assumptions：

1 无人机的飞行速度仅和飞机型号和搭载货物重量有关

**The speeds of the drones are only related to the drones' types and the mass of the cargo the drones loaded.** That means we ignore the wind or other unsure factors. By the physics law – power equals velocity times force, heavier loadings need a larger force, the velocity will be less with the same power.

**2 无人机不是一次性使用的 需要充电**

**The drones can be cycle used (by charging to use next time).** For a drone is not very cheap and DroneGo is a Non-Government Organization, we should concern the financial cost.

3 各种无人机充电时间均一样

**The time for charging is same for all kinds of drones.** They may roughly equal in the reality, assuming they are equal can simplify our calculation and the arrange of time.

4 无人机可且仅可在集装箱处（医院？）充电

**The drones only can be charged at cargo containers of the DroneGo disaster response system.** Because the electrical system in the island is ruined in the disaster.

5 药品不需正置

**The medicines do not need to be placed head on in the containers/cargo bay;** most medicines and medical equipment are well-packed in daily life, with this assumption, we can use the space of containers/cargo bay better.

6 无人机 药品 货箱 均单独打包（初始时药物不放入打包箱）

**Drones, medicines and cargo bays are packed separately in the container (medicines will not be placed in cargo bays and then placed them together in the container).** It is normal in our daily life.

7 环境和气候不影响无人机飞行

**Environments and weather do not have influence in drones flying/observing.** Our plan is arranged for most situation; thus, we ignore the extreme weather which exists rarely.

8 忽略地球弧度

**The whole island is on a plane.** For the difference of longitude is less than 2 degrees and difference of latitude is less than 0.5 degrees in the island, which just has a tiny influence on the shape of the island. Thus, we can ignore it for computational convenience.