

ISO 8616:2026-04 (E)

Specification of monitoring technology for karst critical zones

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General rules	2
4.1 Purpose and task	2
4.2 General requirement	2
4.2.1 Principles of monitoring station layout	2
4.2.2 Monitoring work principle	2
5 Construction of monitoring station in karst critical zones	2
5.1 Classification of types of karst critical zones	2
5.2 Monitoring station construction requirements	3
5.3 Layout of monitoring stations	3
5.4 Maintenance and management of monitoring stations	4
5.5 Other conditions for monitoring station construction	4
6 Monitoring of karst critical zones	4
6.1 General regulations	4
6.2 Environmental investigation in the monitoring area	5
6.2.1 Survey of soil factors	5
6.2.2 Survey of plants	5
6.2.3 Survey of rock	5
6.3 Monitoring of meteorological elements	5
6.4 Monitoring of hydrological elements	5
6.5 Monitoring of soil elements	5
7 Monitoring of specific processes in karst critical zones	6
7.1 Basic principles	6
7.2 Monitoring of loss and leak of water and soil	6
7.3 Monitoring of carbon-water-calcium cycling in basins	6
7.4 Monitoring of carbon sink flux in karst areas	6
7.5 Monitoring of the water environment	6
8 Monitoring-data collection and processing of karst critical zones	7
8.1 Database construction and operation	7
8.1.1 Monitoring-database construction	7
8.1.2 Database operation and maintenance	7
8.2 Data collection	7
8.2.1 Data transmission	7
8.2.2 Data storage	7
8.2.3 Data storage and management strategies	7
8.3 Monitoring data product processing	8
8.3.1 Monitoring data product classification	8
8.3.2 Monitoring data product processing flow	8
8.3.3 Data quality assurance	8
9 Monitoring information sharing and service	8
9.1 Classification of user right	8

9.2	Service methods.....	8
9.2.1	Content services.....	8
9.2.2	Functional services.....	8
9.3	System security.....	9
Annex A (informative) Classification of karst critical zones.....		10
Annex B (informative) Classification of survey and monitoring index of karst critical zone.....		12
Bibliography.....		14