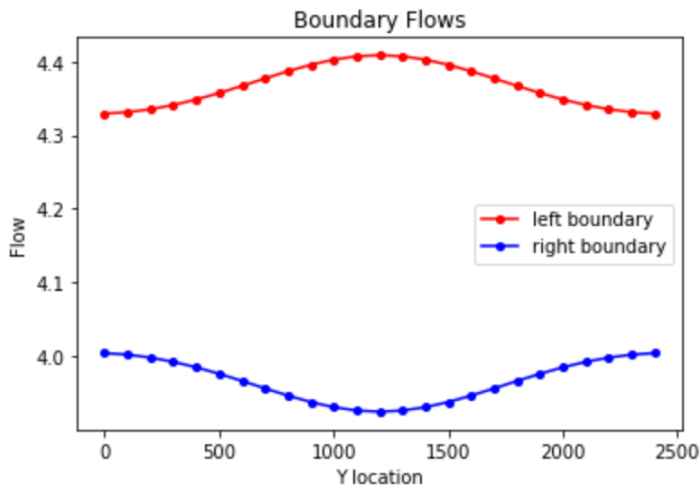
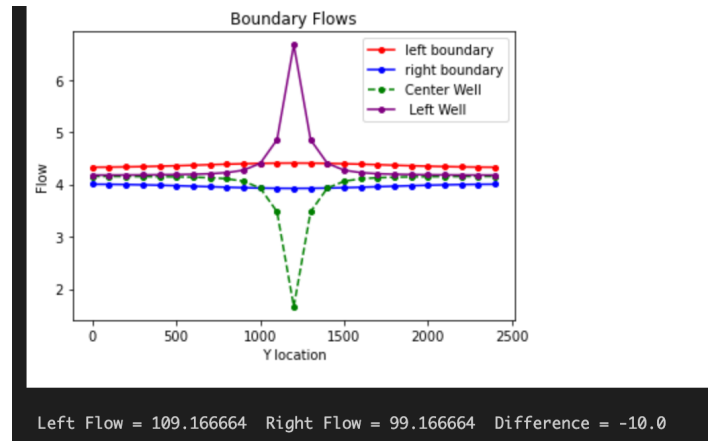


Well at initial location

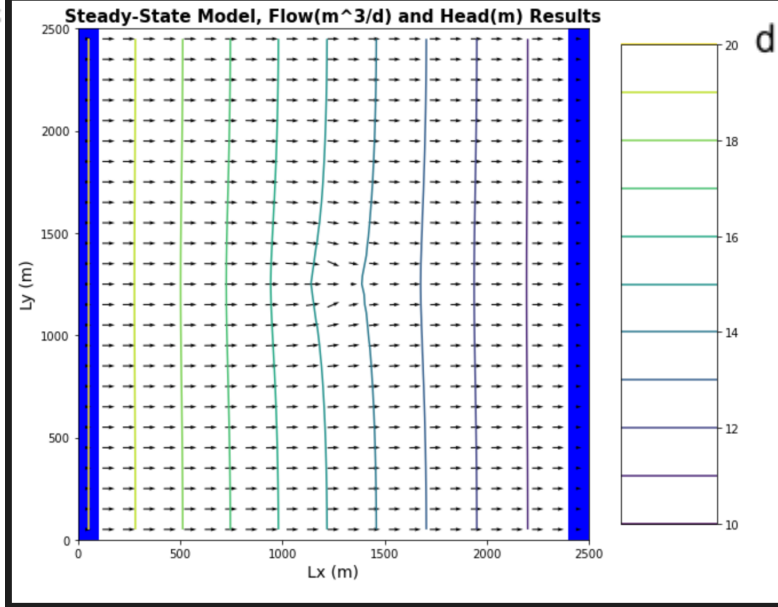
a



b



c



d

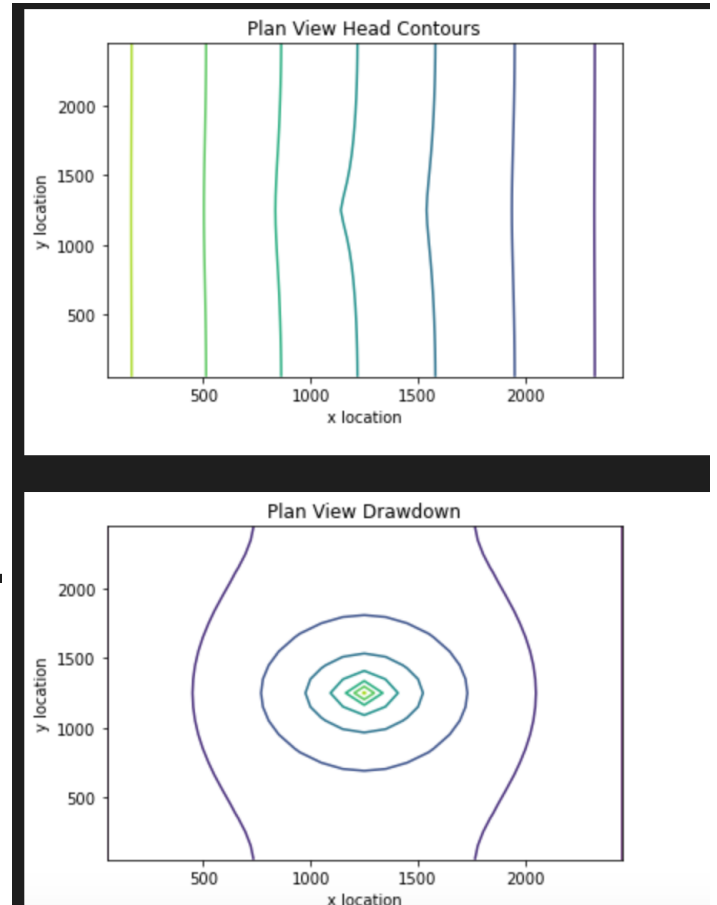
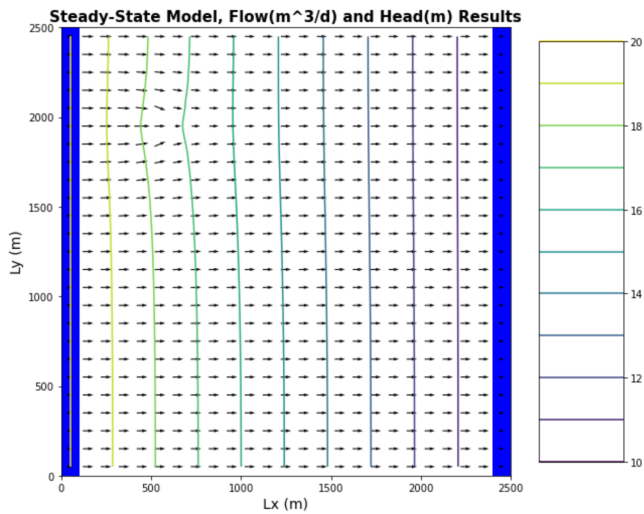


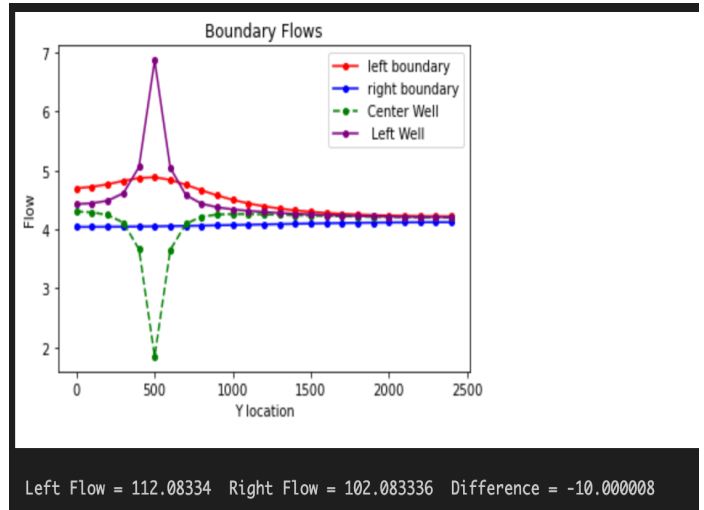
Figure 1: **1a)** Base case boundary flows for the initial location of the well. **1b)** Base case flux through the midline of the domain. **1c)** Equipotential lines with flow vectors through the midline of the domain. **1d)** Base head contours and plan drawdown at the pumping rate of -10 m

Moved well

a



b



c

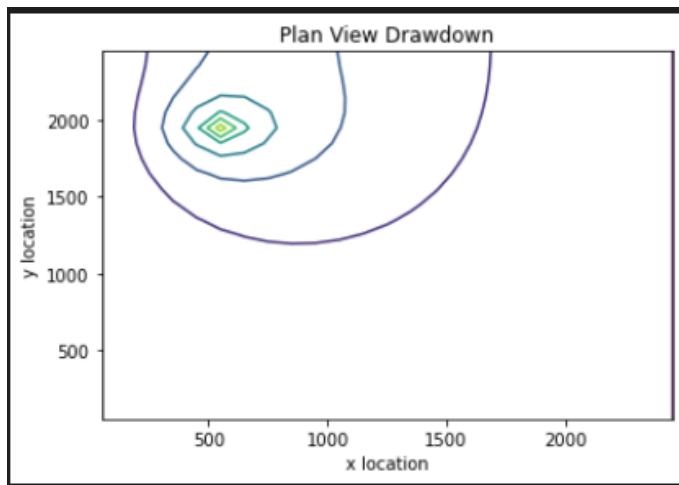


Figure 2: **2a)** Equipotential lines with flow vectors for the moved well. **2b)** Base case boundary flows for the moved well. **2c)** Head contours and plan drawdown at the pumping rate of -10 m for the moved well

BONUS FIGURES:

Pumping Rate - $5 \text{ m}^3/\text{day}$:

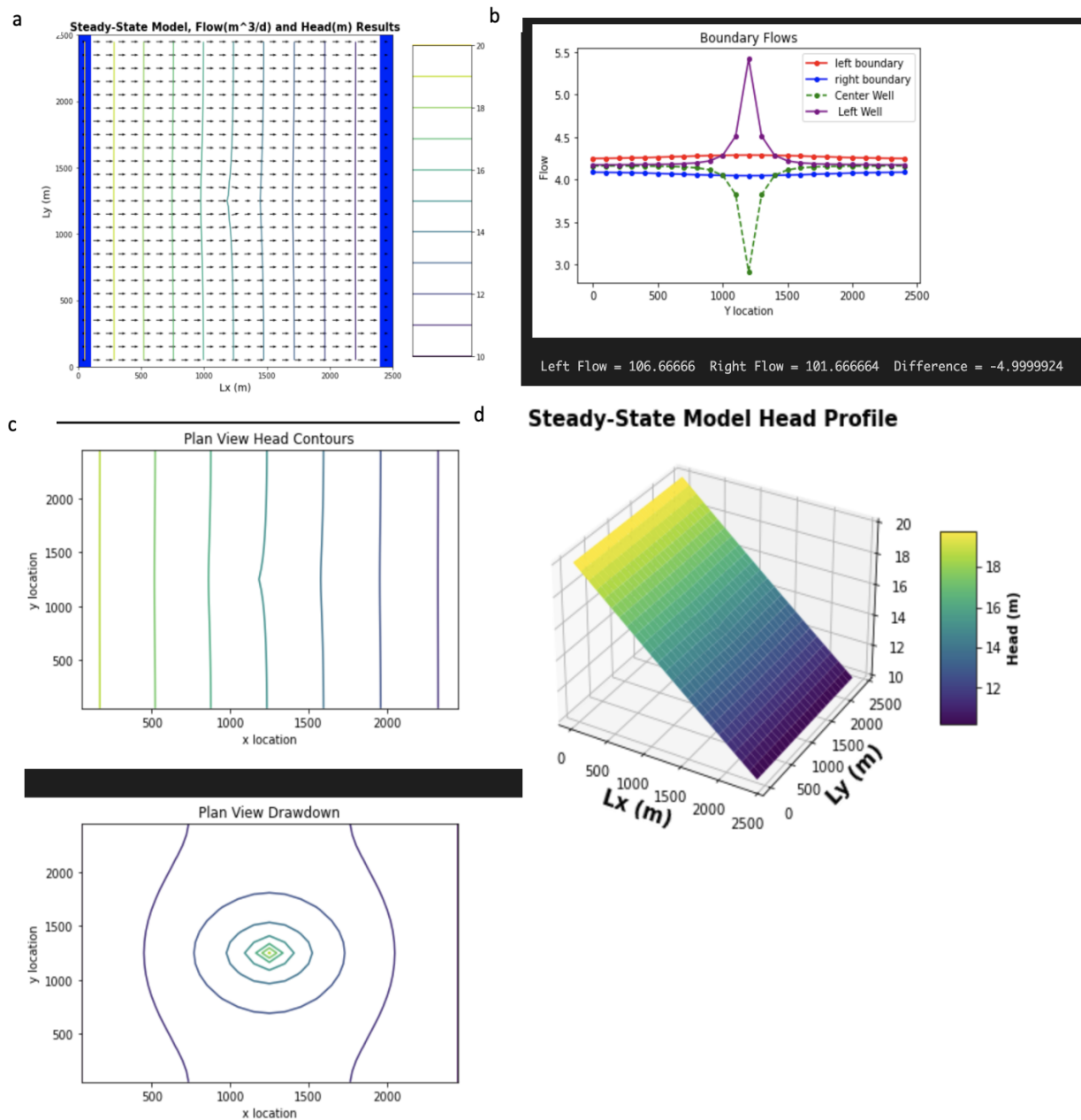


Figure 3: **3a)** Equipotential line plot with flow vectors for the moved well with a pumping rate of $-5 \text{ m}^3/\text{day}$. **3b)** Line plot of boundary flows with center and left of well marked for the well with pumping rate of $-5 \text{ m}^3/\text{day}$. **3c)** Contour plot of drawdown with piping rate $5 \text{ m}^3/\text{day}$. **3d)** Steady state head profile with pumping rate of $-5 \text{ m}^3/\text{day}$.

Pumping Rate - 20 m³/day

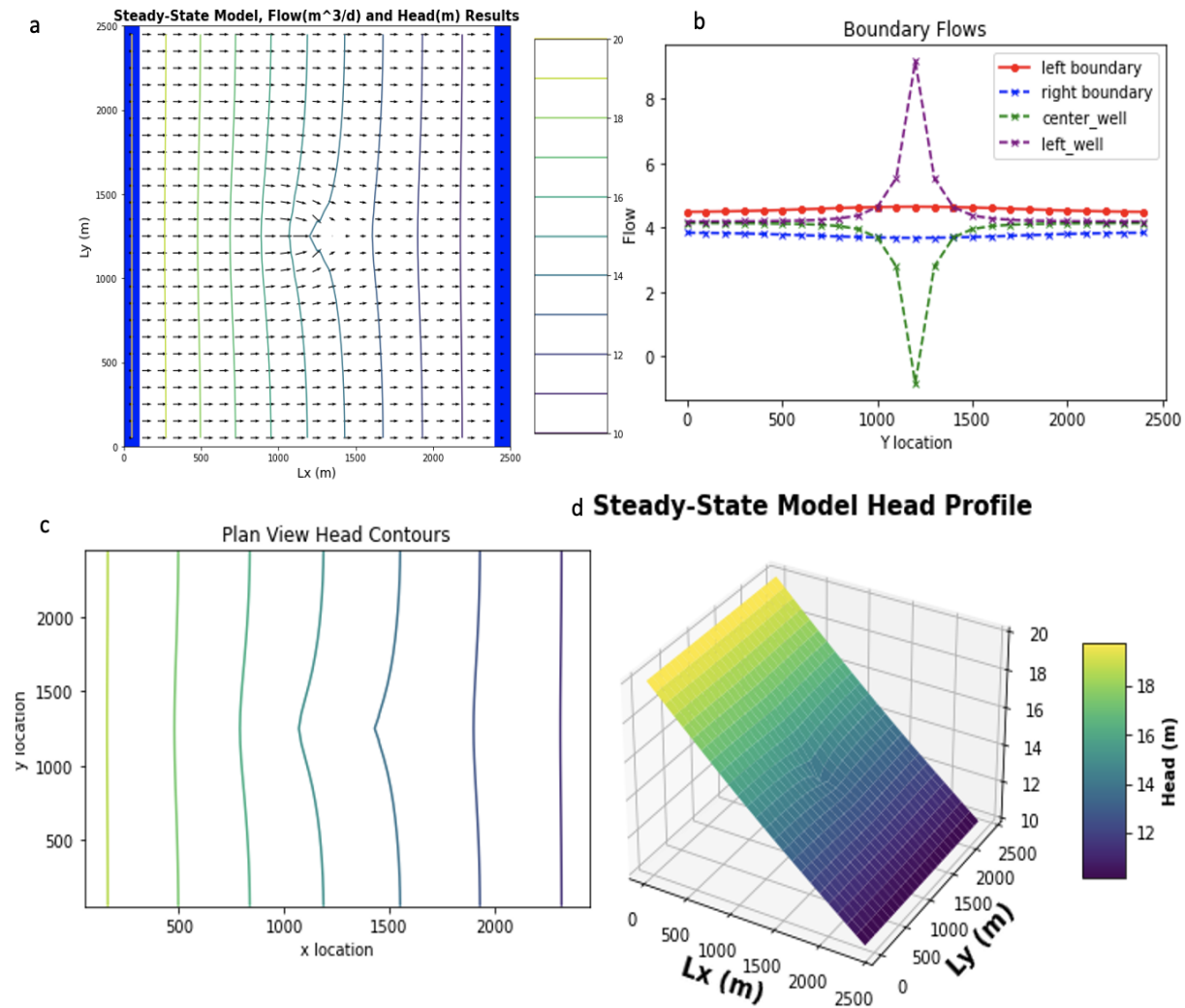


Figure 4: **4a)** Equipotentials and flow lines for the well in the center of the domain $[:,12,12]$ with a pumping rate of $-20 \text{ m}^3/\text{day}$. **4b)** flow lines for the well with the center $[:,12]$ and just left of the well $[:,11]$ denoted in green and purple. **4c)** plane view contour lines for the well with a pumping rate of $-20 \text{ m}^3/\text{day}$. **4d)** Steady state head profile for the well with a pumping rate of $-20 \text{ m}^3/\text{day}$.

Pumping Rate - 25 m³/day:

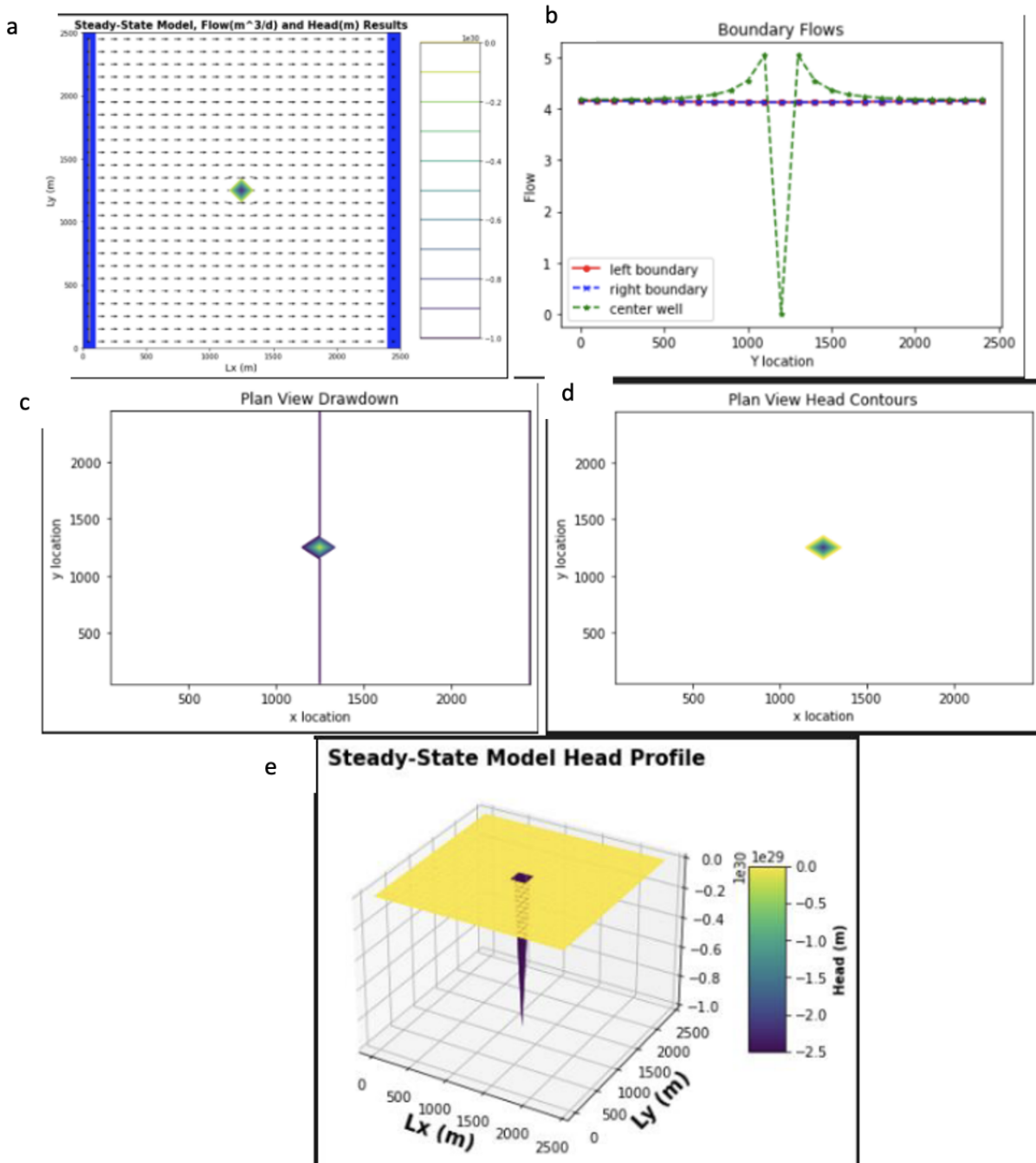


Figure 5: **5a)** Flow lines and equipotential head for the well located at (12,12) with a pumping rate of -25 m³/day. **5b)** Flow lines on the left and right boundary compared to the flow on the center of the well location (:,12) **5c)** Drawdown of the well located at the center of the domain with a rate of -25 m³/day. **5d)** Head contour of the domain. **5e)** Head 3D profile of the system with a negative head of 2.5 m in the place where the well is located.