

$$h = \underset{\substack{\text{反正弦}}}{\text{ArcSin}} \left[\underset{\substack{\text{正弦}}}{\text{Sin}} \left[30.3230373500 * \frac{\text{Pi}}{180} \right] * \underset{\substack{\text{正弦}}}{\text{Sin}} \left[\underset{\substack{\text{反正弦}}}{\text{ArcSin}} \left[0.39795 * \underset{\substack{\text{余弦}}}{\text{Cos}} \left[0.98563 * (x - 173) \right] \right] \right] \right] +$$

$$\underset{\substack{\text{余弦}}}{\text{Cos}} \left[30.3230373500 * \frac{\text{Pi}}{180} \right] *$$

$$\underset{\substack{\text{余弦}}}{\text{Cos}} \left[\underset{\substack{\text{反正弦}}}{\text{ArcSin}} \left[0.39795 * \underset{\substack{\text{余弦}}}{\text{Cos}} \left[0.98563 * (x - 173) \right] \right] \right] * \underset{\substack{\text{余弦}}}{\text{Cos}} [y] * 180;$$

(*x是日期·y是时间·h是太阳高度角*)

ContourPlot3D[z == h, {x, 0, 365}, {y, 0, 24}, {h, -20, 550}, PlotPoints -> 3]

└─三维等高线

└─绘图点

$$h = \underset{\substack{\text{反正弦}}}{\text{ArcSin}} \left[\underset{\substack{\text{正弦}}}{\text{Sin}} \left[30.3230373500 * \frac{\text{Pi}}{180} \right] * \right.$$

$$\underset{\substack{\text{反正弦}}}{\text{Sin}} \left[\underset{\substack{\text{反正弦}}}{\text{ArcSin}} \left[0.39795 * \underset{\substack{\text{余弦}}}{\text{Cos}} \left[0.98563 * (\text{RandomInteger}[\{0, 365\}] - 173) \right] \right] \right] +$$

$$\underset{\substack{\text{余弦}}}{\text{Cos}} \left[30.3230373500 * \frac{\text{Pi}}{180} \right] * \underset{\substack{\text{余弦}}}{\text{Cos}} [$$

$$\underset{\substack{\text{反正弦}}}{\text{ArcSin}} \left[0.39795 * \underset{\substack{\text{余弦}}}{\text{Cos}} \left[0.98563 * (\text{RandomInteger}[\{0, 365\}] - 173) \right] \right] * \underset{\substack{\text{余弦}}}{\text{Cos}} [y] * 180;$$

Reduce[h, y, y ∈ RandomInteger[{0, 24}]]

└─伪随机整数

(*x是日期·y是时间·h是太阳高度角*) ContourPlot3D[

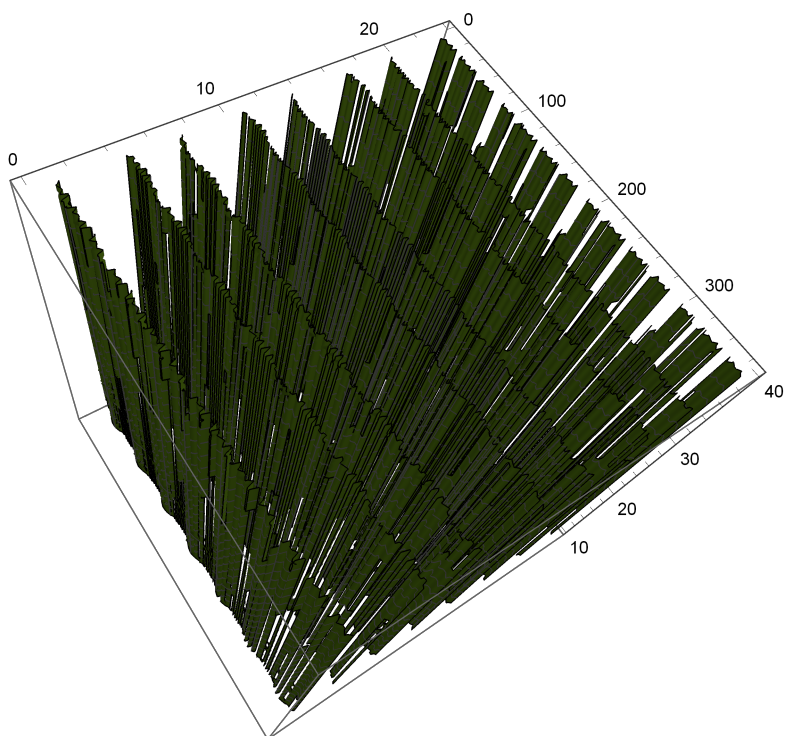
└─三维等高线

$$z == \underset{\substack{\text{反正弦}}}{\text{ArcSin}} \left[\underset{\substack{\text{正弦}}}{\text{Sin}} \left[30.3230373500 * \frac{\text{Pi}}{180} \right] * \underset{\substack{\text{正弦}}}{\text{Sin}} \left[\underset{\substack{\text{反正弦}}}{\text{ArcSin}} \left[0.39795 * \underset{\substack{\text{余弦}}}{\text{Cos}} \left[0.98563 * (x - 173) \right] \right] \right] \right] +$$

$$\underset{\substack{\text{余弦}}}{\text{Cos}} \left[30.3230373500 * \frac{\text{Pi}}{180} \right] * \underset{\substack{\text{余弦}}}{\text{Cos}} \left[\underset{\substack{\text{反正弦}}}{\text{ArcSin}} \left[0.39795 * \underset{\substack{\text{余弦}}}{\text{Cos}} \left[0.98563 * (x - 173) \right] \right] \right] * \right.$$

$$\underset{\substack{\text{余弦}}}{\text{Cos}} [y] * 180, \{x, 0, 365\}, \{y, 0, 24\}, \{z, 10, 40\}, \text{PlotPoints} \rightarrow 10]$$

└─绘图点



(*x是日期·y是时间·h是太阳高度角*) ContourPlot3D[
└─三维等高线

$$z == \text{ArcSin}\left[\text{Sin}\left[30.3230373500 \times \frac{\text{Pi}}{180}\right] \times \text{Sin}\left[\text{ArcSin}\left[0.39795 \times \text{Cos}\left[0.98563 \times (x - 173)\right]\right]\right]\right] +$$
└─反正弦 └─正弦 └─正弦 └─反正弦 └─余弦

$$\text{Cos}\left[30.3230373500 \times \frac{\text{Pi}}{180}\right] \times$$
└─余弦

$$\text{Cos}\left[\text{ArcSin}\left[0.39795 \times \text{Cos}\left[0.98563 \times (x - 173)\right]\right]\right] \times \text{Cos}[y] \times 180,$$
└─余弦 └─反正弦 └─余弦 └─余弦
{x, 0, 365}, {y, 0, 24}, {z, -300, 300}, PlotPoints → 150]
└─绘图点