**ANNEX No. 2:**

# Description of data set extracted from the Austrian TAMOS system which will be transmitted to SUJB


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## 1. TAMOS emergency response package

TAMOS is the main Austrian emergency response package for long-range dispersion predictions and trajectories which has been developed by the Austrian Central Geophysical and Meteorological Institute (ZAMG). The standard meteorological prognostic input data are ECMW fields. Identical program packages of TAMOS are installed at ZAMG in Vienna and at the BMLFUW.

## 2. Prognostic meteorological data

A data set of meteorological prognostic data for the Temelin and Dukovany site could be transmitted from BMLFUW, Vienna to SUJB, Prague. This data set will be extracted from the prognostic data (ECMWF fields) used as input for the TAMOS system prepared by the Austrian meteorological service (ZAMG).

The following data will be transmitted:

- wind direction in degrees,
- wind rate in m/s (in 80 m above the terrain),
- rain intensity in mm/h,
- Pasquill category of stability (A - F)

**Table:** Example of data set transmitted from Vienna to Prague: prognosis of meteorological data for the site Temelin and Dukovany for every full hour and in consecutive hours up to time +12 h:

| time stamp | 19:00:00, 13.10.2003 |
|---|---|
| + 1h | |
| wind direction | 230 |
| wind rate | 3.2 |
| rain intensity | 0 |
| category | D |
| + 2h | |
| wind direction | 200 |
| wind rate | 1.8 |
| rain intensity | 0 |
| category | D |

etc.

.....

| | |
|---|---|
| + 11h | |
| wind direction | 290 |
| wind rate | 5.8 |
| rain intensity | 0.3 |
| category | F |
| + 12h | |
| wind direction | 270 |
| wind rate | 4.8 |
| rain intensity | 1.4 |
| category | F |

## 3. TAMOS Results

During emergencies and exercises with real or hypothetical radioactive atmospheric releases at Temelin and Dukovany the following standard results of the TAMOS system installed at BMLFUW will be transmitted to SUJB:

- Maps for the wind trajectories in Europe obtained by the TAMOS trajectory model FLEXTRA
- Maps for the long-range dispersion predictions obtained by the TAMOS model FLEXPART (Isolines for time integrated near surface air concentrations, deposition and precipitation)

The following figures present examples for the results which could be transmitted

**Figure 1.** Long-range trajectories from TAMOS

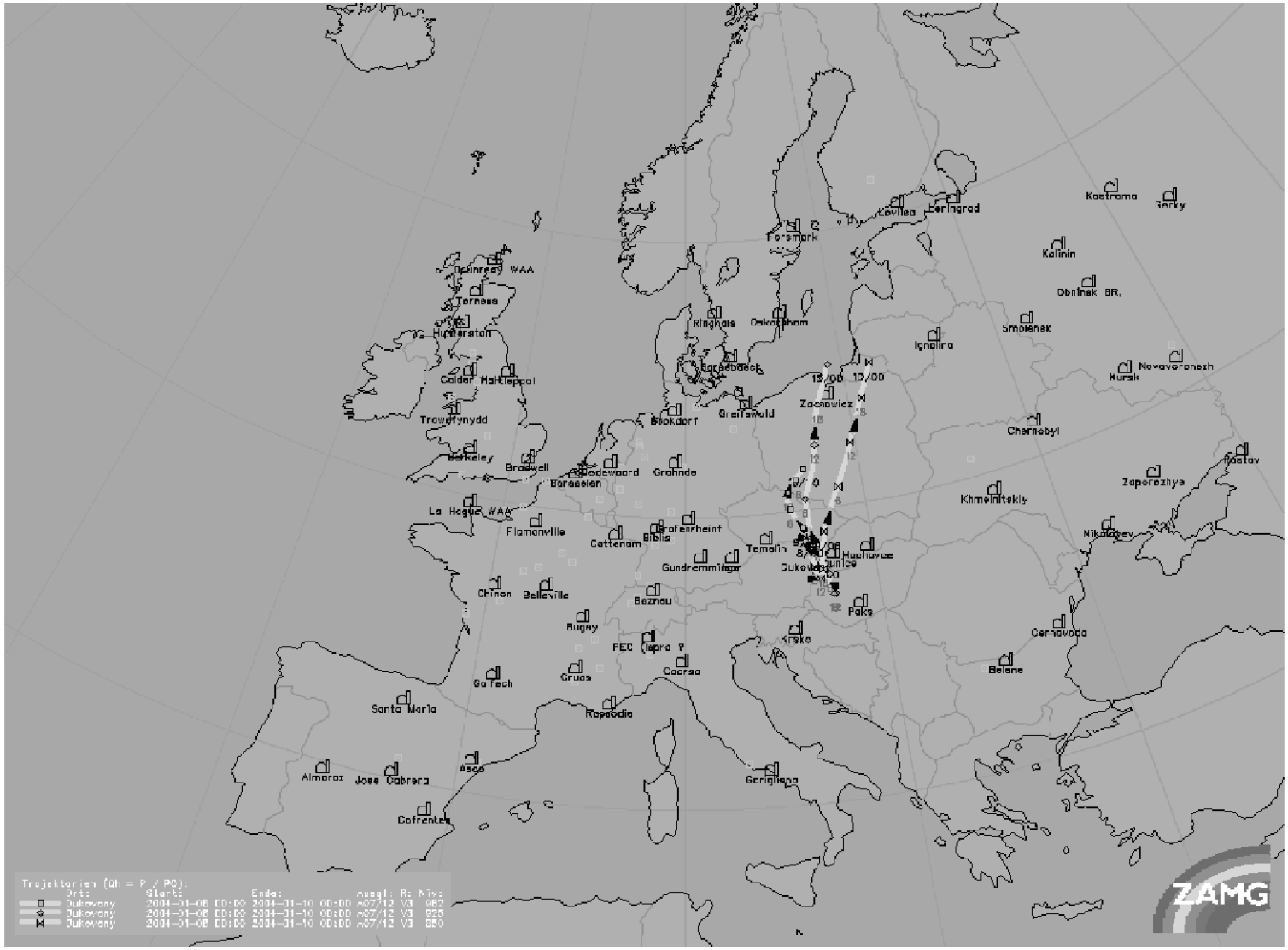

**Figure 2.** Time integrated near surface air concentrations [Bqs/m$^3$], after 24h

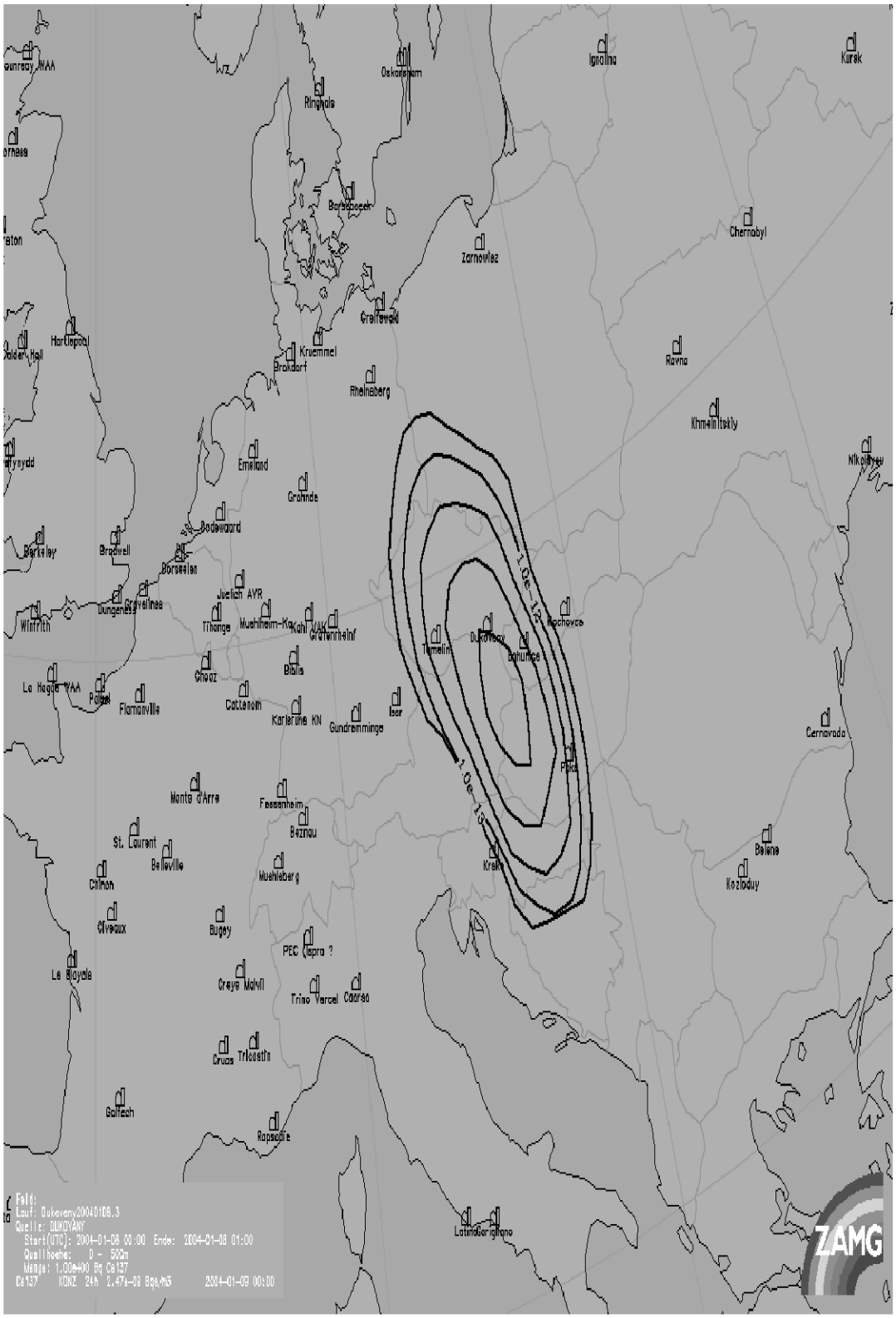

**Figure 3.** Total Deposistion [Bq/m$^2$], after 24h

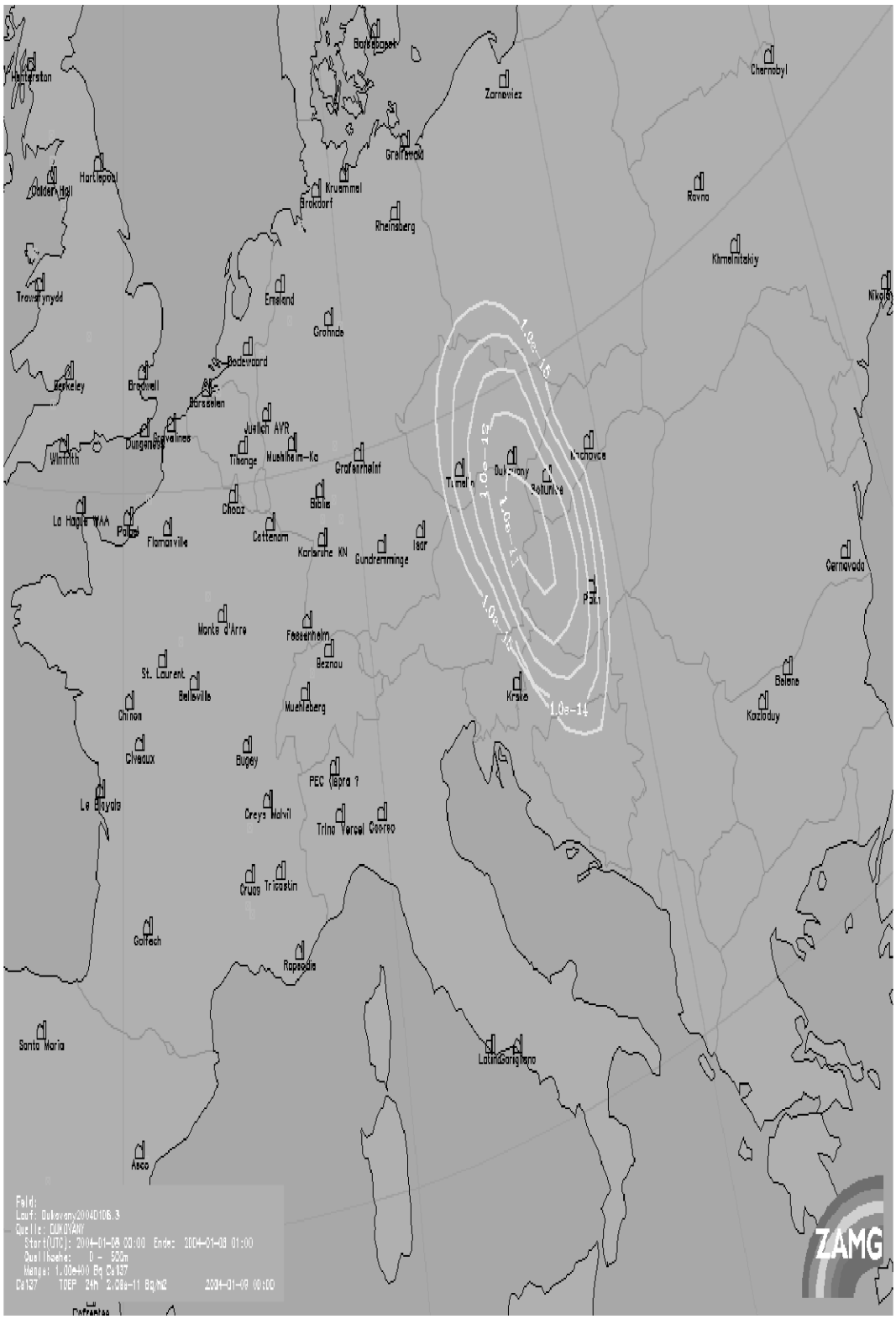

**Figure 4.** Time integrated precipitation rate [mm], after 24h