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Abstract: This subject uses SQL Server database management system as the background database, and designs the meteorological station data table, meteorological element data table, crop data table, and agricultural gas product data table. This paper briefly reviews the development process of agricultural remote sensing and the theoretical basis of its application; Then, the relevant research and applications at home and abroad are expounded from the four fields of crop yield estimation, agricultural resource investigation, agricultural disaster monitoring and precision agricultural management. Finally, it is proposed that agricultural remote sensing should be combined with the ground agricultural observation network technology. The functional modules of the Friendship Platform are analyzed, and then the system implementation is elaborated. The shared platform operates stably, and realizes comprehensive functions such as weather forecast, soil moisture monitoring, meteorological disaster warning and emergency response.

Keywords: Interactive Guidance System, Sharing Platform, Agrometeorological Remote Sensing Sensor Network

1. INTRODUCTION
Agricultural production is a living social production activity carried out in the open air on the earth's surface. It has the basic characteristics of production dispersion, temporal and spatial variability, and disaster suddenness, which are difficult for people to grasp and control with conventional technology [1]. This is the reason why agricultural production has been in a passive position for a long time. When agricultural meteorological disasters occur, if the defense measures are not If it is appropriate or not timely, it will have a greater impact on the agricultural economic production of the year [2]. The occurrence of agricultural meteorological disasters is determined by irresistible natural factors, but we can study the occurrence and development laws of disasters. In recent years, my country's extreme weather and climate events have increased and strengthened. The meteorological service, which plays an important role in addressing climate change, has received unprecedented attention from the whole society [3].

The system design goal is based on the construction of agrometeorological database, expands the field of environmental climate business, comprehensively applies advanced technologies such as satellite remote sensing, computer and its network, and realizes the process and systemization of information collection, analysis and processing, and product production and release [4]. In recent years, extreme disaster events occur frequently. For example, in early 2005, winter wheat in Henan suffered rare freezing damage, and the affected area reached 1.5 million hectares; the meteorological information system is an important part of the national basic information system. It is closely related [5]. In the summer of 2007, some counties in the Huaihe River Basin in Henan suffered serious floods. The Internet of Things is the Internet of things connected to things [6]. It refers to the deployment of intelligent chips and software with certain perception, computing and execution capabilities in objects. Information transmission and processing, so as to realize the interconnection between objects and between objects and people [7].

With the rapid development of modern information technology, its application in various fields of society is becoming more and more extensive, and the agricultural field also needs the support of information technology [8]. The application of computer information technology in the field of agriculture is an effective way for countries to improve the comprehensive competitiveness of agriculture, and to a certain extent reflects the comprehensive strength of the country [9]. In recent years, with the continuous development of Internet technology, my country's agricultural development direction is towards resource diversification, the platform transformation of agricultural achievements [10]. With the help of the resource advantages of the network platform to help agricultural development, the excellent agricultural-related data can be better used and popularized. [11] The Internet of Things has been recognized as another new wave of the world's information industry after computers, the Internet and mobile communications. It has been listed as one of the seven strategic industries in my country and has become a hot research topic in recent years. [12]

The Agricultural Internet of Things is the application and development of Internet of Things technology in the agricultural field. Its basic idea is to apply Internet of Things technology [13]. Under the background of the new normal, my country's agricultural development is facing severe challenges. It is necessary to speed up the transformation of agricultural development methods and accelerate the promotion of agricultural modernization. Construction [14]. Water conservancy, mechanization and informatization are three important symbols of modern agriculture and agricultural modernization. At present, the development of informatization has become a shortcoming of the national agricultural modernization construction [15]. At present, the
main means of monitoring and forecasting meteorological disasters in my country is remote sensing GPS, and thermal infrared remote sensing systems include ASTER, MO-DIS and TM/ETM. The NOAA-AVHRR satellite was used to collect thermal infrared data, and then processed and analyzed the data [16].

Because remote sensing technology has the advantages of large amount of information, multi-platform and multi-resolution (time and space), fast and large coverage, it is the best means to grasp agricultural resources, crop growth, agricultural disasters and other information in a timely manner [17]. In developing countries participating in WMO-related meteorological benefit assessment activities, meteorological services have already been further developed into social productive forces that generate economic benefits and play an important role in social and economic development [18].

2. THE PROPOSED METHODOLOGY
2.1 The Agricultural Meteorological Remote Sensing Network
Under the action of electromagnetic waves, spectral absorption and reflection characteristics that reflect the composition and structural information of substances will be formed in certain specific bands. At the same time, the production management expert knowledge rules are added, and refined meteorological elements for mining Internet data and comprehensive expert knowledge decision-making technology are developed, and the weather details in the next 1 to 7 days are timely pushed to agricultural practitioners through the weather forecast and early warning platform. However, in the soil-crop -In the complex system of the atmosphere, agricultural production not only has a large operating area and strong seasonality, but also has many factors that affect the growth and development of crops. Under the action of electromagnetic waves, spectral absorption and reflection characteristics that reflect the composition and structural information of substances will be formed in certain specific bands. At the same time, the production management expert knowledge rules are added, and refined meteorological elements for mining Internet data and comprehensive expert knowledge decision-making technology are developed, and the weather details in the next 1 to 7 days are timely pushed to agricultural practitioners through the weather forecast and early warning platform. However, in the soil-crop -In the complex system of the atmosphere, agricultural production not only has a large operating area and strong seasonality, but also has many factors that affect the growth and development of crops.

2.2 The Construction of Interactive Guidance System of Agricultural Sensor Network
Including the survey of current resources such as cultivated land resources and soil resources, as well as dynamic monitoring of land desertification and salinity, farmland environmental pollution, soil erosion, etc., to provide the quantity, distribution and changes of various resources. The development of agriculture in my country is in an extremely fast pace. During this period, due to the large land area of our country, the emergency response technology for different regions and crops is also different, and corresponding emergency response technology will be generated accordingly. The traditional weather forecast of the meteorological department lacks timeliness. The benefits of agricultural meteorological services in Jinzhou are obvious. The DTBLX algorithm is used to characterize the internal data resources of different third-party agricultural platforms. The unique data fingerprinting architecture of the DTBLX algorithm can dynamically identify the validity of the internal data of the cloud platform. The traditional agricultural information management and service is based on the collection of agricultural information, processing and storage, transmission and retrieval as the core management and service, information transmission and application are often one-way, its timeliness and pertinence are not strong, and management and service lack of dynamic. However, in the process of practical application of EH-WSNs and agricultural environmental monitoring since the nodes are directly installed in the field environment, there is no or lack of relevant protection facilities, various natural factors (such as heavy rain, strong wind, etc.) and other factors (such as wild animals) It may lead to the failure of the sensor node, and further cause the communication link to break, network split and function failure.

2.3 The Interactive Guidance System Construction and Sharing Platform Design
According to the functions, the system is divided into regional agricultural gas environment, agricultural gas information compilation, agricultural meteorological remote sensing, agricultural production forecast, agricultural gas business automation, and other business systems linked to a relatively independent functional module. It makes the agricultural precision service level and the meteorological equipment security management level significantly improved. In recent years, around the central task of accelerating meteorological modernization, the meteorological department has given full play to the guiding and supporting role of modern science and technology. According to the platform design goals, the application layer is divided into disaster remote sensing information extraction subsystem, database management subsystem, disaster grade evaluation subsystem, monitoring result display and output subsystem in terms of structure and function. Meteorological data, connect microclimate observations and related automatic weather station data to the platform, and focus on strengthening the processing, analysis and service of agricultural meteorological data at the Internet of Things demonstration sites. By establishing the corresponding agricultural meteorological indicators. This function displays the weather conditions of various regions in Hainan Province in the form of a map.

3. CONCLUSIONS
This research introduces ontology, applies ontology technology and Internet of Things technology, and combines neural network and other intelligent computing technologies to study the methods of agricultural information acquisition, description, analysis and fusion processing. Great mechanism. The platform runs stably and has achieved the expected results. In the future work, we will rely on this sharing platform to study the timely communication of agricultural meteorological information6 to the public through mobile terminals such as mobile phones. Combined with the latest progress of the agricultural Internet of Things system model, on this basis, we have initially established a suitable agricultural The general system architecture model of networking development provides a good reference for the
application and development of the agricultural Internet of Things in the next step.

4. REFERENCES


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