

Supplementary Material

On the Initial Phase of the Ongoing Unrest at Campi Flegrei and Its Relation with Subsidence at Vesuvio (Italy)

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This Supplementary Material includes Supplementary Figures S3–S36.

Figures S3–S19 show scatter plots of the quasi-vertical displacement u_V at various locations in Campi Flegrei (P01–P17) and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010. Each location is circular with a diameter of 600 metres. The map in Figure 4 displays the locations. The map uses a colour scheme to represent locations characterized by similar scatter plots. Cyan indicates locations with noisy almost-zero displacements during Campi Flegrei subsidence and uplift after then. Blue indicates locations with a positive correlation with P18 during Campi Flegrei subsidence and uplift after then. Magenta indicates locations with a positive correlation with P18 during the whole 1993–2010 period, with some peculiarities. Red indicates locations with a positive correlation with P18 during the whole 1993–2010 period. The epoch is identified by the colour of the symbols, which can be seen in the vertical colour-bar at the right of each figure.

Figures S20–S36 show scatter plots of the horizontal displacement u_H at various locations in Campi Flegrei (P01–P17) and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010. Each location is circular with a diameter of 600 metres. The map in Figure 5 displays the locations. The map uses a colour scheme to represent locations characterized by similar scatter plots. Cyan indicates locations with noisy almost-zero horizontal displacements during Campi Flegrei subsidence and westward horizontal displacements after then. Blue indicates locations with a positive correlation with the quasi-vertical displacement at P18 during Campi Flegrei subsidence and almost-zero horizontal displacements after then. Magenta indicates locations with a negative correlation with the quasi-vertical displacement at P18 during Campi Flegrei subsidence and westward horizontal displacements after then. Red indicates locations with a positive correlation with the quasi-vertical displacement at P18 during Campi Flegrei subsidence and westward horizontal displacements after then. The epoch is identified by the colour of the symbols, which can be seen in the vertical colour-bar at right of each figure.

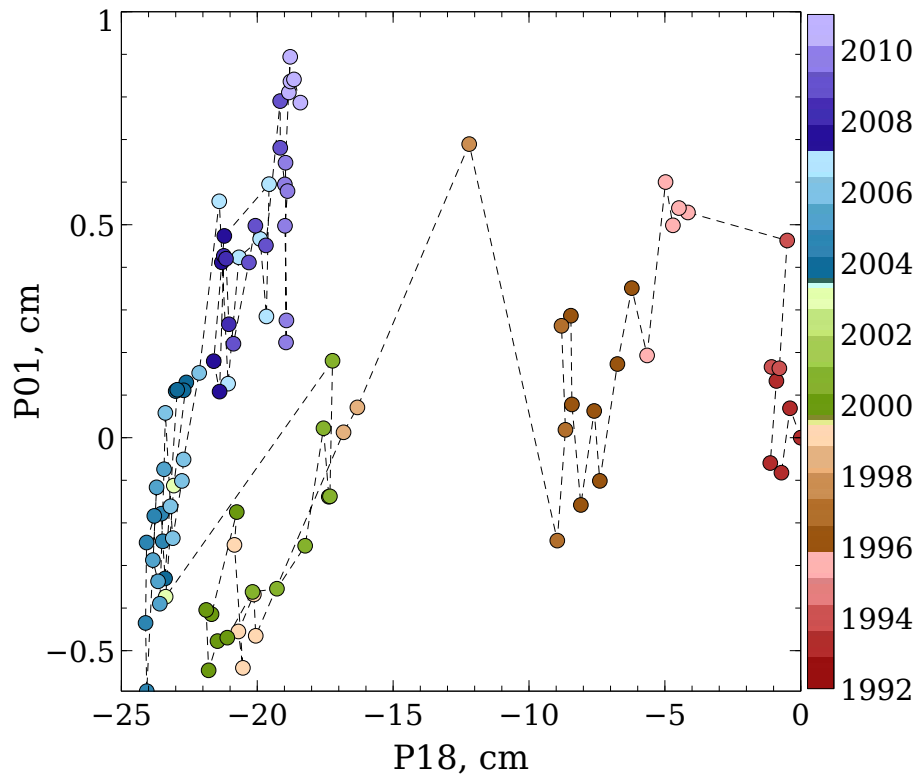


Figure S3: Scatter plot of the quasi-vertical displacement u_V at P01 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

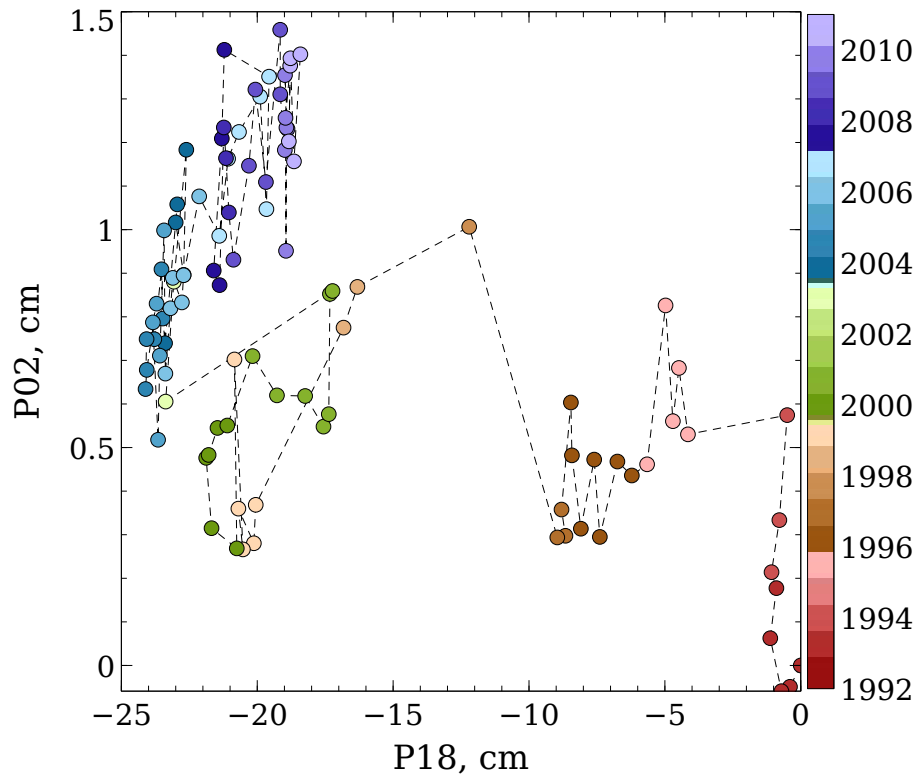


Figure S4: Scatter plot of the quasi-vertical displacement u_V at P02 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

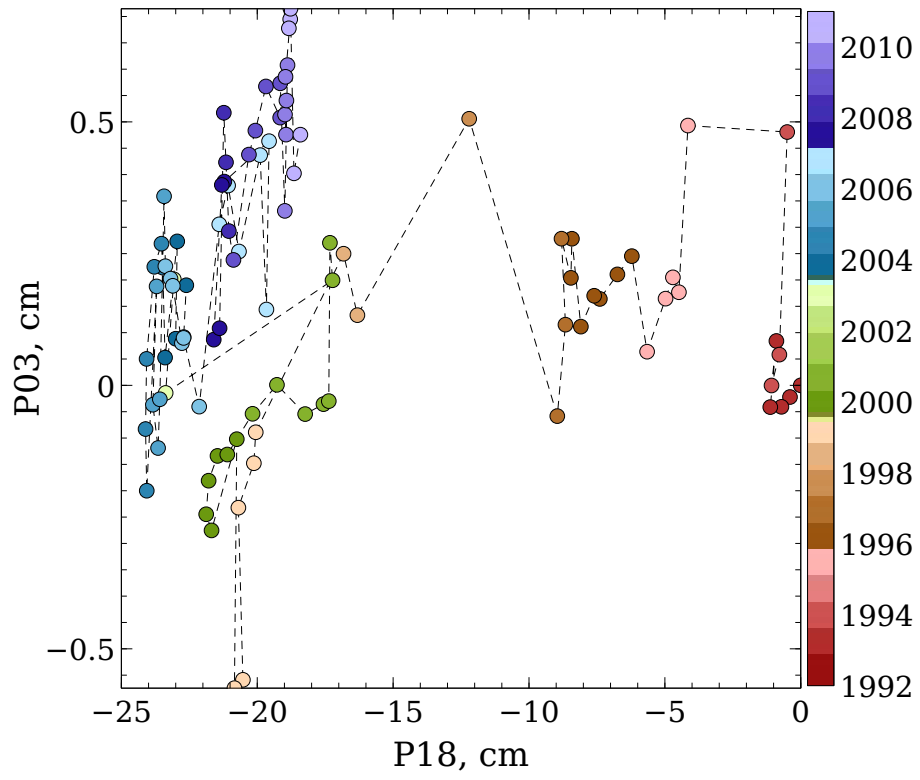


Figure S5: Scatter plot of the quasi-vertical displacement u_V at P03 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

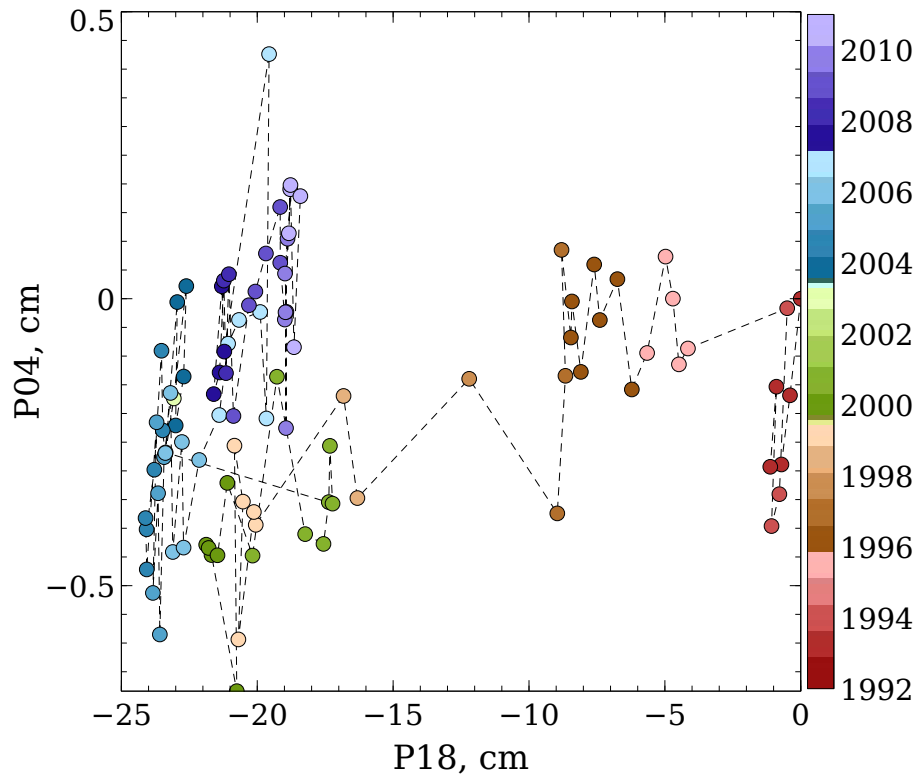


Figure S6: Scatter plot of the quasi-vertical displacement u_V at P04 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

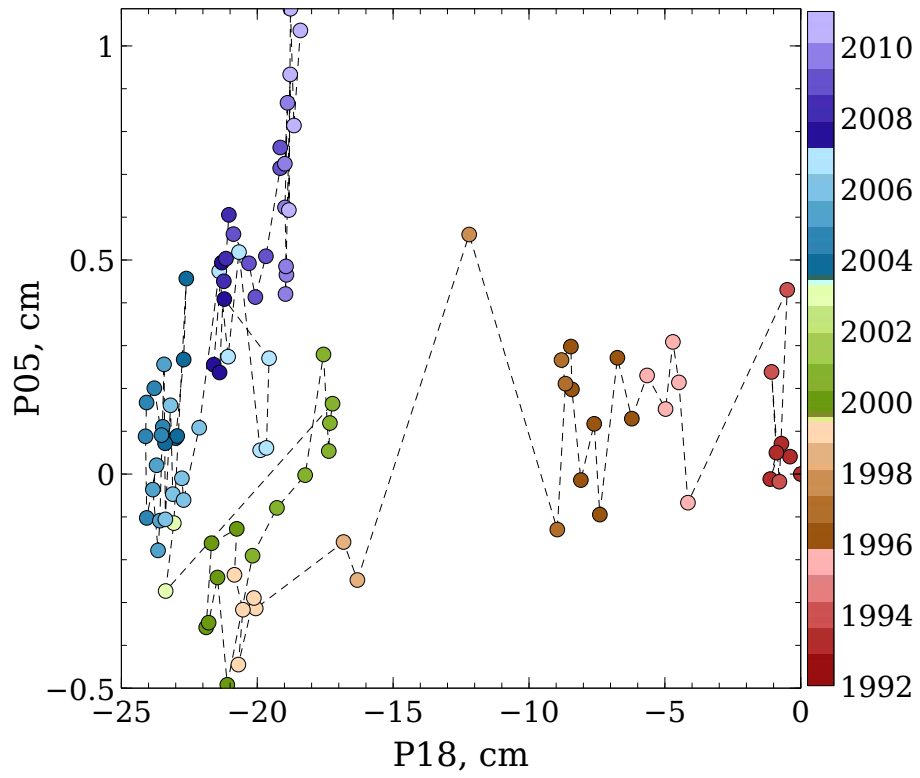


Figure S7: Scatter plot of the quasi-vertical displacement u_V at P05 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

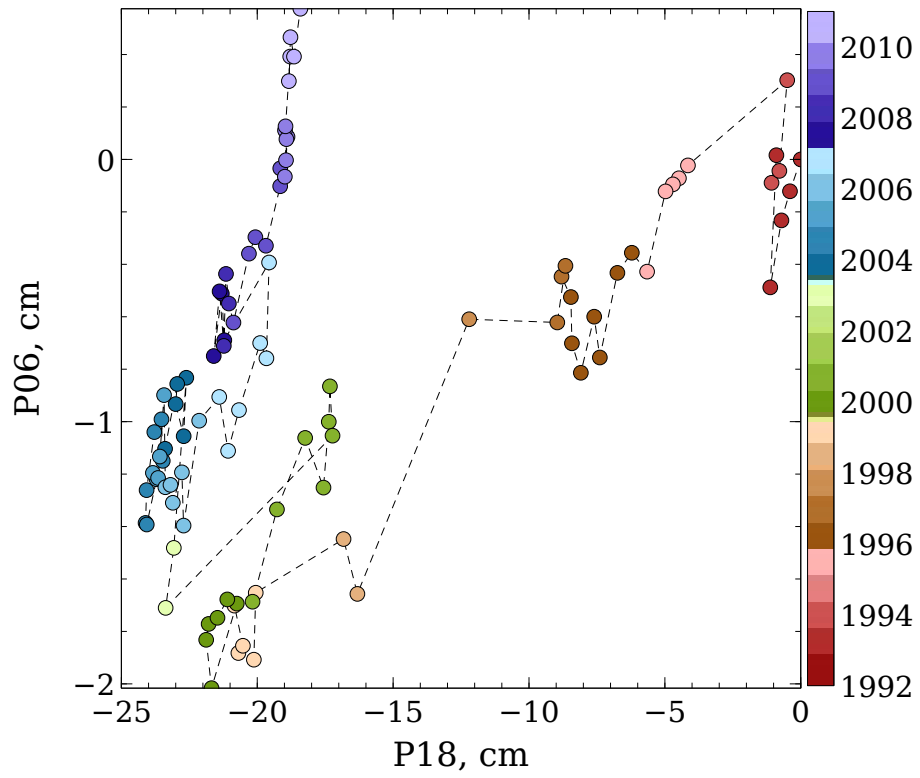


Figure S8: Scatter plot of the quasi-vertical displacement u_V at P06 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

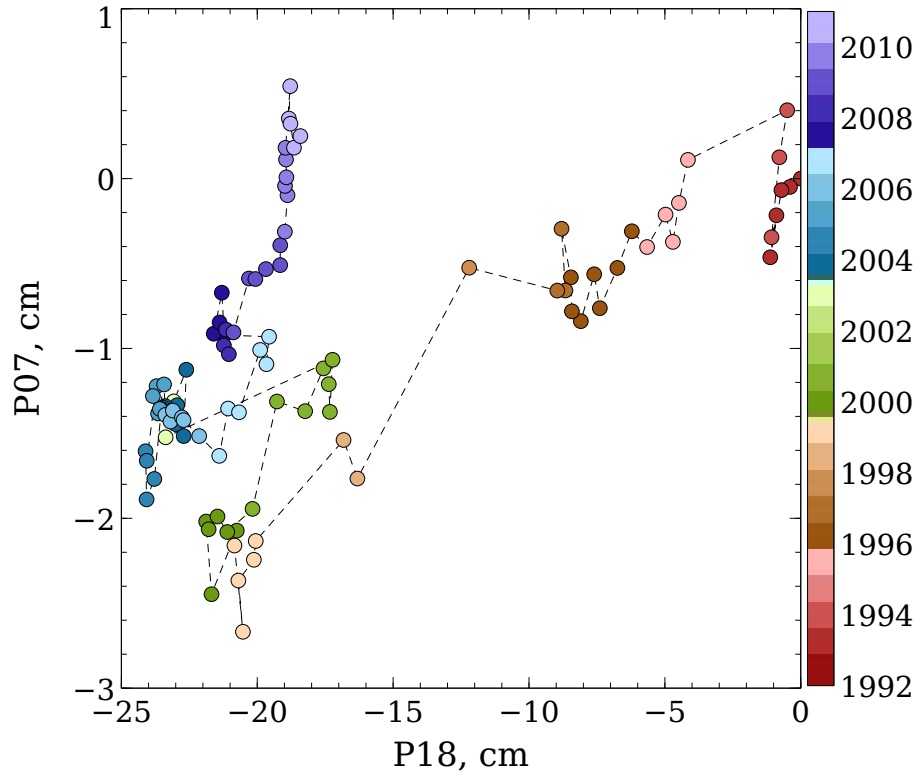


Figure S9: Scatter plot of the quasi-vertical displacement u_V at P07 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

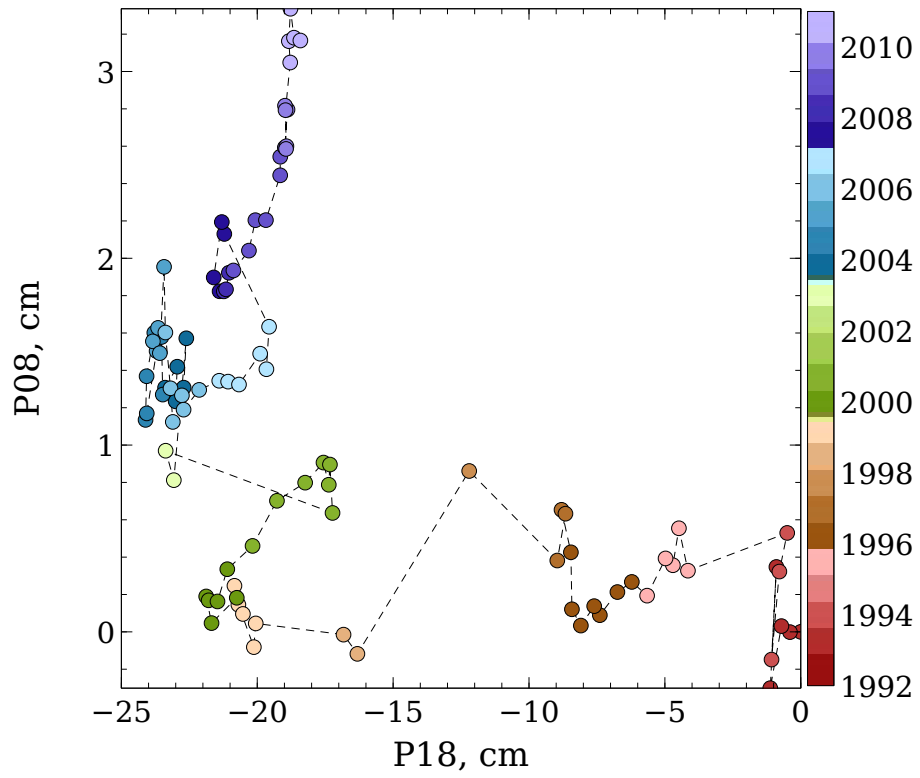


Figure S10: Scatter plot of the quasi-vertical displacement u_V at P08 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

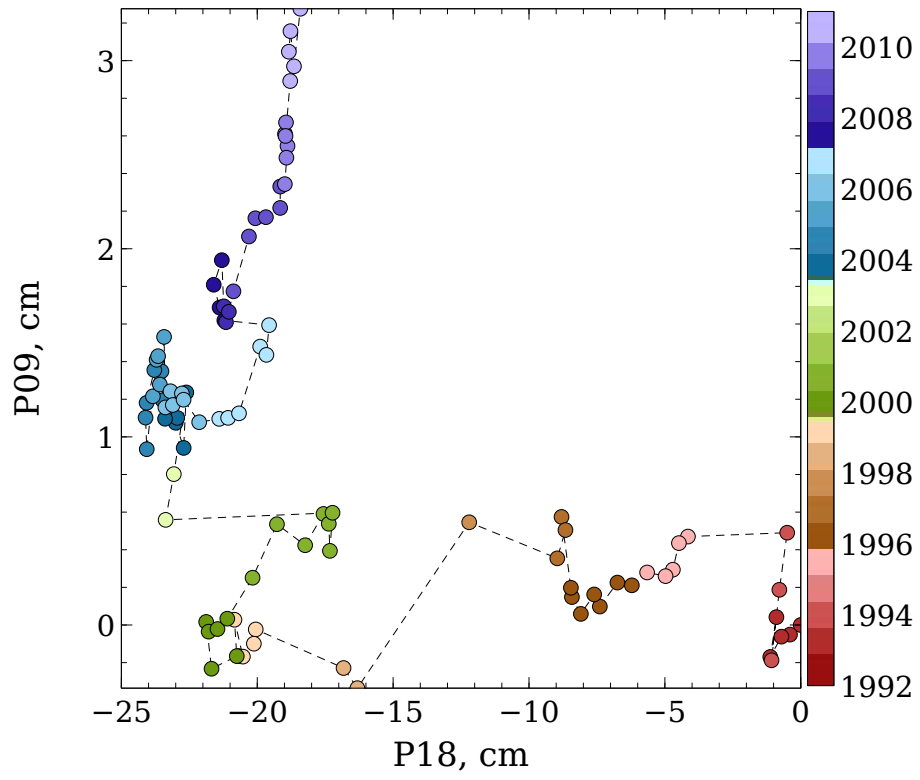


Figure S11: Scatter plot of the quasi-vertical displacement u_V at P09 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

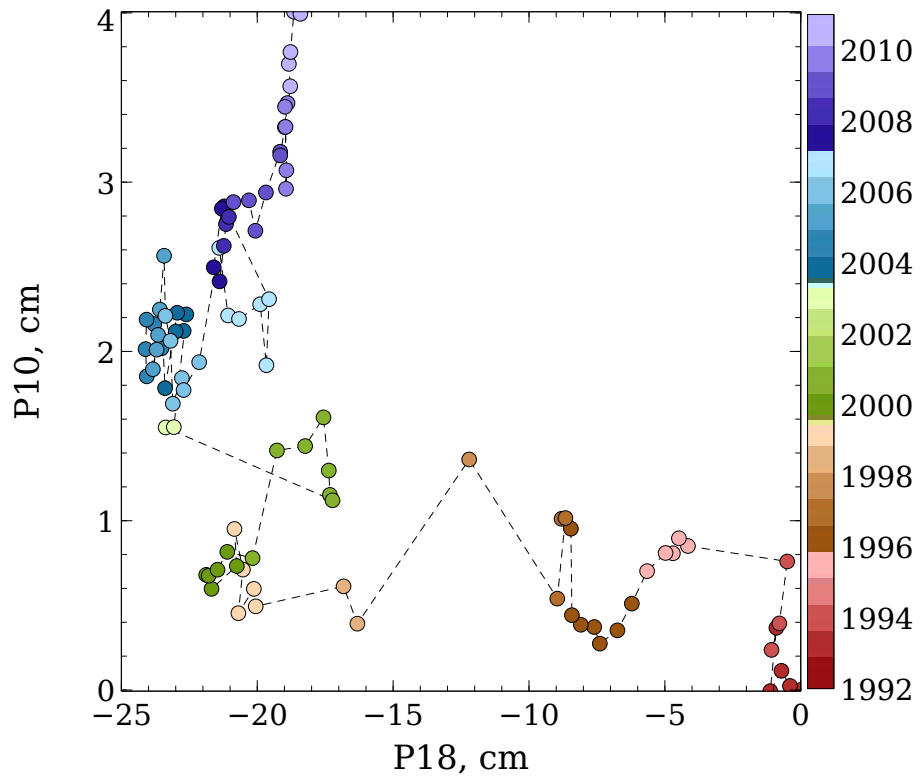


Figure S12: Scatter plot of the quasi-vertical displacement u_V at P10 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

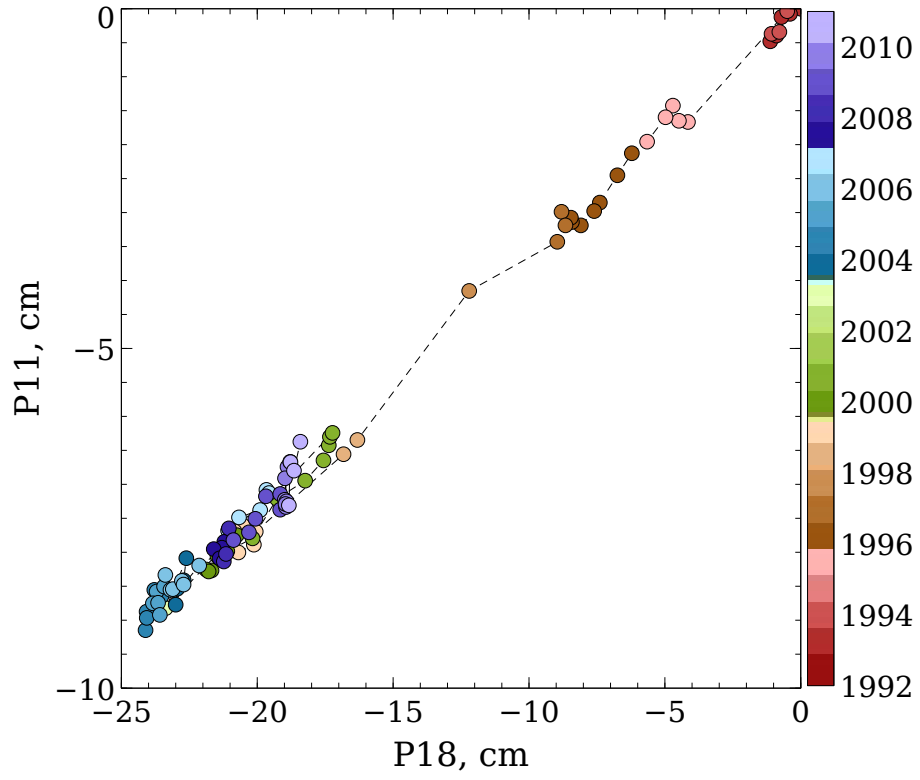


Figure S13: Scatter plot of the quasi-vertical displacement u_V at P11 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

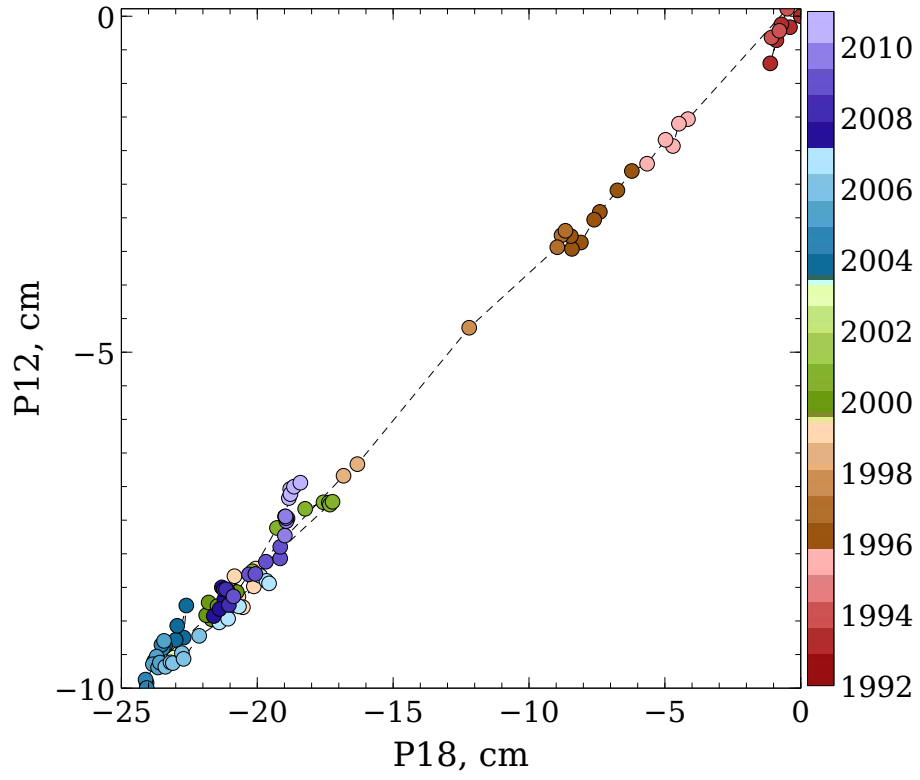


Figure S14: Scatter plot of the quasi-vertical displacement u_V at P12 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

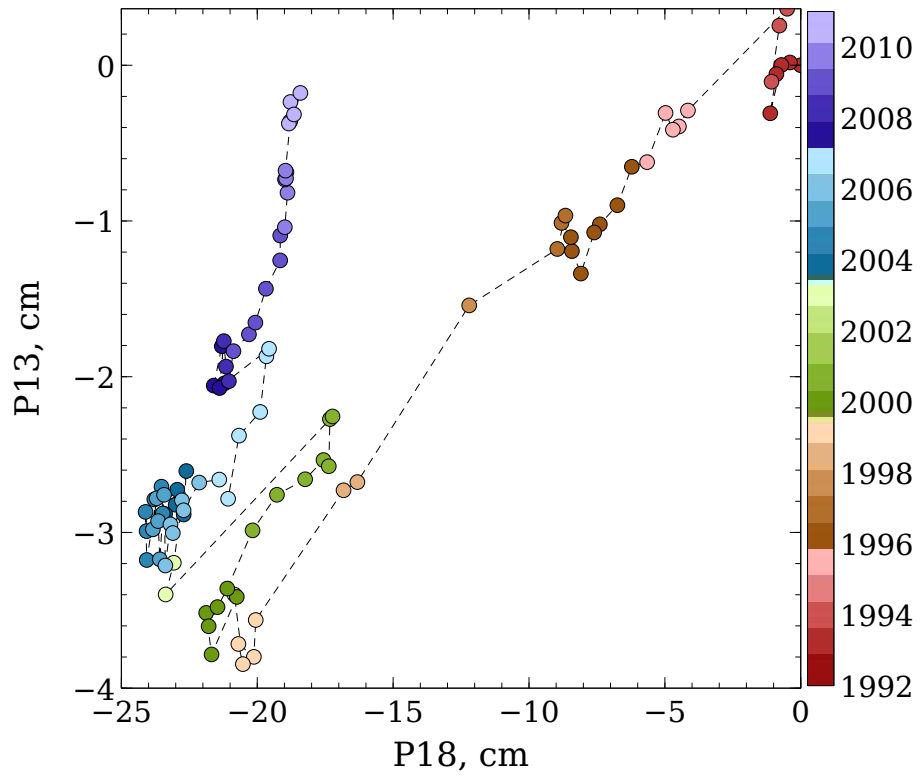


Figure S15: Scatter plot of the quasi-vertical displacement u_V at P13 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

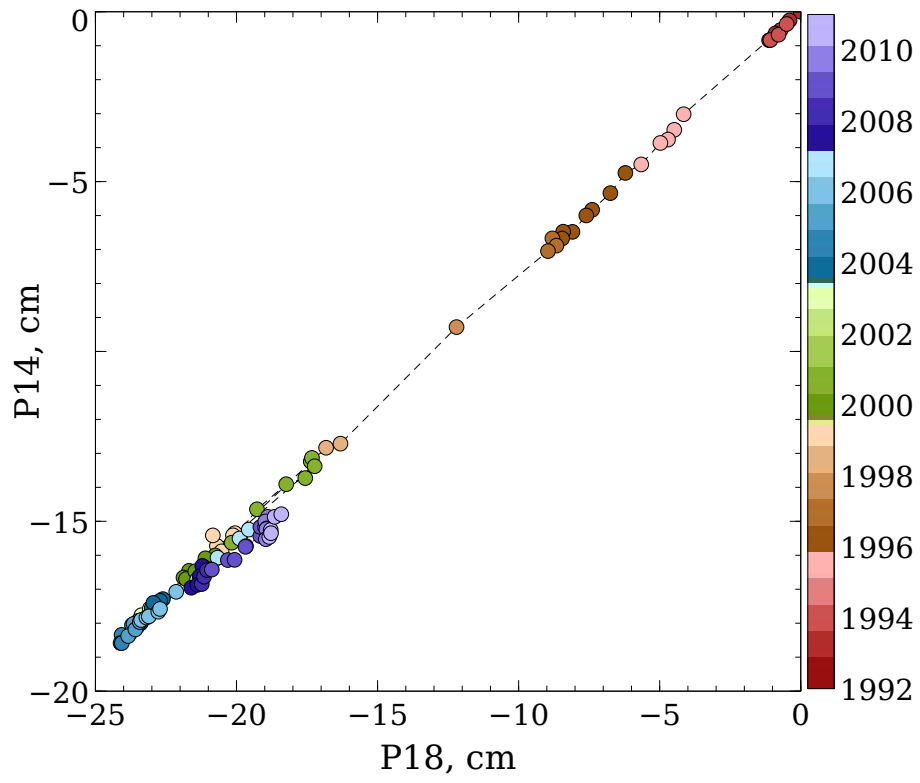


Figure S16: Scatter plot of the quasi-vertical displacement u_V at P14 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

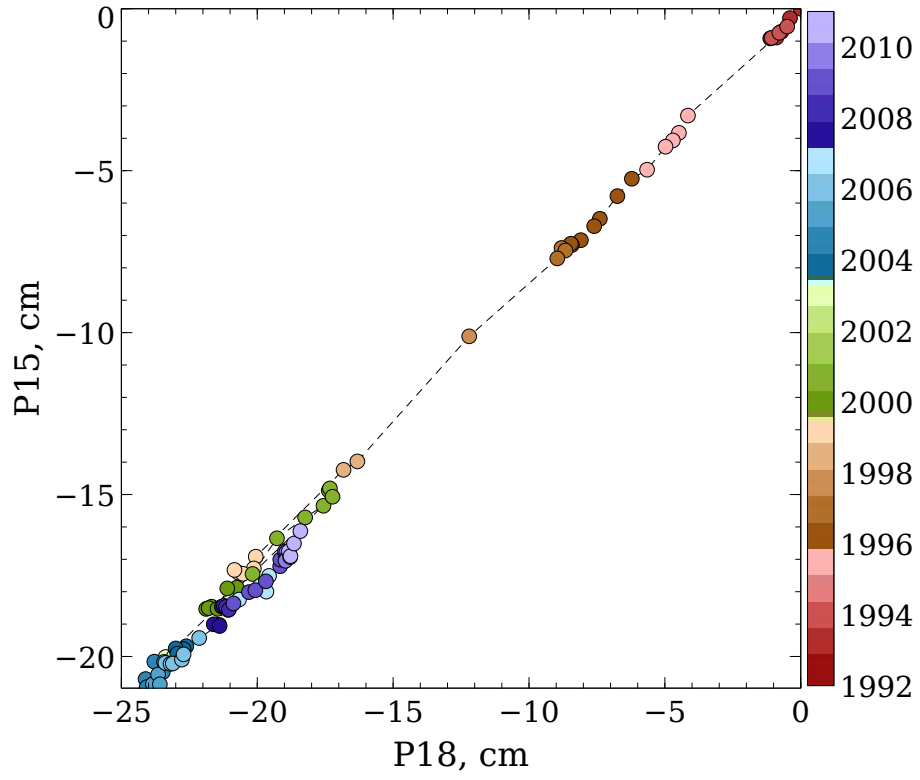


Figure S17: Scatter plot of the quasi-vertical displacement u_V at P15 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

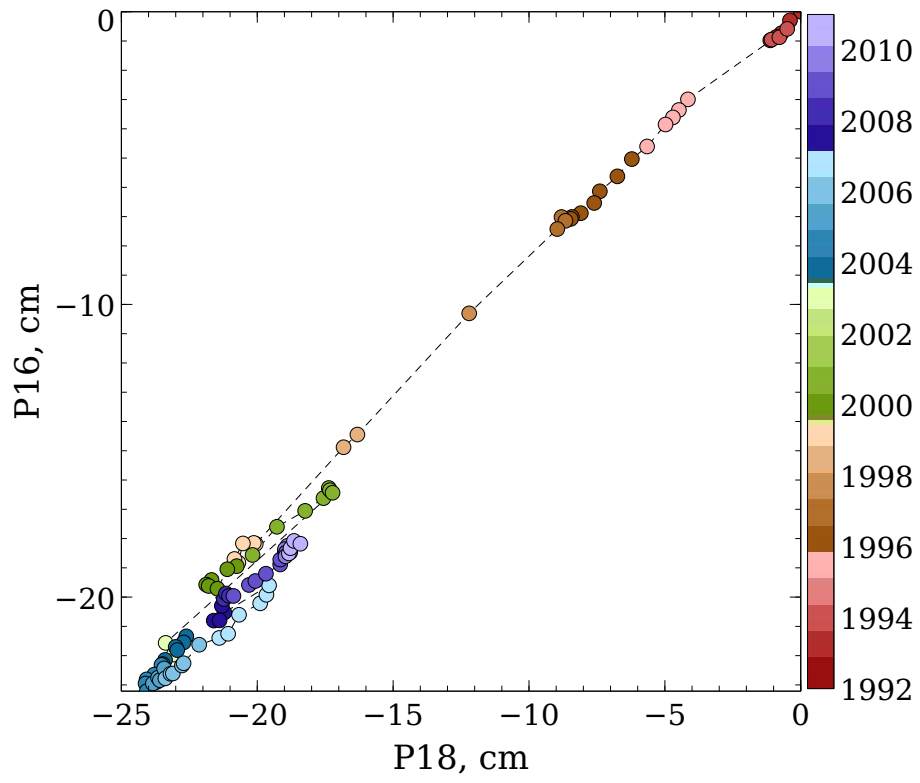


Figure S18: Scatter plot of the quasi-vertical displacement u_V at P16 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

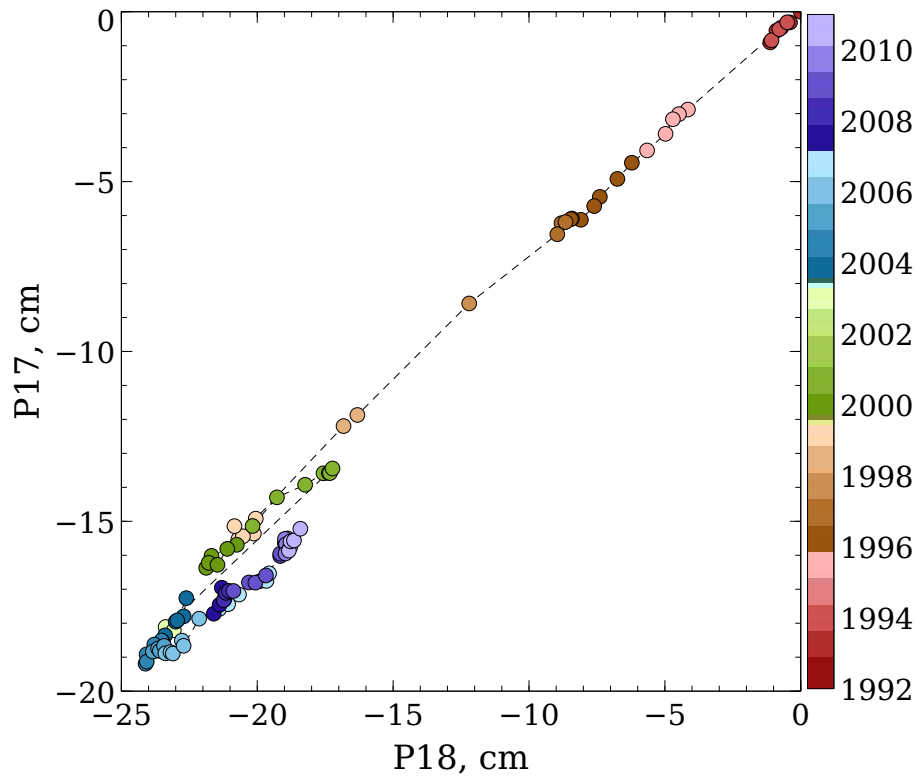


Figure S19: Scatter plot of the quasi-vertical displacement u_V at P17 and in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

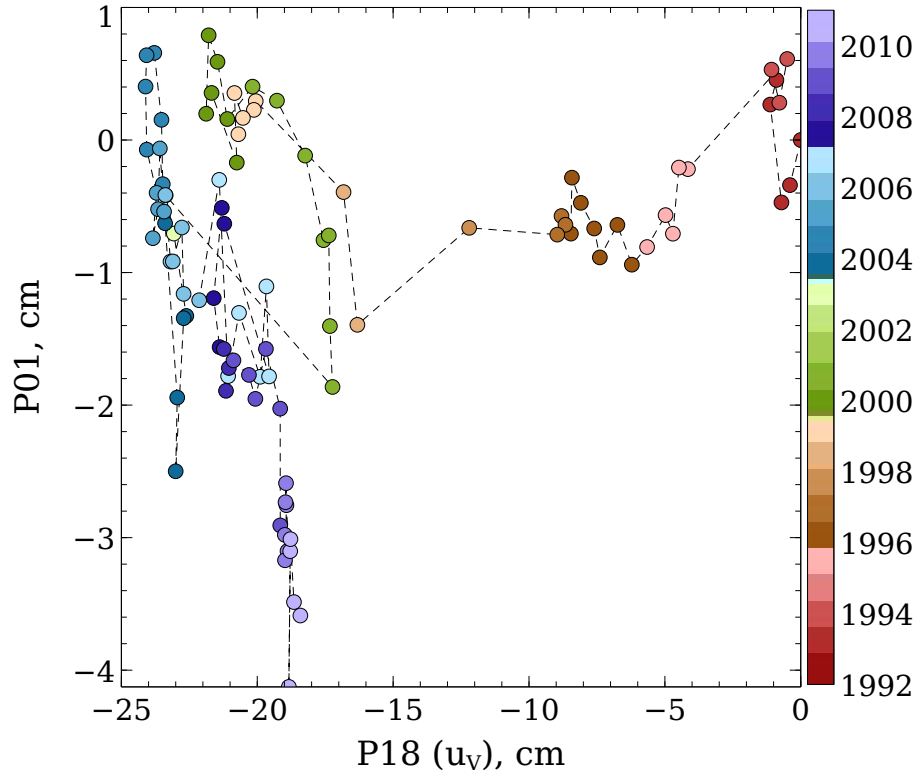


Figure S20: Scatter plot of the horizontal displacement u_H at P01 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

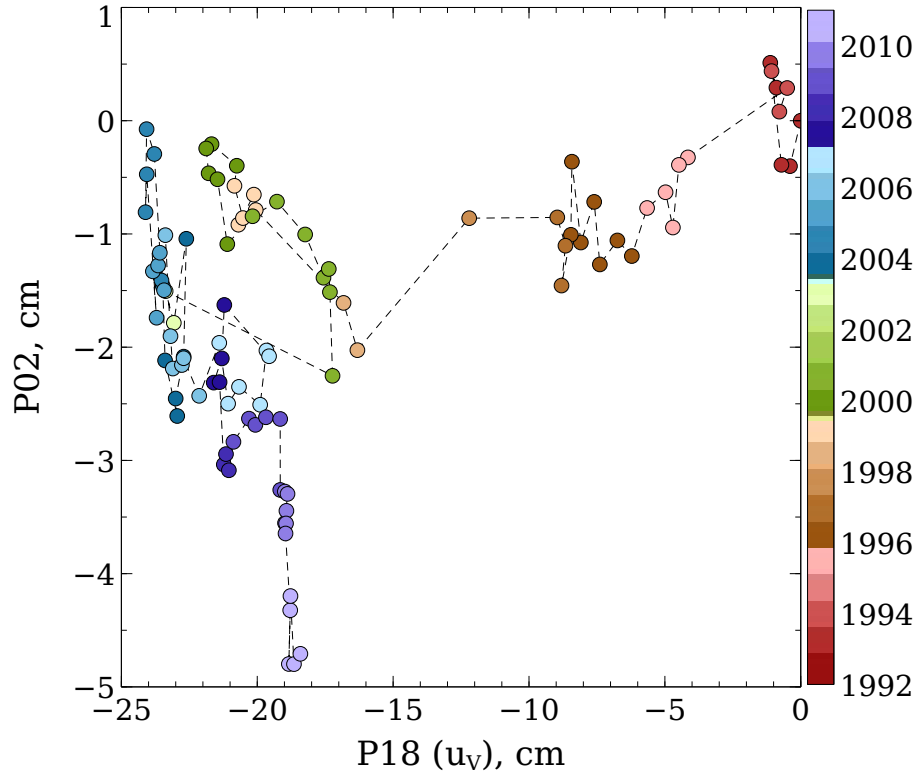


Figure S21: Scatter plot of the horizontal displacement u_H at P02 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

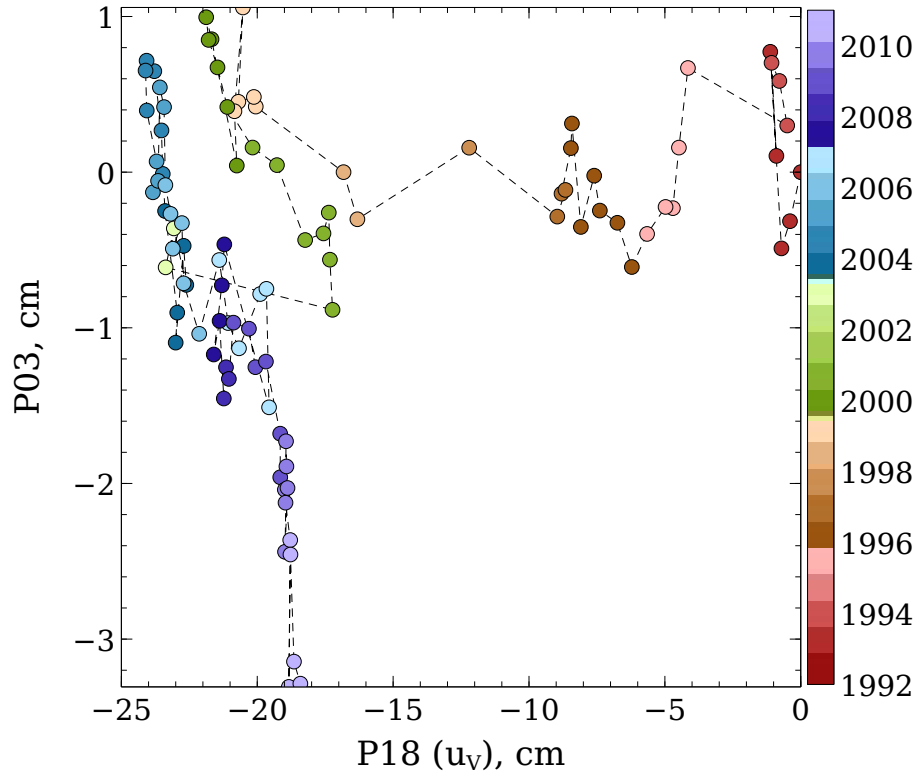


Figure S22: Scatter plot of the horizontal displacement u_H at P03 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

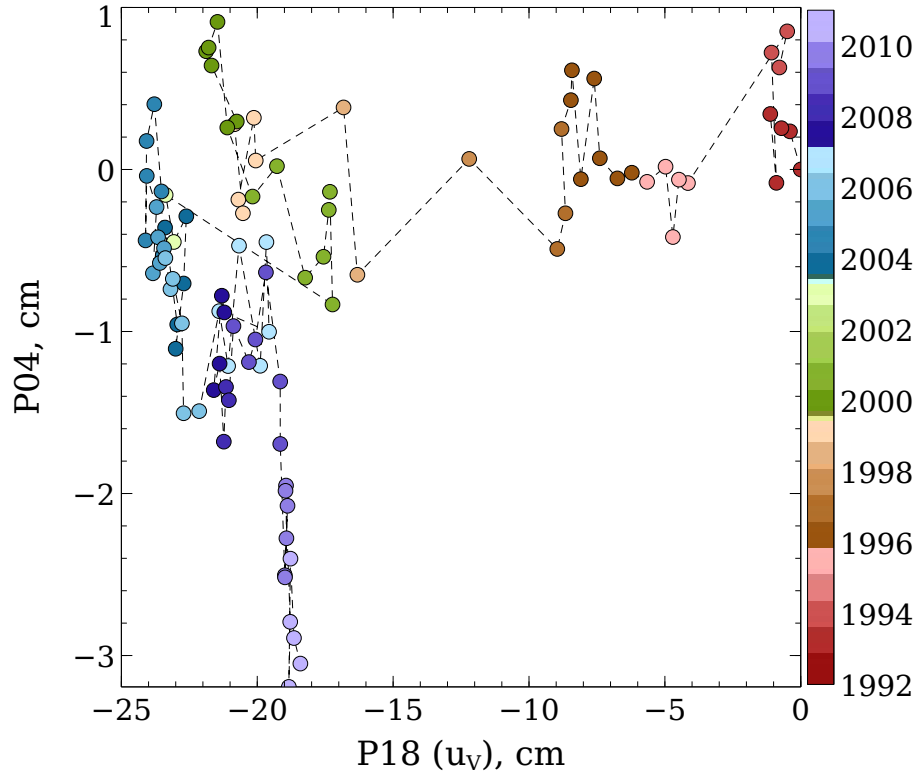


Figure S23: Scatter plot of the horizontal displacement u_H at P04 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

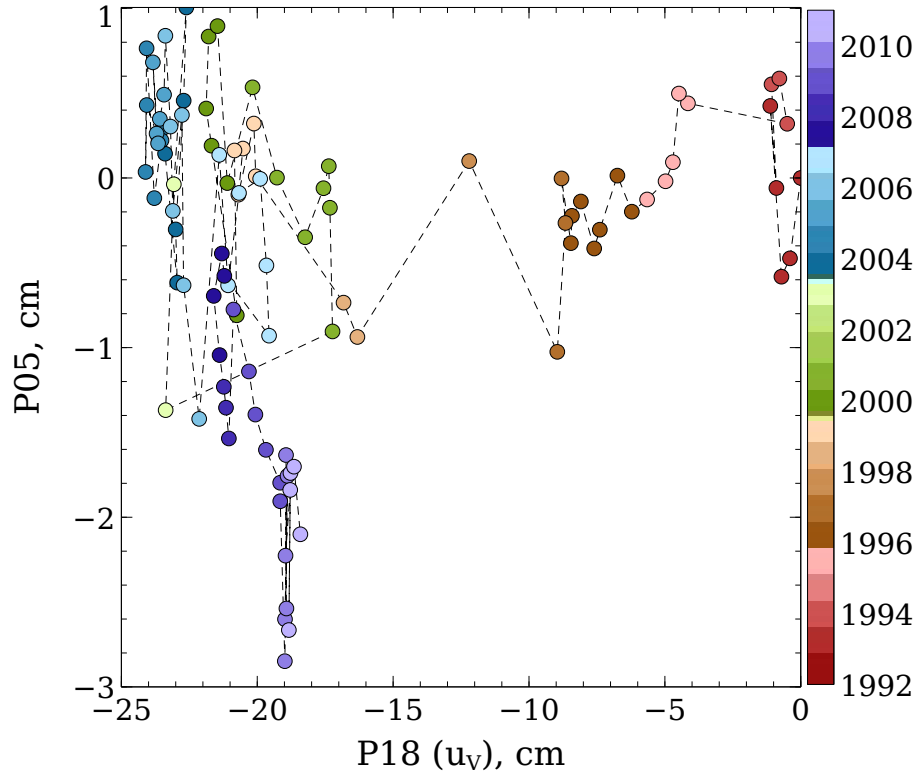


Figure S24: Scatter plot of the horizontal displacement u_H at P05 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

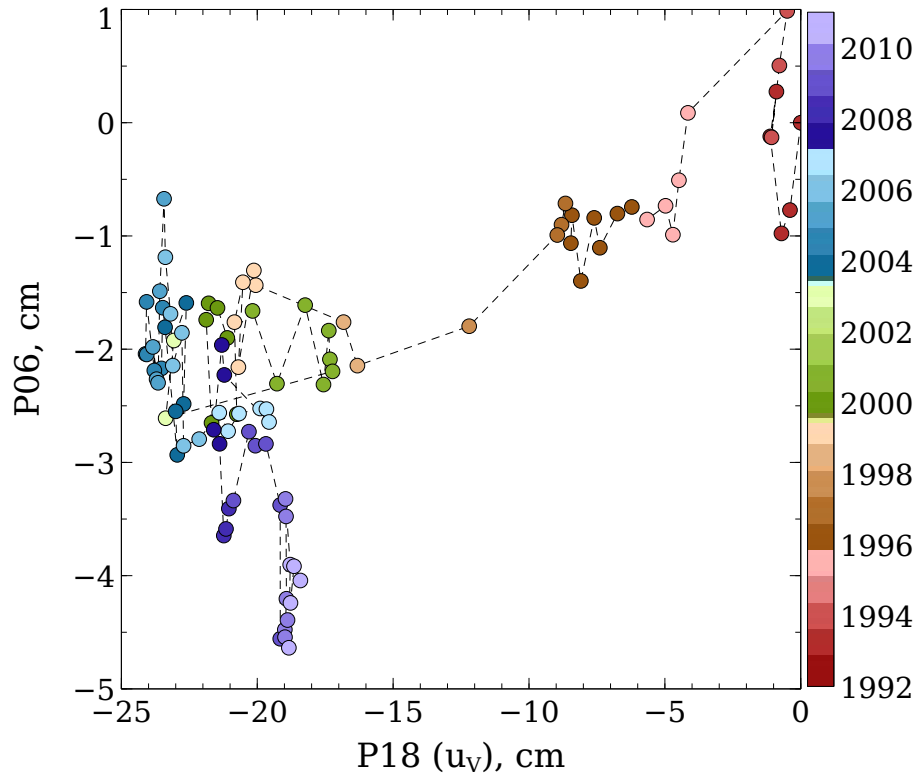


Figure S25: Scatter plot of the horizontal displacement u_H at P06 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

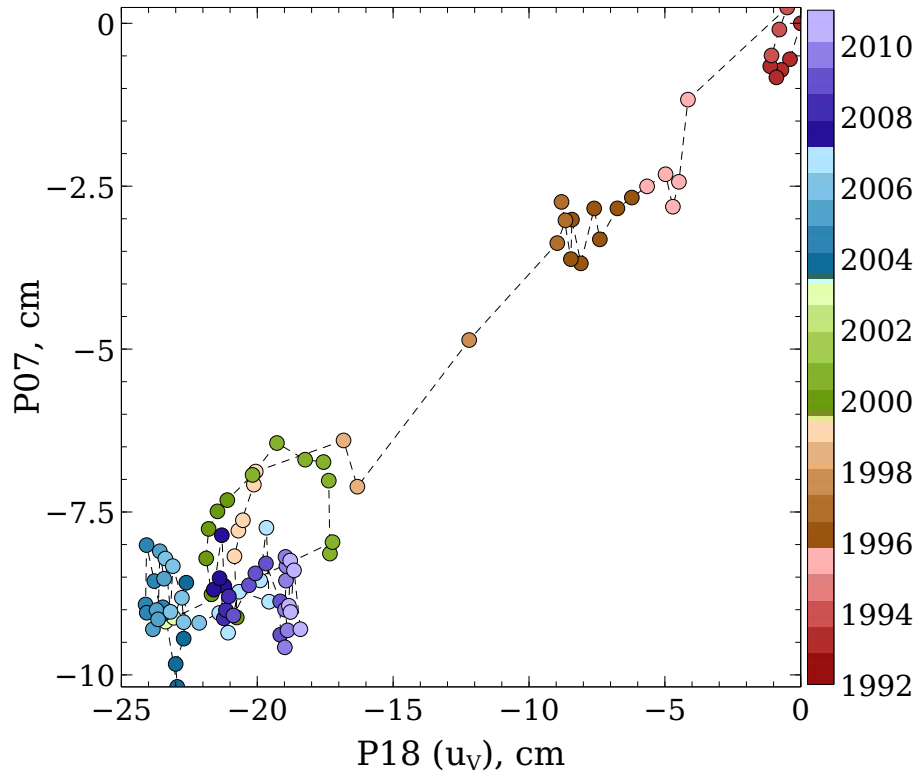


Figure S26: Scatter plot of the horizontal displacement u_H at P07 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

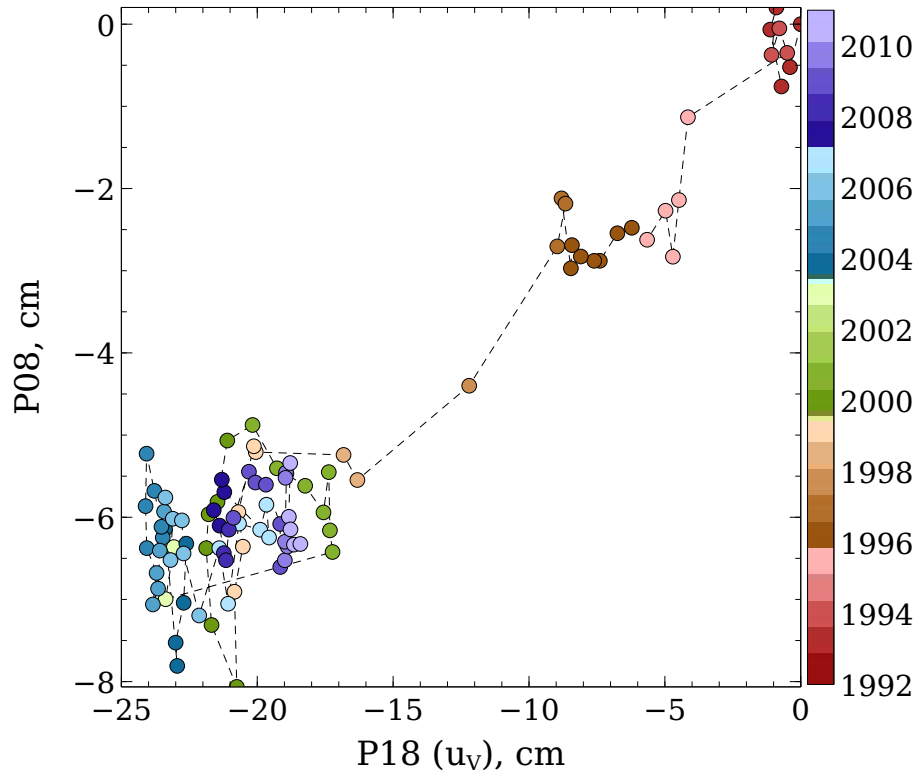


Figure S27: Scatter plot of the horizontal displacement u_H at P08 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

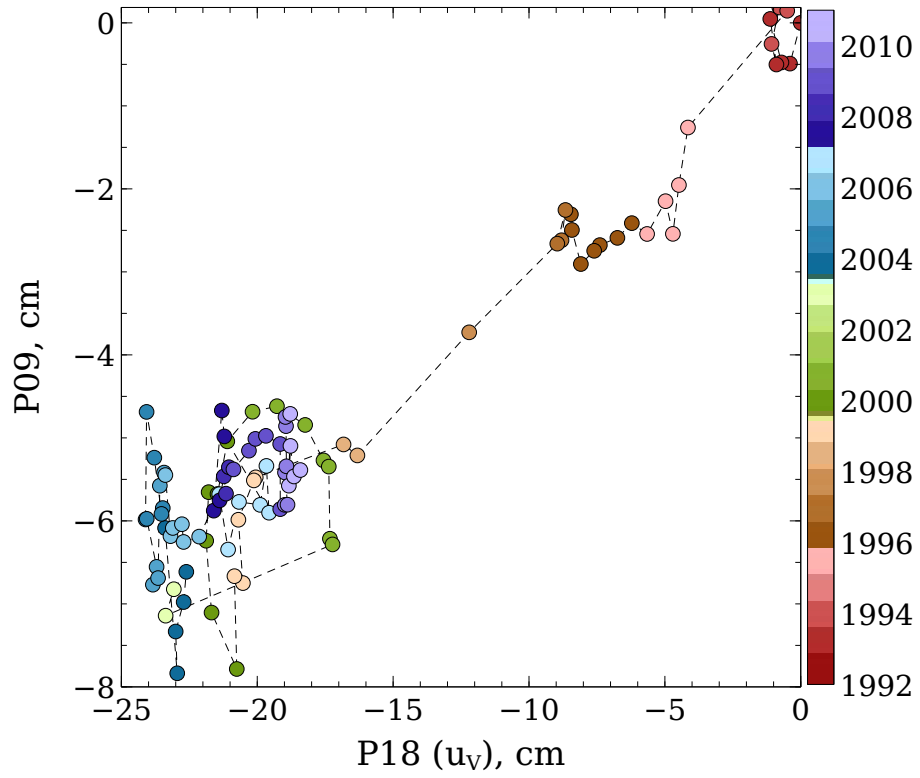


Figure S28: Scatter plot of the horizontal displacement u_H at P09 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

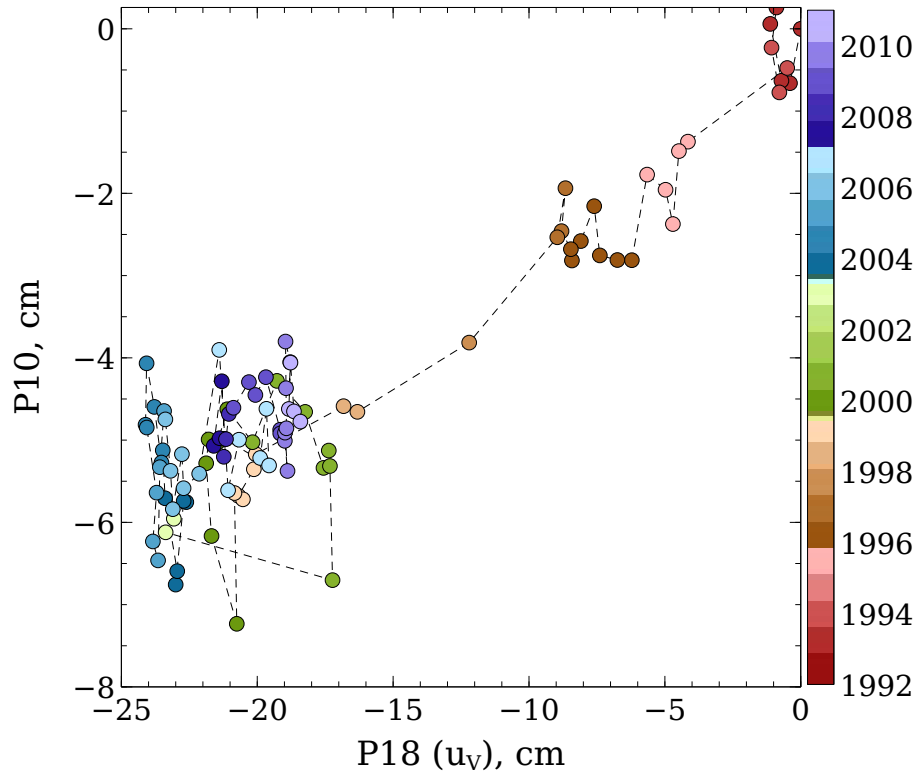


Figure S29: Scatter plot of the horizontal displacement u_H at P10 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

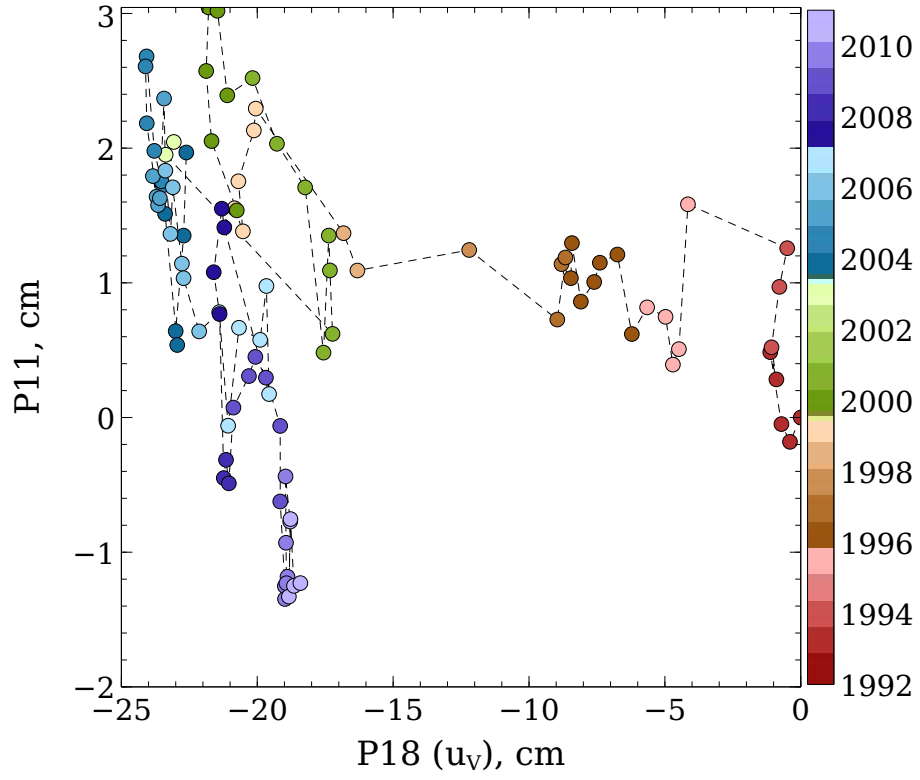


Figure S30: Scatter plot of the horizontal displacement u_H at P11 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

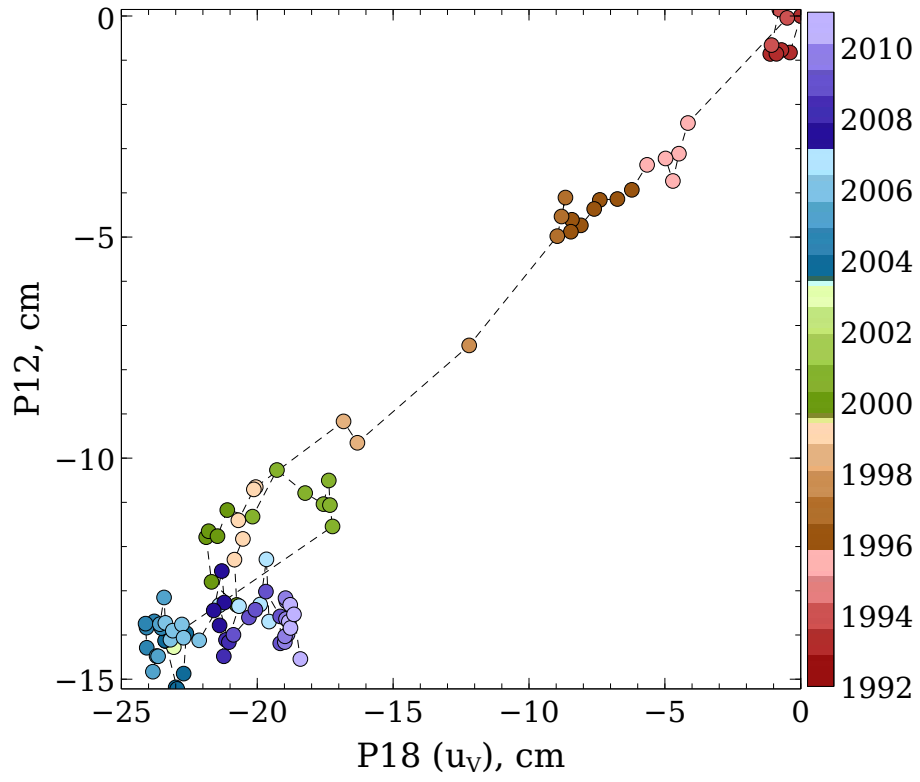


Figure S31: Scatter plot of the horizontal displacement u_H at P12 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

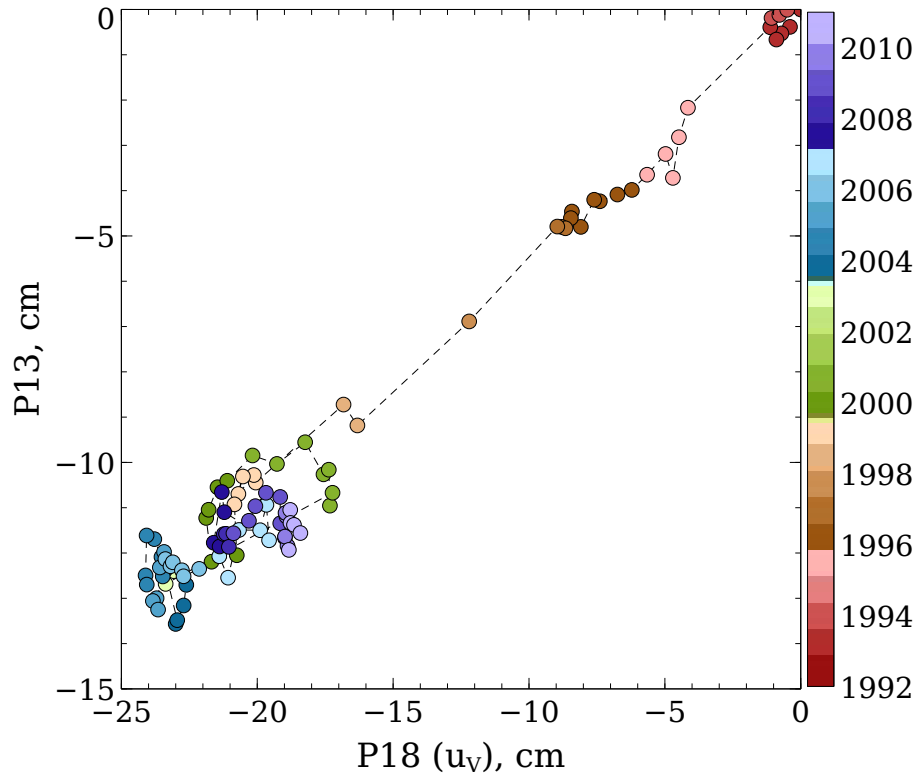


Figure S32: Scatter plot of the horizontal displacement u_H at P13 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

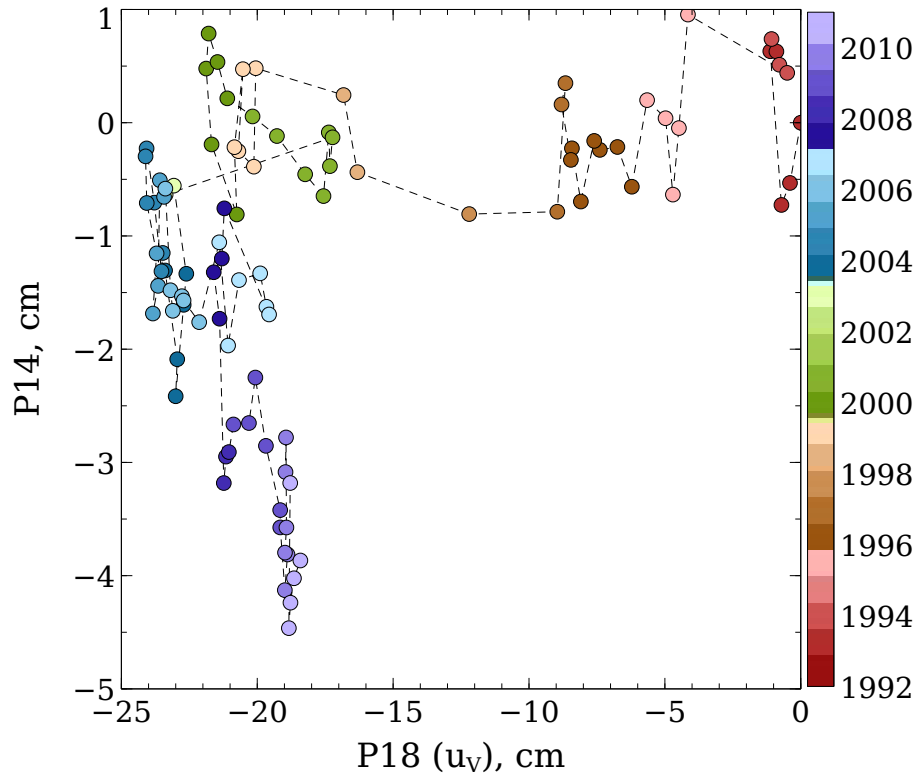


Figure S33: Scatter plot of the horizontal displacement u_H at P14 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

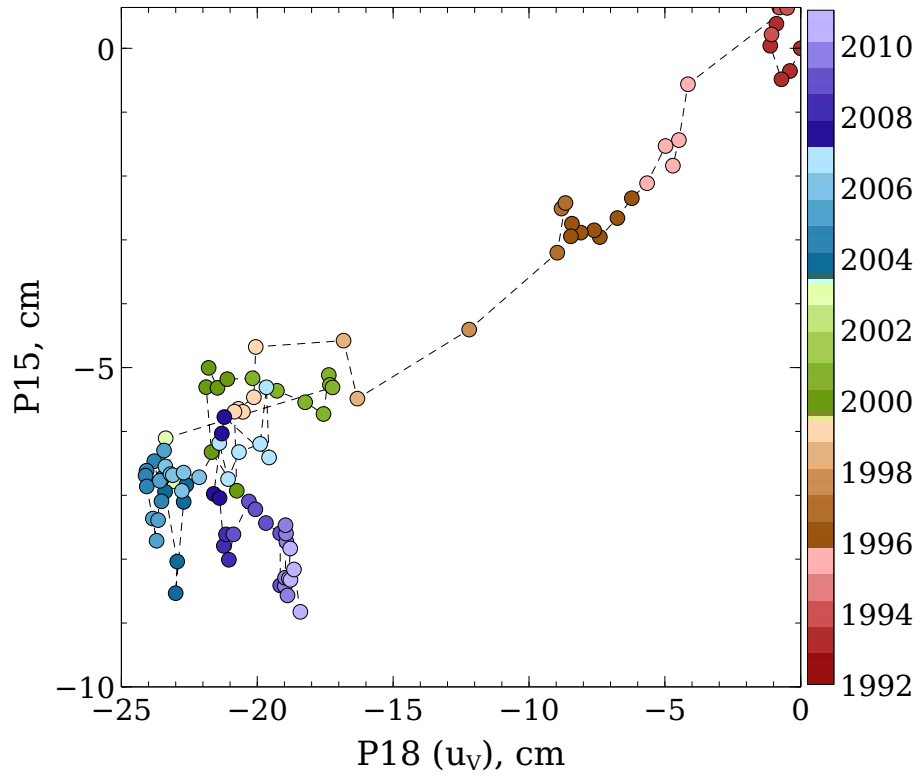


Figure S34: Scatter plot of the horizontal displacement u_H at P15 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

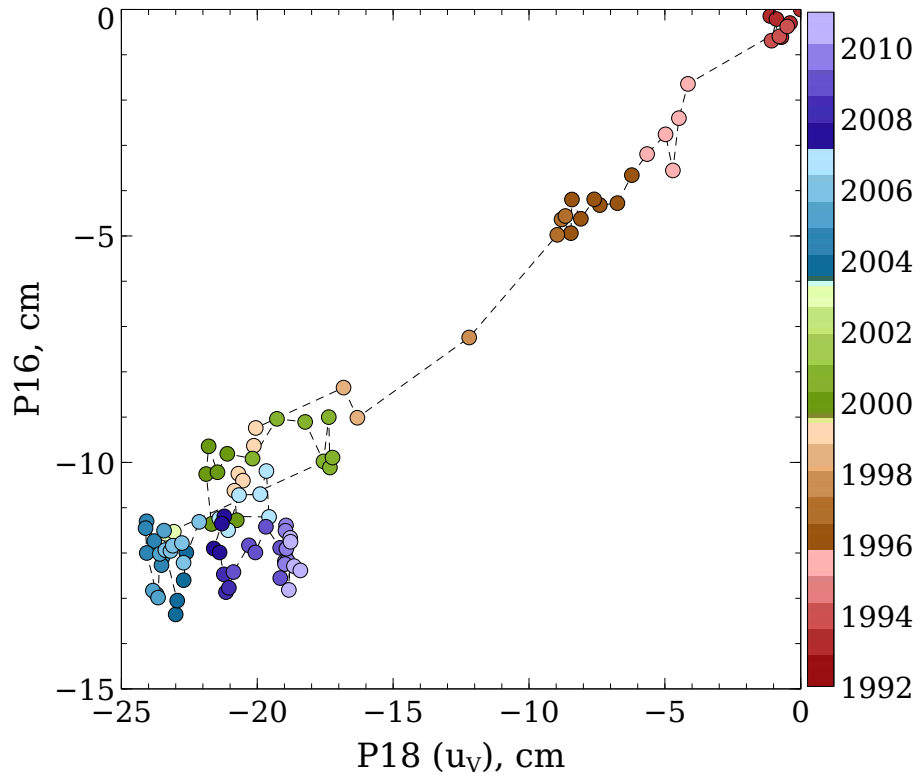


Figure S35: Scatter plot of the horizontal displacement u_H at P16 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.

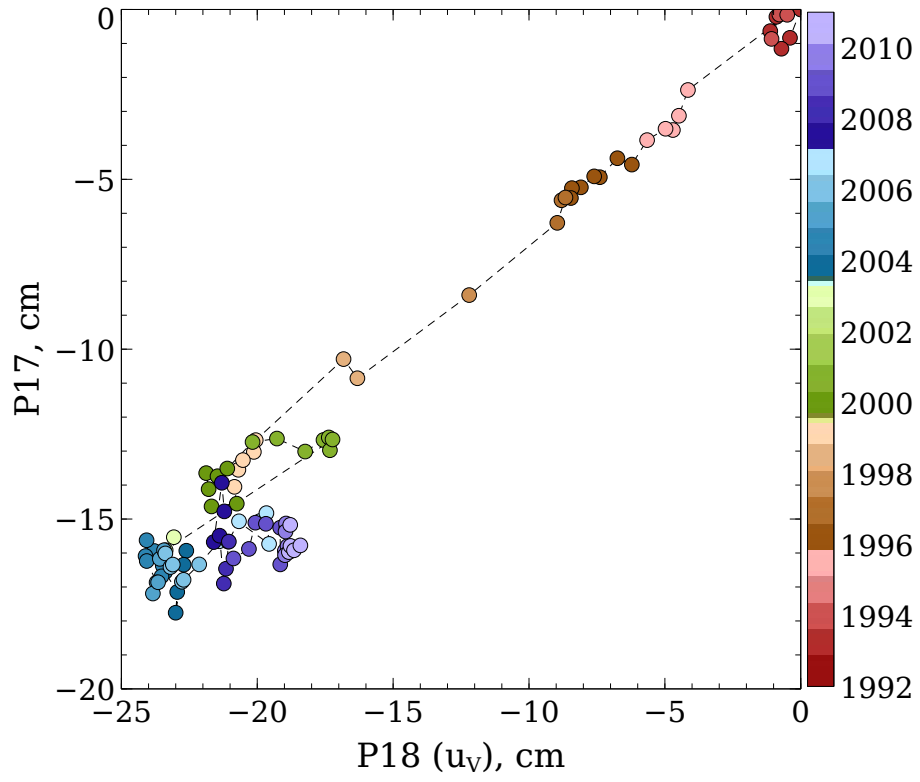


Figure S36: Scatter plot of the horizontal displacement u_H at P17 and the quasi-vertical displacement u_V in the area of maximum pre-2000 subsidence (P18) from 1993 to 2010.