

OTHER ACTIVITIES OF A DANGEROUS NATURE AND OTHER POTENTIAL HAZARDS

OTHER ACTIVITIES OF A DANGEROUS NATURE

1.1 The Agencia Estatal de Meteorología operates seven radiosonde stations of the synoptic network of observation in altitude.

Each one of the following stations, belonging to the Regional Basic Synoptic Network of the World Meteorological Organization (WMO) regional Association VI, accomplishes the following daily radiosoundings, from 1115 to 1200, and from 2315 to 0000 UTC:

STATIONS	COORDINATES	ALTITUDE	IDENTIFICATION
A CORUÑA	4322N 00826W	130 m	08000
SANTANDER CMT	4329N 00348W	52 m	08023
MADRID/BARAJAS	4028N 00335W	631 m	08221
MURCIA	3800N 00110W	61 m	08430
PALMA DE MALLORCA/SON BONET	3936N 00242E	41 m	08302
HUELVA, RONDA ESTE	3716N 00654W	19 m	08383

In these stations the radiosonde rig is composed of:

- A balloon weighing 350/500 g, filled with helium gas, with a diameter of approximately 1.40/1.50 m at the time of launching, reaching maximum altitudes of 24/29 km;
- A parachute of 1.10 m diameter and 60-75 g weight;
- A radiosonde with a GPS receiver to set the wind and a digital transmitter of a GFSK modulated signal in the 400.15-406 MHz band. It weighs approximately 113-150 g and its dimensions are 95 x 95 x 88.5 or 155 x 63 x 46 mm;
- The average rate of ascent of the whole unit is approximately 320 m/min. The full sounding operation takes 100 min.

At the Madrid/Barajas station, in addition to the thermodynamic sounding, an ozone sounding is performed every Wednesday from 1100 to 1145 UTC. In this case the radiosonde rig is composed of:

- A balloon weighing 1200 g, filled with helium gas, with a diameter of approximately 1.79 m

- at the time of launching, reaching a maximum altitude of 34 km;
- A parachute of 1.10 m diameter and 160-200 g estimated weight;
 - A radiosonde with a GPS receiver to set the wind and a digital transmitter of a GFSK modulated signal in the 400.15-406 MHz band. It weighs approximately 113 g and its dimensions are 155 x 63 x 46 mm;
 - An ozone sensor weighing 600 g, whose dimensions are 191 x 191 x 254 mm;
 - The average rate of ascent of the whole unit is approximately 320 m/min. The sounding operation takes approximately 120 minutes to complete. Afterwards, the weather balloon falls, with the balloon popped, and it is slowed down by a parachute.

STATION	COORDINATES	ALTITUDE	IDENTIFICATION
GÜIMAR (TENERIFE)	2819N 01623W	115 m	60018

This station, belonging to the Regional Basic Synoptic Network of the World Meteorological Organization (WMO) Association I, accomplishes the following radiosoundings:

- Daily, from 1115 to 1200, and from 2315 to 0000 UTC.

The radiosonde rig is composed of:

- A balloon weighing 350/500 g, filled with helium gas, with a diameter of approximately 1.50 m at the time of launching, reaching maximum heights between 24-29 Km;
- A parachute of 1.10 m diameter and 60-75 g weight;
- A radiosonde with a GPS receiver to set the wind and a digital transmitter of a GFSK modulated signal in the 400.15-406 MHz band. It weighs approximately 113 g and its dimensions are up to 155 x 63 x 46 mm;
- The average rate of ascent of the whole unit is 320 m/min. The sounding operation takes approximately 90-120 minutes to complete. Afterwards, the weather balloon falls, with the balloon popped, and it is slowed down by a parachute.

1.2 Outside the synoptic network, ozone soundings are performed at the following station:

STATION	COORDINATES	ALTITUDE
PUERTO DE LA CRUZ (TENERIFE)	2825N 01632W	114 m

This station accomplishes an ozone radiosounding on Wednesdays at 1230 UTC (from October to

April) and 1130 UTC (from April to October).

The radiosonde rig is composed of:

- A balloon weighing 1200 g, filled with helium gas, with a diameter of approximately 1.79 m at the time of launching, reaching a maximum altitude of 34 km;
- A parachute of 1.10 m diameter and 70 g weight;
- A radiosonde with a GPS receiver to set the wind and a digital transmitter of a GFSK modulated signal in the 401.5 MHz band. It weighs approximately 270 g and its dimensions are 220 x 80 x 75 mm;
- An ozone sensor weighing 600 g, whose dimensions are 191 x 191 x 254 mm;
- The average rate of ascent of the whole unit is approximately 300 m/min.

1.3 The Departamento de Medio Ambiente of the Generalitat de Catalunya operates one radiosonde station:

STATION	COORDINATES	ALTITUDE
BARCELONA	4123N 00207E	94 m

This station accomplishes two daily radiosoundings, at 1100 and 2300.

The radiosonde rig is composed of:

- A balloon weighing 350 g, filled with helium gas, with a diameter of approximately 1.25 m at the time of launching, reaching a maximum altitude of 25-30 km;
- Does not use parachute;
- A radiosonde with a GPS receiver to set the wind and a digital transmitter of a PSK 4800 Baudios modulated signal in the 400.15-406 MHz band. It weighs approximately 150 g and its dimensions are 95 x 95 x 88.5 mm;
- The average rate of ascent of the whole unit is approximately 250 m/min. The sounding operation takes approximately 90-120 minutes to complete. Afterwards, the weather balloon falls, with the balloon popped, and it is slowed down by a parachute.

1.4 The Consellería de Medio Ambiente, territorio y vivienda of the Xunta de Galicia operates one radiosonde station:

STATION	COORDINATES	ALTITUDE
SANTIAGO (A CORUÑA)	4253N 00831W	287 m

This station accomplishes one weekly radiosounding on Tuesdays from 0800 and 1000 in winter, and from 0700 and 0900 in summer.

The radiosonde rig is composed of:

- A balloon weighing 350/500 g, filled with helium gas, with a diameter of approximately 1.60 m at the time of launching, reaching a maximum altitude of 28 km;
- A parachute of 1 m diameter and 70 g weight;
- A radiosonde with a GPS receiver to set the wind and a digital transmitter of a GFSK modulated signal in the 401 MHz band. It weighs approximately 100 g in total and its dimensions are 282 x 63 x 46 mm (body and TH sensor);
- The average rate of ascent of the whole unit is 300 m/min;
- Besides the scheduled launches, isolated releases may be conducted in coordination with Madrid ACC and Santiago TACC.

1.5 UAS Geographical Zones

The UAS Geographical Zones identified within Spanish territory and sovereign airspace are available at:

<https://aip.enaire.es/AIP/UAS-en.html>