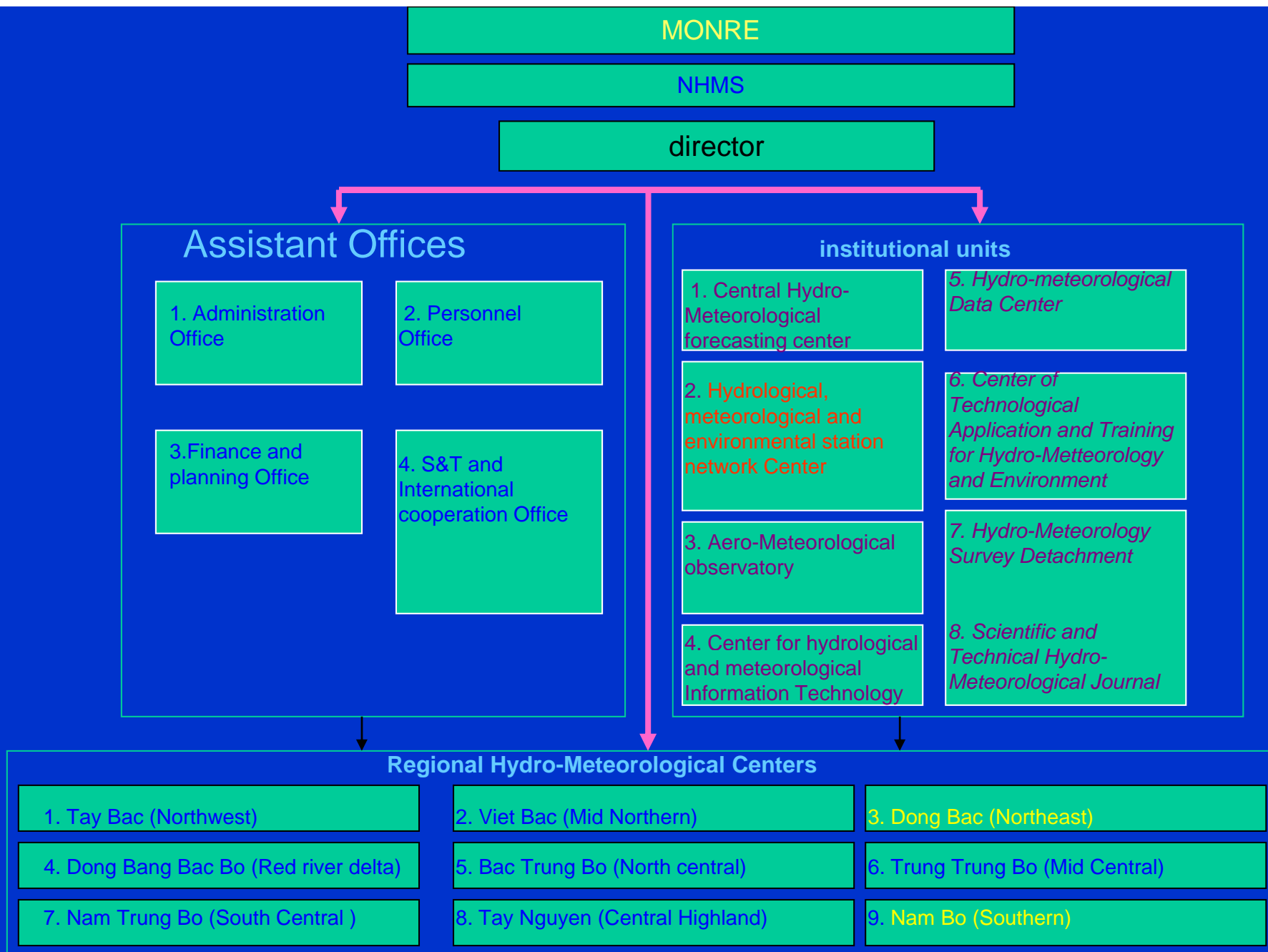


**NATIONAL
HYDRO-METEOROLOGICAL
SERVICE OF VIET NAM
(NHMS)**

The NHMS

- ***Position:*** NHMS is a functional body under ,
Ministry of Natural Resources and Environment
- ***Main function:***
 - To manage and operate Meteorological, Upper Air, Hydrological & Environmental (*water & air*) Network of Stations.
 - Conduct Meteorological, Hydrological forecasting
 - Data archive and service.



Organization chart of NHMS

STATION Network

Meteorological network of stations

- Total 174 stations, divided into 3 classes

Class 1: Weather watch: 24/24 hrs

Observation parameters: *Wind (direction & speed), Rain fall, Air pressure, Air Temperature, Humidity, Sunshine, Evaporations, Land Temperature (ground and deep layers); Cloud, Visibility, Ground conditions, Radiation (at some stations).*

Data collection & transmission: 8 times/day

Class 2: Same as class 1, but not doing the observation of radiation, air pressure (at some stations).

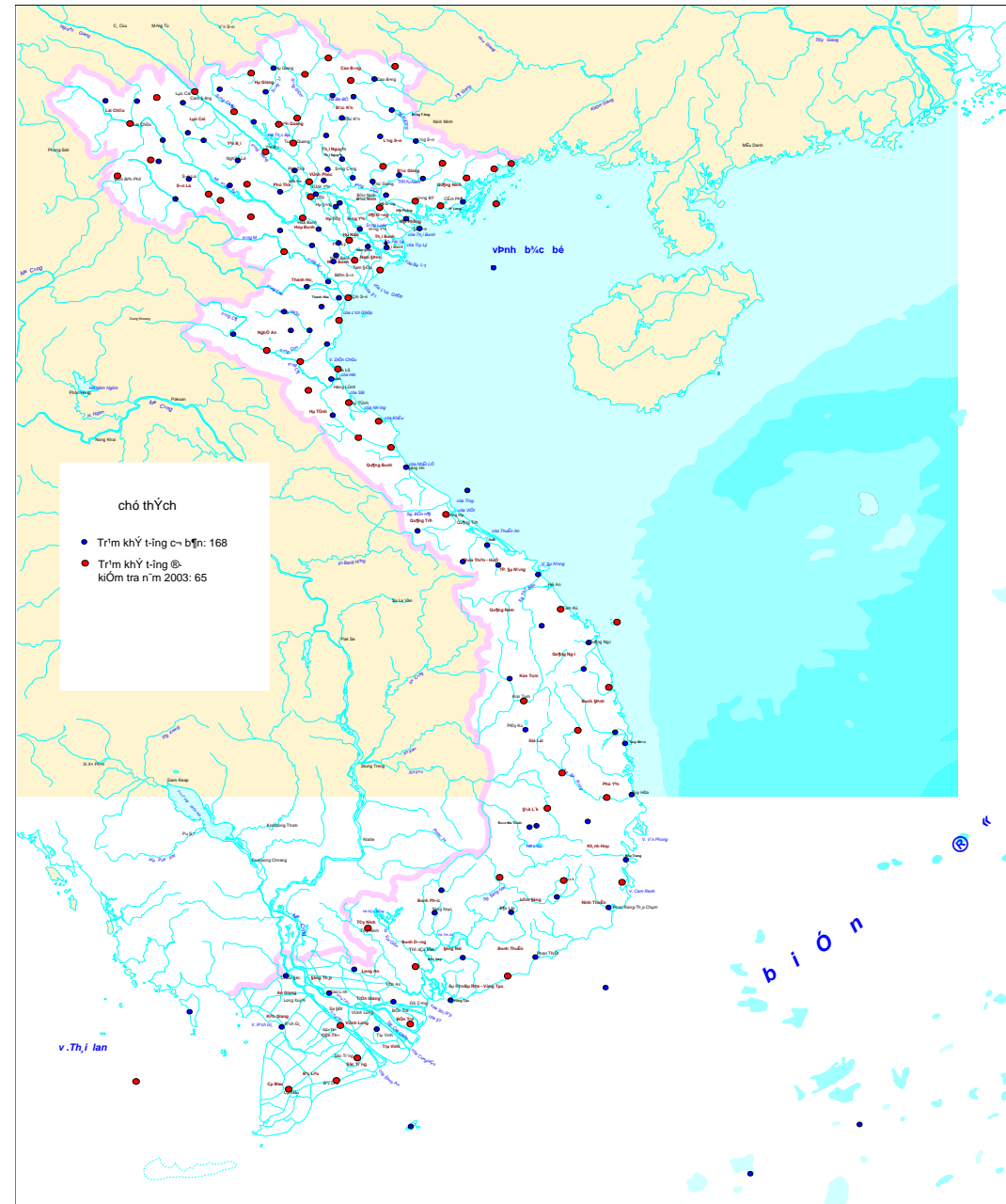
Data collection & transmission: 4 times/day

Class 3: Same as class 2, but not doing the observation of air pressure. **Data**

Total: 174 stations

- Class 1: 58
- Class 2: 70
- Class 3: 46
- Synoptic : 174
- Radiation : 13
- Agro. met. : 27
- GSN: 25

Bản đồ mạng lưới trạm khí tượng toàn quốc



meteorological Stations











UPPER AIR: 13
ALL ARE GUAN stations



Equipment calibration

- 3 calibration lab. (Northern, central and southern)
- *Initial* and *periodical* verification/calibration of all the equipments and instruments for the network.
- Maintenance and simple repairing works
- National certification on standard of calibration lab.
- High class of calibration equipments

HYDROgraph CalibratIOn



Rain gauge calibration



Anemometer calibration



Anemometer calibration



Current meter calibration



SITING

- Most of station are located in populated areas
- Problem:
 - Violation of technical corridor
 - Relocation of stations
 - Land for new stations

METADATA

- Technical documentation (station book):
one at each station, one in network
management center
- Contents of station book
 - Site specifications: location map, longitude,
latitude, pictures (at least from two sides),
elevation above sea level, horizontal
visibility.
 - Station history and duty.

METADATA

- Description of landscape around the station in radius of 300m, 3000m, and 8000-10000m. Record all changes in landscape around the station.
- Description of garden and location of observing instruments in the garden.

METADATA

- Description of horizon line at the station.
- Instruction how to go to the station.
- Station staff: number of staff, education, staff change.

METADATA

- Instrument: number of instruments in use and spare, technical specifications, calibration time.
- Every supervision visit to the station will be recorded in this book with comments and recommendations of head of supervision team or expert.

Thank you for attention !