Ten alien species were recorded in a first-time survey of the benthic biodiversity of the upper sublittoral at Sigri Bay (Lesvos Island, north-eastern Aegean Sea). The record of the mollusc Syrnola fasciata is the first in Hellenic territorial waters. The records of the brown alga Stypopodium schimperi, the bivalve Septifer cumingii, the gastropods Syrnola fasciata and Smaragdia souverbiana and the bony fish Siganus luridus constitute evidence for a further northwards extension of their geographic ranges in the Aegean Sea. The record of Cerithium scabridum is the first in Lesvos Island and partially fills the gap in the distribution of the species in the eastern Aegean Sea. We also recorded the green alga Caulerpa cylindracea, the angiosperm Halophila stipulacea and the bivalve Pinctada imbricata radiata, which are widely distributed in the eastern Mediterranean. The polychaete Marphysa adenensis, which was also found at Sigri Bay, has recently been reported for the first time from the Mediterranean as a cryptogenic species.

Keywords: invasive species, non-indigenous species, Lessepsian migrants, geographic range, geographic distribution, eastern Mediterranean

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2005a; Katsanevakis et al., 2013) that the occurrence of Lesspeesian migrants is generally negligible in the north Aegean Sea, where the waters are colder (Zervakis & Georgopoulos, 2002), a few recently published exceptions notwithstanding (e.g. Karachle et al., 2004; Zenetos et al., 2005b; Manousis et al., 2010; Yaglioglu et al., 2011; Cinar and Daghi, 2012; Manousis & Galinou-Mitsoudi, 2014). On the other hand, the alien species whose pathway of introduction is shipping activities have invaded locations throughout the Aegean Sea, with major gulfs with dense marine traffic (e.g. Saronikos, Thermaikos) being hotspots for these species (Katsanevakis et al., 2013).

The abundance and state characterization of non-indigenous species, especially the invasive ones, will be used as criteria for determining the environmental status relevant to the ‘non-indigenous species’ descriptor of Annex I to the MSFD (EU, 2010). Given the fact that new alien species are introduced every year in the Mediterranean and the Aegean Sea, and that the distribution of many of the introduced species is expanding, continuous collection of data on the geographical distribution of alien species, and the pathways of their introduction, are deemed essential prior tasks for the assessment and management of biological invasions and the environmental quality of marine waters at large (Meliane & Hewitt, 2005; Zenetos et al., 2012; Katsanevakis et al., 2013).

This paper aims to contribute to our knowledge of the current patterns of distribution and pathways of introduction of alien marine species in the north-eastern Aegean Sea.

MATERIALS AND METHODS

A survey of the benthic biodiversity (megafauna, macrofauna and macrophytic flora) of the upper sublittoral zone of Sigri Bay (Lesvos Island, north-eastern Aegean Sea) was conducted in 2013 (Figure 1). The marine environment in the Sigri Bay is considered to be relatively undisturbed, the most important pressure being artisanal fisheries. One of the principal aims of the survey was to check for the presence of alien marine species. The sampling of soft substrate macrofauna was carried out in June, with a Van Veen sediment grab (0.1 m² sampling surface), at seven sampling stations (two replicate samples per sampling station). The laboratory analysis of the macrofauna was carried out according to Eleftheriou & McIntyre (2005). A visual census (Harmelin-Vivien & Harmelin, 1975; Harmelin et al., 1985) and an underwater photographic survey of the megafauna and macrophytic flora on hard substrate and in Posidonia oceanica (Linnaeus) Delile meadows was carried out by scuba diving in September, at eight sampling stations at a depth of ca. 15 m (three transects of 25 × 5 m² per habitat and per sampling station). The geographical coordinates of all sampling stations are given in Table A1 in the appendix. Accepted species names and authorities were checked using a web service provided by the World Register of Marine Species (WoRMS) online database (WoRMS Editorial Board, 2014). Species distribution-related data (range in the Mediterranean, extent of occurrence and area of occupancy in the Aegean Sea) were assessed using the mapping web service provided by the European Alien Species Information Network (EASIN) online database (Katsanevakis et al., 2012; EASIN, 2014). The ranges of the species in the Mediterranean are given in terms of the marine ecoregions where the species have been recorded, according to the scheme of Spalding et al. (2007). The area of occupancy was assessed in relative terms, using the 10 × 10 km² grid option of the EASIN mapping web service. The species impact was also retrieved from the EASIN online database (EASIN, 2014). The information given in this paper regarding the biogeographical origin of the species and whether they are established or invasive in the eastern Mediterranean follows Zenetos et al. (2010). We considered as ‘established’ in the study area those species that have self-maintaining populations, as evidenced by a minimum of two (three for fishes) records from different localities in the study area (sensu Zenetos et al., 2005a; Katsanevakis & Tsiamis, 2009).

RESULTS AND DISCUSSION

Ten alien marine species were recorded in the study area (Table 1): the gastropods Cerithium scabridum, Smaragdia souverbiana and Syrnola fasciata, the bivalves Septifer cumingii and Pinctada imbricata radiata, the polychaete worm Marchytha adenensis, the bony fish Siganus luridus, the macro-algae Caulerpa cylindracea and Stypopodium schimperi and the angiosperm Halophila stipulacea. The record of the mollusc Syrnola fasciata is the first from Hellenic territorial waters. The records of the molluscs Septifer cumingii, Syrnola fasciata and Smaragdia souverbiana, the bony fish Siganus luridus and the brown alga Stypopodium schimperi constitute evidence for a further northwards extension of their geographic ranges in the Aegean Sea. The record of Cerithium scabridum is the first in Lesvos Island and partially fills the gap in the distribution of the species in the eastern Aegean Sea. The polychaete M. adenensis, which was also found in Sigrí Bay, has recently been reported for the first time from the Mediterranean as a cryptogenic species (Katsiaras et al., 2014). All of the recorded species were rare, with the exception of Caulerpa cylindracea, which was observed on a variety of substrates across the study area.

Caulerpa cylindracea

Synonym: Caulerpa racemosa var. cylindracea (Sonder) Verlaque, Huismann & Boudouresque

The green alga Caulerpa cylindracea, endemic to south-west Australia (Verlaque et al., 2003), was introduced in the Mediterranean via the Suez Canal. It is presently one of the best-known and most important invasive alien species in the Hellenic seas and the Mediterranean in general (Strefis & Zenetos, 2006; Tsiamis et al., 2010), its distribution reaching currently as far as the Canary Islands (Verlaque et al., 2004). The broad distribution of C. cylindracea in a wide spectrum of habitats across the Mediterranean is based on its especially effective vegetative and sexual reproduction, as well as secondary dispersal mechanisms, i.e. shipping (Klein & Verlaque, 2008). In many cases, C. cylindracea has drastically changed the structure and functioning of the local ecosystems, causing a decline in macroalgal diversity and alteration in the composition of macroalgae, as well as a modification of the structure and properties of the substrate (Piazzi et al., 2005; Klein & Verlaque, 2008).

In the area of Sigri Bay, C. cylindracea was found at all of the visual census stations and at the macrofauna sampling stations MF1, MF5 and MF7, in the northern part of the bay.
We consider it as established in the study area. The alga was observed to grow on hard and soft substrates and along the edges of the matts of *Posidonia oceanica* (Figure 2A, B). It is known that *C. cylindracea* has the ability to grow at the edges of *P. oceanica* meadows and this growth is likely to have a negative impact on *P. oceanica* leaves in the proximity of the alga, while growth inside the seagrass meadow has been found to be dependent on the seagrass shoot density (Ceccherelli et al., 2000; Katsanevakis et al., 2010). This species has been recorded at Lesvos Island also by Tsiamis et al. (2010).

*Stypopodium schimperi*

*Stypopodium schimperi* is a brown alga which was introduced in the Mediterranean via the Suez Canal and is considered as one of the tropical species that is becoming dominant in the eastern Mediterranean (Bianchi, 2007). It has been recorded in both the south and the north Aegean Sea (Tsiamis et al., 2010, 2013) and it grows on rocky bottoms, in shallow waters up to several meters deep (Verlaque & Boudouresque, 1991). It is considered among the worst invasive species in the Mediterranean because of its impact on biodiversity and ecosystem functioning (Streftaris & Zenetos, 2006). Although its invasive behaviour is well known along the Levantine coasts, such behaviour had not been observed in Greece until extremely high abundances and dominance of this species were observed in Rhodes Island in 2009 (Tsiamis et al., 2010). Its effectiveness as an invasive species may be attributed to its perennial life cycle, its possession of defence metabolites and its avoidance by grazers (Boudouresque & Verlaque, 2002).

In the area of Sigri Bay, *S. schimperi* patches were observed on rocky substrate at the visual census station VC4, at the

(Figure 1). We consider it as established in the study area. The alga was observed to grow on hard and soft substrates and along the edges of the matts of *Posidonia oceanica* (Figure 2A, B). It is known that *C. cylindracea* has the ability to grow at the edges of *P. oceanica* meadows and this growth is likely to have a negative impact on *P. oceanica* leaves in the proximity of the alga, while growth inside the seagrass meadow has been found to be dependent on the seagrass shoot density (Ceccherelli et al., 2000; Katsanevakis et al., 2010). This species has been recorded at Lesvos Island also by Tsiamis et al. (2010).
Table 1. List of the alien species recorded in the study area and their invasion ecology-related attributes. Data are compiled from the scientific literature and on-line databases (cf. Materials and Methods), except *, which is new information in this paper.

<table>
<thead>
<tr>
<th>Species</th>
<th>Phylum</th>
<th>Sampling stations</th>
<th>Origin</th>
<th>Range in the Mediterranean</th>
<th>Impact</th>
<th>Established in the eastern Mediterranean</th>
<th>Invasive in the eastern Mediterranean</th>
<th>Area of occupancy in the Aegean Sea (Hellenic territorial waters)</th>
<th>Extent of occurrence in the Aegean Sea (Hellenic territorial waters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stypopodium schimperi (Kützing)</td>
<td>Ochrophyta</td>
<td>VC₄</td>
<td>IWP</td>
<td>31–33</td>
<td>High</td>
<td>+</td>
<td>+</td>
<td>High</td>
<td>Sea of Crete to Lesvos Island*</td>
</tr>
<tr>
<td>Caulerpa cylindracea Sonder</td>
<td>Chlorophyta</td>
<td>VC₁–VC₇, MF₁, MF₅, MF₇</td>
<td>IP</td>
<td>30–36</td>
<td>High</td>
<td>+</td>
<td>+</td>
<td>High</td>
<td>Sea of Crete to Chalkidiki peninsula</td>
</tr>
<tr>
<td>Halophila stipulacea (Forsskål) Ascherson</td>
<td>Tracheophyta</td>
<td>MF₅–MF₇</td>
<td>RS</td>
<td>30–35</td>
<td>High</td>
<td>+</td>
<td>+</td>
<td>High</td>
<td>Sea of Crete to Thessalonikian Bay</td>
</tr>
<tr>
<td>Cerithium scabridum Philippi, 1848</td>
<td>Mollusca</td>
<td>MF₁–MF₇</td>
<td>IO, RS</td>
<td>31–34</td>
<td>Low or unknown</td>
<td>+</td>
<td>+</td>
<td>High</td>
<td>Lesvos Island*, Rhodes Island</td>
</tr>
<tr>
<td>Septifer cumingii Reculz, 1849</td>
<td>Mollusca</td>
<td>MF₇</td>
<td>RS</td>
<td>31</td>
<td>Low or unknown</td>
<td>+</td>
<td>+</td>
<td>Low</td>
<td>Crete, Cyclades, Saronikos Gulf, Lesvos Island*</td>
</tr>
<tr>
<td>Siganus souverbiana (Montrouzier in Souverbie &amp; Montrouzier, 1863)</td>
<td>Mollusca</td>
<td>MF₅, MF₇</td>
<td>IP, RS</td>
<td>31–32</td>
<td>Low or unknown</td>
<td>+</td>
<td>−</td>
<td>Low</td>
<td>Rhodes Island, Saronikos Bay, Lesvos Island*</td>
</tr>
<tr>
<td>Syrnola fasciata Jickel, 1882</td>
<td>Mollusca</td>
<td>MF₁, MF₇</td>
<td>IP</td>
<td>32</td>
<td>Low or unknown</td>
<td>+</td>
<td>−</td>
<td>Low</td>
<td>Sigri Bay (Lesvos Island)*</td>
</tr>
<tr>
<td>Pinctada imbricata radiata (Leach, 1814)</td>
<td>Mollusca</td>
<td>VC₇</td>
<td>IP, RS</td>
<td>30–35</td>
<td>High</td>
<td>+</td>
<td>+</td>
<td>High</td>
<td>Sea of Crete to Lesvos Island</td>
</tr>
<tr>
<td>Marphysa adenensis Gravier, 1900</td>
<td>Annelida</td>
<td>MF₇</td>
<td>IP?</td>
<td>31, 34</td>
<td>Low or unknown</td>
<td>?</td>
<td>?</td>
<td>Low</td>
<td>Lesvos Island</td>
</tr>
<tr>
<td>Siganus luridus (Rüppell, 1829)</td>
<td>Chordata</td>
<td>VC₄, VC₆</td>
<td>IO, RS</td>
<td>31–35</td>
<td>High</td>
<td>+</td>
<td>+</td>
<td>High</td>
<td>Sea of Crete to Lesvos Island*</td>
</tr>
</tbody>
</table>
Fig. 2. Photographs of the alien species recorded in the study area: (A) Caulerpa cylindracea growing on the edge of a Posidonia oceanica mat; (B) Caulerpa cylindracea growing among photophilic algae (e.g., Padina pavonica (Linnaeus) Thivy); (C) a Stypopodium schimperi stand; (D) Septifer cumingii; (E, F) Smaragdia souverbiana; (G) Cerithium scabridum; (H) Syrnola fasciata. Scale bar: 1 mm.
south of Kavalauros islet (Figures 1 & 2C). We do not have enough data to assess its establishment status in the study area. To our knowledge, this is presently the northernmost published record of this species in the Aegean Sea, the immediately preceding one having been at Chios Island (Katsanevakis & Tsiamis, 2009).

**Halophila stipulacea**

The marine angiosperm *Halophila stipulacea* is a Lessepsian migrant that is established and invasive in the eastern Mediterranean (Zenetos *et al.*, 2010) and in the Hellenic seas, although it is absent from the far north Aegean Sea, probably because of the lower seawater temperature therein (Tsiamis *et al.*, 2010). It is found on sandy bottoms at various depths, usually along with the native seagrass *Cymodocea nodosa* (Ucetia) Ascherson and, occasionally, it can be abundant (Tsiamis *et al.*, 2013). It is considered to be harmful to biodiversity (Streftaris & Zenetos, 2006) because of the indications of invasive behaviour on sandy bottoms due to its high abundance. However, no displacement of native species due to *H. stipulacea* has been reported in the Mediterranean Sea yet (Tsiamis *et al.*, 2013).

In the area of Sigri Bay, *H. stipulacea* was found on soft substrate, at the macrofauna sampling stations MF5, MF6 and MF7, in the northern part of the bay (Figure 1). We consider it as established in the study area. The northernmost published records in the Aegean Sea have been at the Pagasitikos Gulf and Sporades Islands (Tsiamis *et al.*, 2010). To our knowledge, this is presently the northernmost published record of this species in the Aegean Sea, the immediately preceding ones having been at Dikili, on the Turkish coast of the Aegean Sea (Akçılı & Cirik, 2007) and at Chios Island (Katsanevakis & Tsiamis, 2009).

**Septifer cumingii**

**Synonym:** *Septifer forskali* Dunker, 1855

The bivalve *Septifer cumingii* was introduced in the Mediterranean via the Suez Canal and is currently established and invasive in the eastern Mediterranean (Zenetos *et al.*, 2012). A suspension feeder, epifaunal and actively mobile, it attaches by byssus on hard substrata in shallow waters, on a variety of substrates that include sandy mud, gravel, and seagrass leaves (Zenetos *et al.*, 2003). A rare species, it was found on the Levantine coast of Turkey (Bakir *et al.*, 2012) and only recently in the southern Aegean (Zenetos *et al.*, 2011) and Saronikos Bay (Zenetos *et al.*, 2013).

In the area of Sigri Bay, *S. cumingii* was found in soft substrate samples at the macrofauna sampling station MF7 (one specimen), in the northern part of the bay (Figures 1 & 2D). We do not have enough data to assess its establishment status in the study area. To our knowledge, this is presently the northernmost published record of this species in the Aegean Sea, the immediately preceding ones having been at the island of Astypalaia in the Dodecanese (Zenetos *et al.*, 2011) and Saronikos Bay (Zenetos *et al.*, 2013).

**Smaragdia souverbiana**

*Smaragdia souverbiana* is a gastropod species that is widely distributed in the Indo-West Pacific (Dekker, 2000). Its first published record in the Mediterranean was from the Levantine coast of Turkey (Bizzurro & Greppi, 1994), although a single shell of *Smaragdia souverbiana* was found in the intestine of the Erythrean alien fish *Callionymus filamentosus* Valenciennes, 1837, which had been caught in Haifa Bay in 1987 (Rothman & Mienis, 2011). *Smaragdia souverbiana* is a seagrass-associated gastropod species (Dekker, 2000; Rossini *et al.*, 2014) that was found to directly consume tissues of the seagrass species *Halophila ovalis* (R. Brown) J.D. Hooker, Zostera marina and *Cymodocea serrulata* (R. Brown) Ascherson & Magnus in eastern Australia (Rossini *et al.*, 2014). Another neritid species that is also directly feeding on seagrasses is *Smaragdia viridis* (Linnaeus, 1758), the only native marine species of the family Neritidae from European coasts (Rueda & Salas, 2007). *Smaragdia viridis* was found to feed on *Zostera marina* Linnaeus and *Cymodocea nodosa* (Ucetia) Ascherson in the western Mediterranean (Rueda & Salas, 2007). *Smaragdia viridis* is the only known native species of marine gastropods that has been shown to belong to the trophic group of seagrass-consuming animals in the Mediterranean (Rueda & Salas, 2007). However, it remains to be demonstrated whether the alien in the Mediterranean *Smaragdia souverbiana* is also directly feeding on seagrasses.

In the area of Sigri Bay, *Smaragdia souverbiana* was found in soft substrate samples, at the macrofauna sampling stations MF5 (two specimens) and MF7 (one specimen), in the northern part of the bay (Figures 1 & 2E, F). We consider it as established in the study area. To our knowledge, this is presently the northernmost published record of this species in the Aegean Sea, the immediately preceding ones having been at Rhodes Island (Bizzurro & Greppi, 1994) and in the Korinthiskos Gulf (Zenetos *et al.*, 2013). We also recorded *Smaragdia viridis* in the area of Sigri Bay, in soft substrate samples, at the macrofauna sampling stations MF1 (18 specimens), MF2 (2), MF5 (2) and MF7 (6).

**Cerithium scabridum**

The gastropod *Cerithium scabridum* is a Lessepsian migrant that is considered established and invasive in the eastern Mediterranean (Zenetos *et al.*, 2010). It is found in shallow waters, on a variety of substrates that include sandy mud, with *Cymodocea nodosa* or *Zostera noltei* Hornemann (Zenetos *et al.*, 2004). Its considerable success as an invasive species may be attributed to its ability for long-distance dispersal via a long-lived pelagic larval stage, high fecundity and a wide ecological niche (Lavie & Nevo, 1986).

In the area of Sigri Bay, *Cerithium scabridum* was found in soft substrate samples at the macrofauna sampling station MF1 (three specimens), in the northern part of the bay (Figures 1 & 2G). We do not have enough data to assess its establishment status in the study area. Its known distribution in the Aegean Sea consists of Imvros (Albayrak, 2001) and Rhodes (Zenetos *et al.*, 2009a) islands. This new record in Lesbos Island, at an intermediate latitude along the eastern Aegean, further closes the gap in its distribution in the eastern Mediterranean Sea.

**Syrnola fasciata**

*Syrnola fasciata* is a marine gastropod species of the family Pyramidellidae. It is of Indo-Pacific origin, it was introduced in the Mediterranean via the Suez Canal and is currently established in the eastern Mediterranean (Zenetos *et al.*, 2010). A rare species, it was found on the Turkish coast of the Aegean Sea (Akcılı & Cirik, 2007) and in the Hellenic area. To our knowledge, this is presently the northernmost published record of this species in the Aegean Sea, the immediately preceding ones having been at Rhodes Island (Bizzurro & Greppi, 1994) and in the Korinthiskos Gulf (Zenetos *et al.*, 2013). We also recorded *Smaragdia viridis* in the area of Sigri Bay, in soft substrate samples, at the macrofauna sampling stations MF1 (18 specimens), MF2 (2), MF5 (2) and MF7 (6).
Sarpa salpa (Linnaeus, 1758) and with the two native herbivorous fish of the Mediterranean, Siganus rivulatus (Forsskal & Niebuhr, 1775), they effectively compete for food and habitat resources. Along with Siganus rivulatus, Siganus luridus is a Lessepsian migrant herbivorous fish along the coasts of the eastern Mediterranean, producing in the Mediterranean via the Suez Canal and is currently established and invasive in the eastern Mediterranean. Whereas, there is only a small number of scattered records in the eastern Mediterranean for Cerithium scabridum, Septifer cumingii, Smaragdia souverbiana, Syrnola fasciata and Marphysa adenensis, and these species are considered to be ‘suspected’ Lessepsian migrants, or species that were possibly transported by shipping activities.

In Sigri Bay, Siganus luridus was found on hard substrate and on Posidonia oceanica meadows at the visual census stations VC4, south of the Kavalouros islet (three individuals, 20 cm in length) and VC6, near the Plaka headland (one individual, 15 cm in length). The Siganus luridus individuals were observed to intermingle with Sarpa salpa individuals. We do not have enough data to assess its establishment status in the study area. To our knowledge, this is presently the northernmost published record of this species in the Aegean Sea, the immediately preceding ones having been at Chios Island (Katsanevakis & Tsimis, 2009), in the gulf of Smyrna (Kara & Akyol, 2011) and at the Cyclades Islands (Giakoumi, 2014).

Half of the alien species found in Sigri Bay were molluscs. This is not surprising though, since molluscs are the most diverse group of marine alien species in the Mediterranean (Zenetos et al., 2012) and also in the Aegean Sea (Zenetos et al., 2011). All of the alien species recorded in the area of Sigri Bay are of Indo-Pacific origin, presumably introduced to the Mediterranean via the Suez Canal. Stypopodium schimperi, Caulerpa cylindracea, Halophila stipulacea, Pinctada imbricata radiata and Siganus luridus are widely distributed in the eastern Mediterranean. Whereas, there is only a small number of scattered records in the eastern Mediterranean for Cerithium scabridum, Septifer cumingii, Smaragdia souverbiana, Syrnola fasciata and Marphysa adenensis, and these species are considered to be ‘suspected’ Lessepsian migrants, or species that were possibly transported by shipping activities.

It is known that low advection contributes to the retention of both larvae and suspended, fine sediments in sheltered habitats such as embayments, and increased larval retention can contribute to an increased establishment of non-native species (Byers & Pringle, 2006). Accordingly, compared to open coasts, a much higher number and proportion of alien species are found in embayments where soft-bottom habitats predominate (Byers & Grabowski, 2014). These processes seem to control the distribution of macrobenthic alien species in the study area; almost all of the alien macrobenthic species (with the exception of Pinctada imbricata radiata, a species associated with hard substrates), as well as H. stipulacea, were recorded only in the sheltered northern part of Sigri Bay and none along the exposed western coast of Nisiopi Island.

The importance of shipping as a pathway for the introduction of alien species in the area of Sigri Bay is unknown. Today, Sigri is a minor port that is used mainly by fishing and military vessels. However, it is also sporadically used by passenger ships and yachts. As such, we speculate that shipping activities may mediate in the introduction of biofouling alien species. Indeed, Pinctada imbricata radiata and Septifer cumingii, which we found in Sigri Bay, are two biofouling species known to foul artificial surfaces (e.g. Öztek et al., 2014). There is a plan for upgrading the port facilities in the near future, and the importance of shipping as a pathway of introduction for alien species in the area may also become enhanced.

Within the limited extent of the study area, we recorded ten alien marine species that are Lessepsian or ‘suspected’ Lessepsian migrants. This result seems to contradict the convention that the presence of Lessepsian migrants in the...
north Aegean Sea is generally negligible (e.g. Pancucci-Papadopoulou et al., 2005; Zenetos et al., 2009b; Katsanevakis et al., 2013) and indicates that the northwards expansion of the distributions of alien marine species in the Aegean Sea is presently an ongoing phenomenon.

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**Appendix**

Table A1. Geographic coordinates in decimal degrees of the sampling stations.

<table>
<thead>
<tr>
<th>Station</th>
<th>Latitude N (DD)</th>
<th>Longitude E (DD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC1</td>
<td>39.226931</td>
<td>25.842886</td>
</tr>
<tr>
<td>VC2</td>
<td>39.221833</td>
<td>25.837631</td>
</tr>
<tr>
<td>VC3</td>
<td>39.202821</td>
<td>25.821202</td>
</tr>
<tr>
<td>VC4</td>
<td>39.198580</td>
<td>25.820260</td>
</tr>
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<td>VC5</td>
<td>39.197512</td>
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</tr>
<tr>
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<td>39.203395</td>
<td>25.848988</td>
</tr>
<tr>
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<td>39.201395</td>
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<td>39.216481</td>
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<td>MF7</td>
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