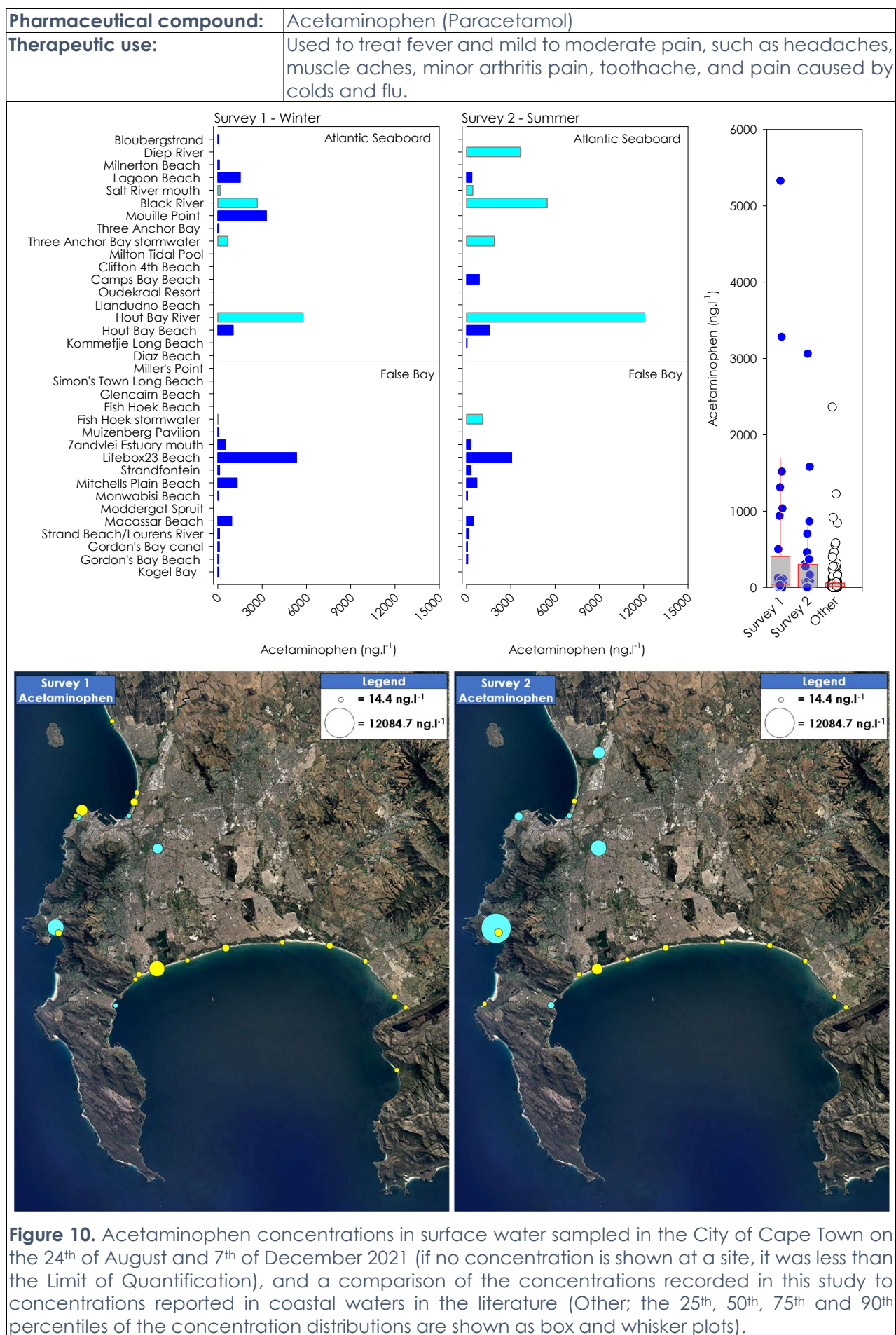
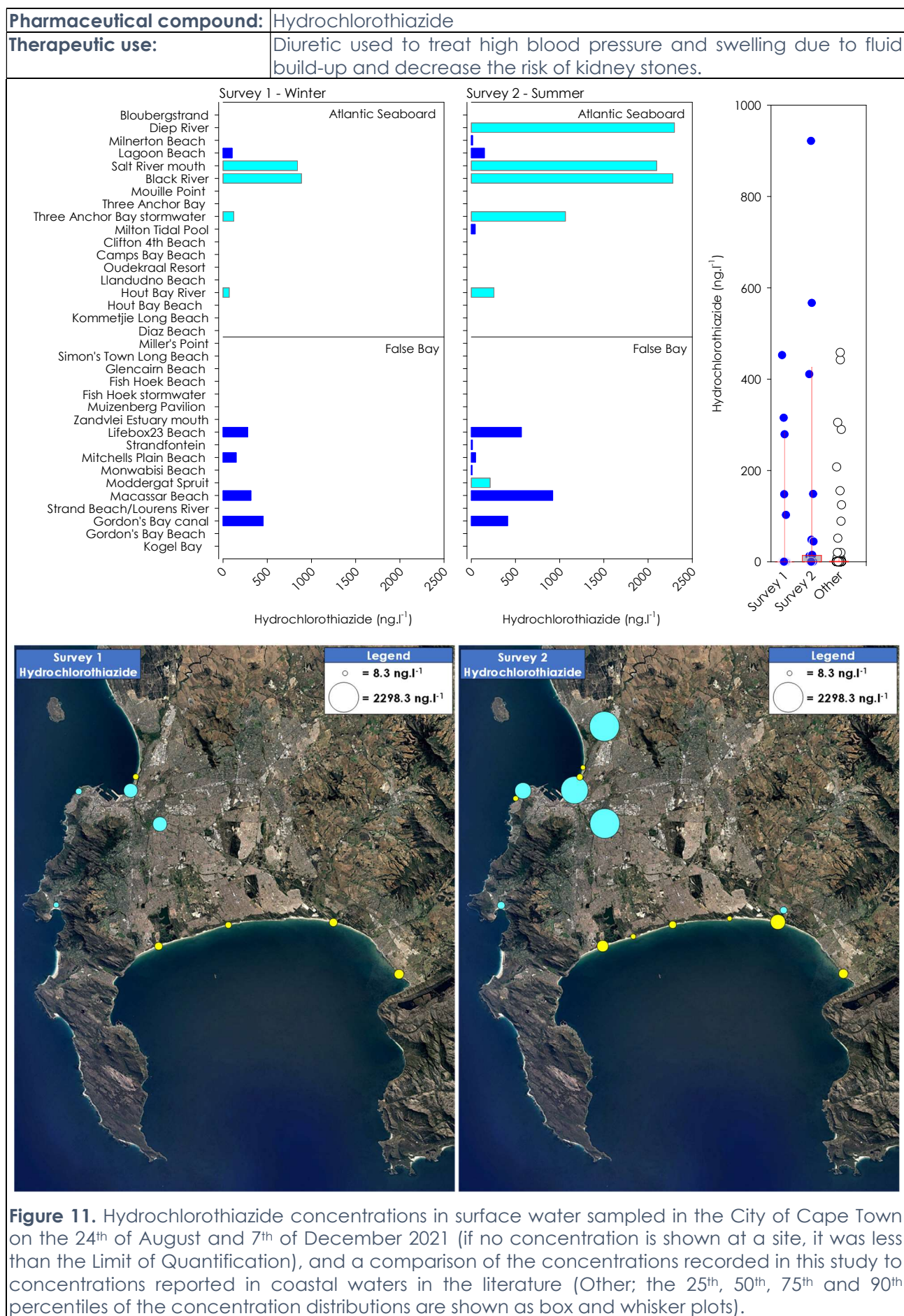
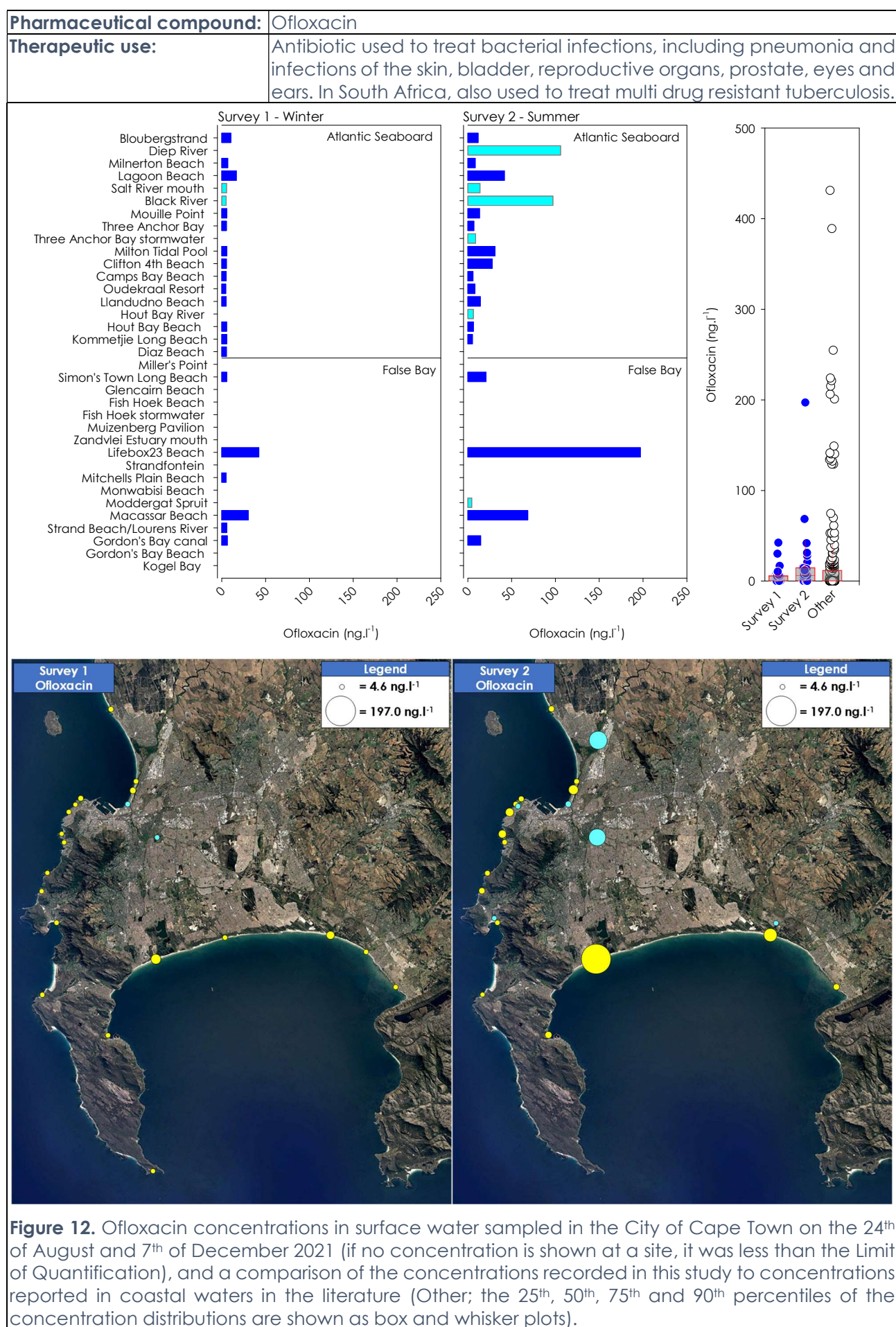


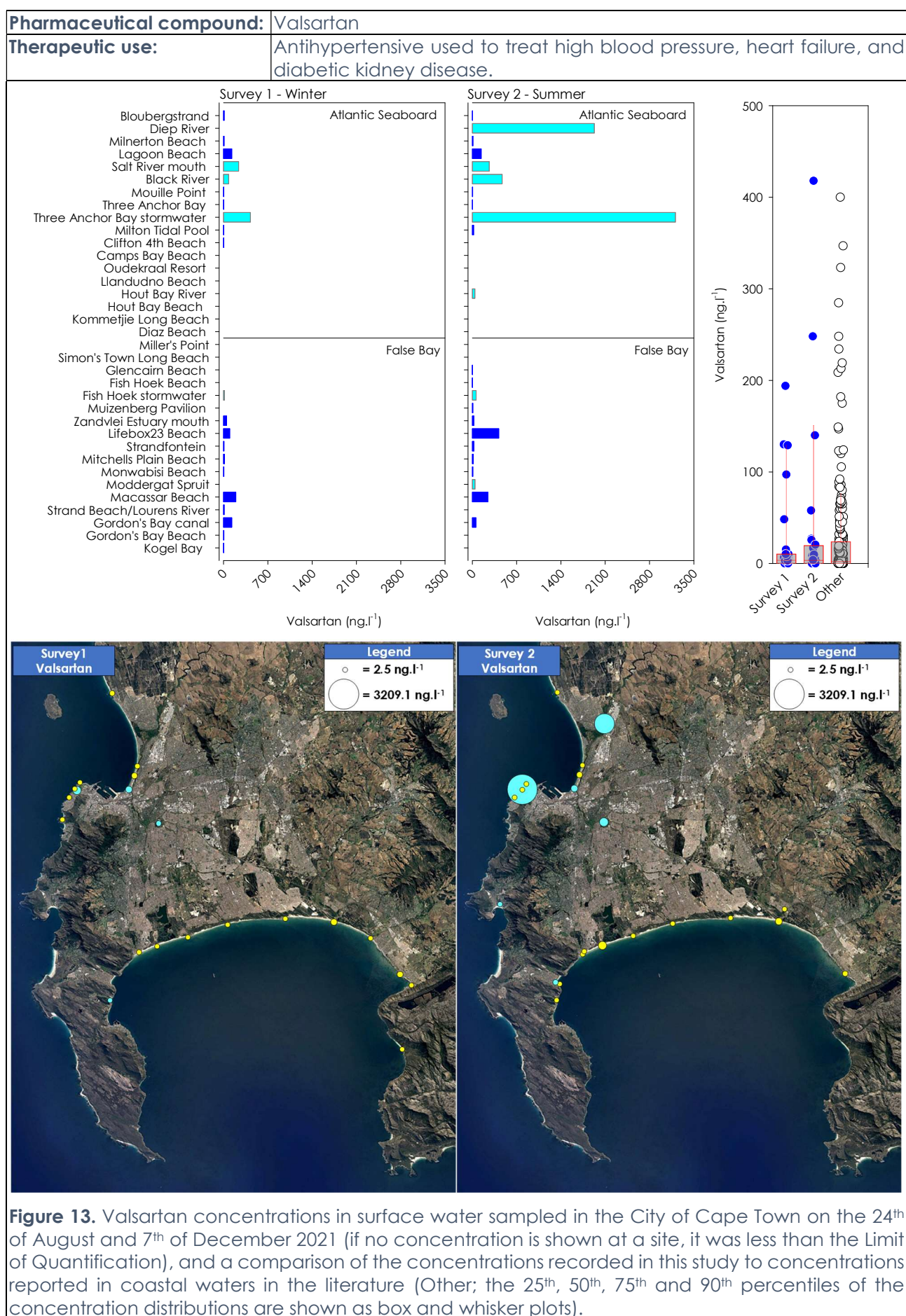
Figure 8. The total concentration for different therapeutic use classes of pharmaceutical compounds at sites on the Atlantic Seaboard and False Bay coast, considering all sites (top) and only coastal sites (bottom).

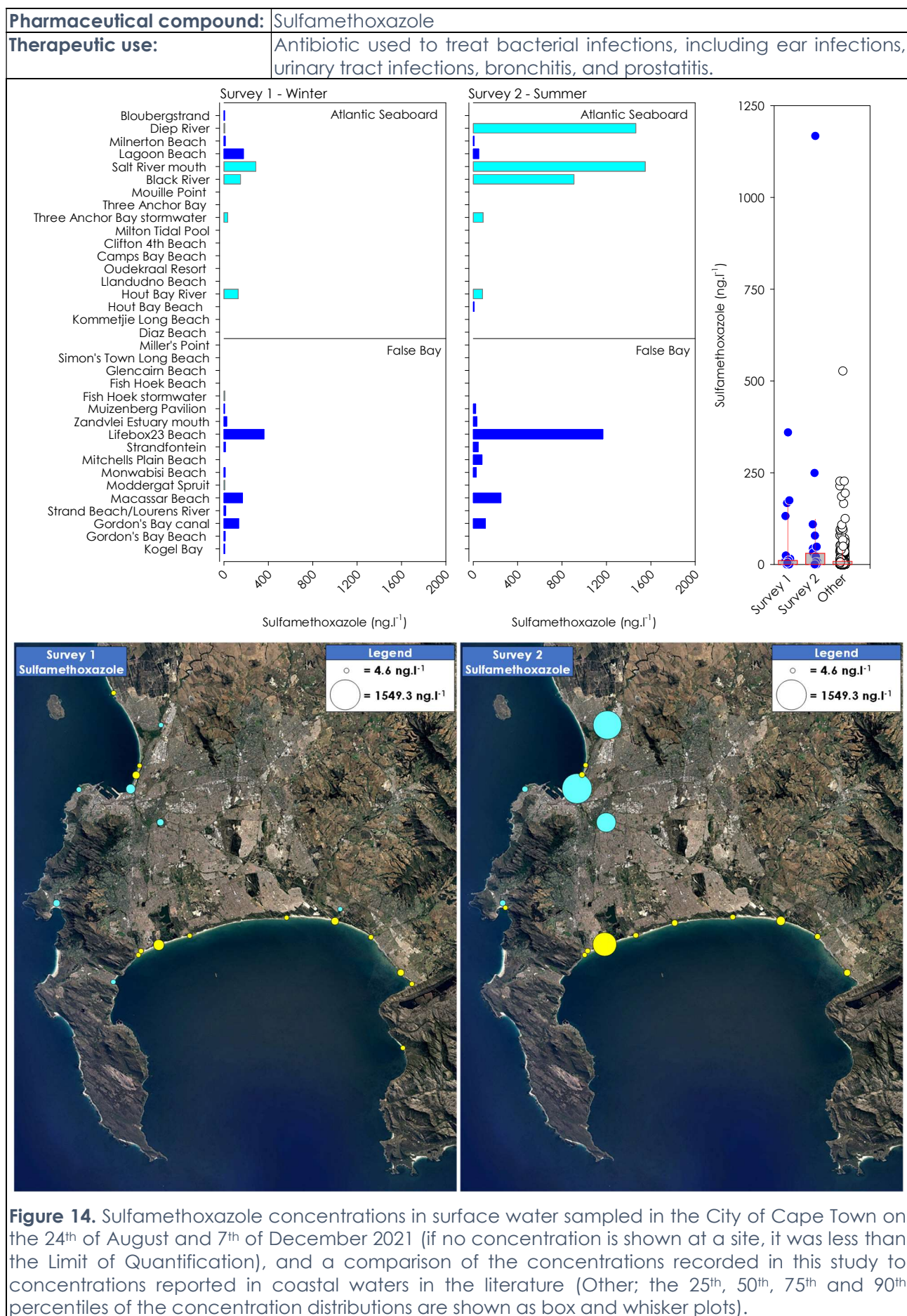


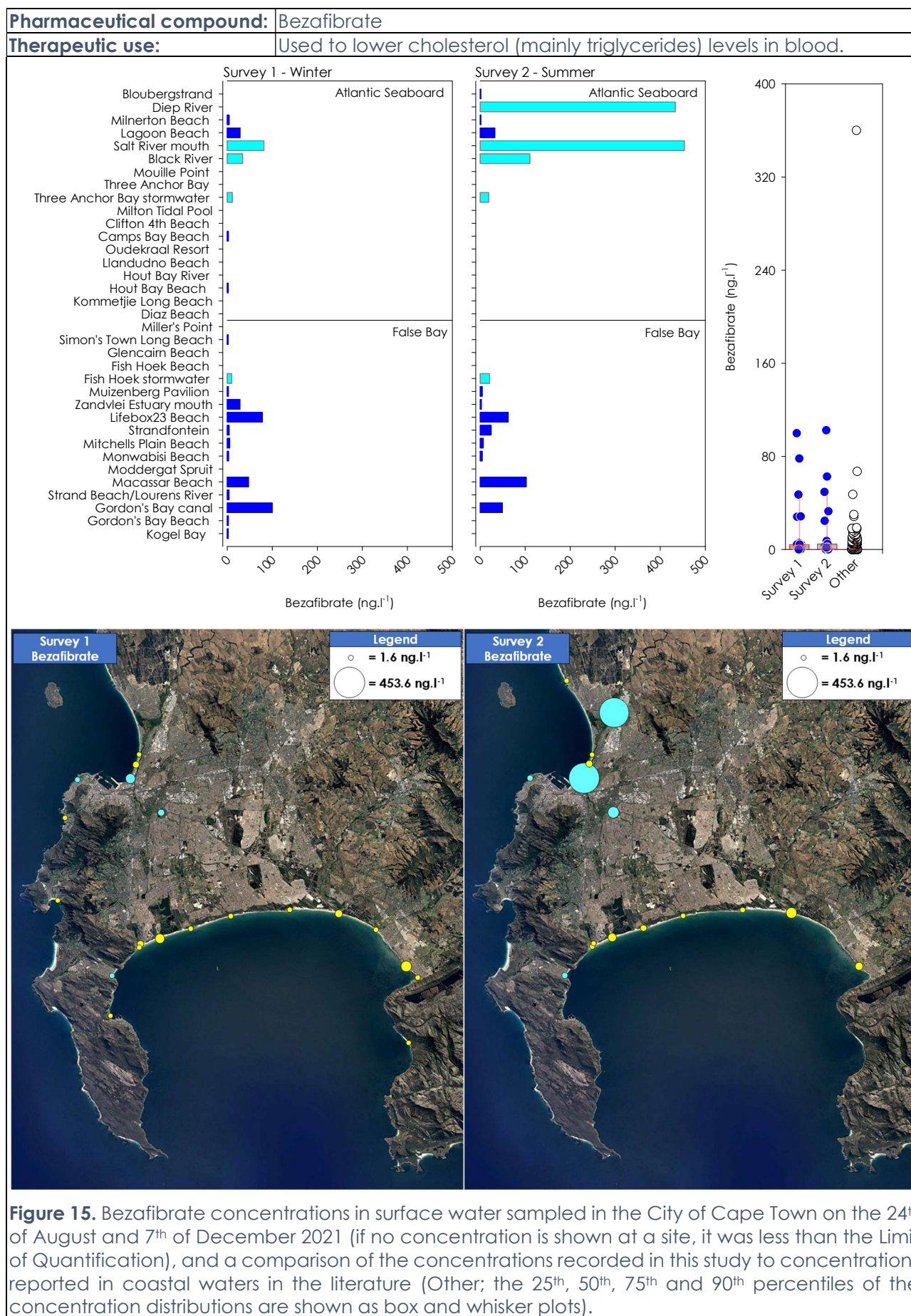


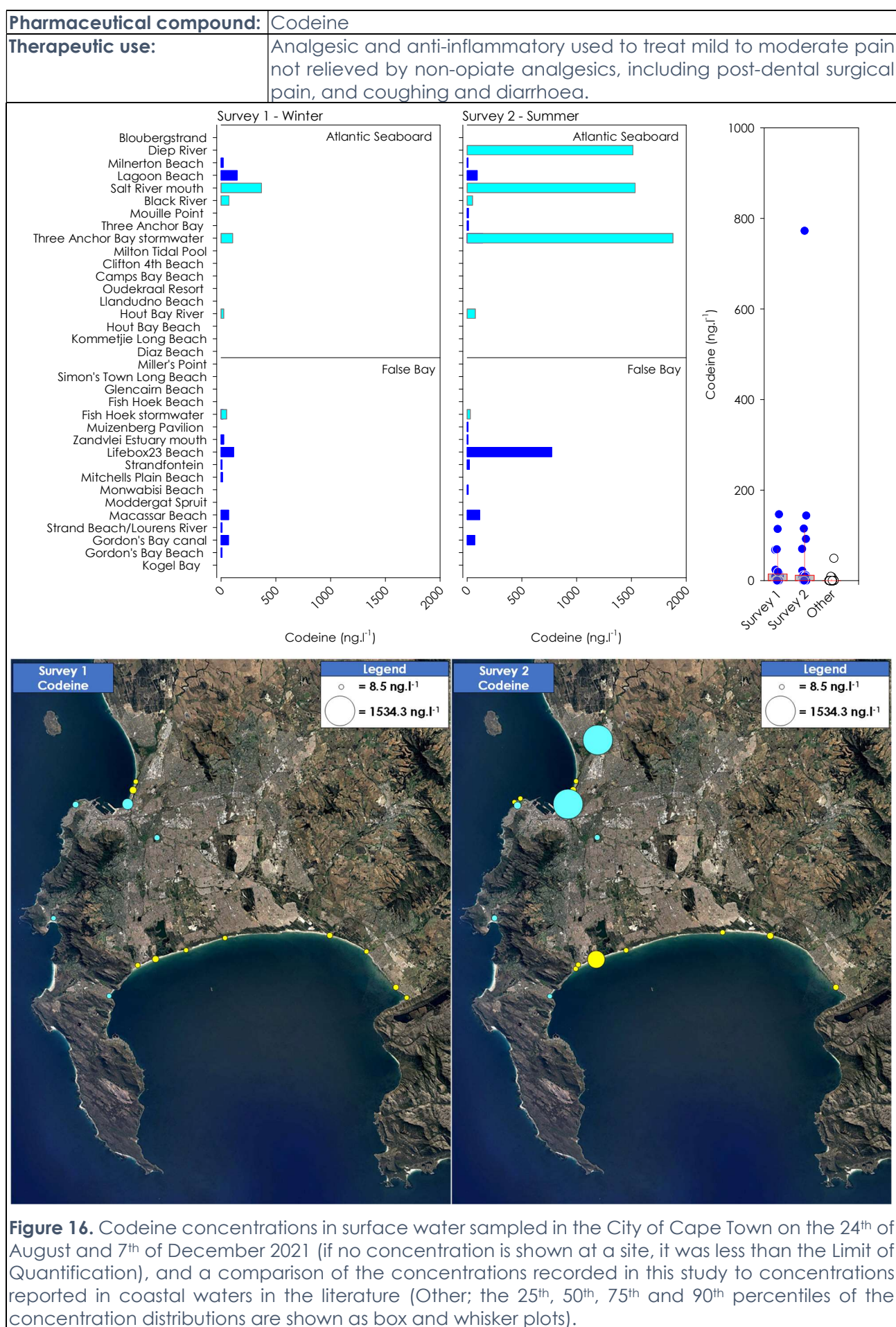


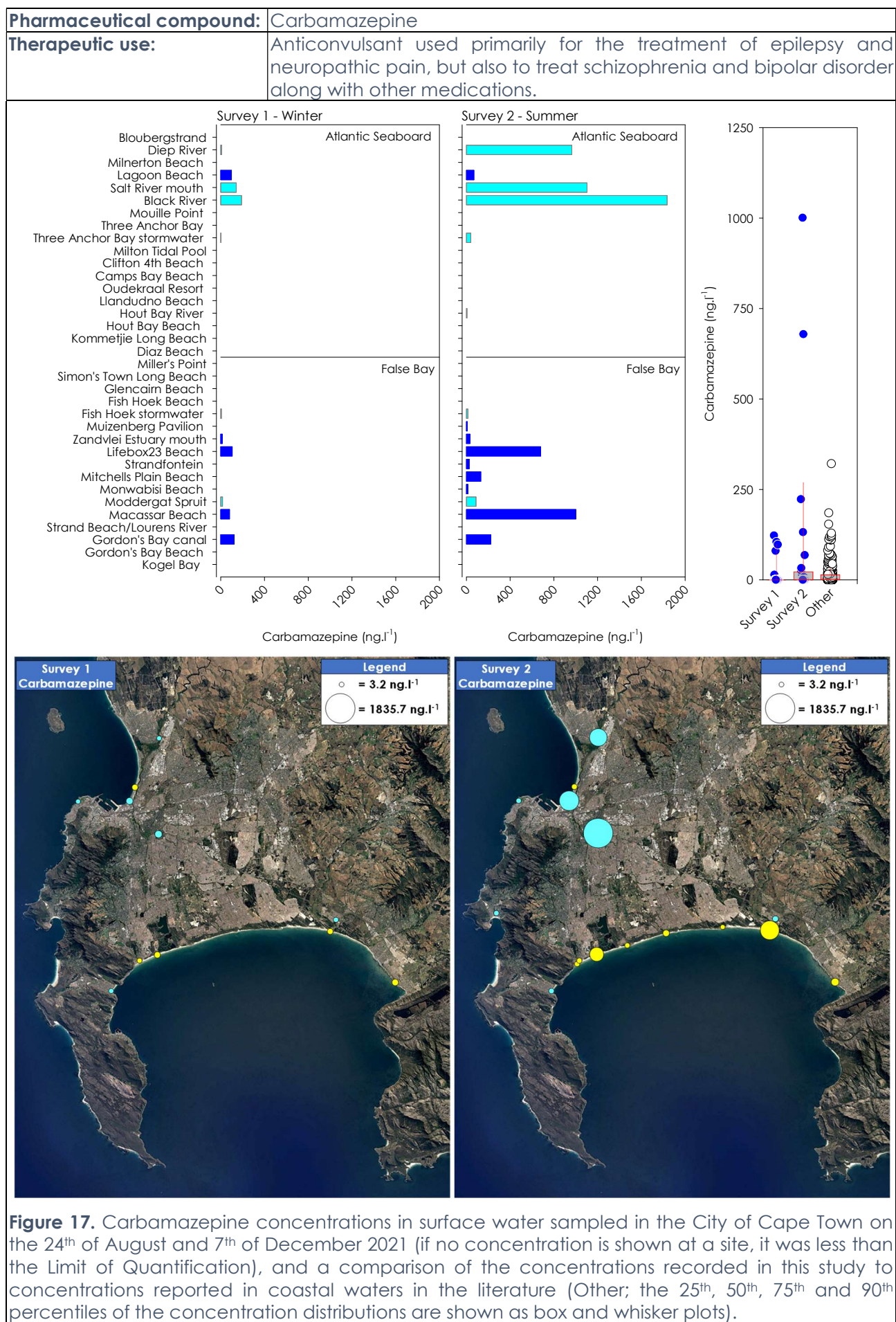


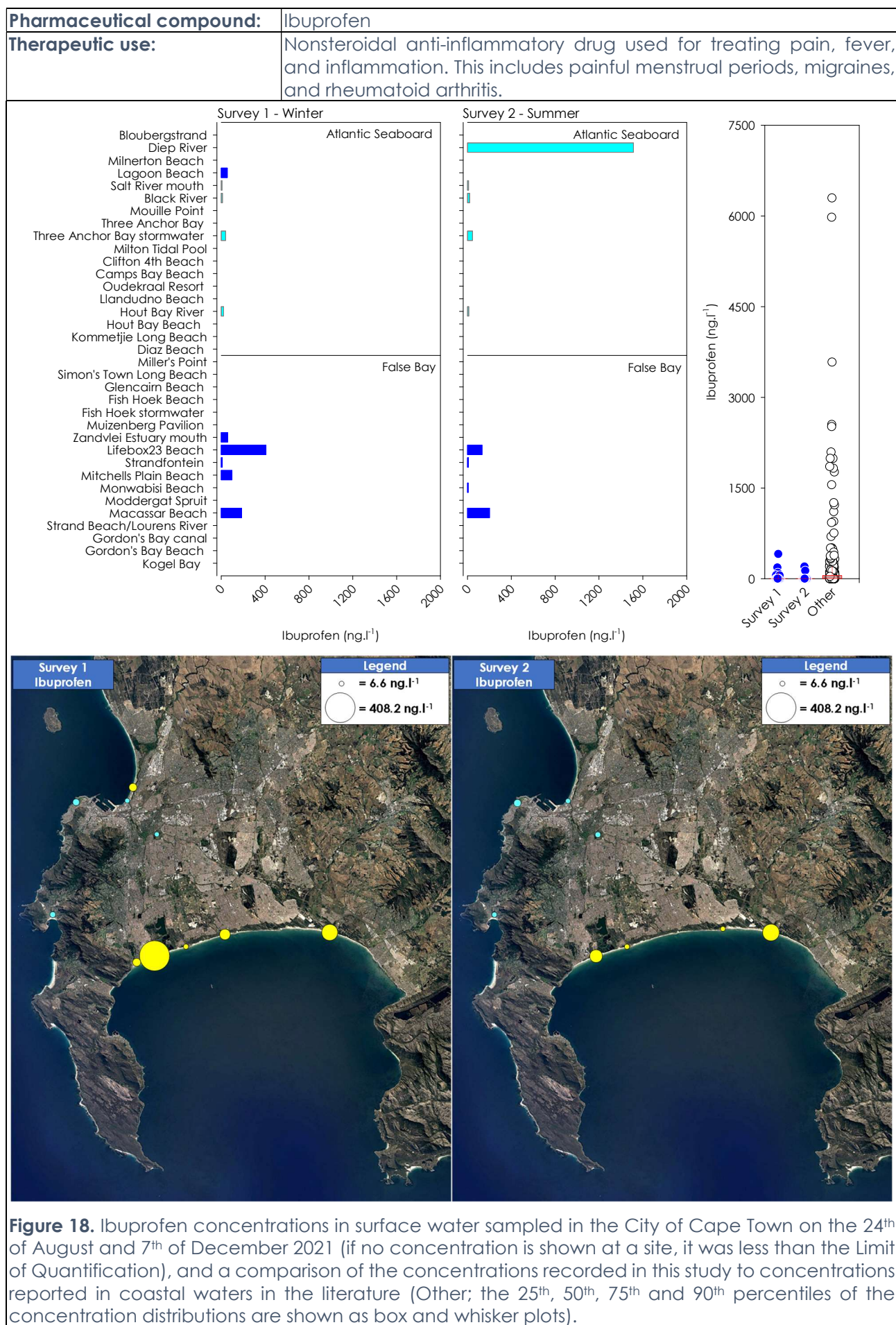


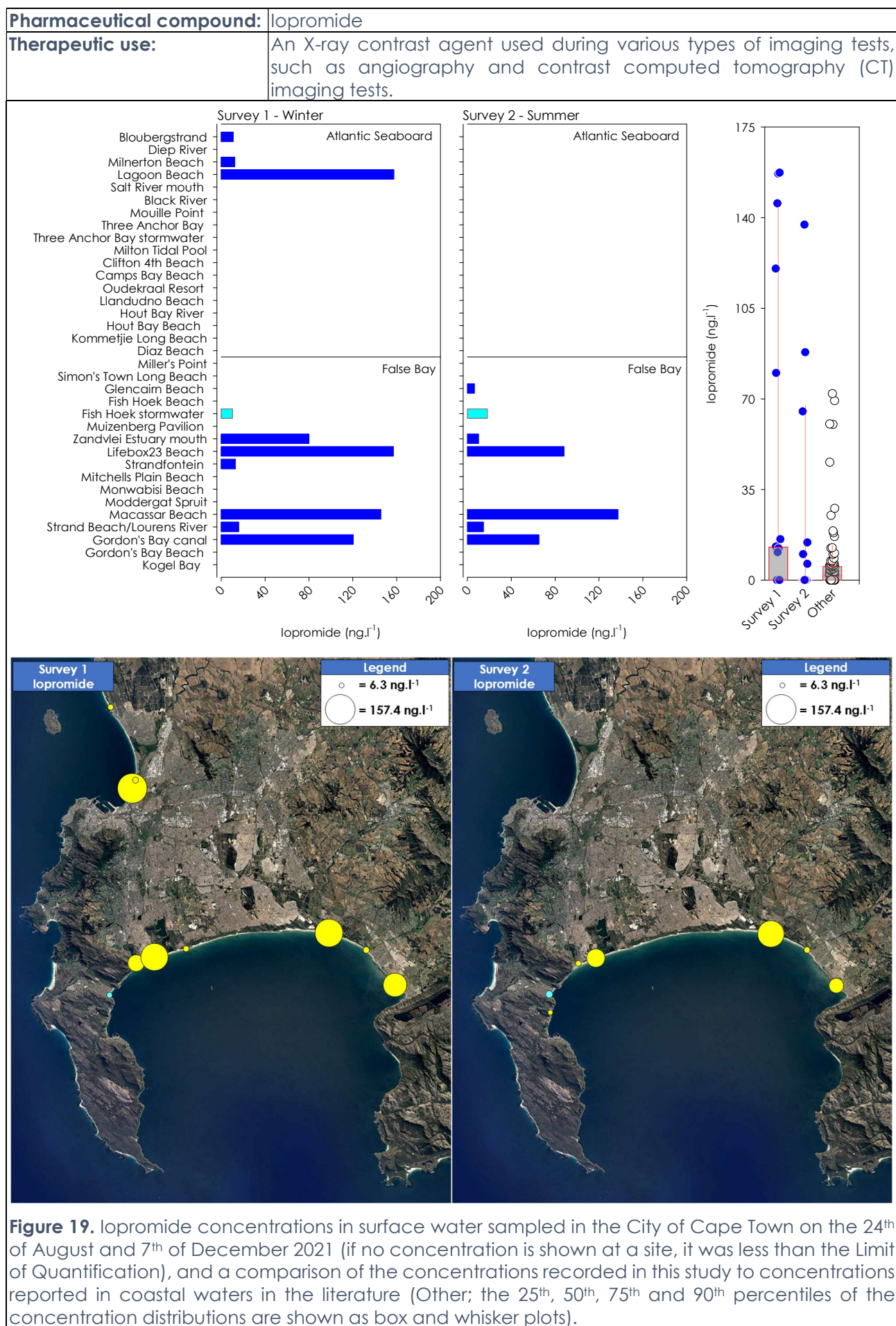


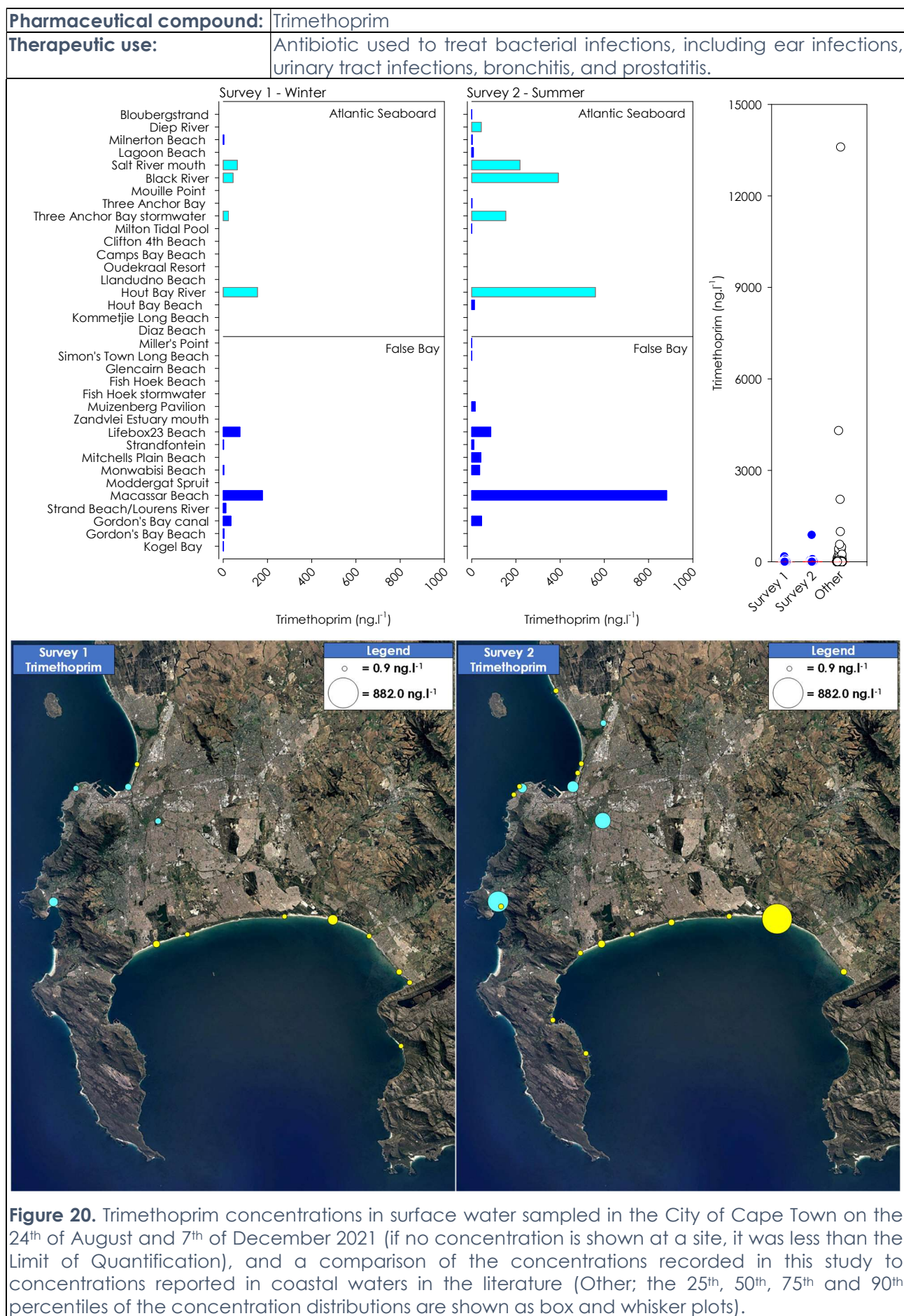


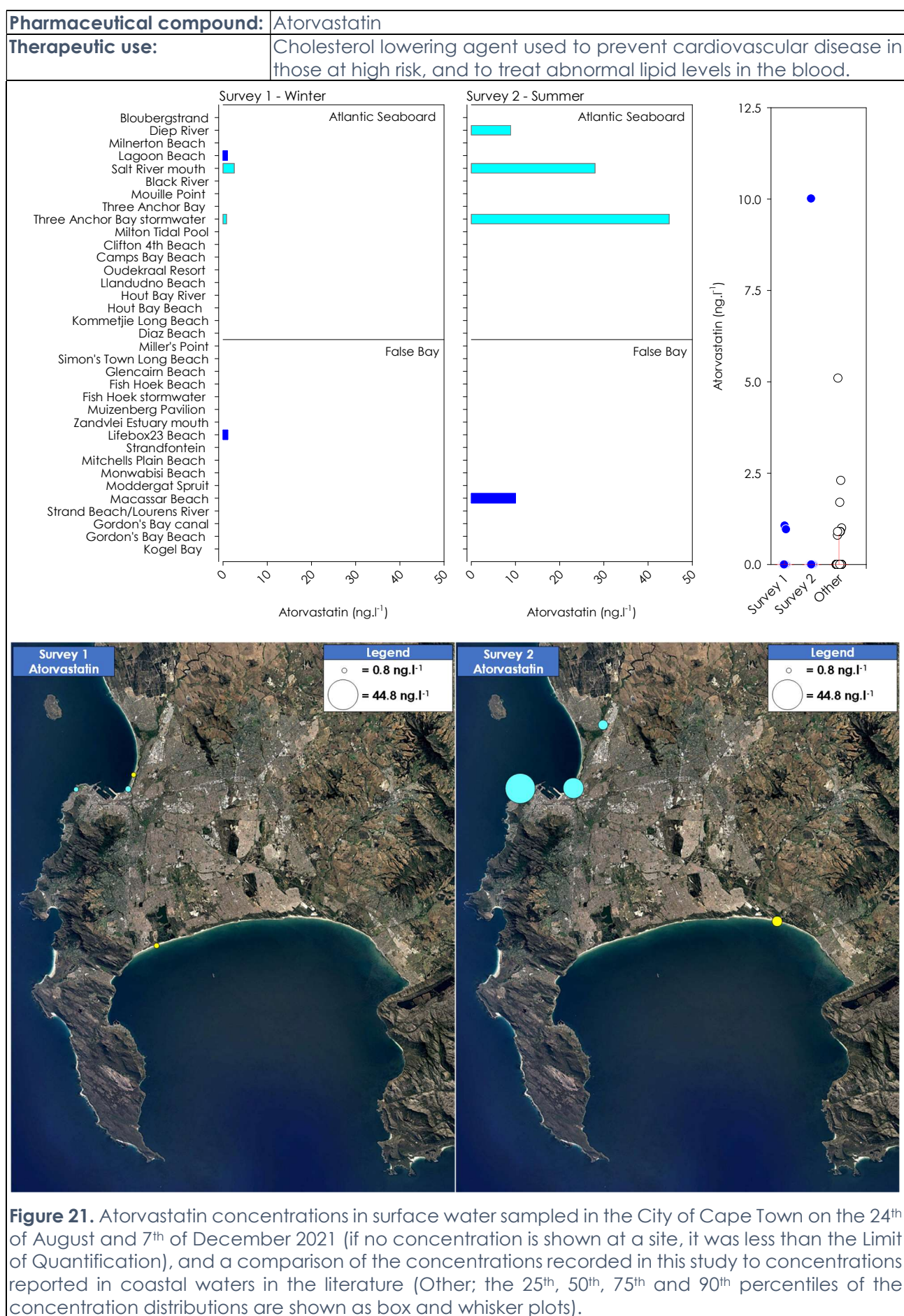


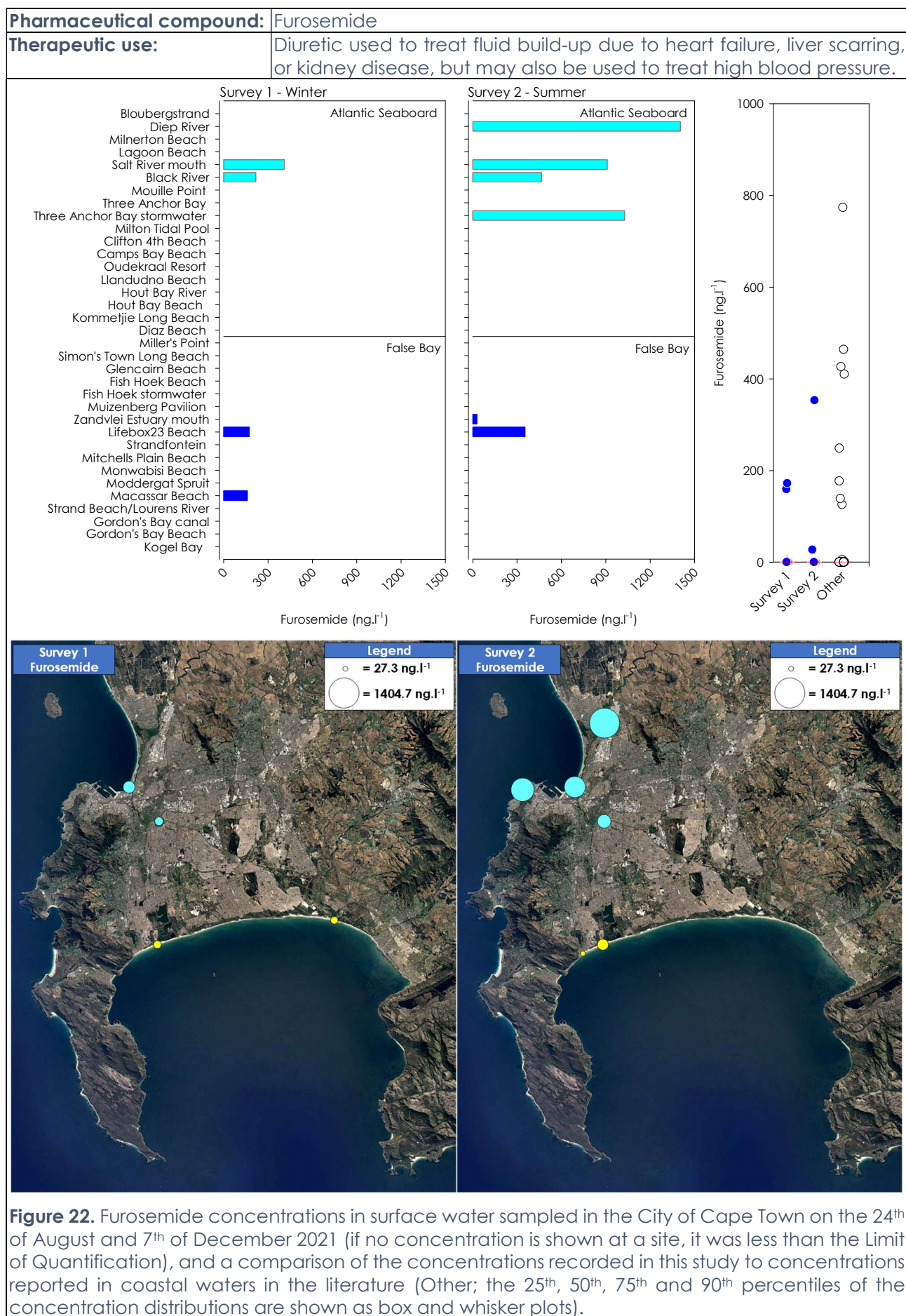


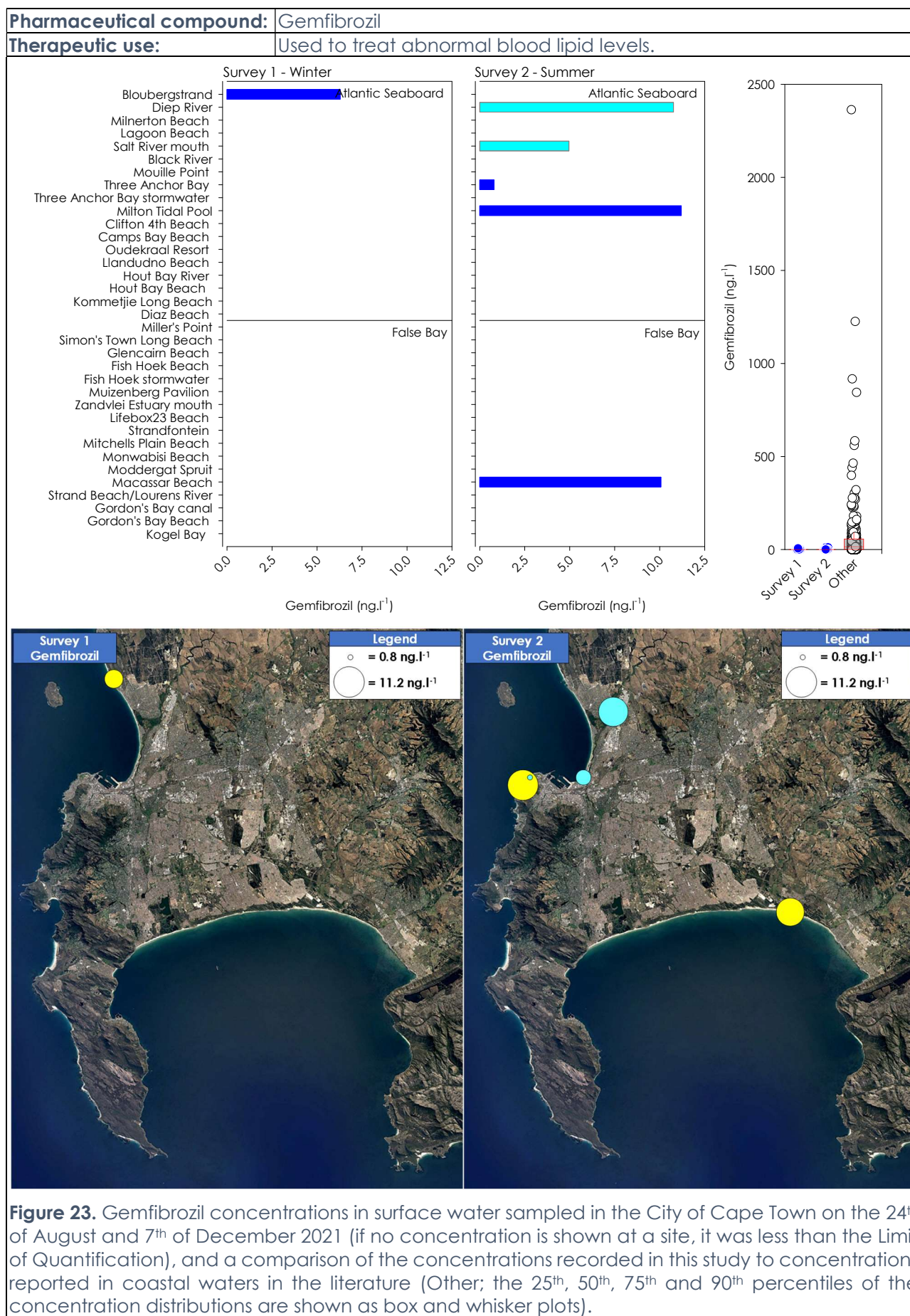


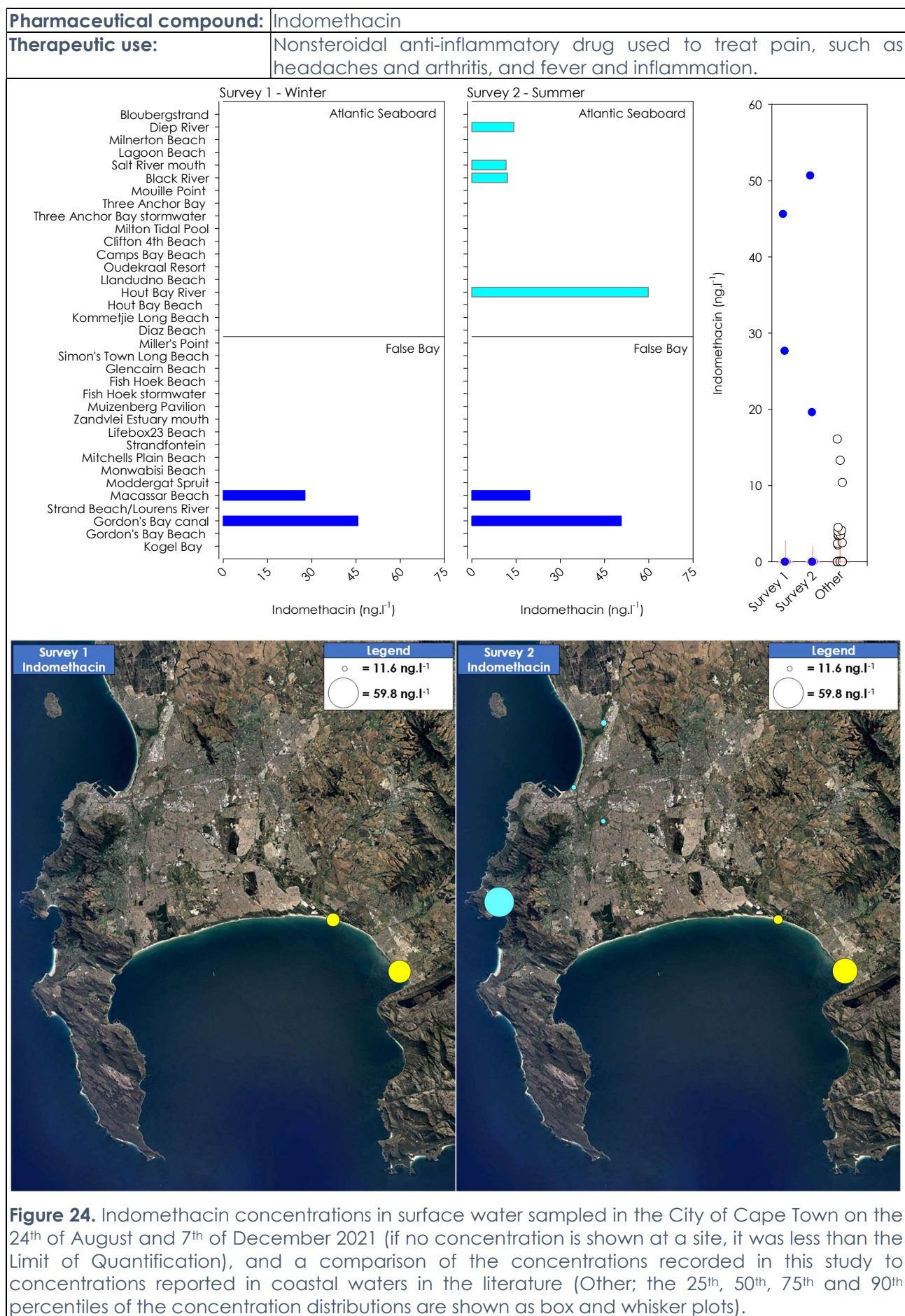


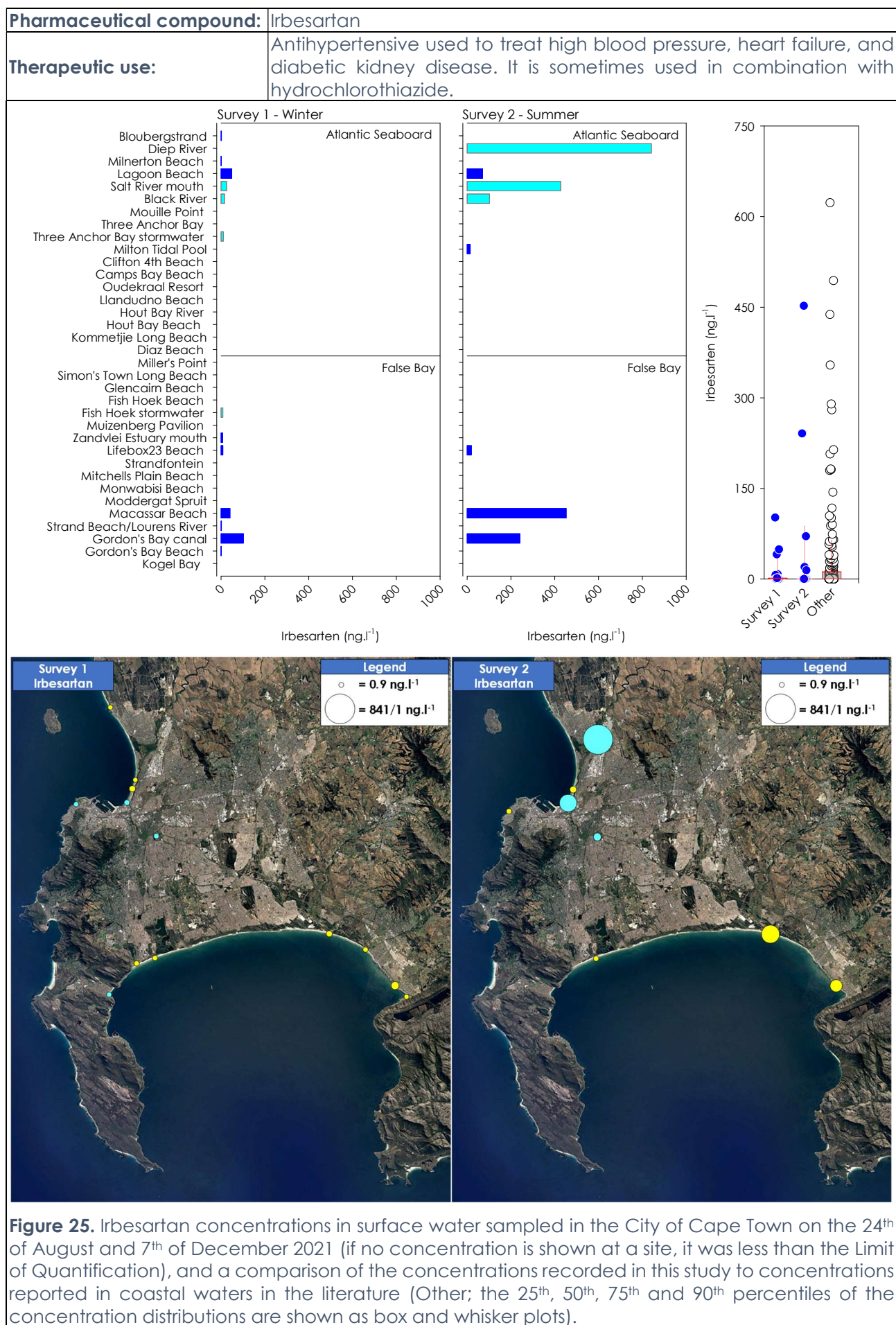












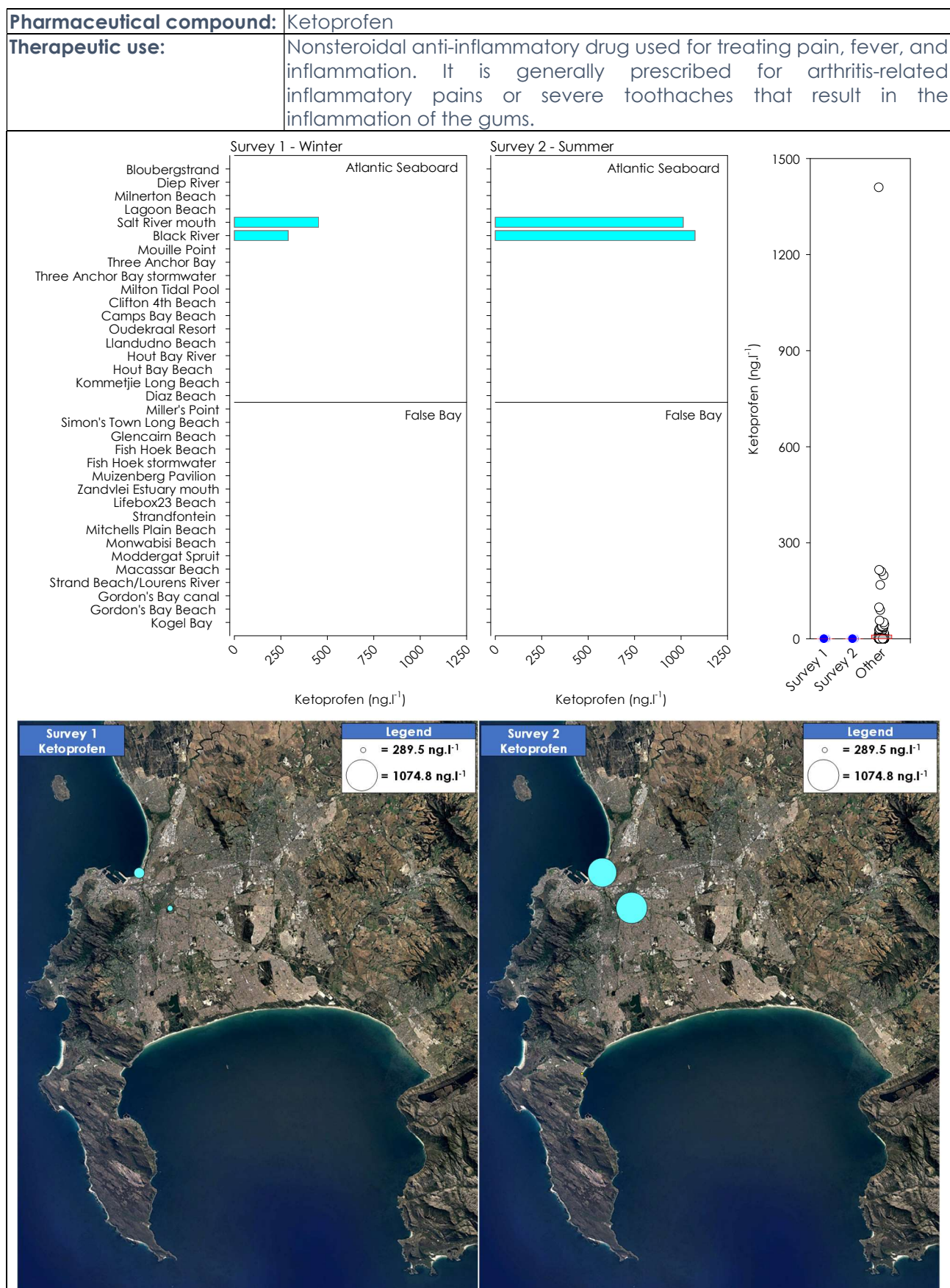
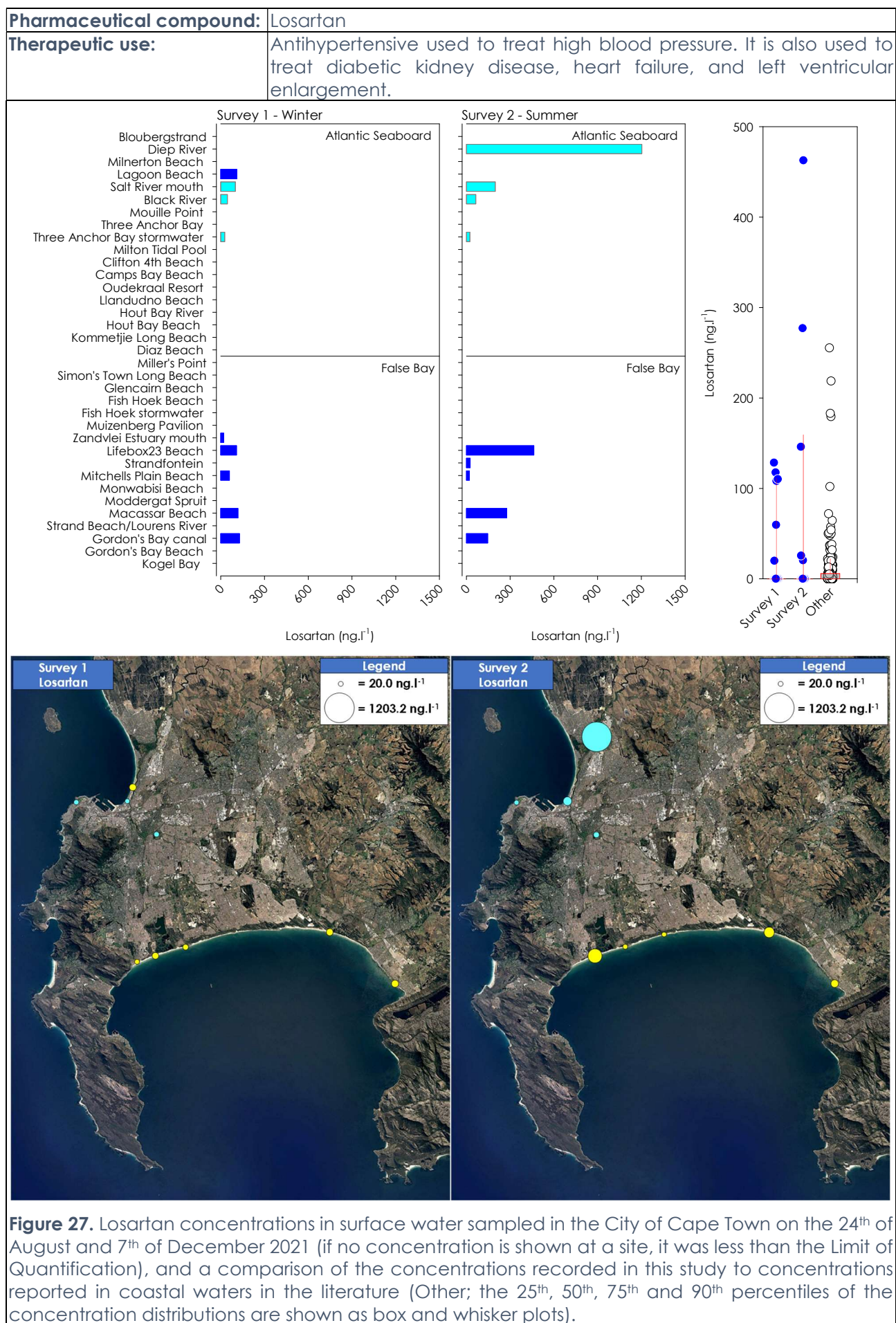
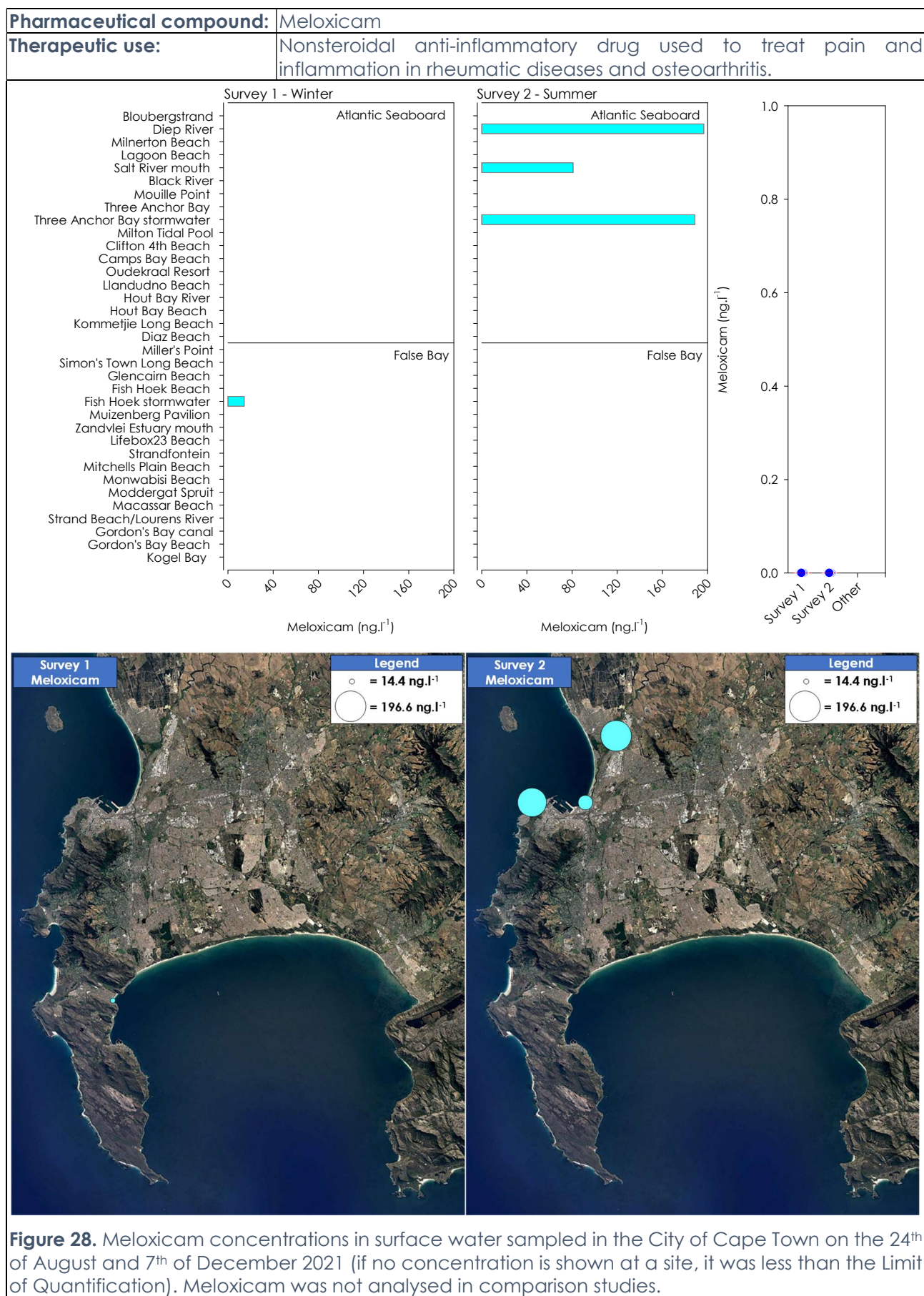
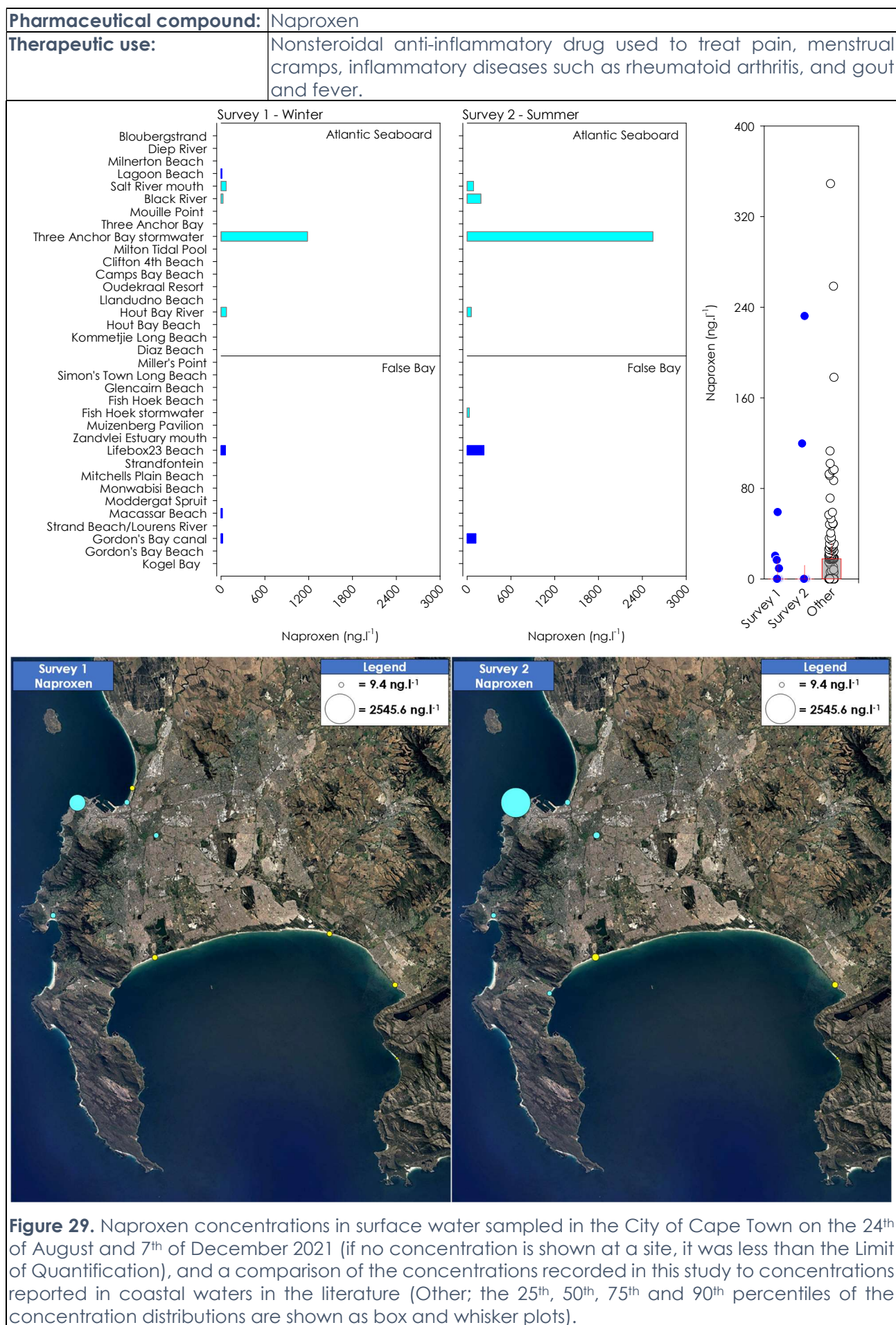
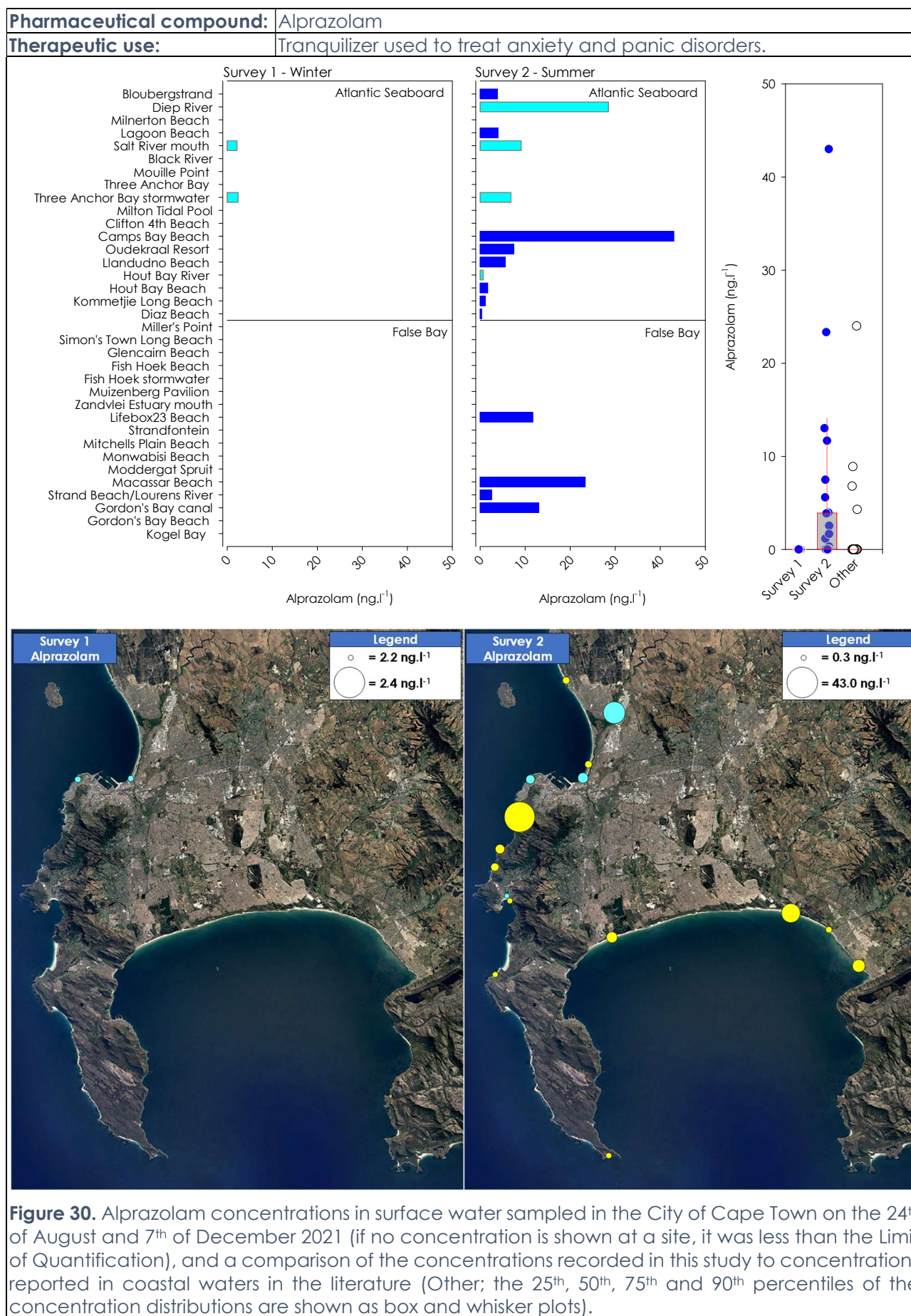


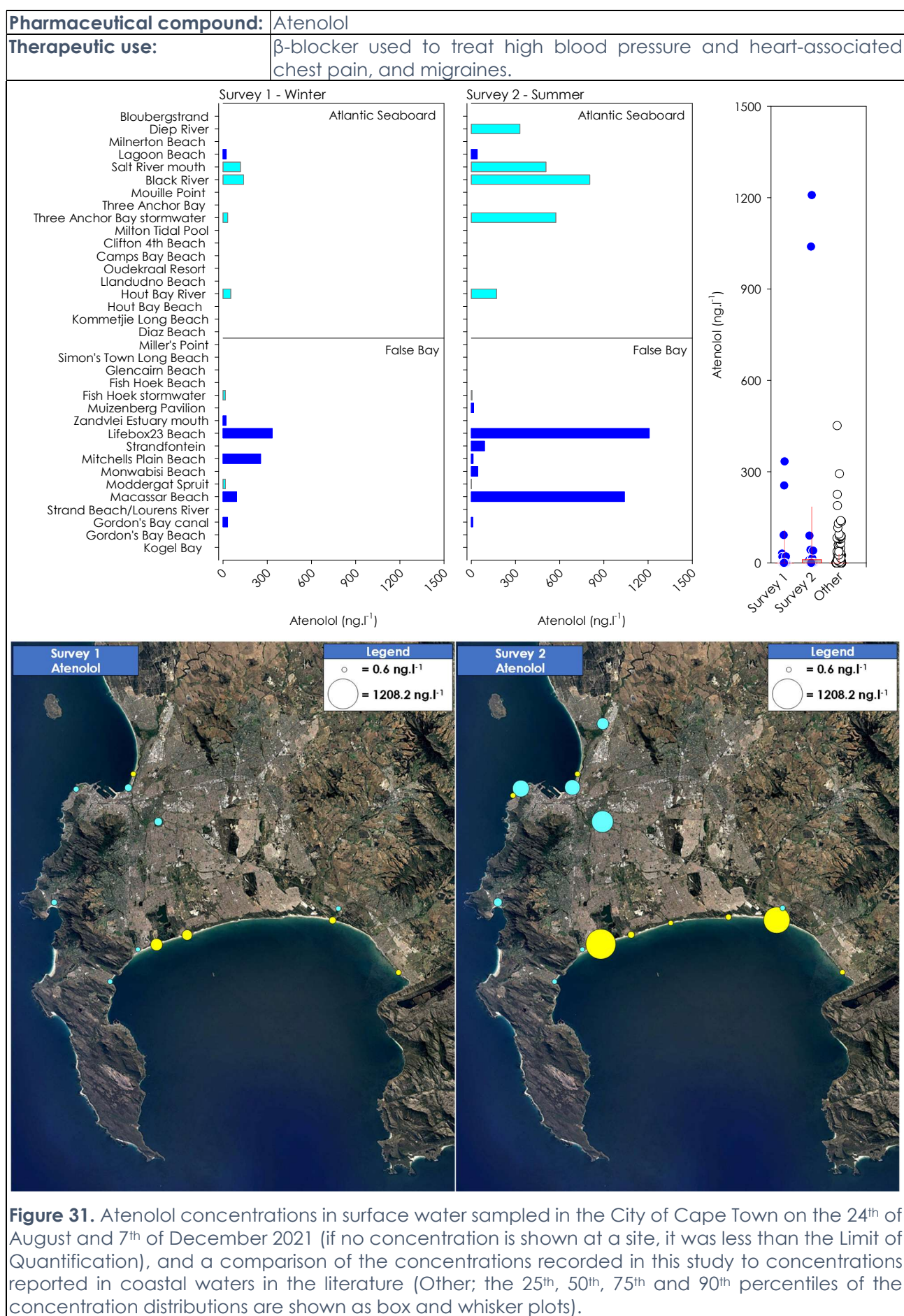
Figure 26. Ketoprofen concentrations in surface water sampled in the City of Cape Town on the 24th of August and 7th of December 2021 (if no concentration is shown at a site, it was less than the Limit of Quantification), and a comparison of the concentrations recorded in this study to concentrations reported in coastal waters in the literature (Other; the 25th, 50th, 75th and 90th percentiles of the concentration distributions are shown as box and whisker plots).

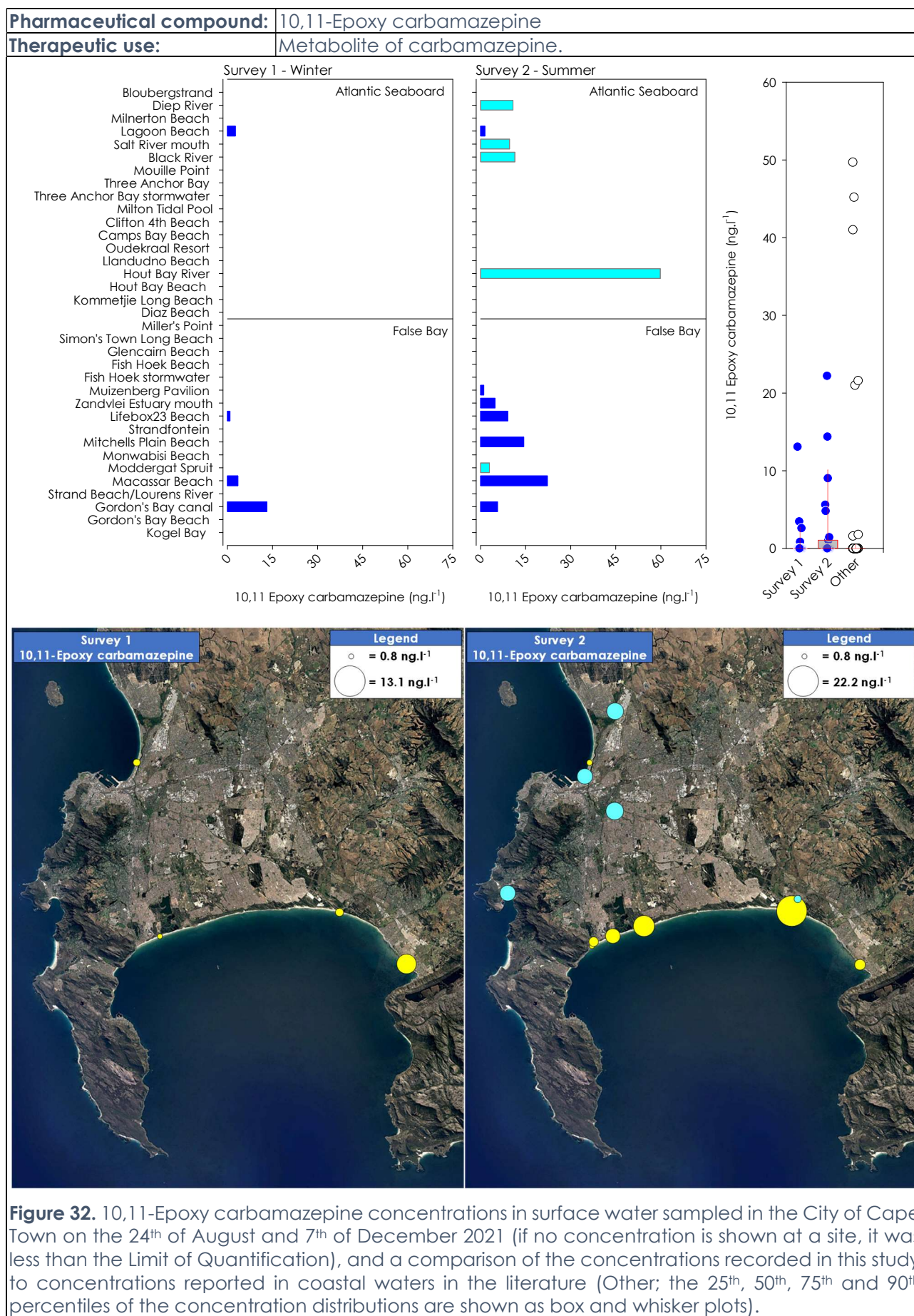


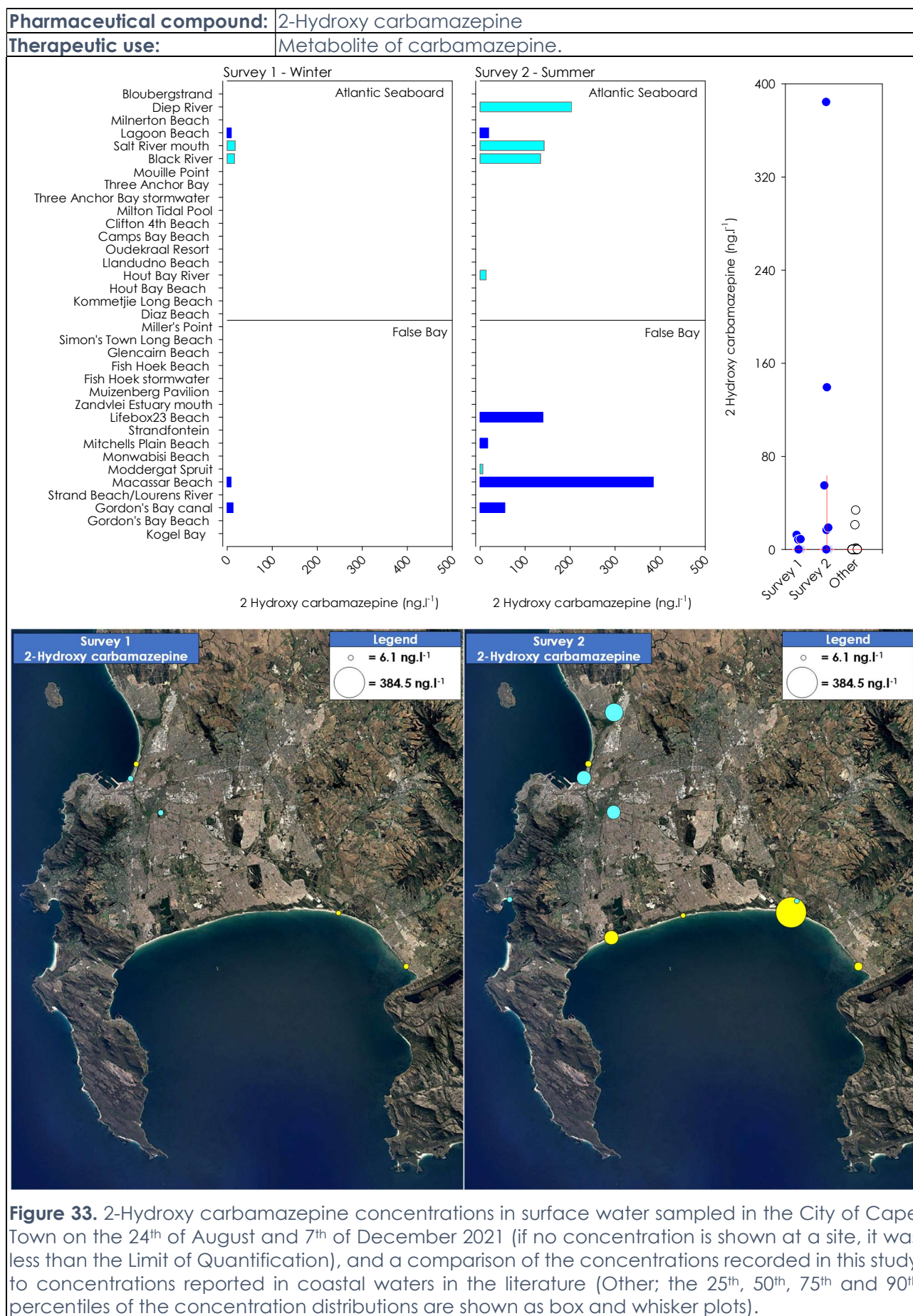


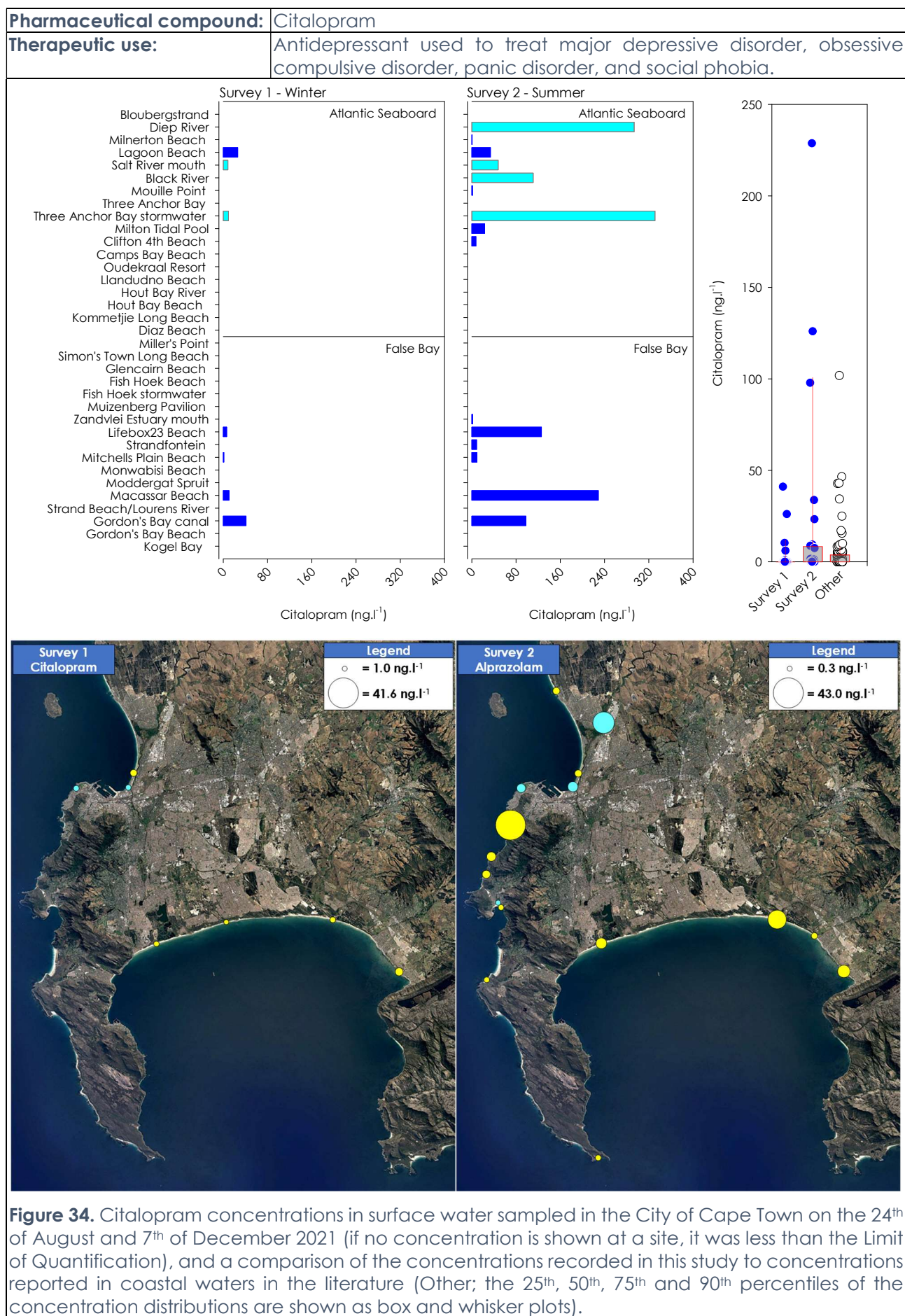


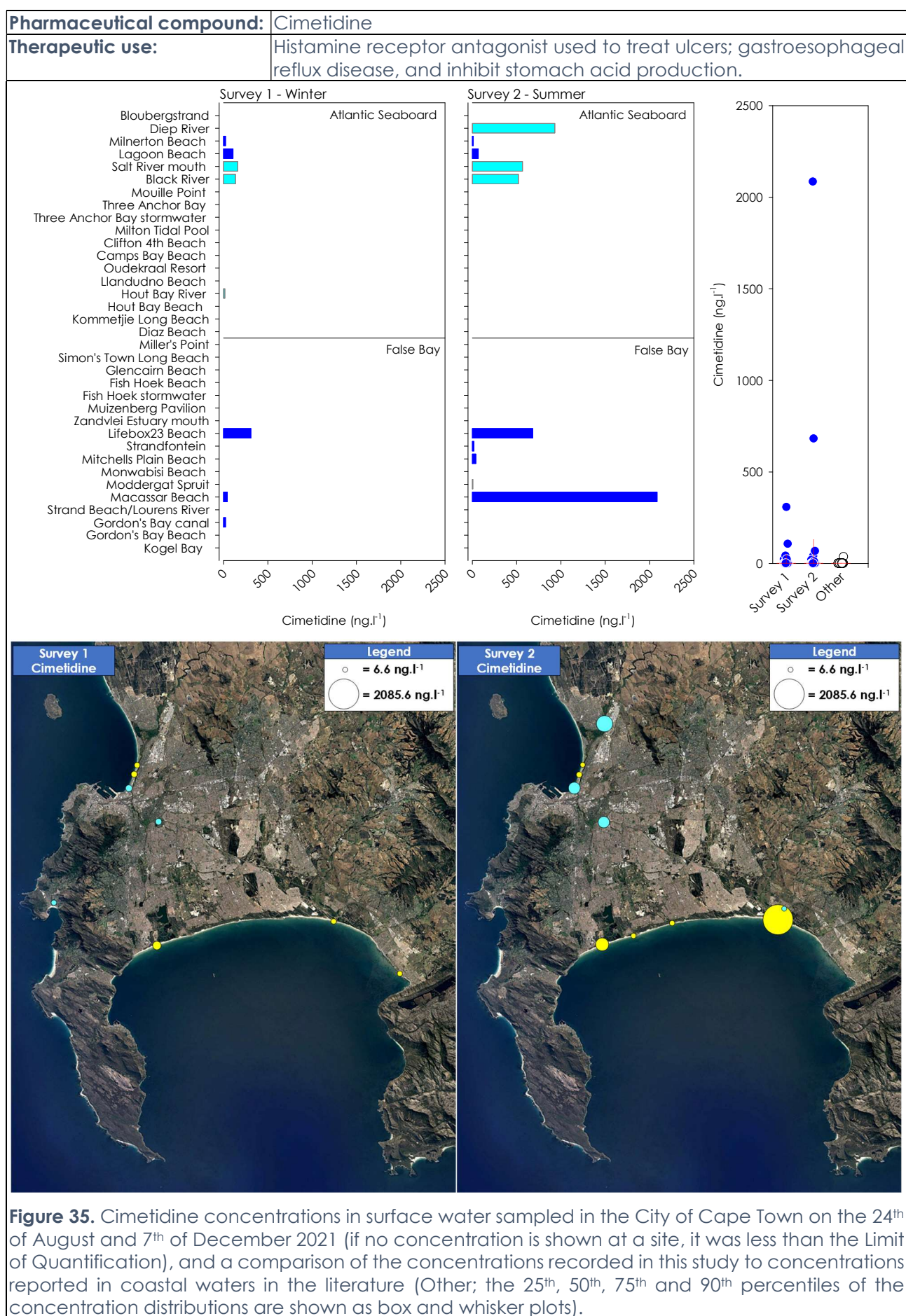












Pharmaceutical compound:	Desloratadine
Therapeutic use:	Antihistamine used to relieve allergy symptoms, nasal congestion, and chronic idiopathic urticaria (hives). It may also be used to treat acne.

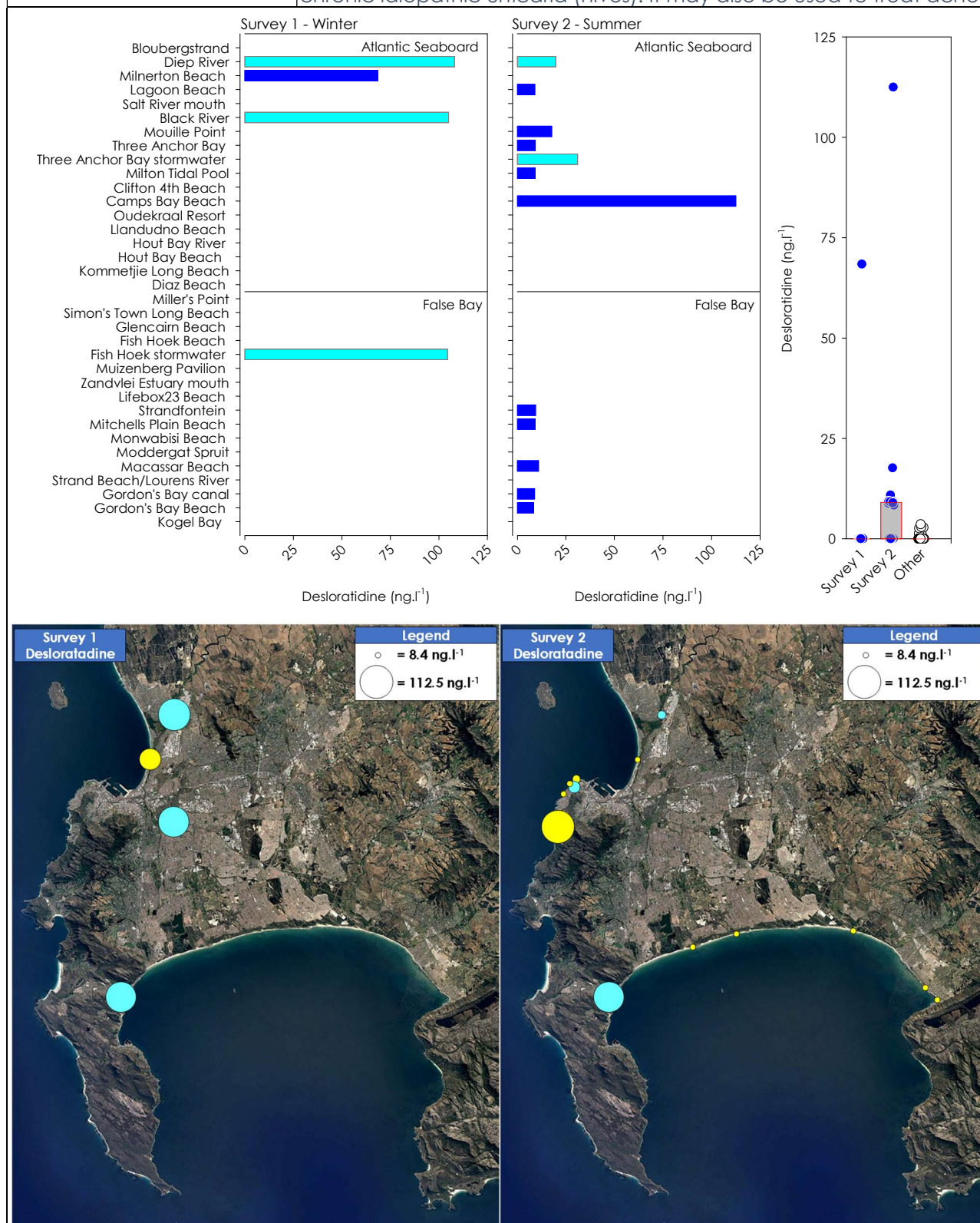
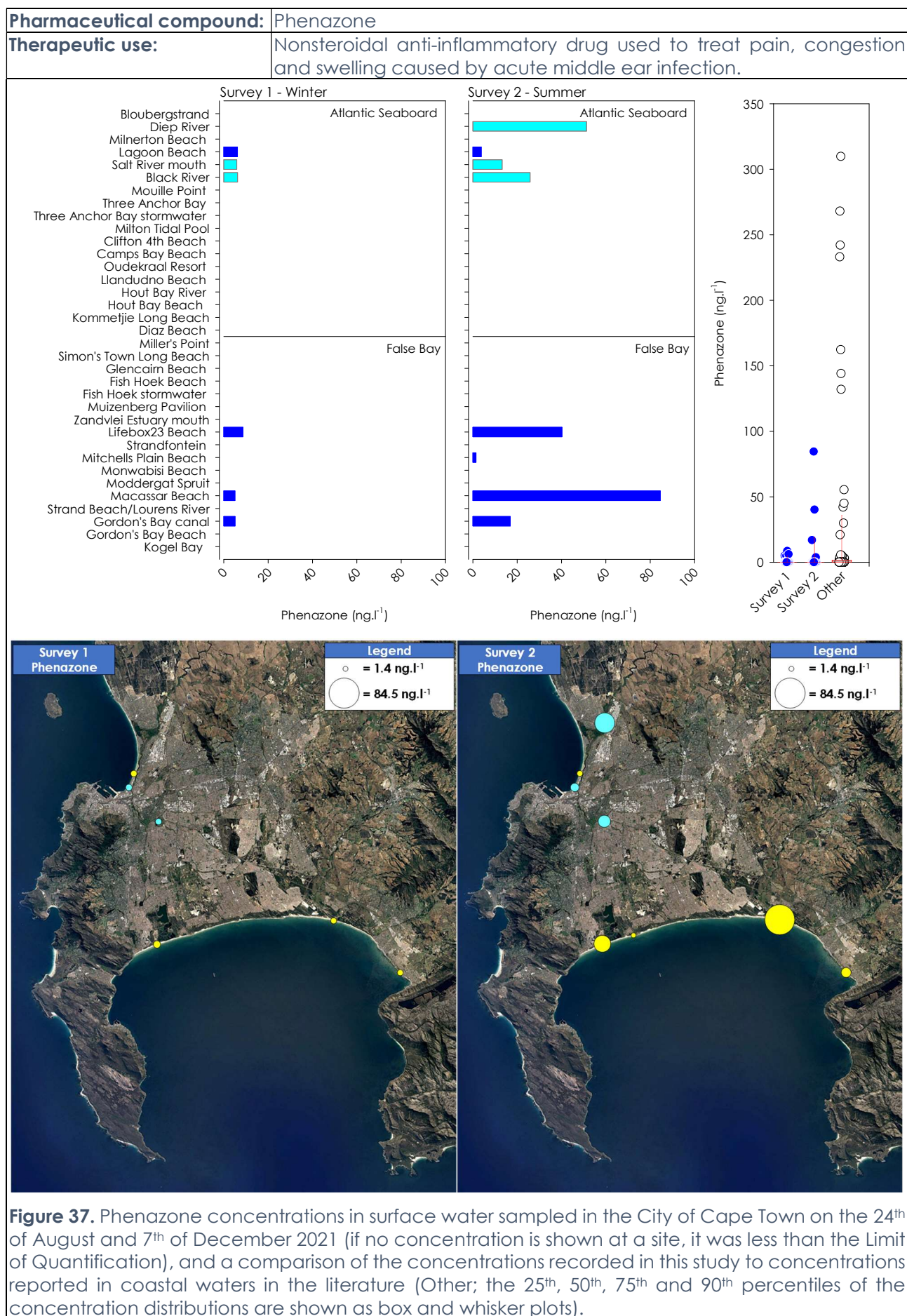
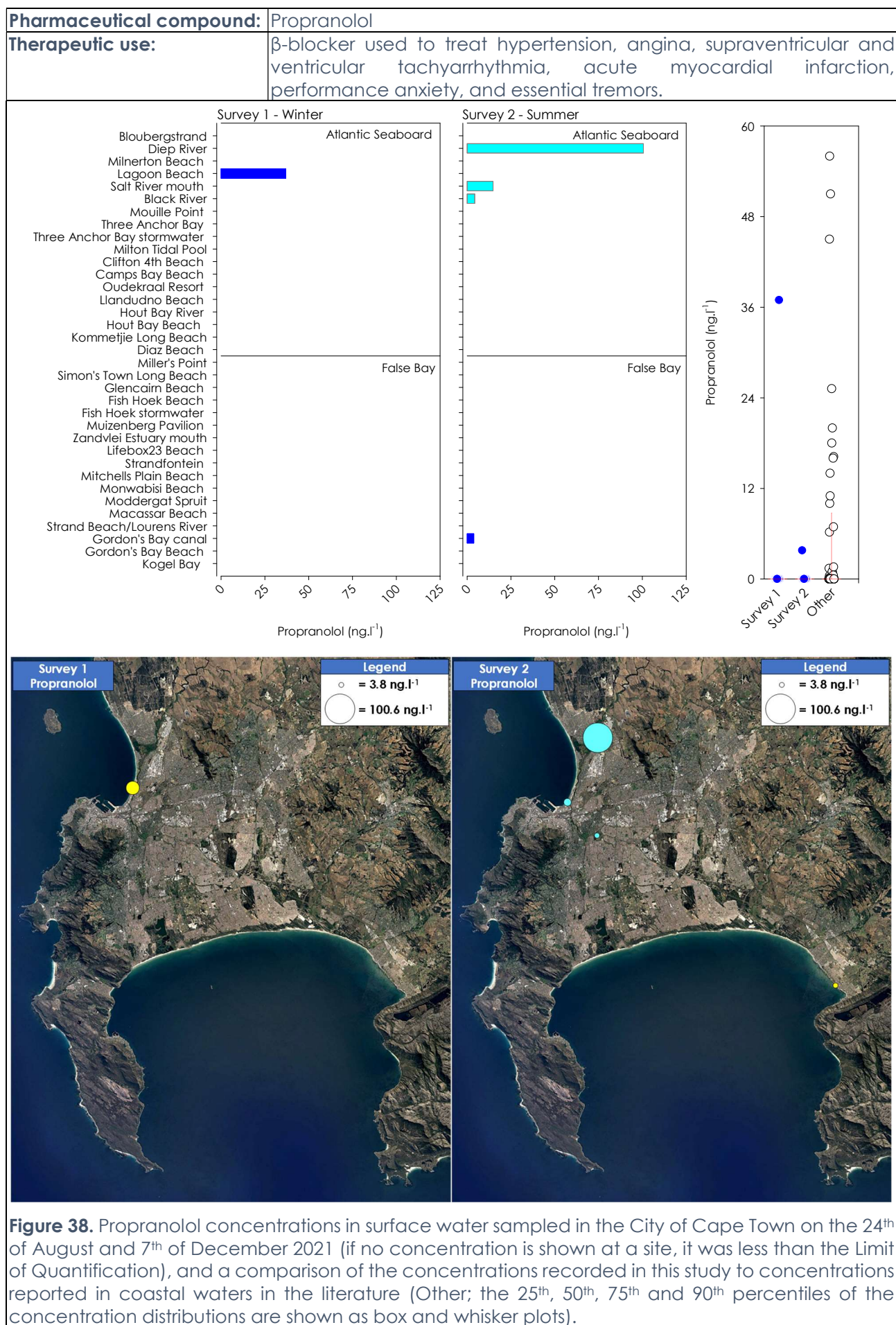
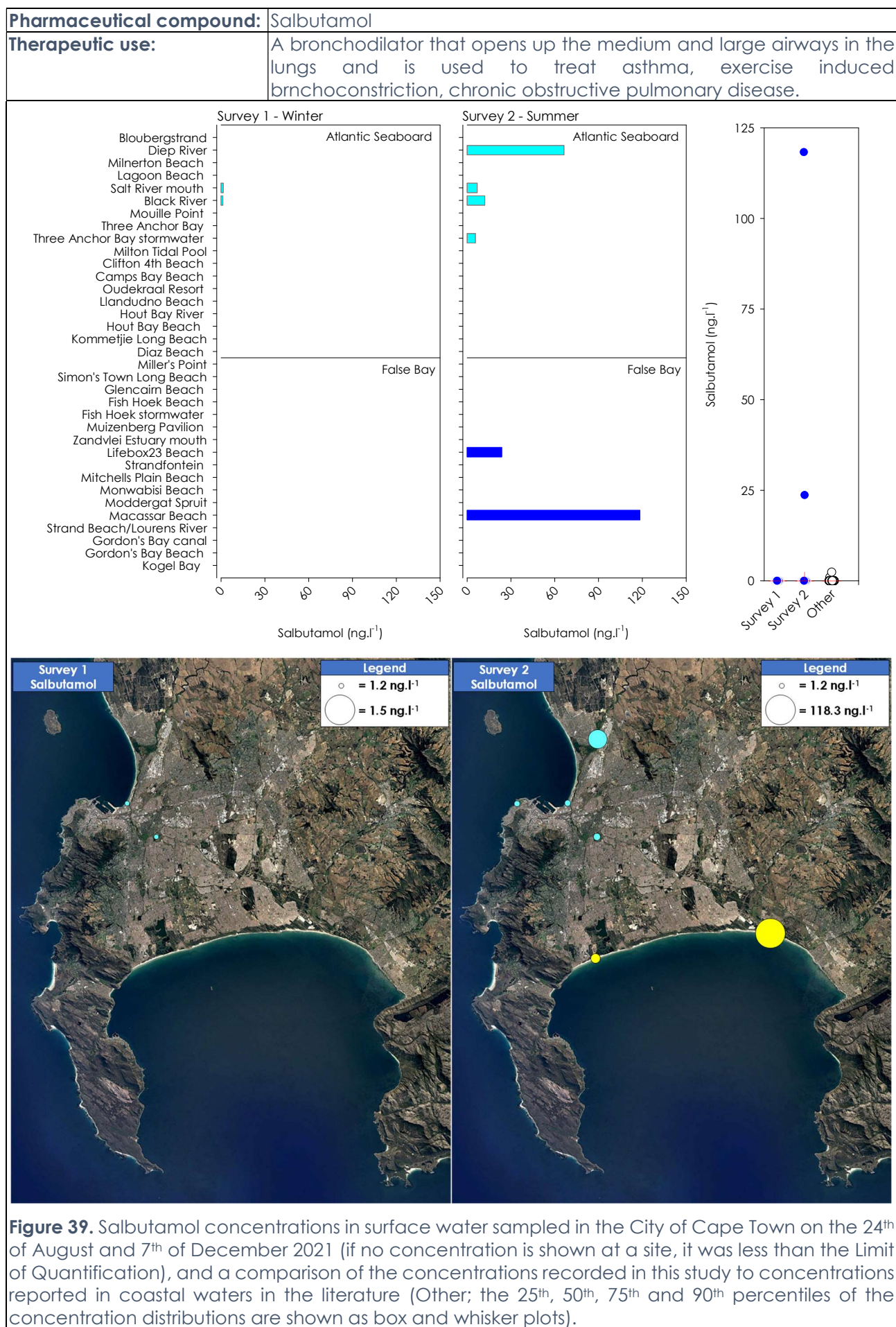
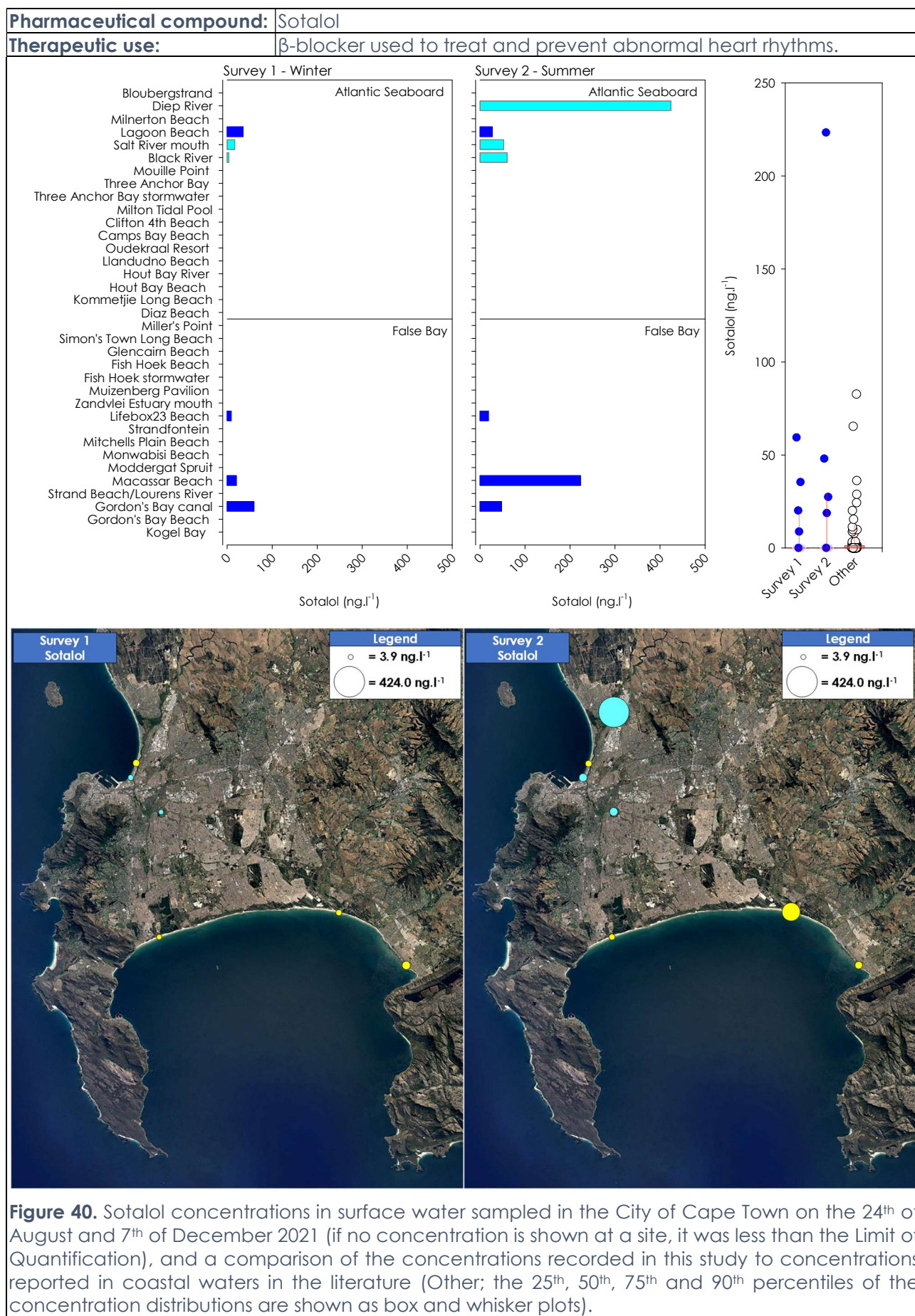


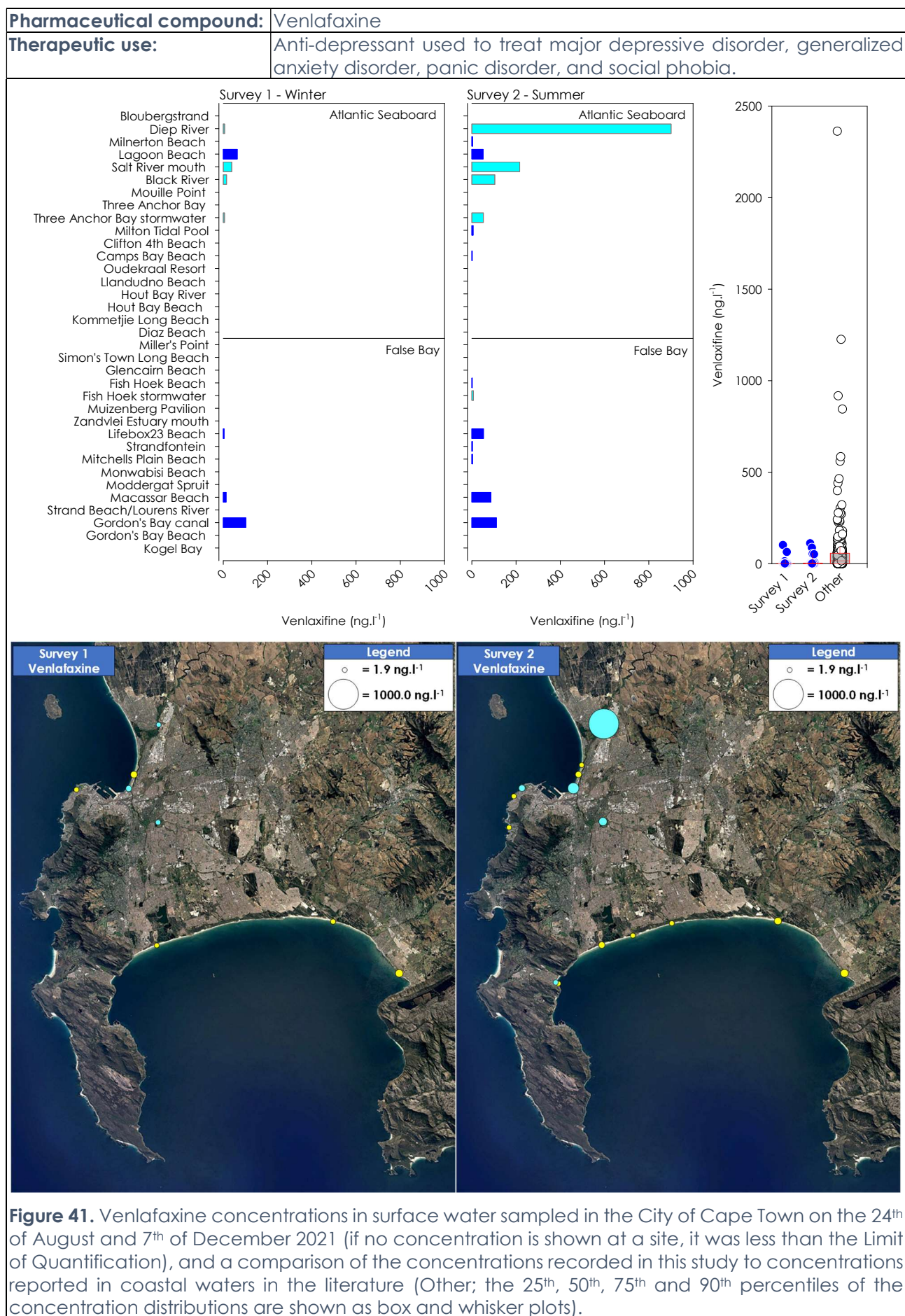
Figure 36. Desloratadine concentrations in surface water sampled in the City of Cape Town on the 24th of August and 7th of December 2021 (if no concentration is shown at a site, it was less than the Limit of Quantification), and a comparison of the concentrations recorded in this study to concentrations reported in coastal waters in the literature (Other; the 25th, 50th, 75th and 90th percentiles of the concentration distributions are shown as box and whisker plots).

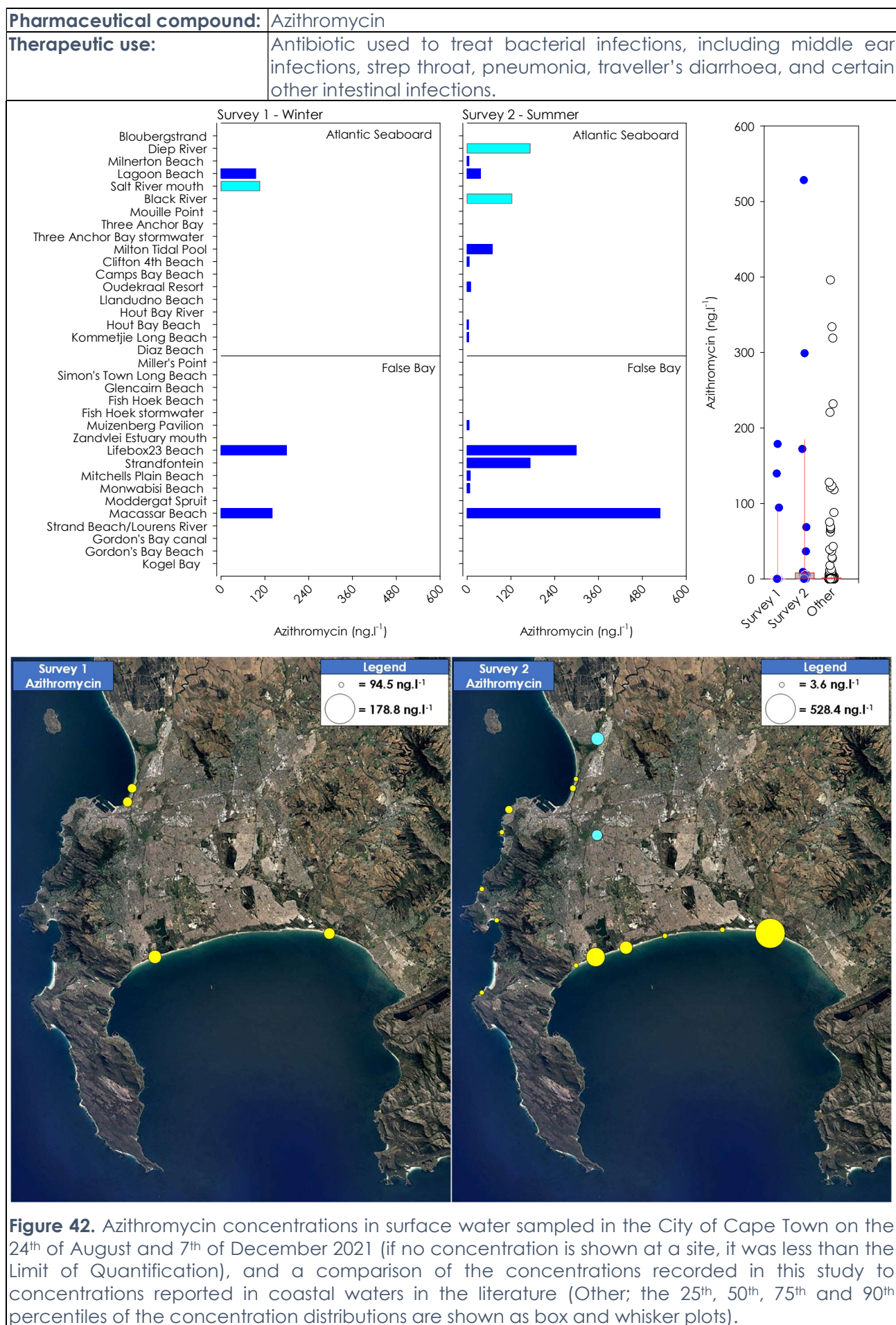


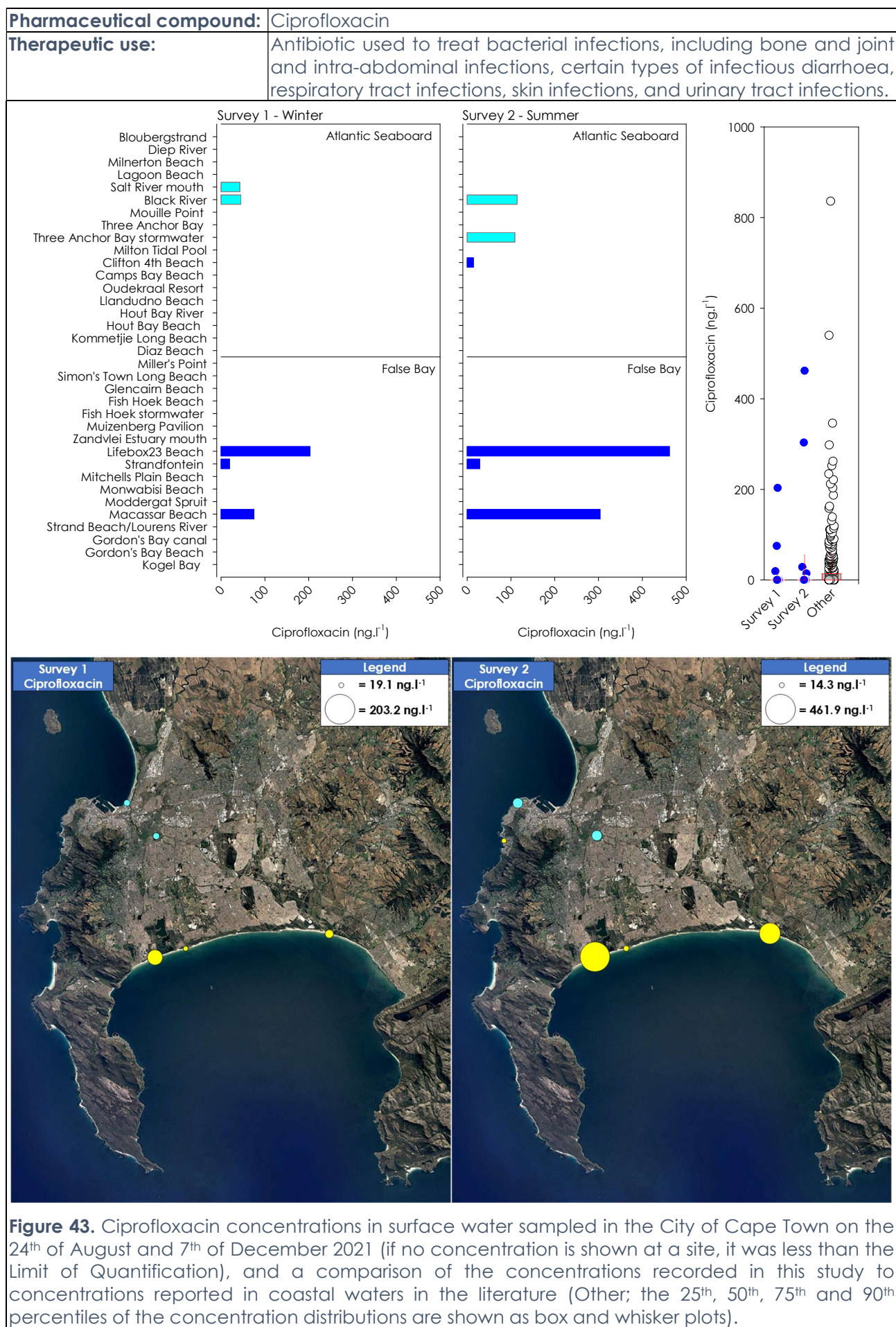


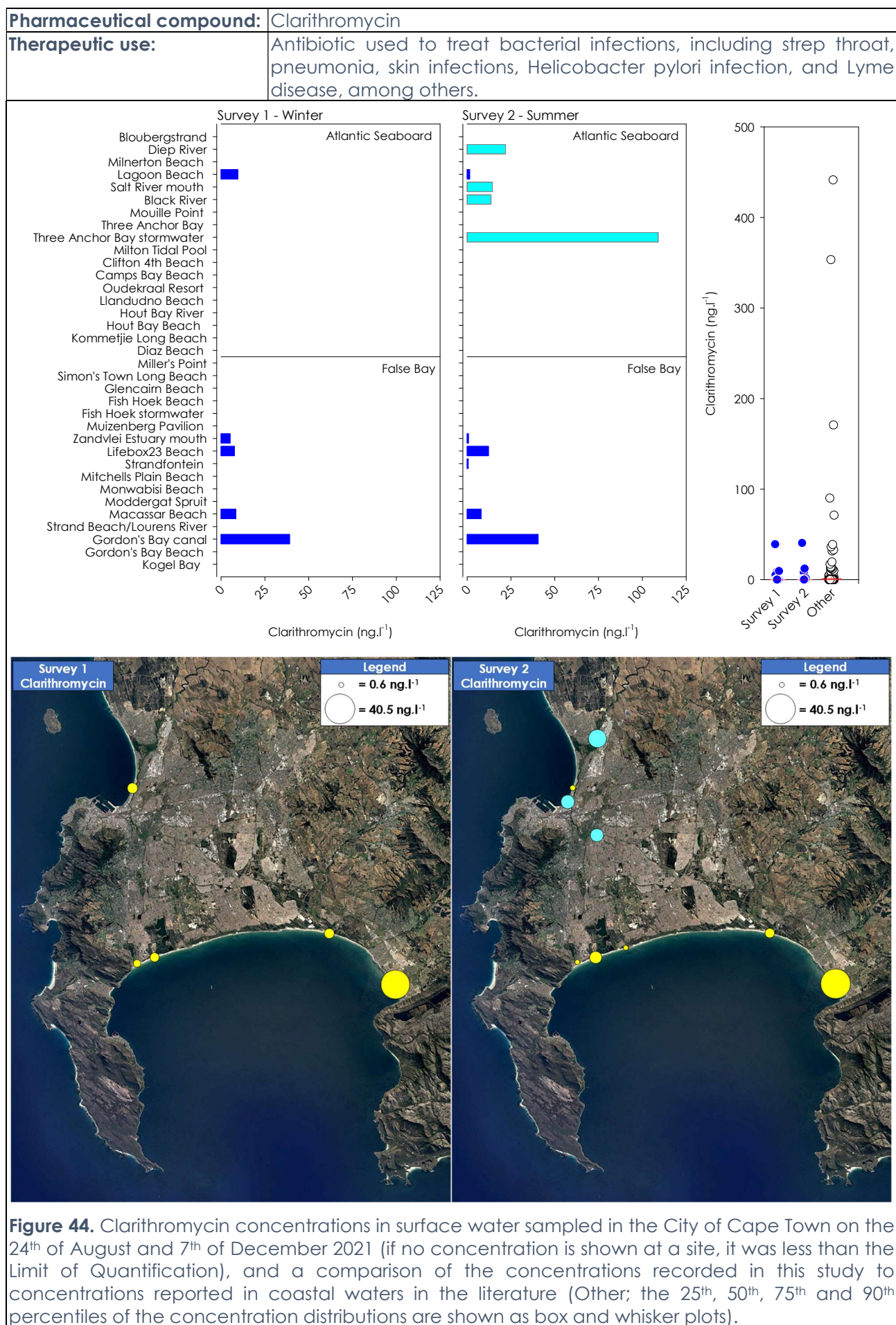


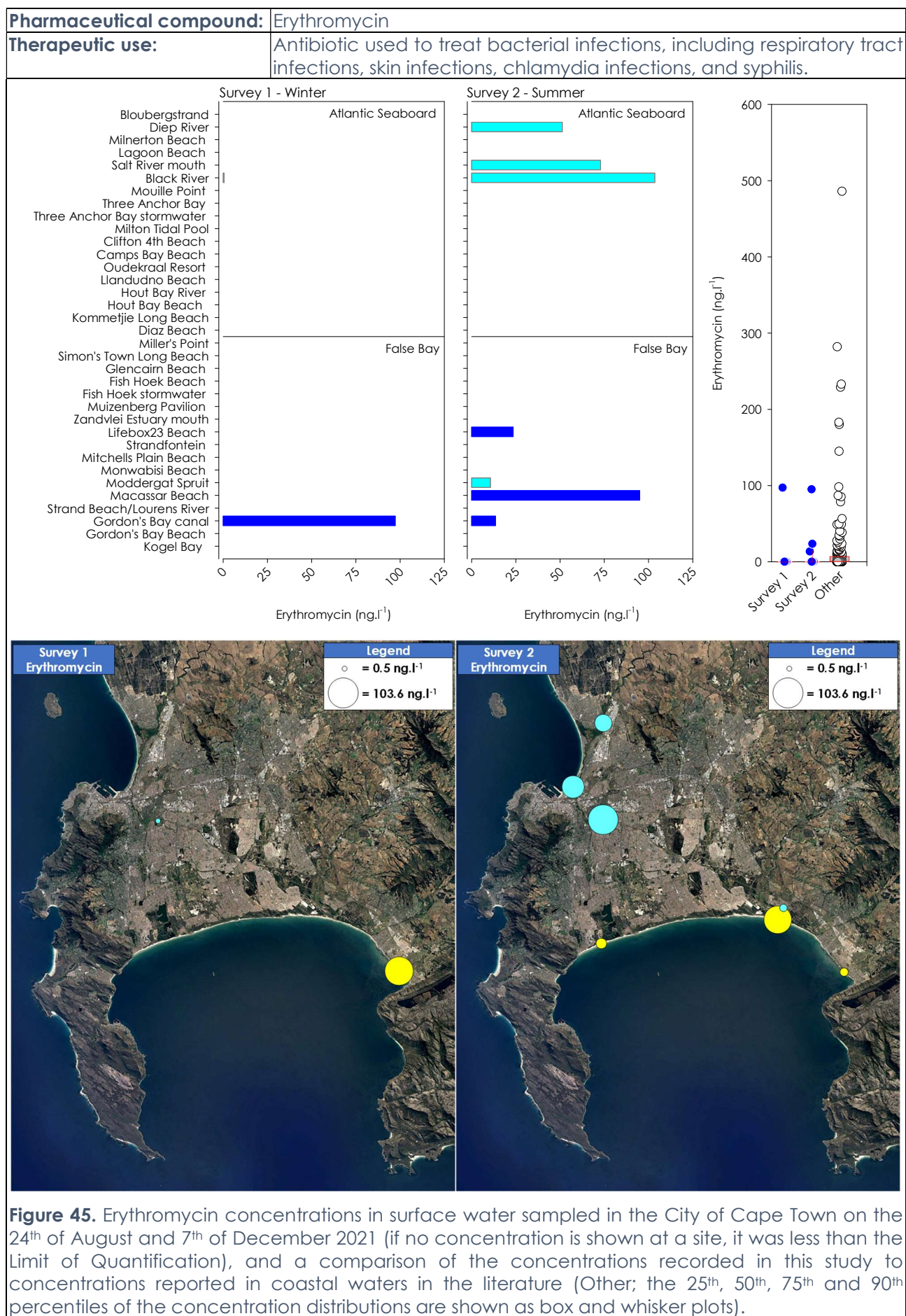


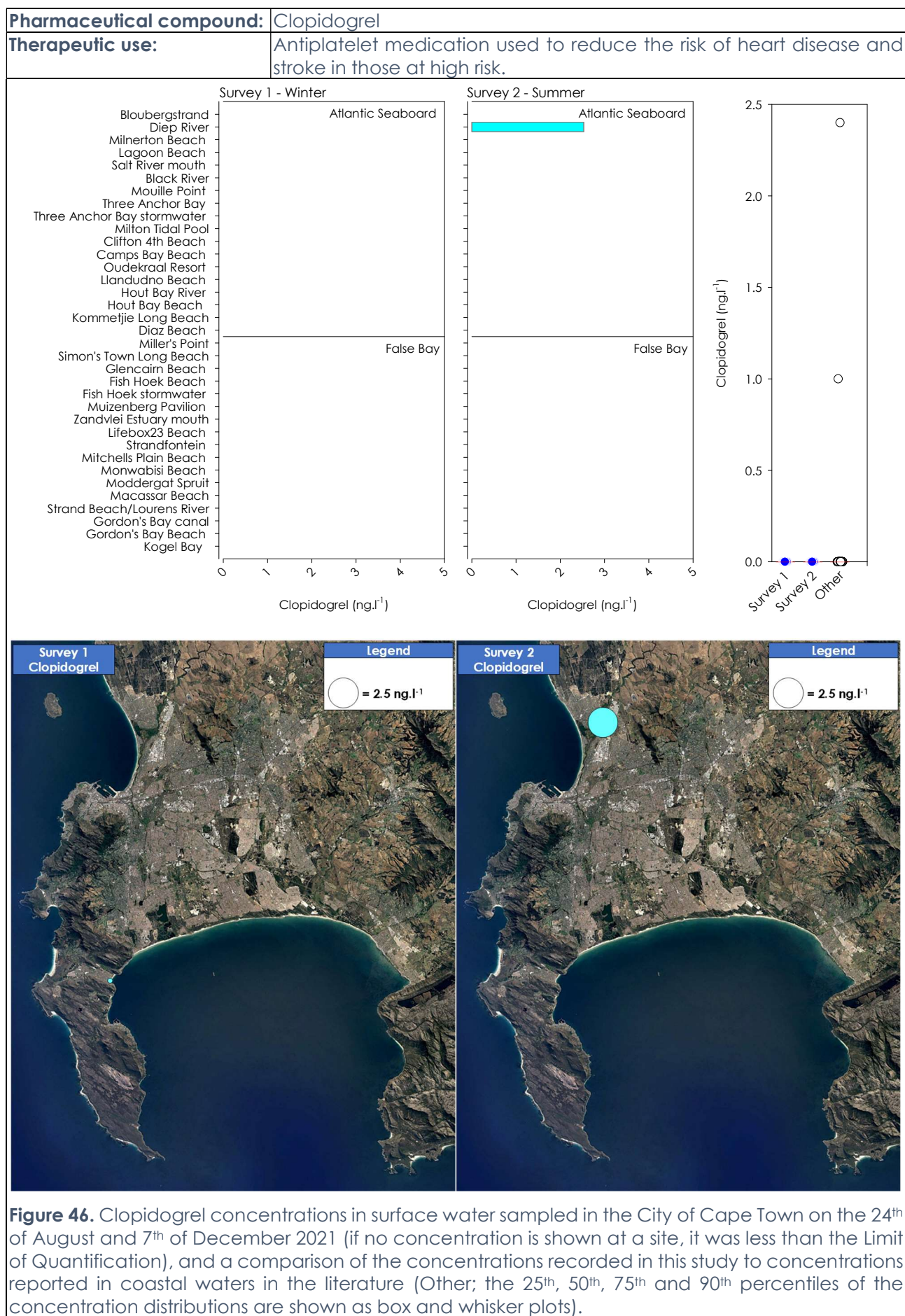












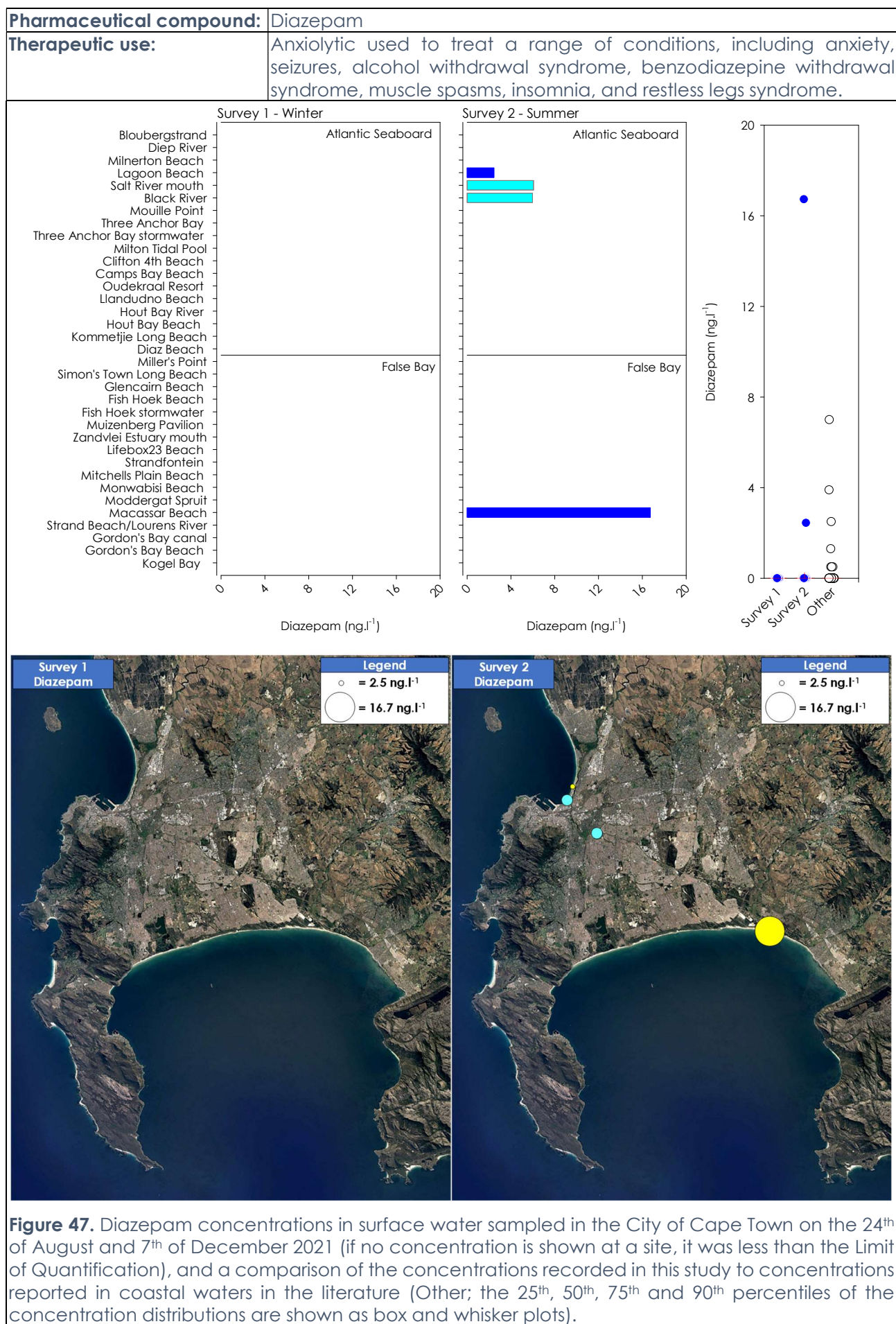
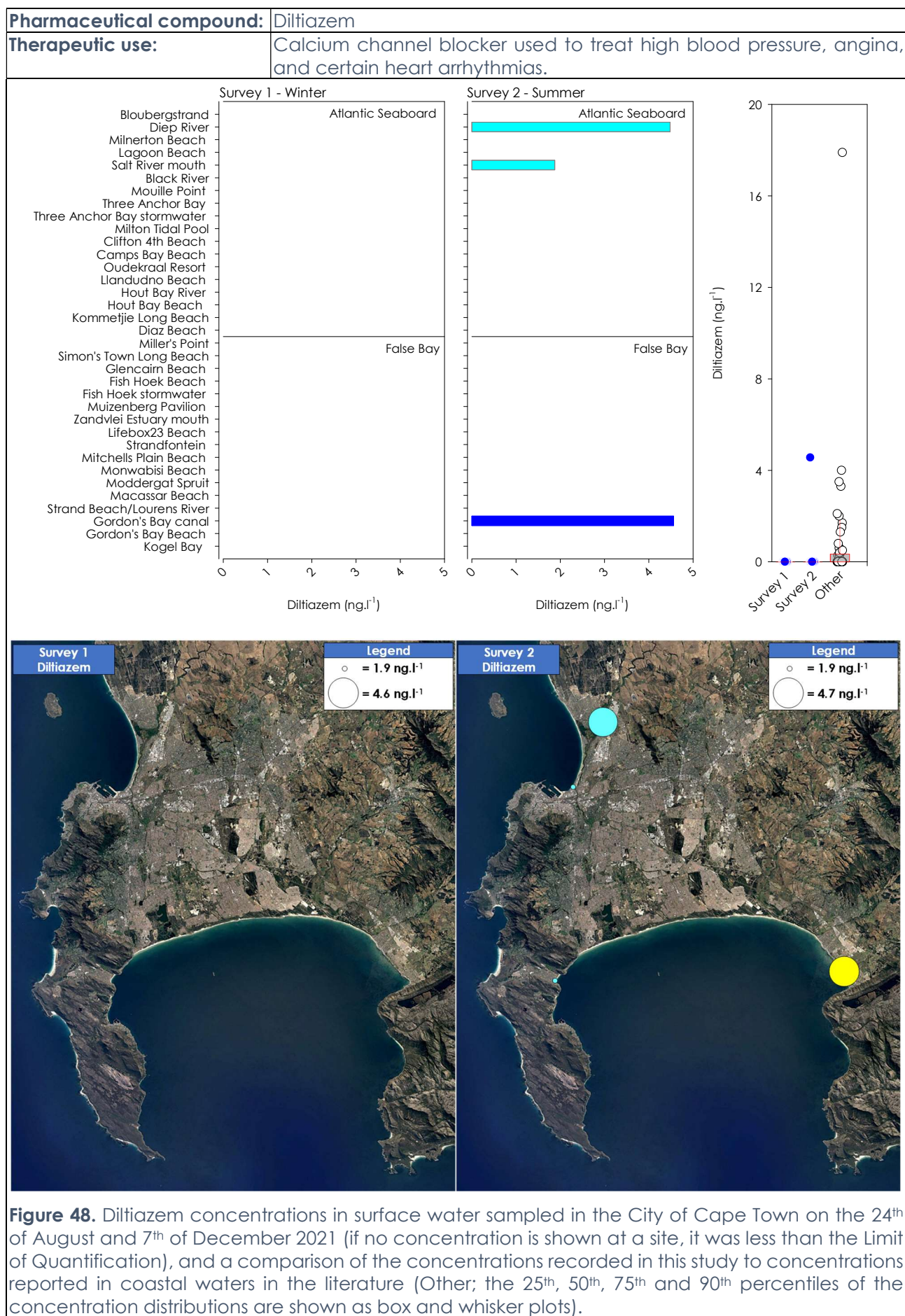
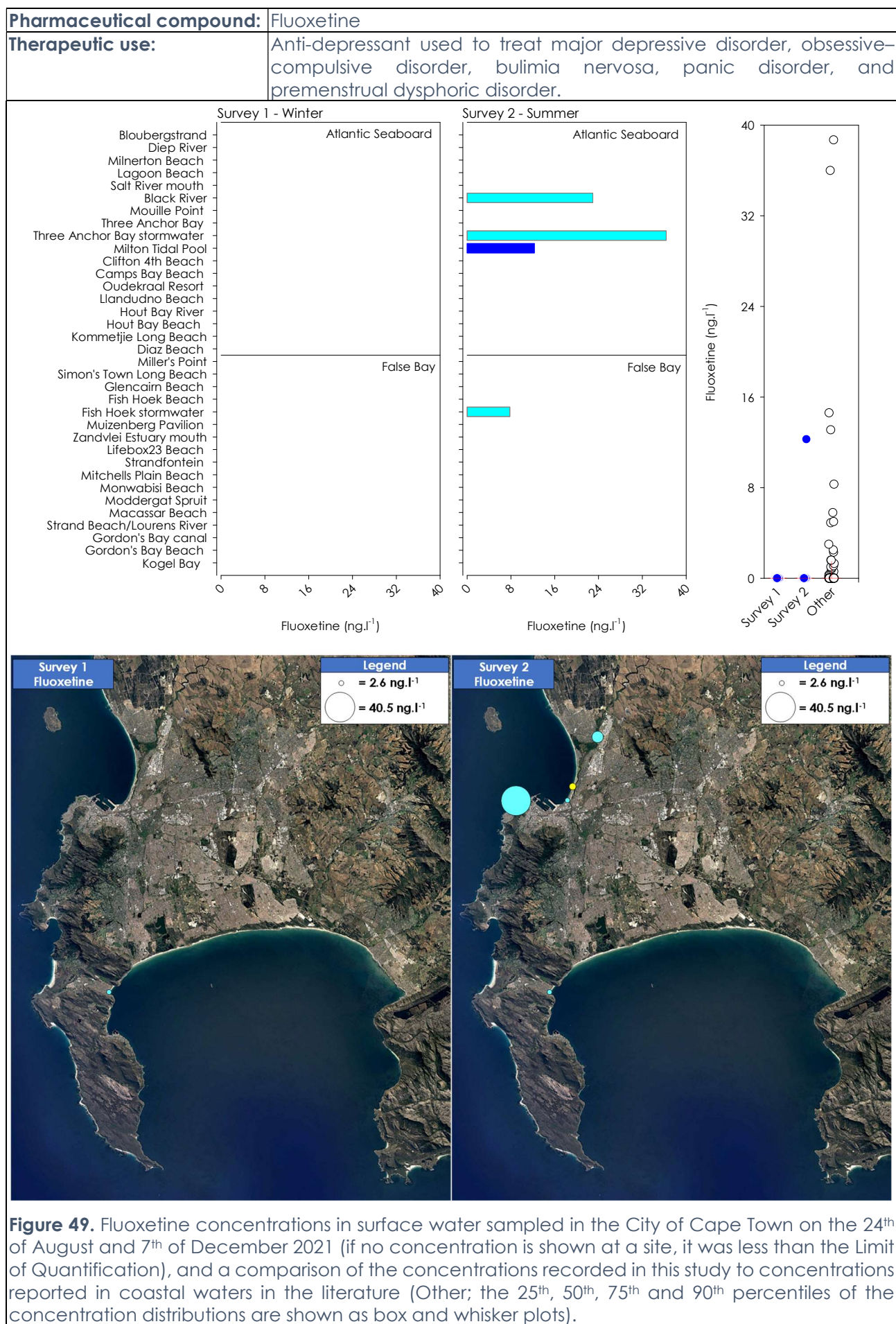


Figure 47. Diazepam concentrations in surface water sampled in the City of Cape Town on the 24th of August and 7th of December 2021 (if no concentration is shown at a site, it was less than the Limit of Quantification), and a comparison of the concentrations recorded in this study to concentrations reported in coastal waters in the literature (Other; the 25th, 50th, 75th and 90th percentiles of the concentration distributions are shown as box and whisker plots).





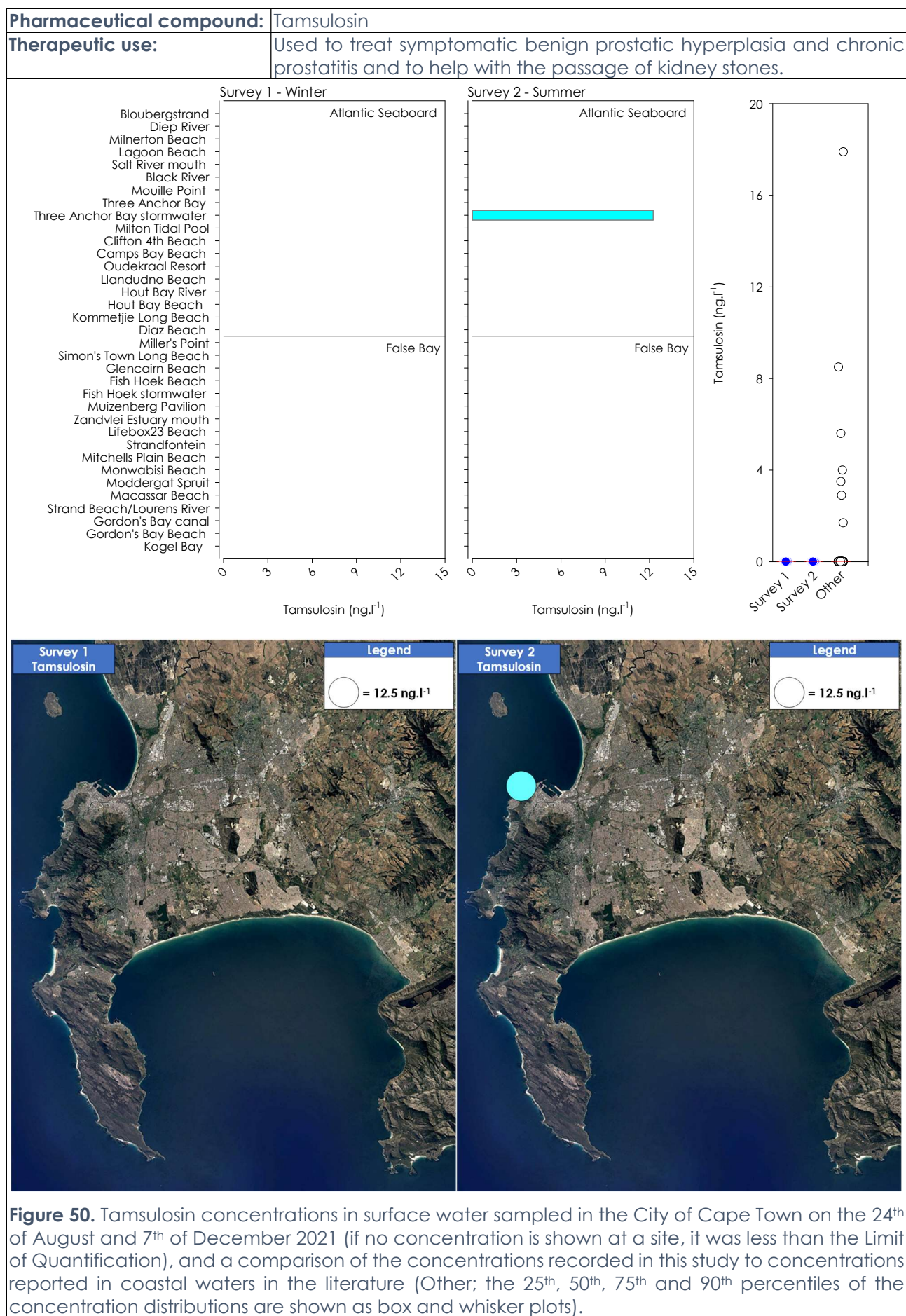
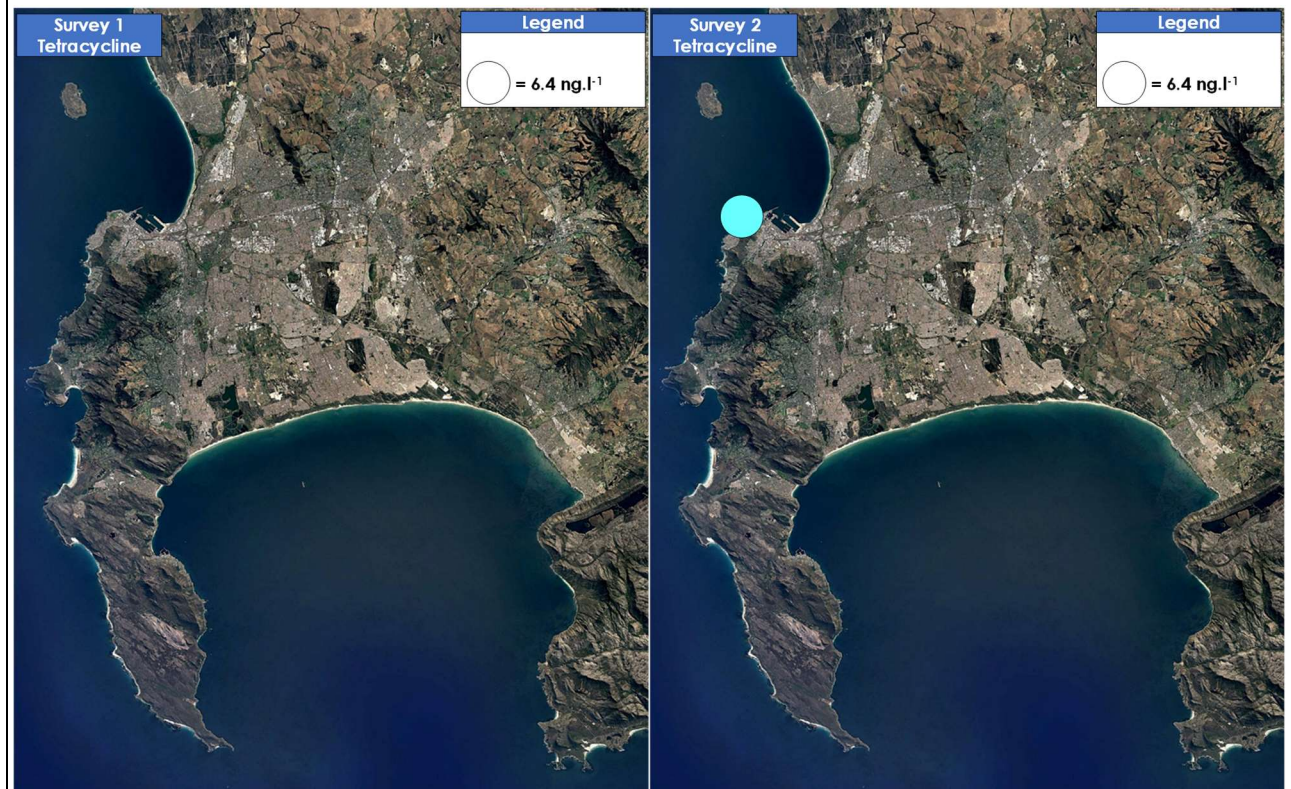


Figure 1 consists of three panels illustrating tetracycline concentrations in the environment.

The left panel, titled "Survey 1 - Winter", shows Tetracycline (ng.l⁻¹) concentrations for 30 locations. The locations are grouped into two categories: "Atlantic Seaboard" (top 15 locations) and "False Bay" (bottom 15 locations). The y-axis represents Tetracycline concentration in ng.l⁻¹, ranging from 0 to 10. The x-axis represents Tetracycline concentration in ng.l⁻¹, ranging from 0 to 10.

The middle panel, titled "Survey 2 - Summer", shows Tetracycline (ng.l⁻¹) concentrations for the same 30 locations. The locations are grouped into two categories: "Atlantic Seaboard" (top 15 locations) and "False Bay" (bottom 15 locations). The y-axis represents Tetracycline concentration in ng.l⁻¹, ranging from 0 to 10. The x-axis represents Tetracycline concentration in ng.l⁻¹, ranging from 0 to 10. A red horizontal bar highlights the "Atlantic Seaboard" category.

The right panel shows Tetracycline (ng.l⁻¹) concentrations for "Survey 1", "Survey 2", and "Other" categories. The y-axis represents Tetracycline concentration in ng.l⁻¹, ranging from 0 to 2500. The x-axis represents Tetracycline concentration in ng.l⁻¹, ranging from 0 to 10. Data points are colored by location type: blue for Atlantic Seaboard and red for False Bay.



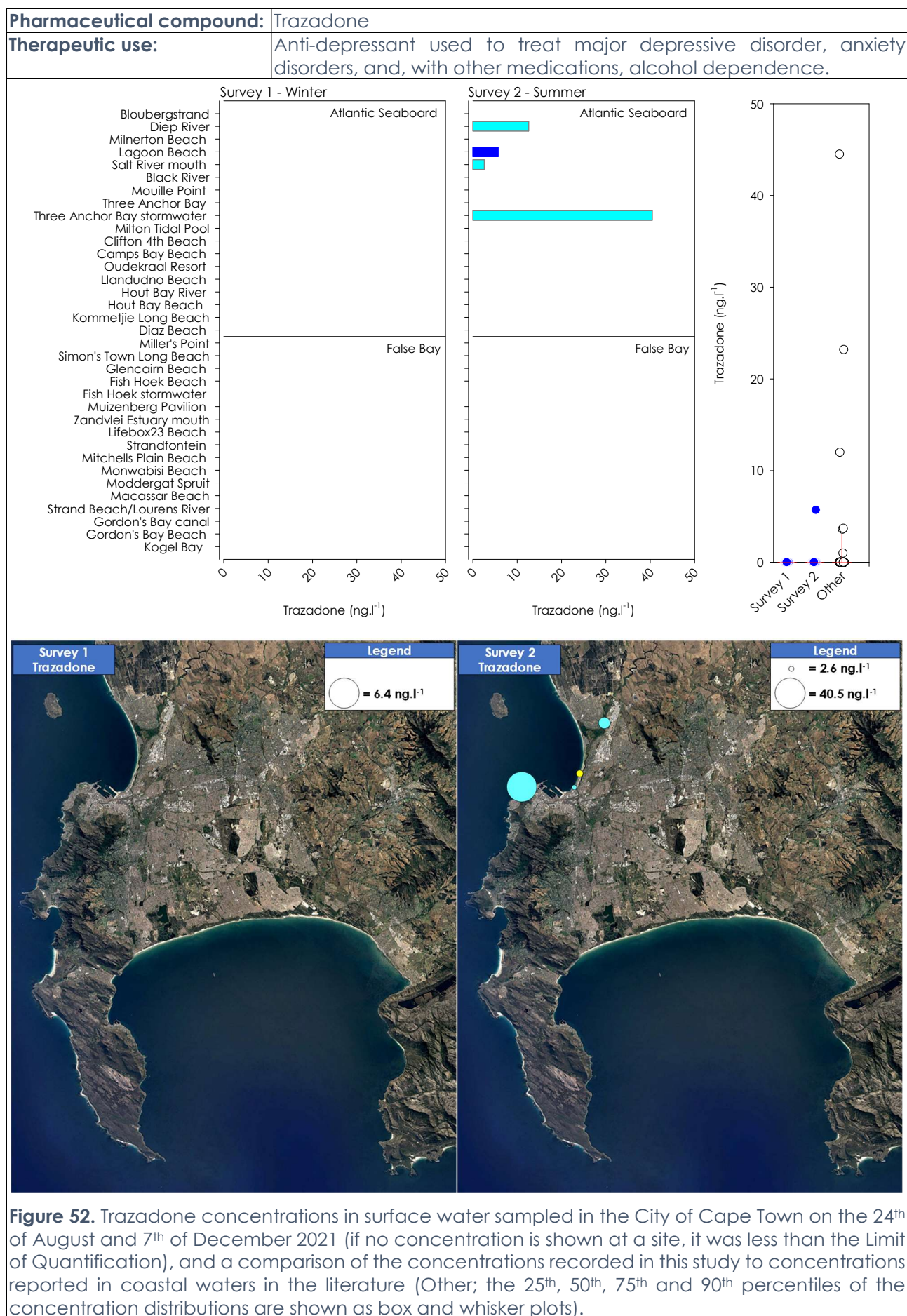
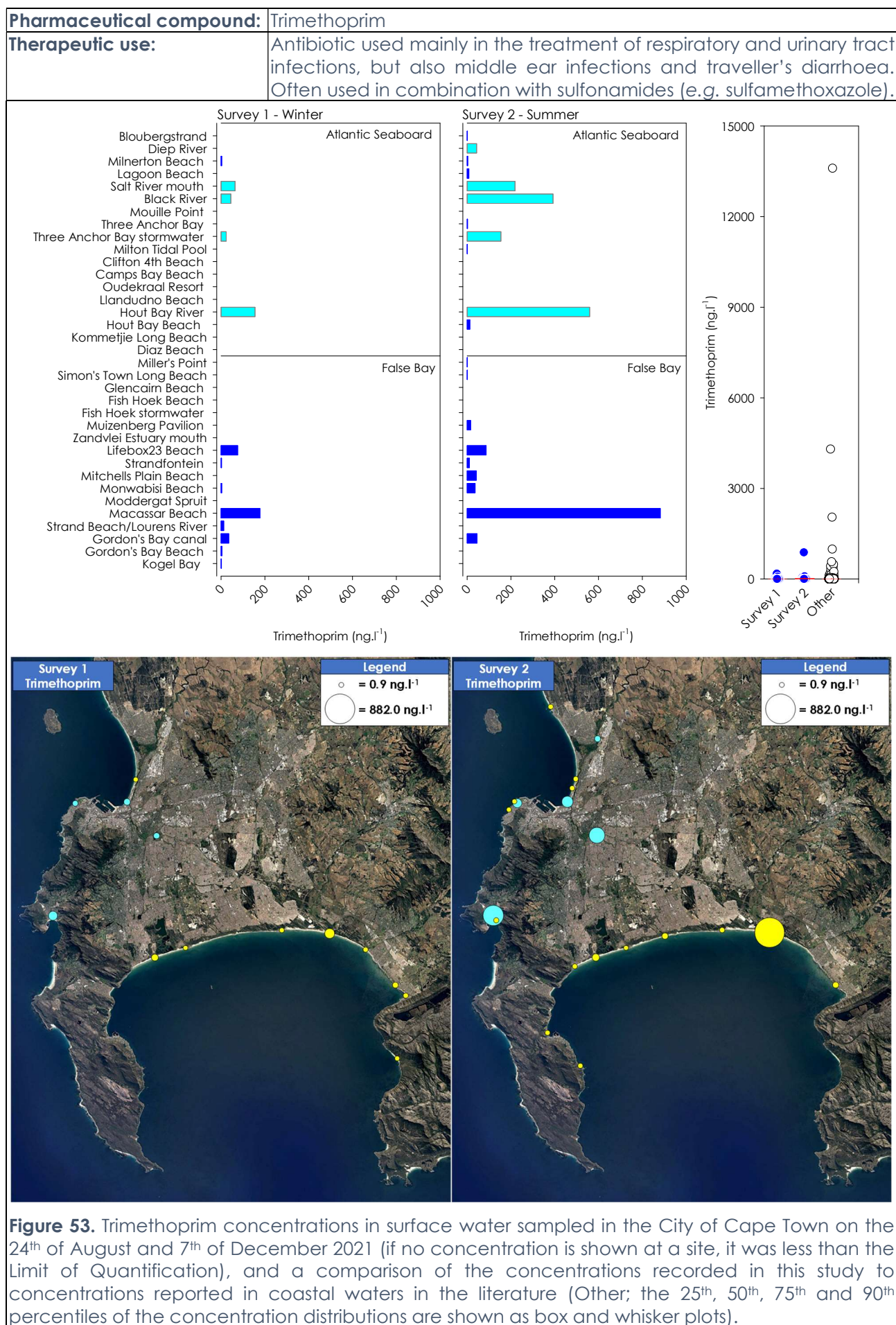


Figure 52. Trazadone concentrations in surface water sampled in the City of Cape Town on the 24th of August and 7th of December 2021 (if no concentration is shown at a site, it was less than the Limit of Quantification), and a comparison of the concentrations recorded in this study to concentrations reported in coastal waters in the literature (Other; the 25th, 50th, 75th and 90th percentiles of the concentration distributions are shown as box and whisker plots).



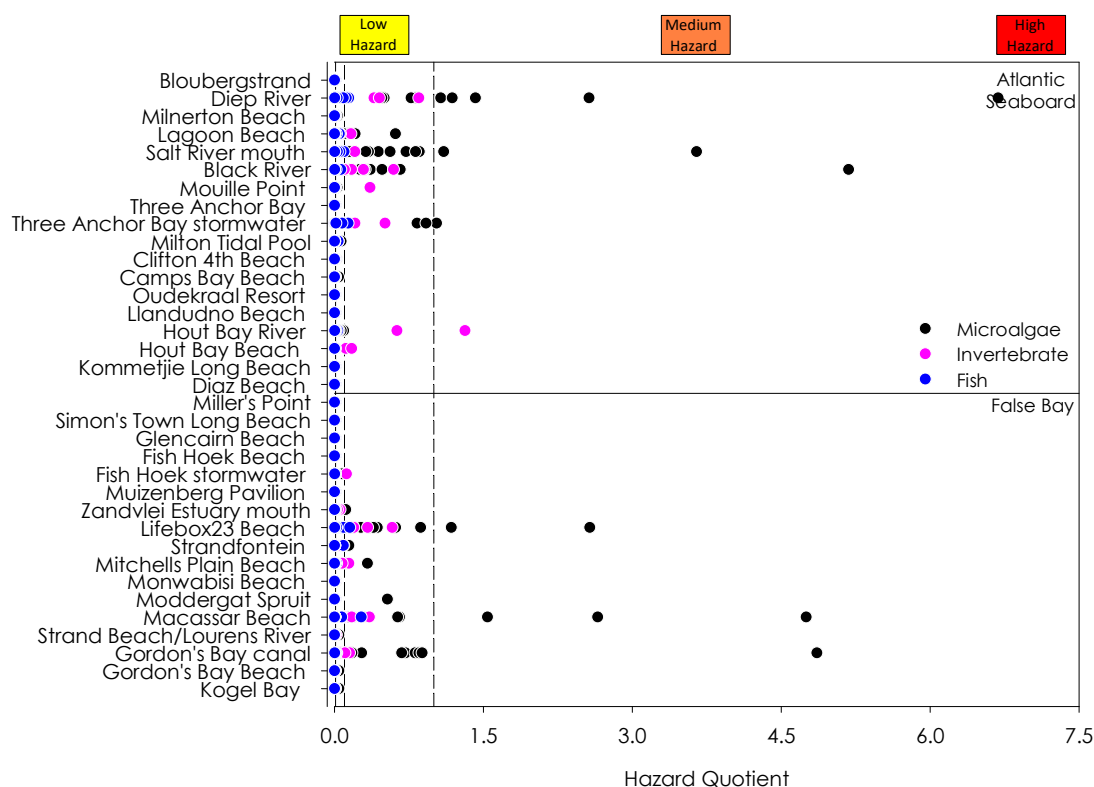


Figure 55. Hazard Quotients for pharmaceutical compound concentrations in water samples collected at different sites in the City of Cape Town on the 24th of August and 7th of December 2021, as determined using toxicity information provided by Kuzmanović *et al.* (2015) for freshwater biota.

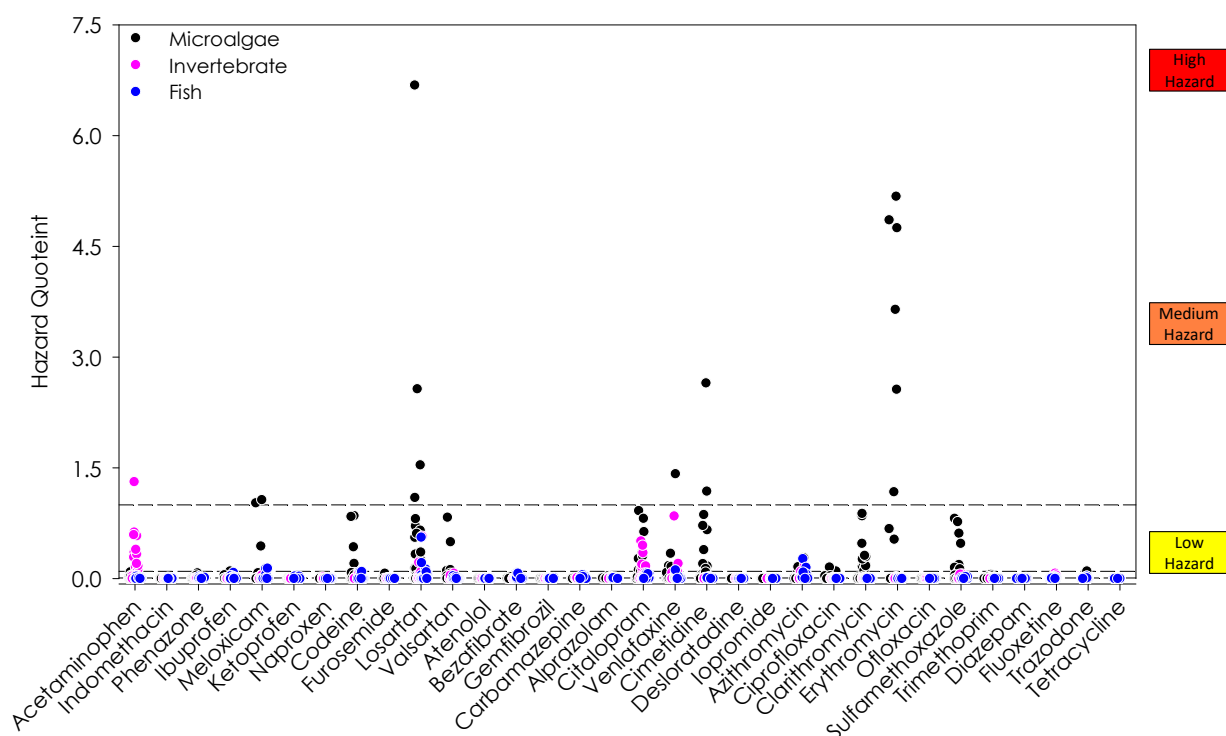


Figure 56. Hazard Quotients for pharmaceutical compounds in water samples collected in the City of Cape Town on the 24th of August and 7th of December 2021, determined using toxicological information provided by Kuzmanović *et al.* (2015) for freshwater biota.

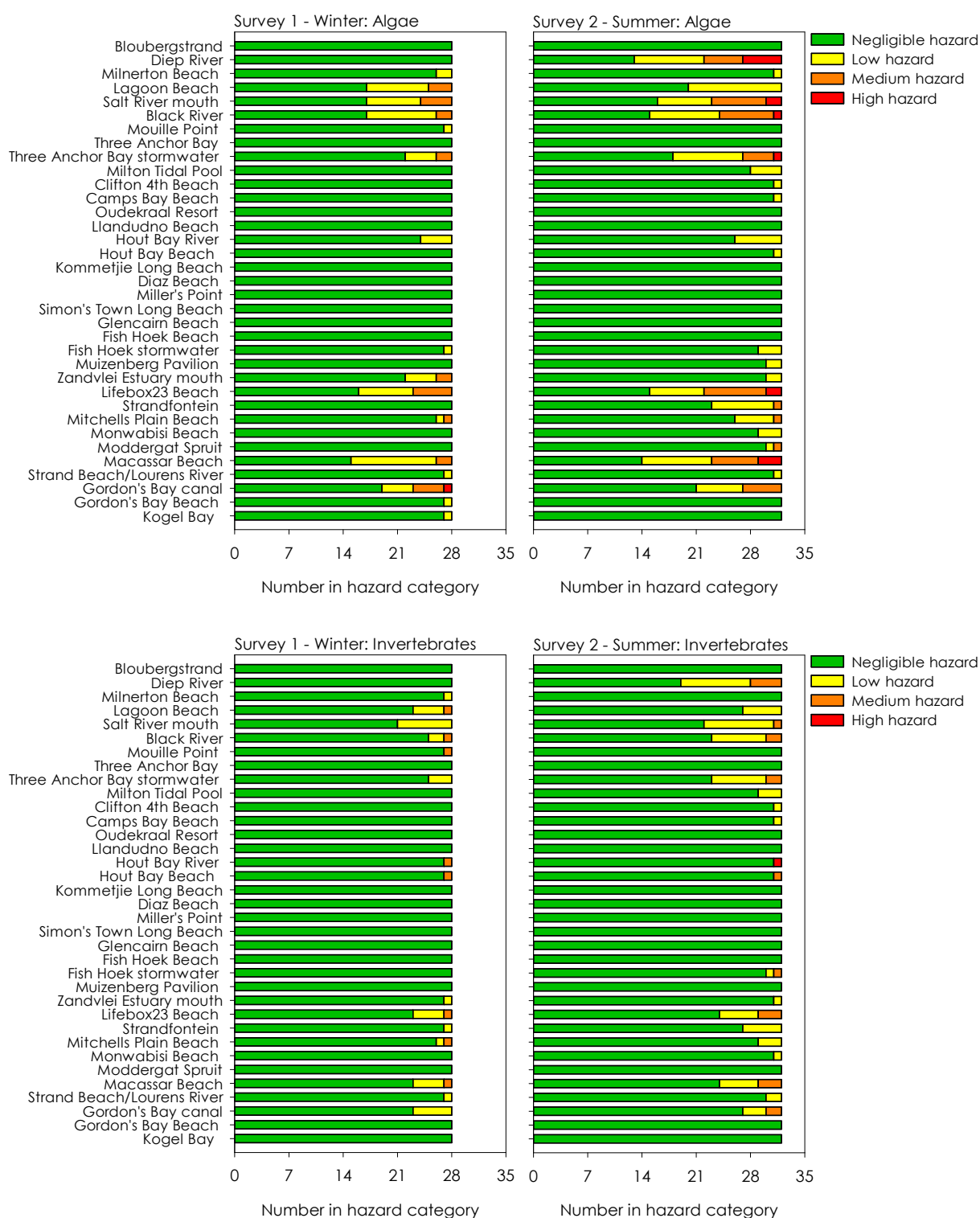


Figure 57. The number of Hazard Quotients (i.e. pharmaceutical compounds) falling into different hazard classes in water samples collected at different sites in the City of Cape Town on the 24th of August and 7th of December 2021, determined using toxicological information provided by Kuzmanović *et al.* (2015) for freshwater biota. This figure continues on the following page.

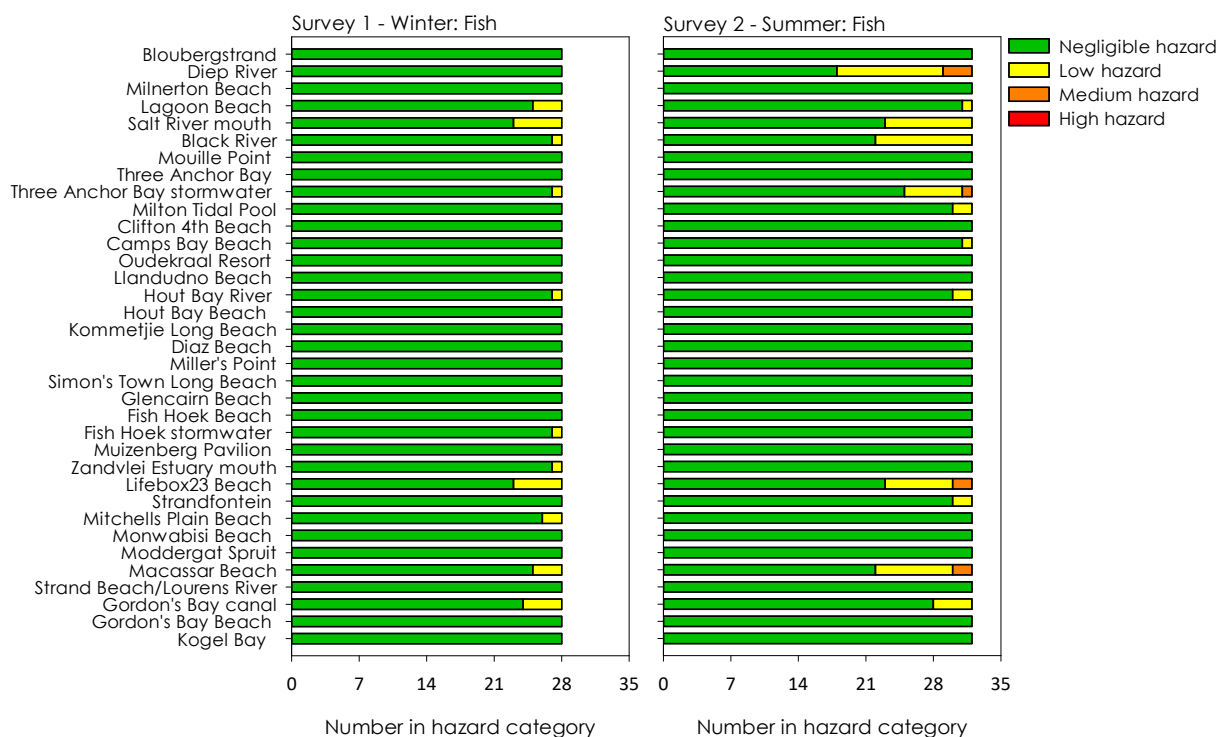


Figure 57 continued. The number of Hazard Quotients (i.e. pharmaceutical compounds) falling into different hazard classes in water samples collected at different sites in the City of Cape Town on the 24th of August and 7th of December 2021, determined using toxicological information provided by Kuzmanović *et al.* (2015) for freshwater biota.

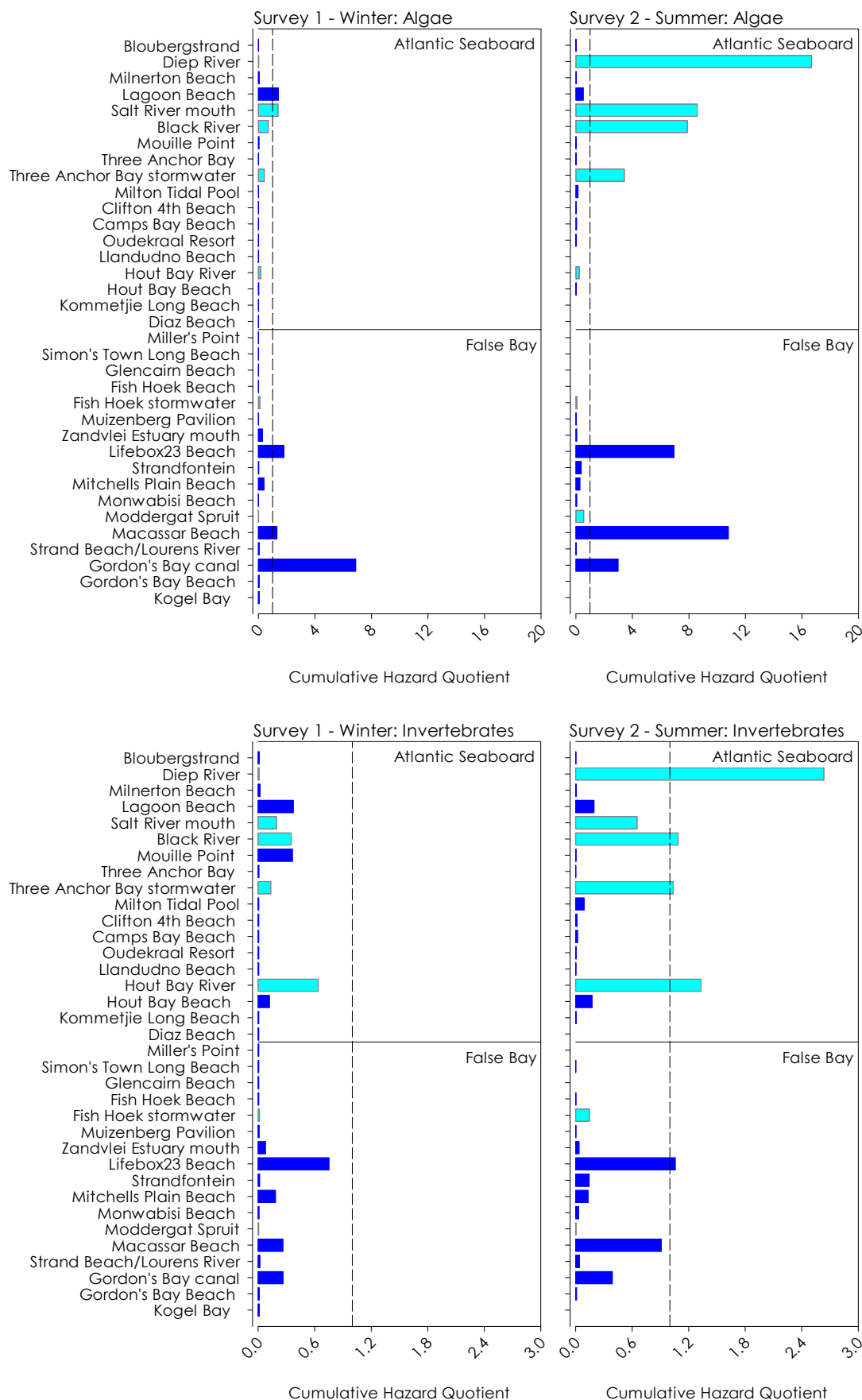


Figure 58. The cumulative Hazard Quotient for pharmaceutical compounds in water samples collected at different sites in the City of Cape Town on the 24th of August and 7th of December 2021, determined using toxicological information provided by Kuzmanović *et al.* (2015) for freshwater biota.

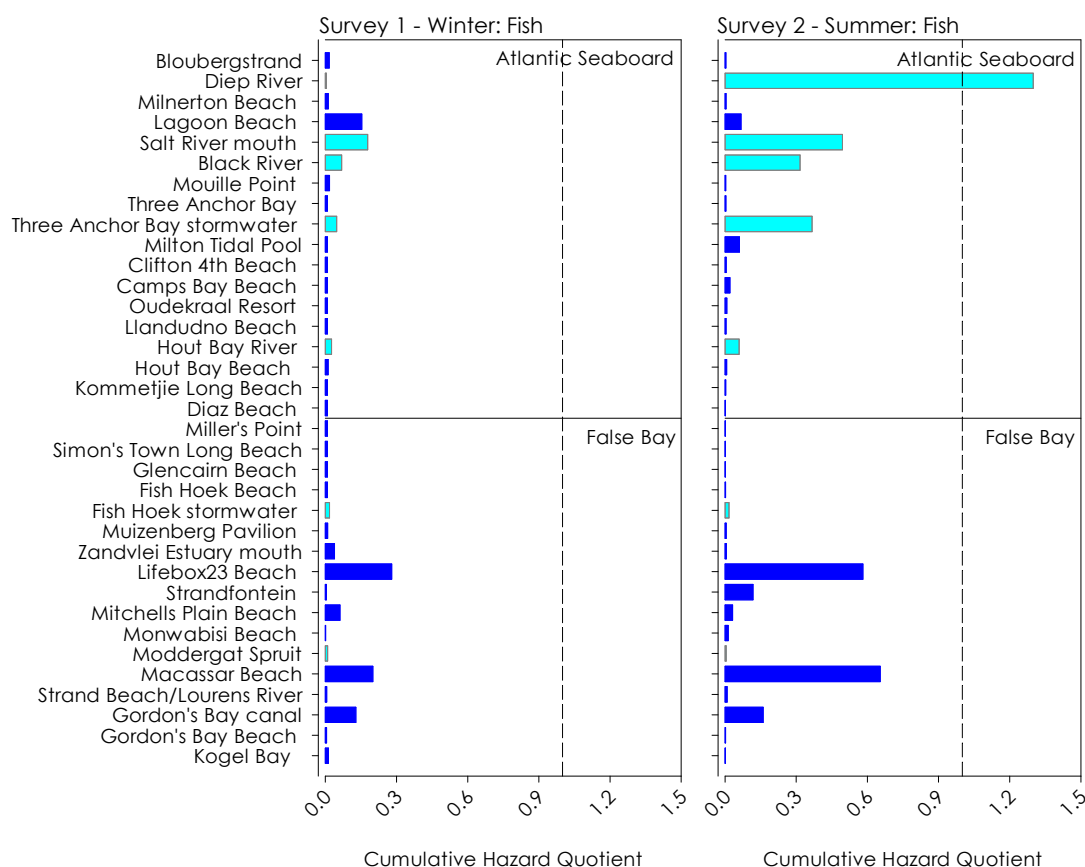


Figure 58 continued. The cumulative Hazard Quotient for pharmaceutical compounds in water samples collected at different sites in the City of Cape Town on the 24th of August and 7th of December 2021, determined using toxicological information provided by Kuzmanović *et al.* (2015) for freshwater biota.

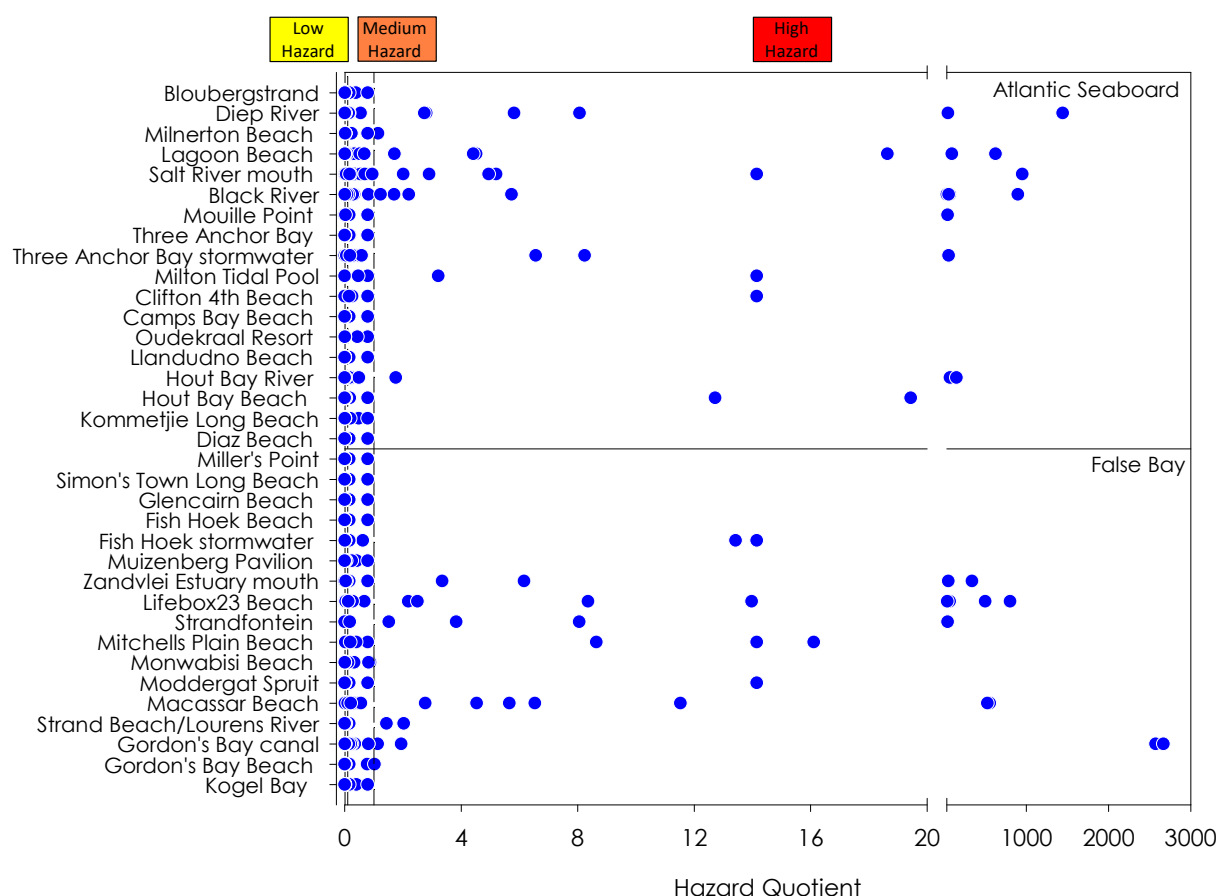


Figure 59. Hazard Quotients for pharmaceutical compound concentrations in water samples collected at different sites in the City of Cape Town on the 24th of August and 7th of December 2021, determined using toxicological information provided by Minguez *et al.* (2016). Note that the Negligible Hazard area is not denoted by a name for space reasons but is situated to the left of the Low Hazard classification.

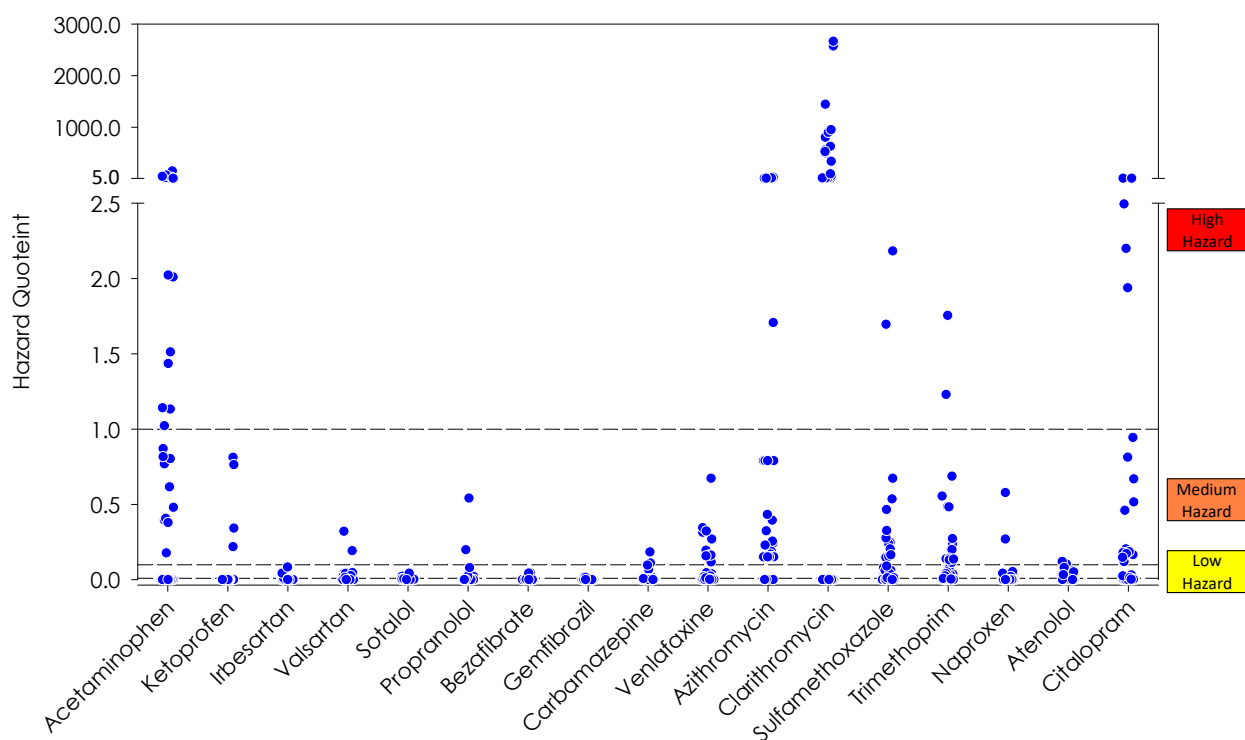


Figure 60. Hazard Quotients for pharmaceutical compounds in water samples collected in the City of Cape Town on the 24th of August and 7th of December 2021, determined using toxicological information provided by Minguez *et al.* (2016).

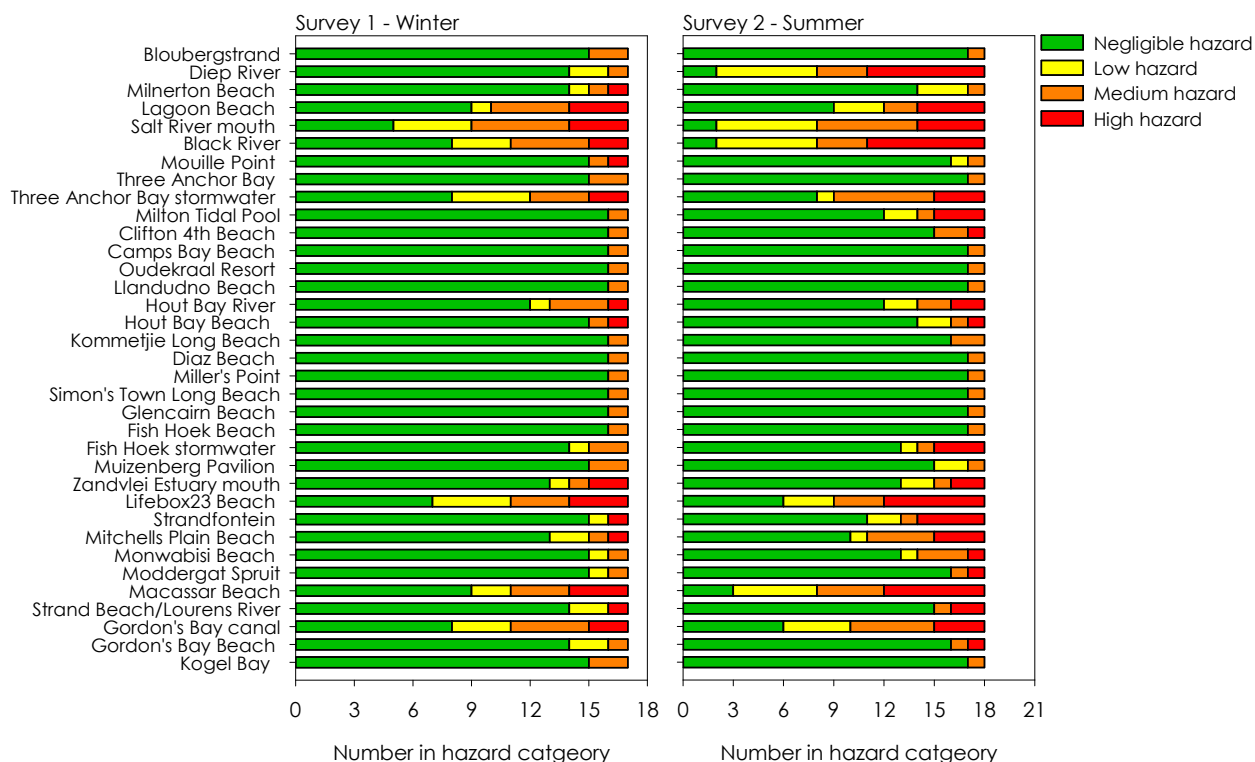


Figure 61. The number of Hazard Quotients (i.e. pharmaceutical compounds) falling into different hazard classes in water samples collected at different sites in the City of Cape Town on the 24th of August and 7th of December 2021, determined using toxicological information provided by Minguez *et al.* (2016).

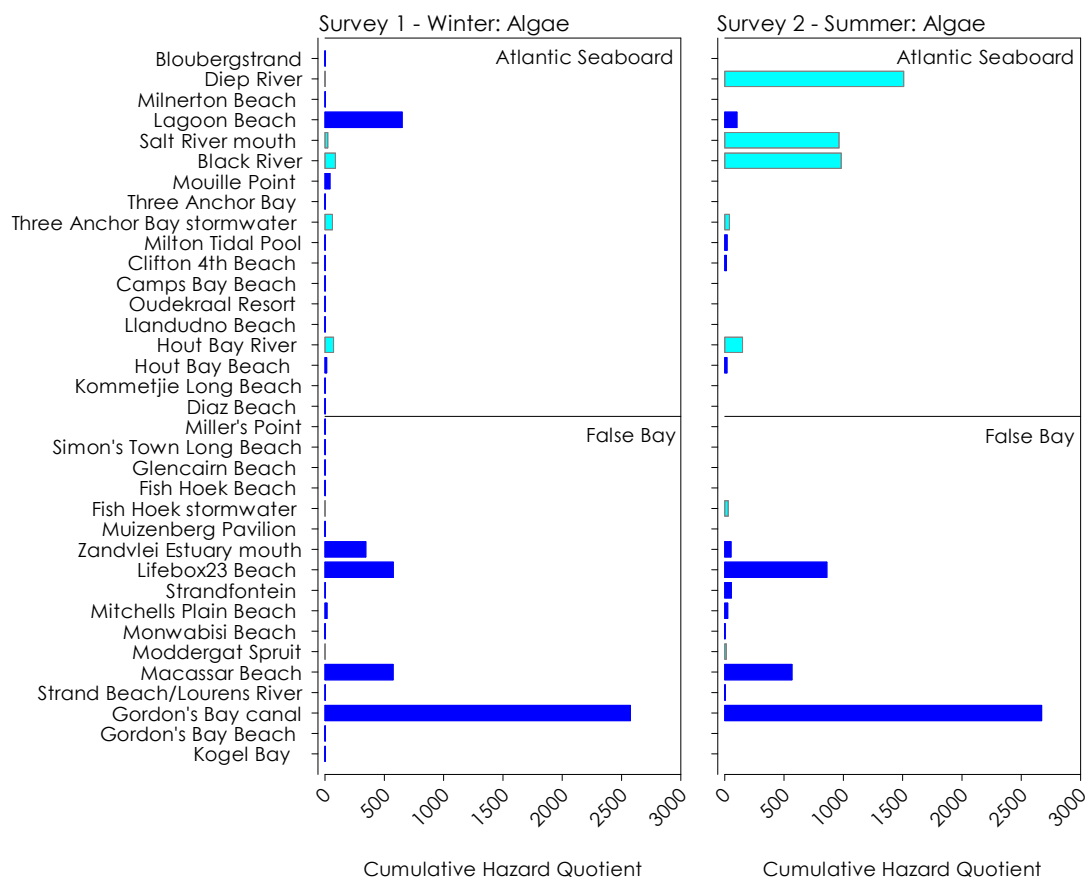


Figure 62. The cumulative Hazard Quotient for pharmaceutical compounds in water samples collected at different sites in the City of Cape Town on the 24th of August and 7th of December 2021, determined using toxicological information provided by Minguéz *et al.* (2016).

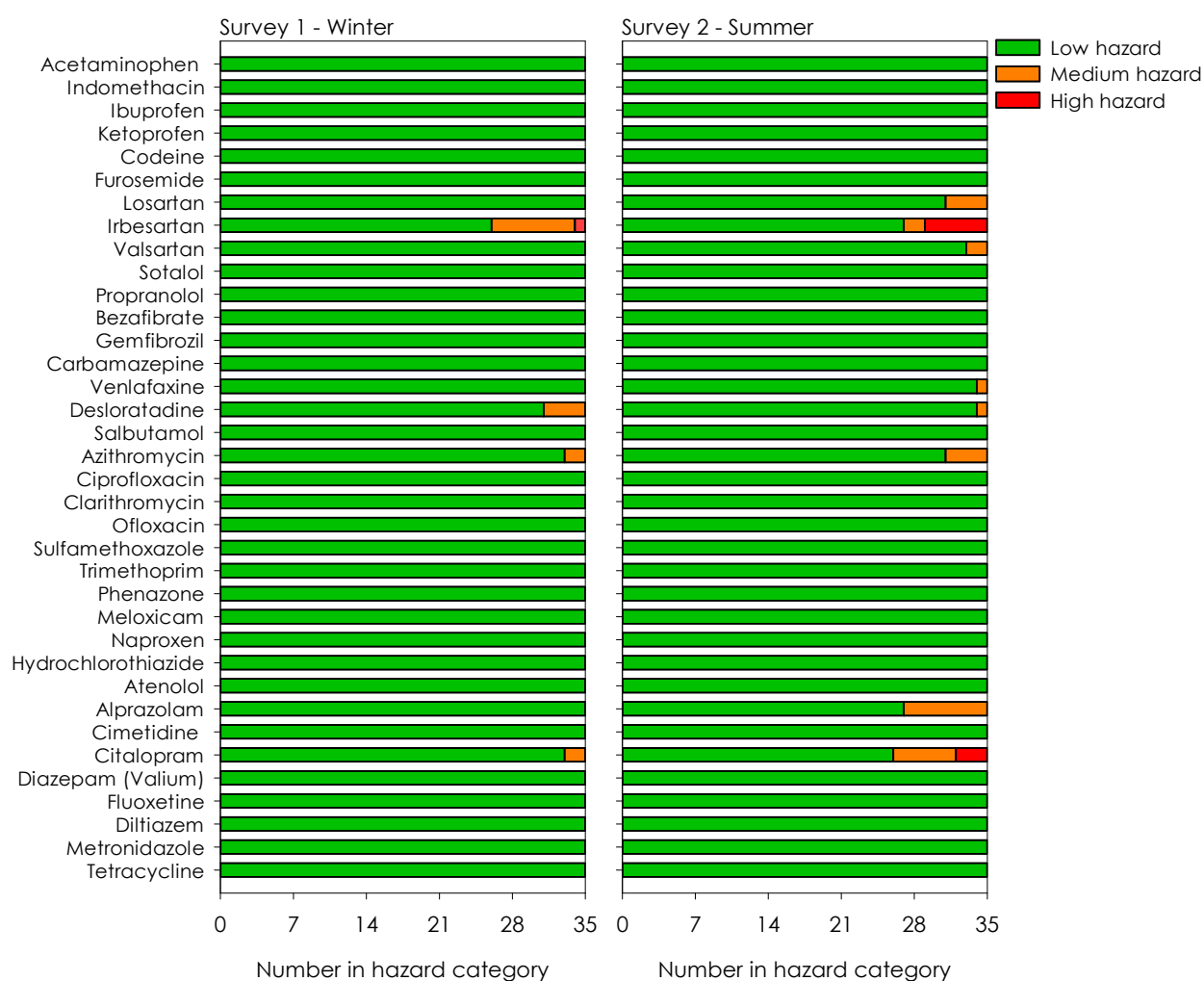


Figure 63. The number of Concentration Ratios for different pharmaceutical compounds falling into different hazard classes in water samples collected at different sites in the City of Cape Town on the 24th of August 2021, determined using Critical Environmental Concentrations provided by Fick *et al.* (2010).

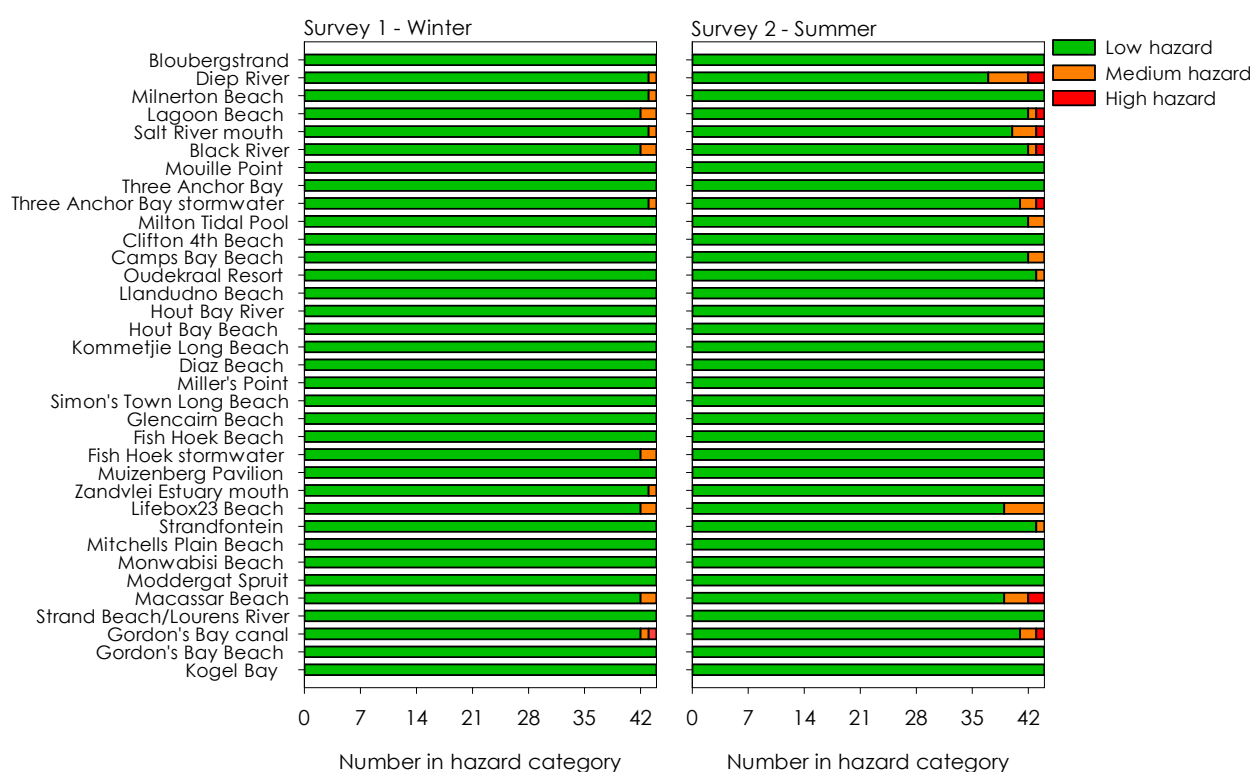


Figure 64. The number of Concentration Ratios (*i.e.* pharmaceutical compounds) falling into different hazard classes in water samples collected at different sites in the City of Cape Town on the 24th of August 2021, determined using Critical Environmental Concentrations provided by Fick *et al.* (2010).