/\*

基础表 --单位,地址,河流,类型

总表

衍生表 --降雨量,蒸发量,基面

\*/

DROP TABLE BInfo;

DROP TABLE raininfo;

DROP TABLE EvaInfo;

DROP TABLE StationInfo ;

DROP TABLE Department;

DROP TABLE River;

DROP TABLE StationType;

DROP TABLE location;

/\*

所属单位表

DepartmentID 单位编号

Department 单位名

\*/

create table Department(

DepartmentID int not null AUTO\_INCREMENT,

Department char(10) UNIQUE,

primary key (DepartmentID)

);

/\*

河流表

RiverID河流编号

River 河流名称

\*/

create table River(

RiverID INT not null AUTO\_INCREMENT,

River char(8) UNIQUE,

primary key (RiverID)

);

/\*

测站类型表

测站类型编号 TypeID

测站类型名 Station

\*/

create table StationType(

TypeID INT not null AUTO\_INCREMENT,

Station char(8) UNIQUE,

primary key (TypeID)

);

/\*

测站地理位置表location

站址site(具体地址)

东经el

北纬nl

备注 nt

\*/

CREATE TABLE location(

LocationID INT NOT null AUTO\_INCREMENT,

site VARCHAR(50),

el NUMERIC(12.9),

nl NUMERIC(11.9),

nt VARCHAR(200),

primary key (LocationID)

);

/\*

测站基本信息表（总表）

Scode 测站编码

Sname测站名称

BuildTime建站时间

\*/

create table StationInfo(

Scode char(10),

Sname CHAR(10),

TypeID int ,

RiverID INT,

LocationID INT,

DepartmentID INT,

BuildTime DATE,

primary key (Scode) ,

foreign key (TypeID) references StationType(TypeID) on update cascade on delete cascade,

foreign key (RiverID) references River(RiverID) on update cascade on delete cascade,

foreign key (LocationID) references Location(LocationID) on update cascade on delete cascade,

foreign key (DepartmentID) references Department(DepartmentID) on update cascade on delete cascade

);

/\*

降水量观测场信息表raininfo（

测站编码Scode

变动日期，changedate

获值模式，valuemode

记录模式， recordmode

绝对高程， elevation

器口离地高度， height

备注 nt）；

\*/

create table raininfo(

Scode CHAR(10),

changedate DATE,

Valuemode CHAR(4),

Recordmode CHAR(4),

Elevation NUMERIC(7.3),

height NUMERIC(3.1),

nt varchar(200),

foreign key (Scode) references StationInfo(Scode) on update cascade on delete cascade

);

/\*

基面信息表---BInfo

测站编码Scode

基面名称--Bname

基面高程--Blevation

基面修正值--BcorrectionValue

备注--NT

\*/

CREATE TABLE BInfo (

Scode CHAR(10),

Bname CHAR(16),

Belevation NUMERIC(7,3),

BcorrectionValue NUMERIC(7,3),

Nt VARCHAR(200),

foreign key (Scode) references StationInfo(Scode) on update cascade on delete cascade

);

/\*

水面蒸发量观测场信息EvaInfo

测站编码Scode

changeDate 变动日期

changeSituation 变动情况

positionalFeatures 蒸发场位置特征

type 蒸发器型式

nt 备注

\*/

CREATE TABLE EvaInfo(

Scode CHAR(10),

changedate DATE,

changeSituation CHAR(10),

positionalFeatures CHAR(4),

type CHAR(30),

nt VARCHAR(200),

foreign key (Scode) references StationInfo(Scode) on update cascade on delete cascade

);

//创建视图

CREATE VIEW final(Scode,Sname,Station,Department,River,BuildTime) AS

SELECT S.Scode, S.Sname, T.Station, D.Department, R.River,S.BuildTime

FROM StationInfo S, Department D, River R, StationType T

WHERE S.TypeID = T.TypeID

AND S.RiverID = R.RiverID

AND S.DepartmentID = D.DepartmentID;