

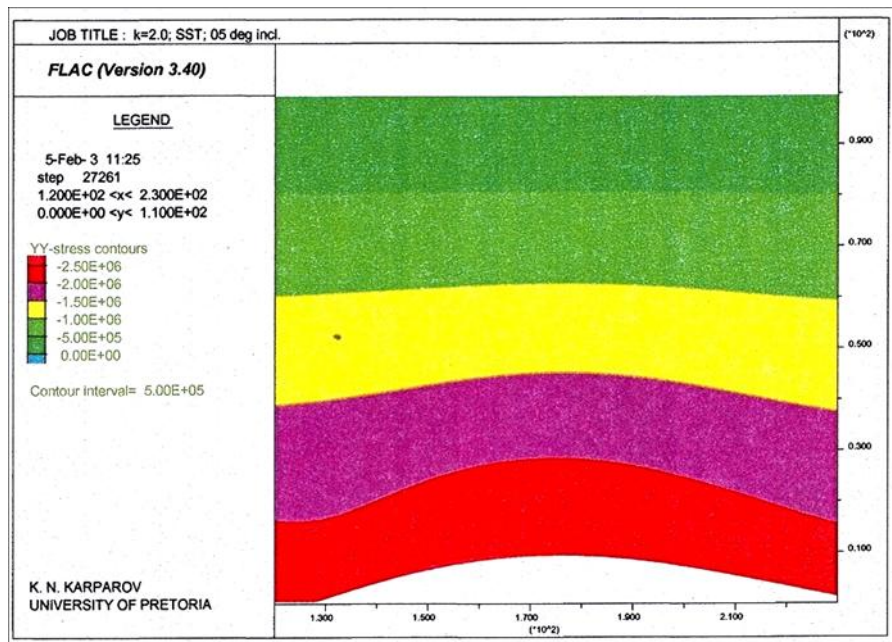
**APPENDIX 2. FIGURES**

Figure A2.1

Vertical stress component of the FLAC model with homogeneous sandstone and 5°-layer inclination of the undulated strata formation

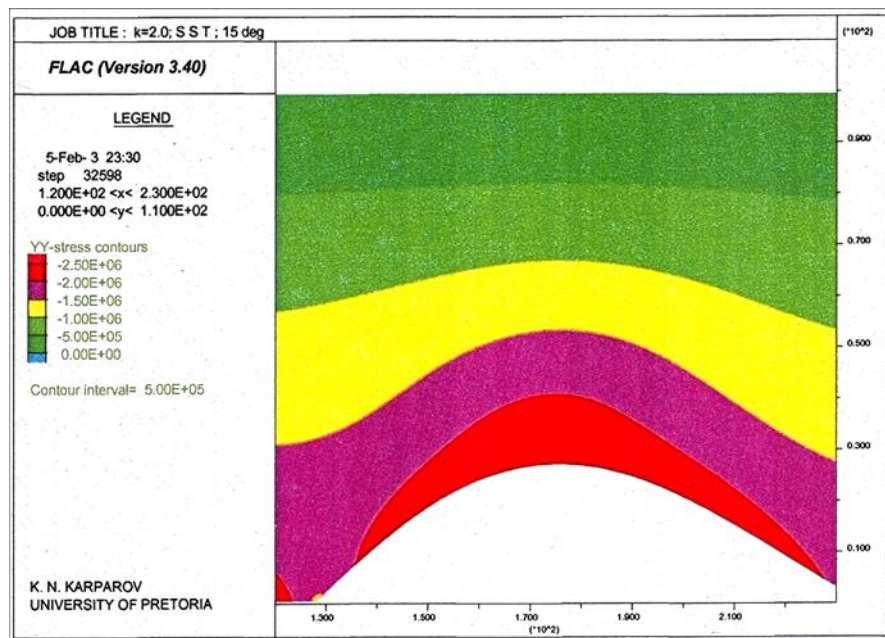


Figure A2.2

Vertical stress component of the FLAC model with homogeneous sandstone and 15°-layer inclination of the undulated strata formation

Appendix 2. Figures

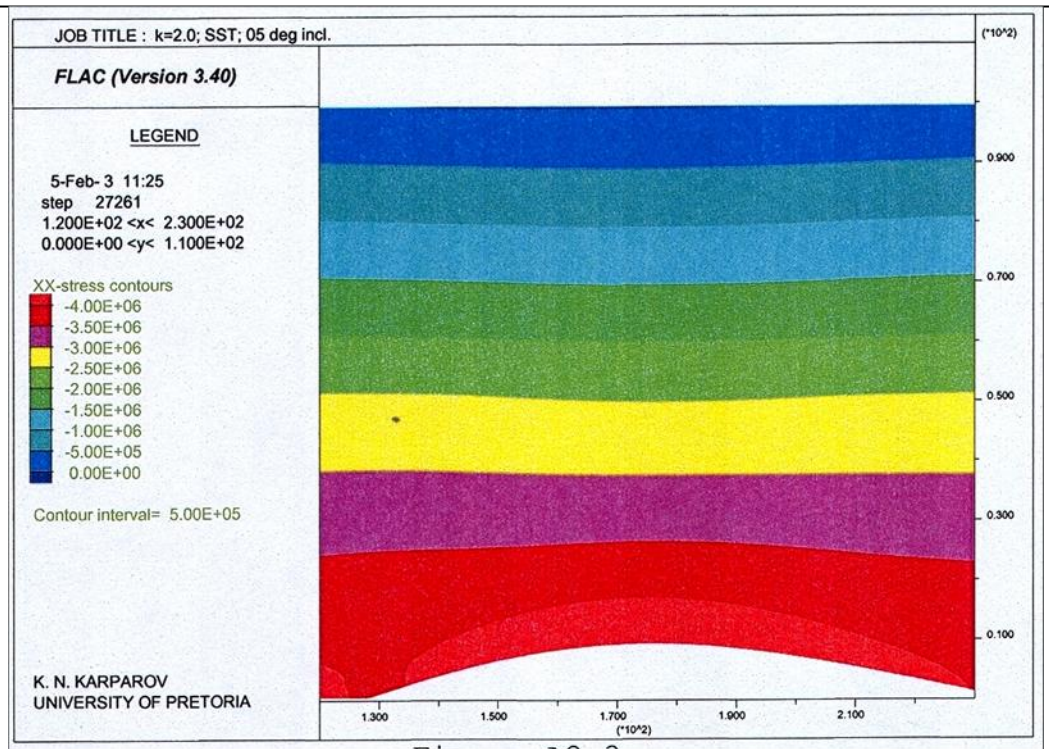


Figure A2.3

Horizontal stress component of the FLAC model with 5<sup>0</sup>-layer inclination of the undulated strata formation in massive sandstone

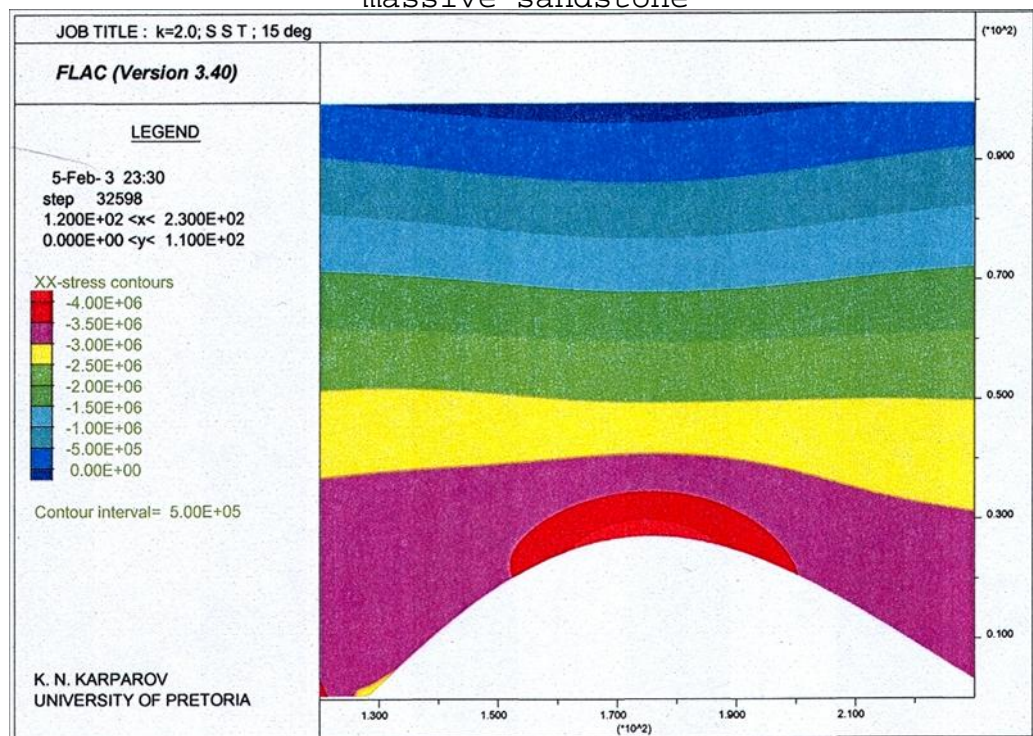


Figure A2.4

Horizontal stress component of the FLAC model with 15<sup>0</sup>-layer inclination of the undulated strata formation in massive sandstone

Appendix 2. Figures

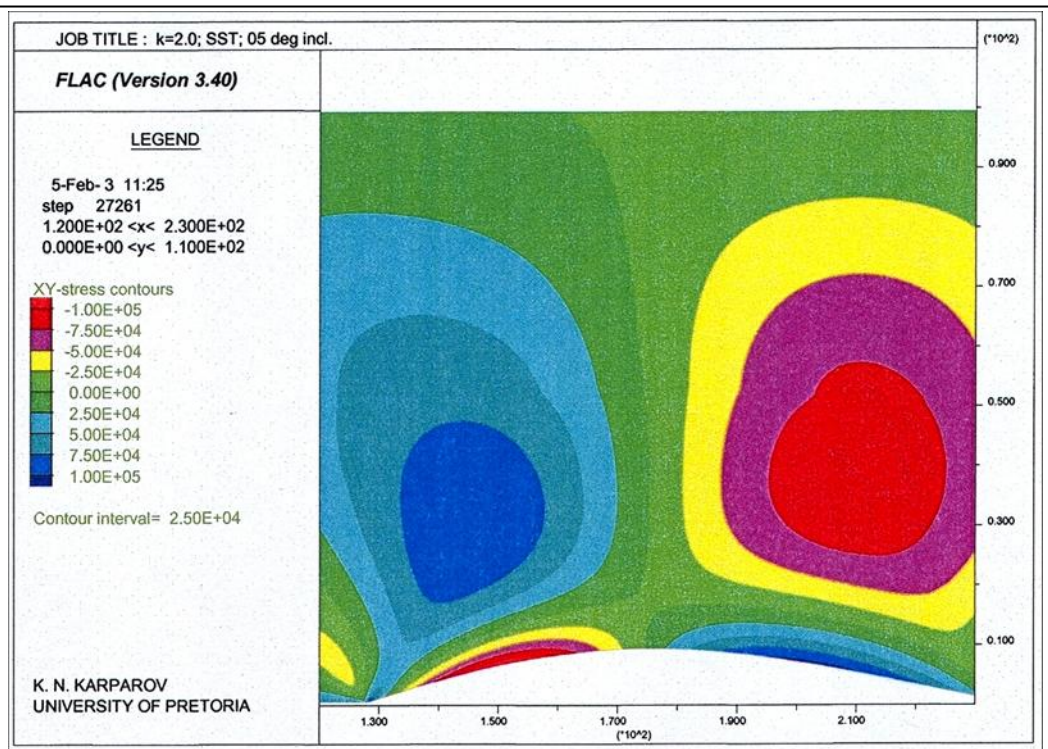


Figure A2.5

Sear stress component of the FLAC model with 5<sup>0</sup>-layer inclination of the undulated strata formation in massive sandstone

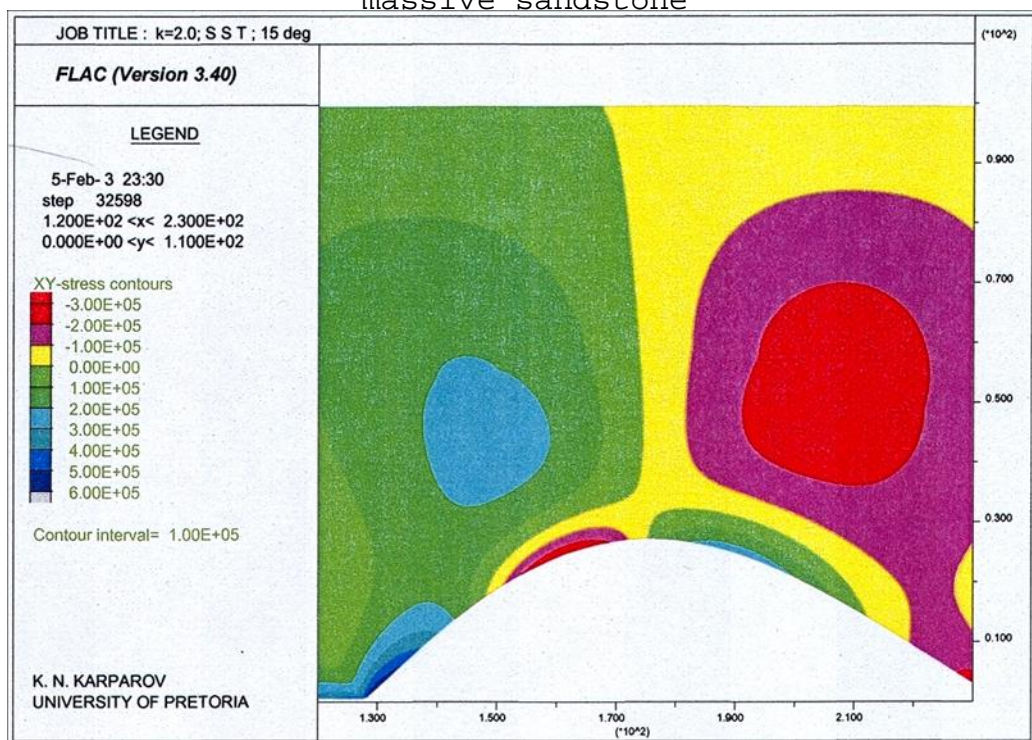


Figure A2.6

Shear stress component of the FLAC model with 15<sup>0</sup>-layer inclination of the undulated strata formation in massive sandstone

Appendix 2. Figures

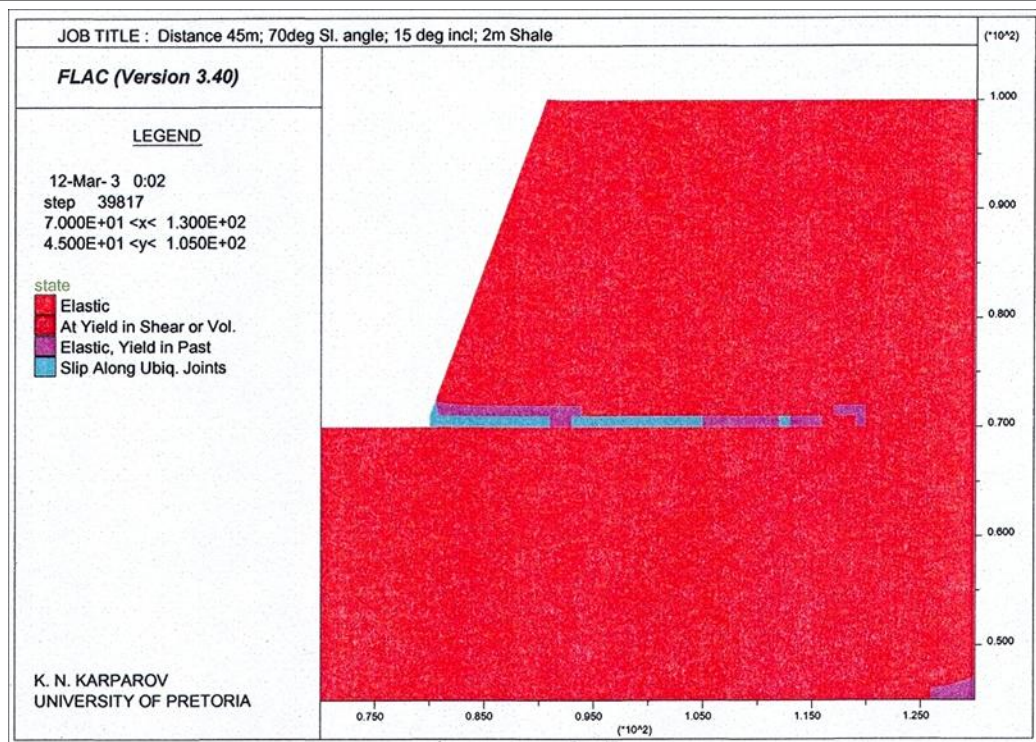


Figure A2.7

State condition of the 70<sup>0</sup>-slope profile with 2m embedded shale layer, adjacent to anticline formation with 15<sup>0</sup>-layer inclination

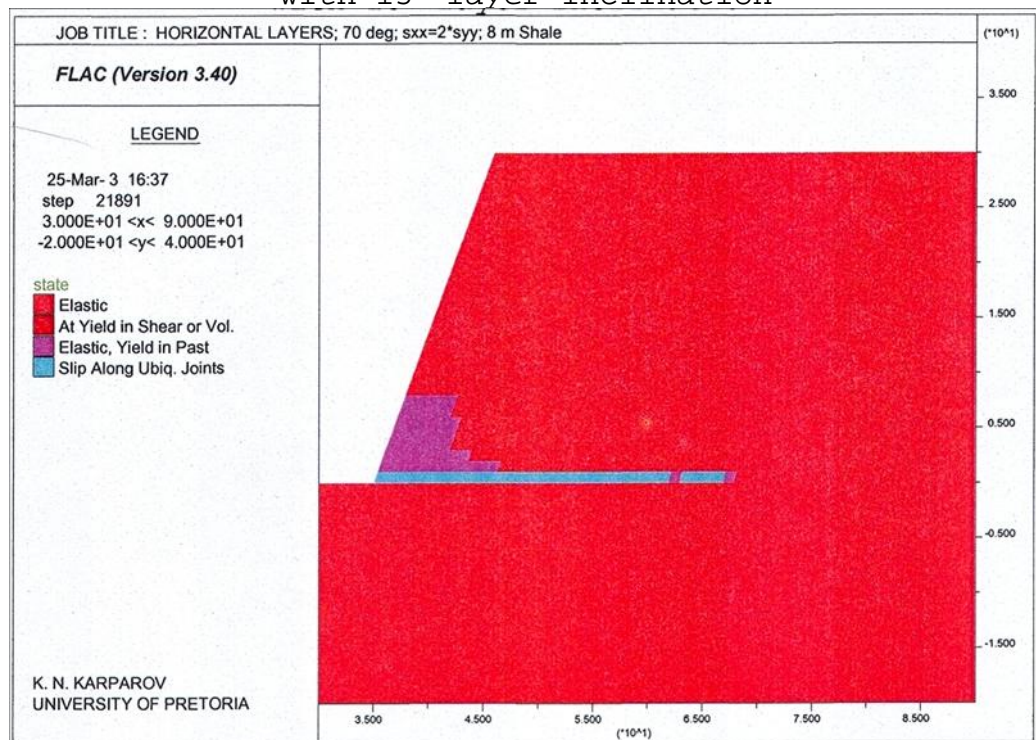


Figure A2.8

State condition of the 70<sup>0</sup>-slope profile with 8m thick embedded flat shale layer

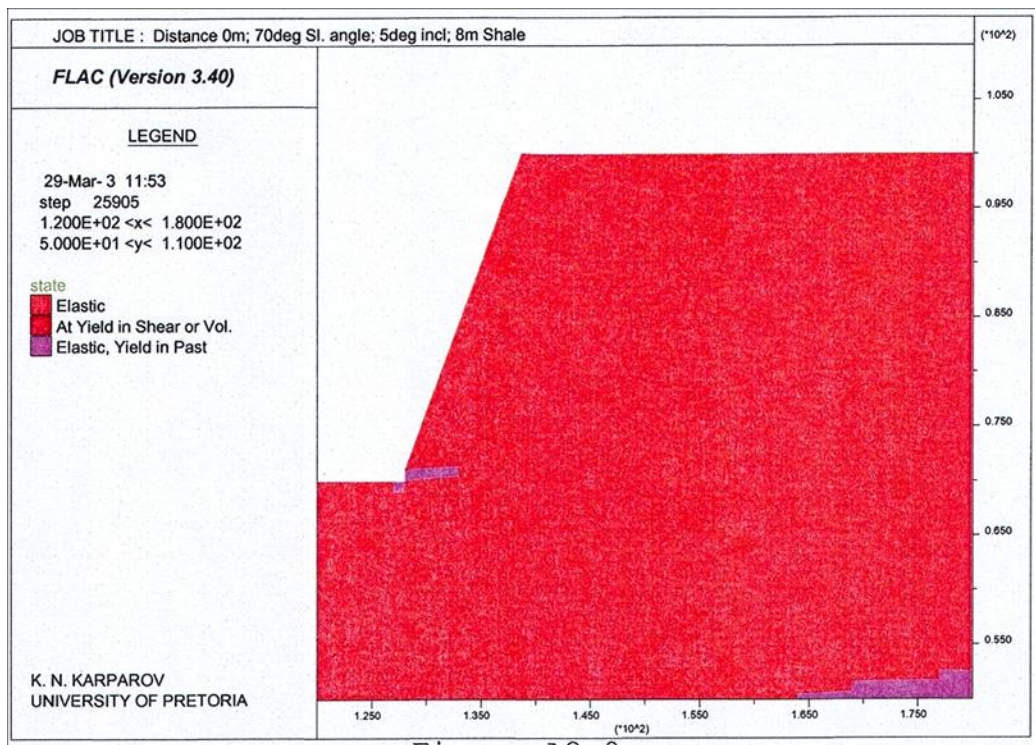


Figure A2.9

State condition of the 70<sup>0</sup>-slope profile with 8m thick embedded shale layer at the anticline formation with 5<sup>0</sup>-layer inclination

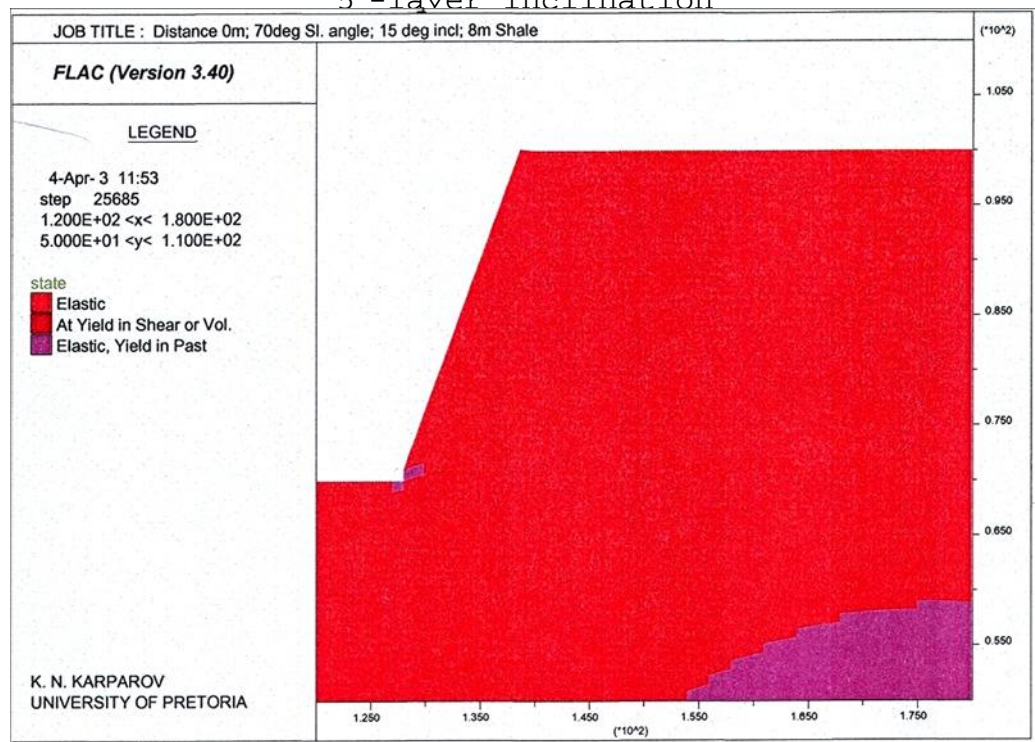


Figure A2.10

State condition of the 70<sup>0</sup>-slope profile with 8m thick embedded shale layer at the anticline formation with 15<sup>0</sup>-layer inclination

Appendix 2. Figures

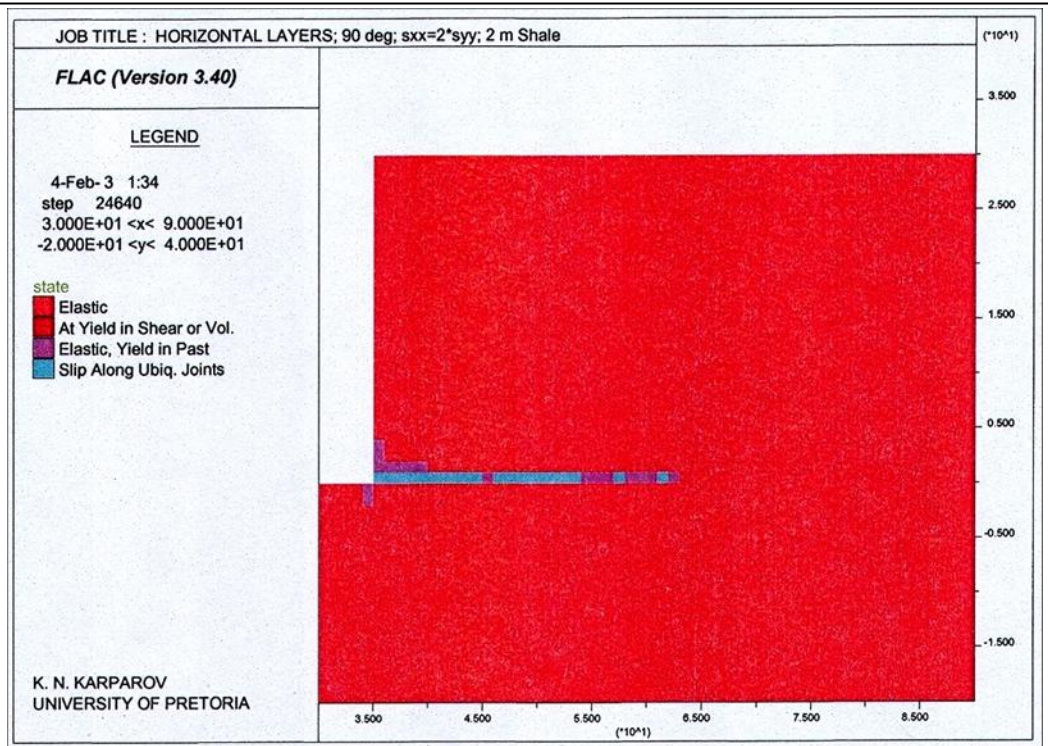


Figure A2.11

State condition of the  $90^0$ -slope profile with 2m thick embedded flat shale layer

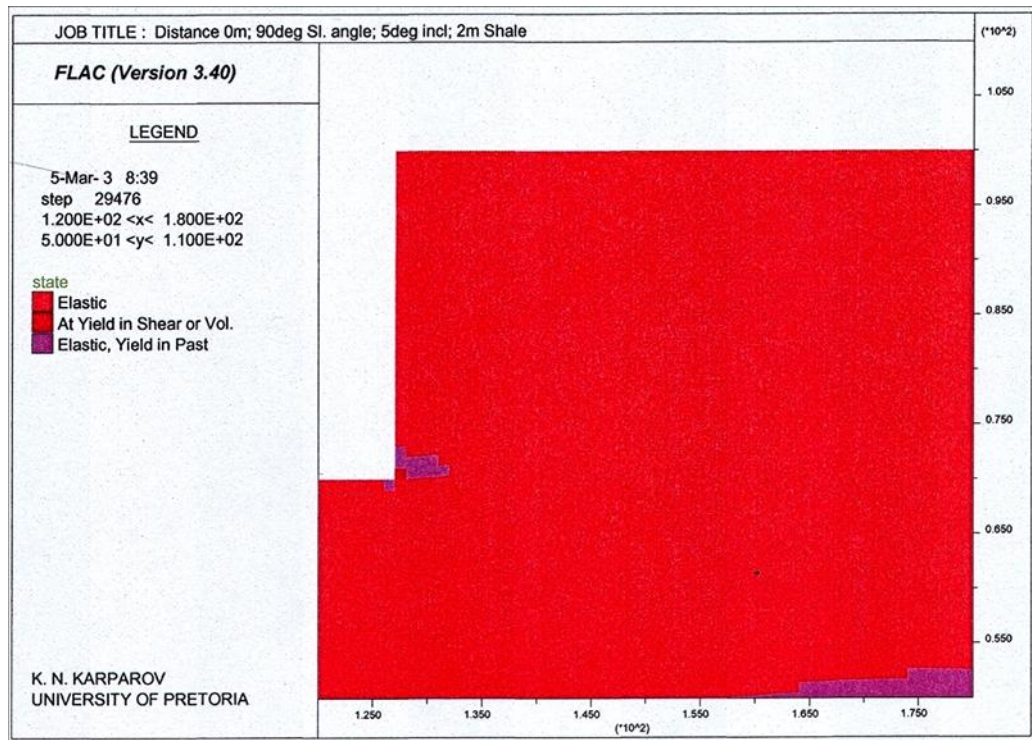


Figure A2.12

State condition of the  $90^0$ -slope profile with 2m thick embedded shale layer at the anticline formation with  $5^0$ -layer inclination

Appendix 2. Figures

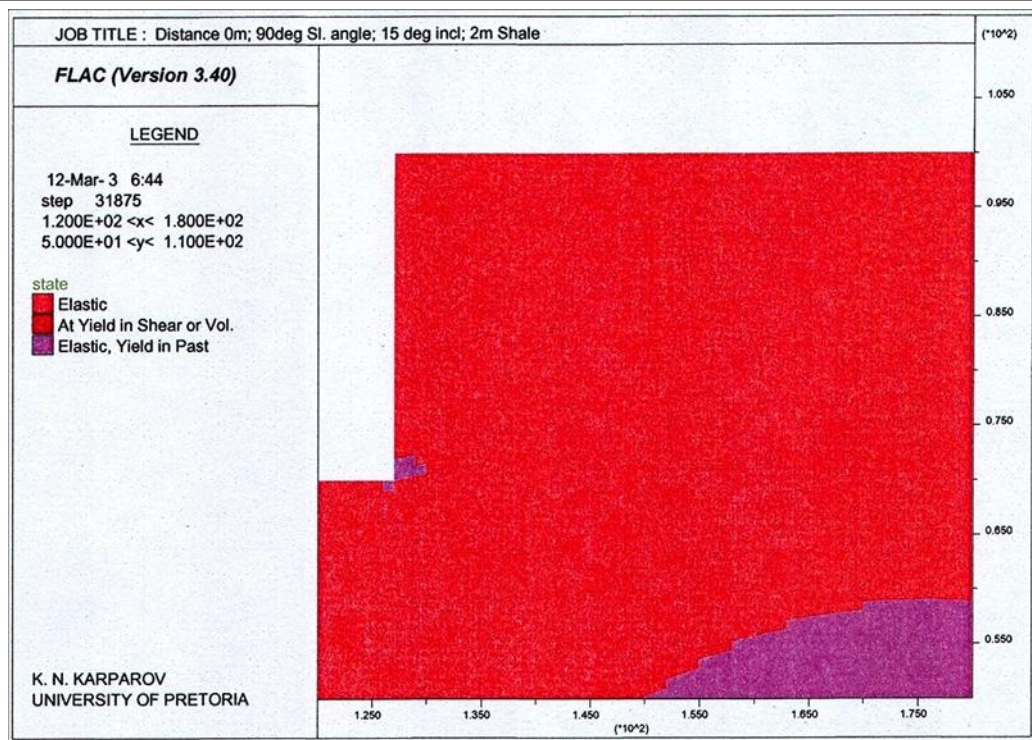


Figure A2.13

State condition of the 90<sup>0</sup>-slope profile with 2m embedded shale layer at the anticline formation with 15<sup>0</sup>-layer inclination

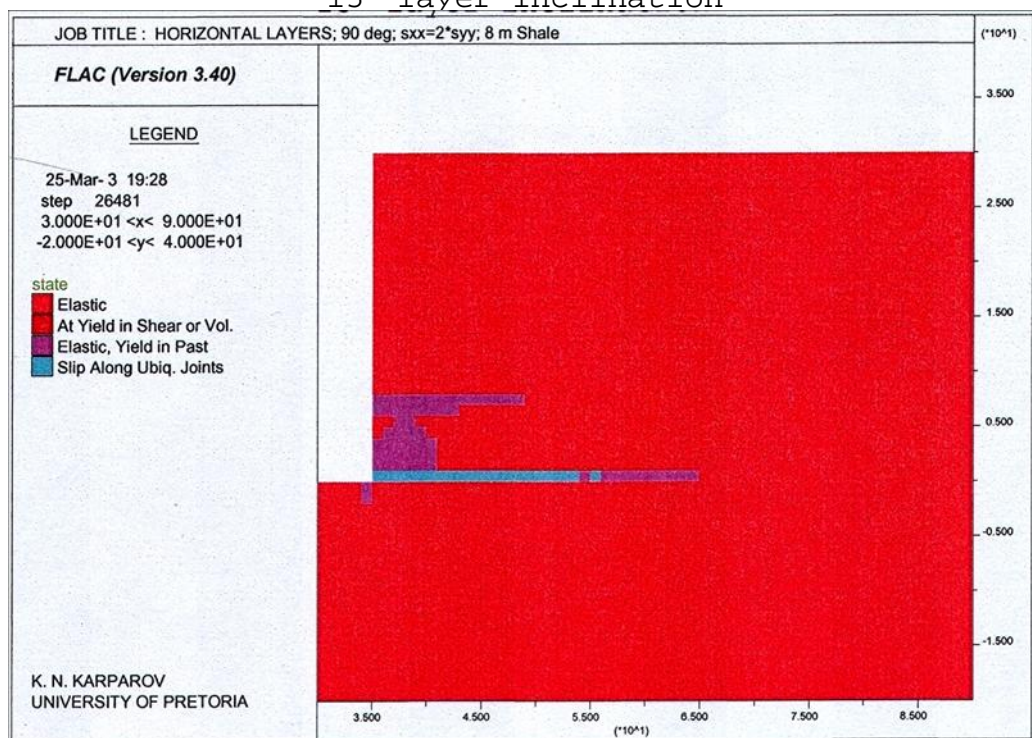


Figure A2.14

State condition of the 90<sup>0</sup>-slope profile with 8m thick embedded flat shale layer

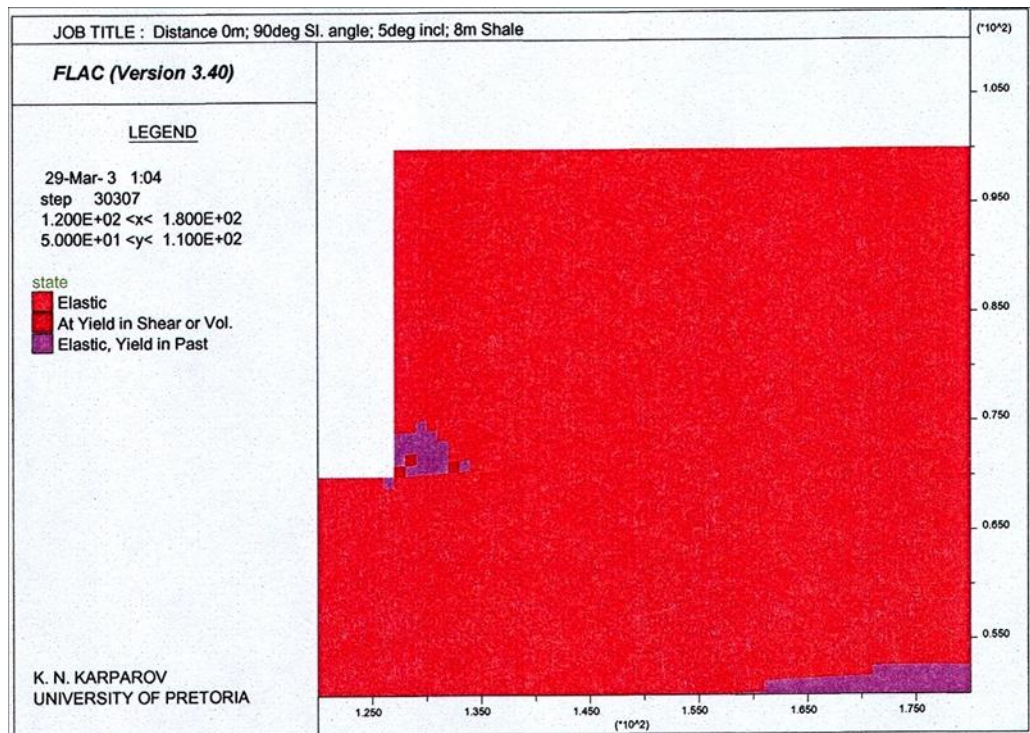


Figure A2.15

State condition of the 90<sup>0</sup>-slope profile with 8m thick embedded shale layer at the anticline formation with 5<sup>0</sup>-layer inclination

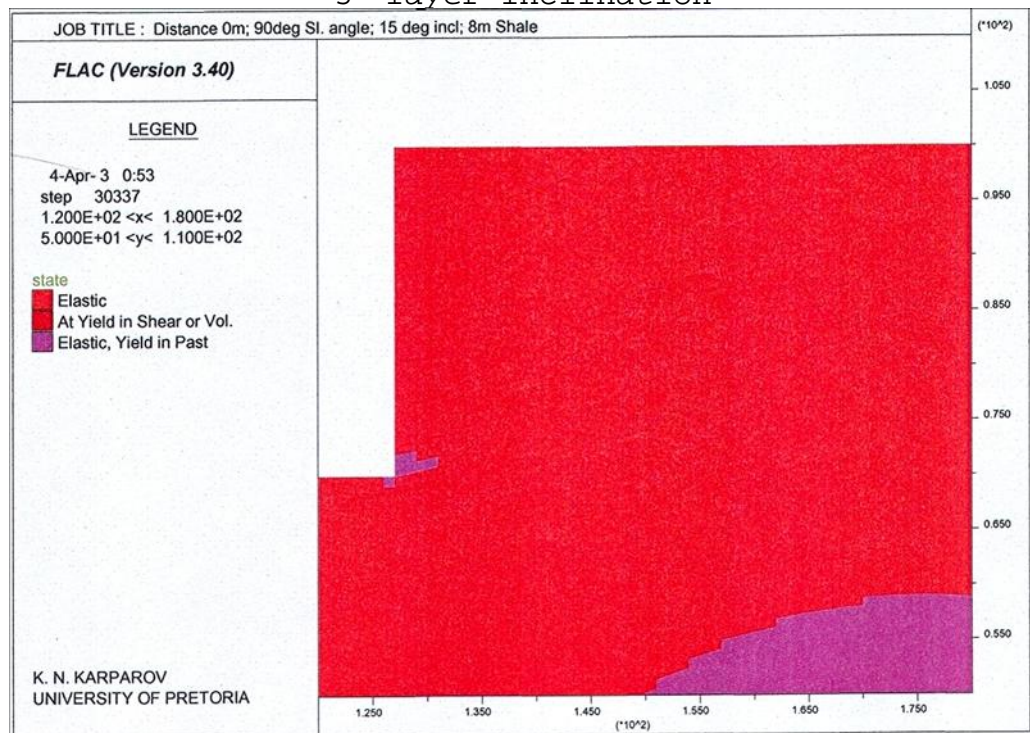


Figure A2.16

State condition of the 90<sup>0</sup>-slope profile with 8m thick embedded shale layer at the anticline formation with 15<sup>0</sup>-layer inclination



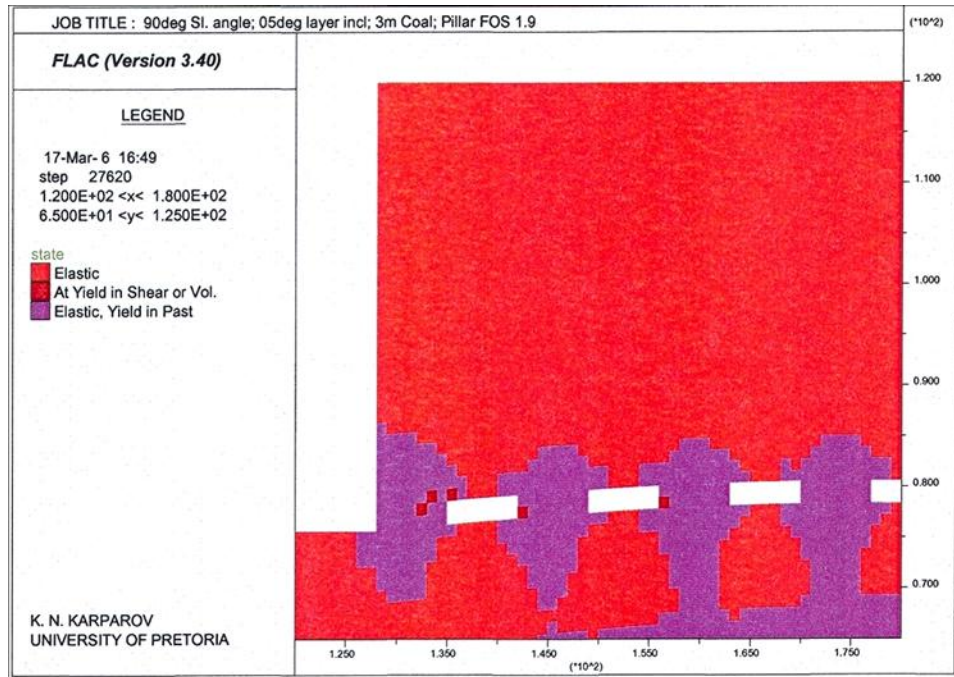


Figure A2.17

State in the profile with  $90^{\circ}$ -slope angle, pillar safety factor 1.9 at the anticline formation with  $5^{\circ}$ -limb inclination

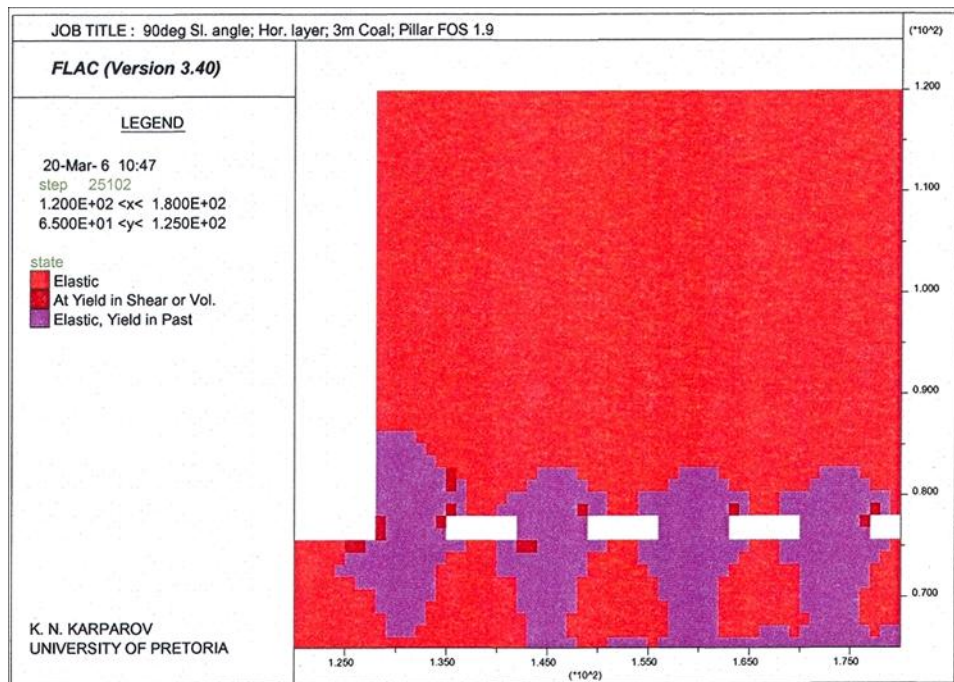


Figure A2.18

State in the profile with  $90^{\circ}$ -slope angle, pillar safety factor 2.2 and flat coal seam

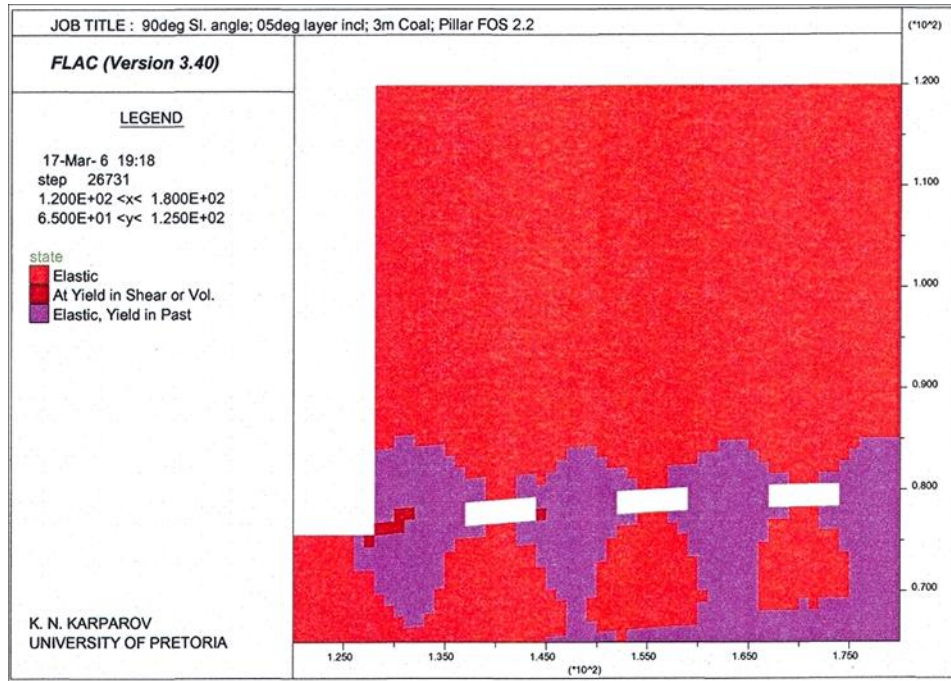


Figure A2.19

State in the profile with 90<sup>0</sup>-slope angle, pillar safety factor 2.2 at the anticline formation with 5<sup>0</sup>-limb inclination

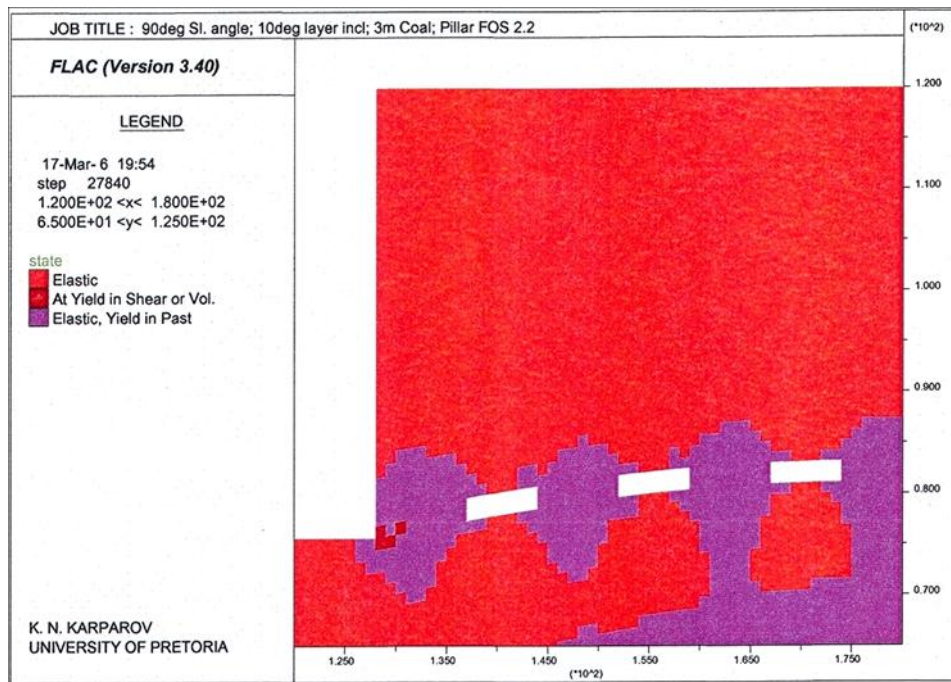


Figure A2.20

State in the profile with 90<sup>0</sup>-slope angle, pillar safety factor 2.2 at the anticline formation with 10<sup>0</sup>-limb inclination

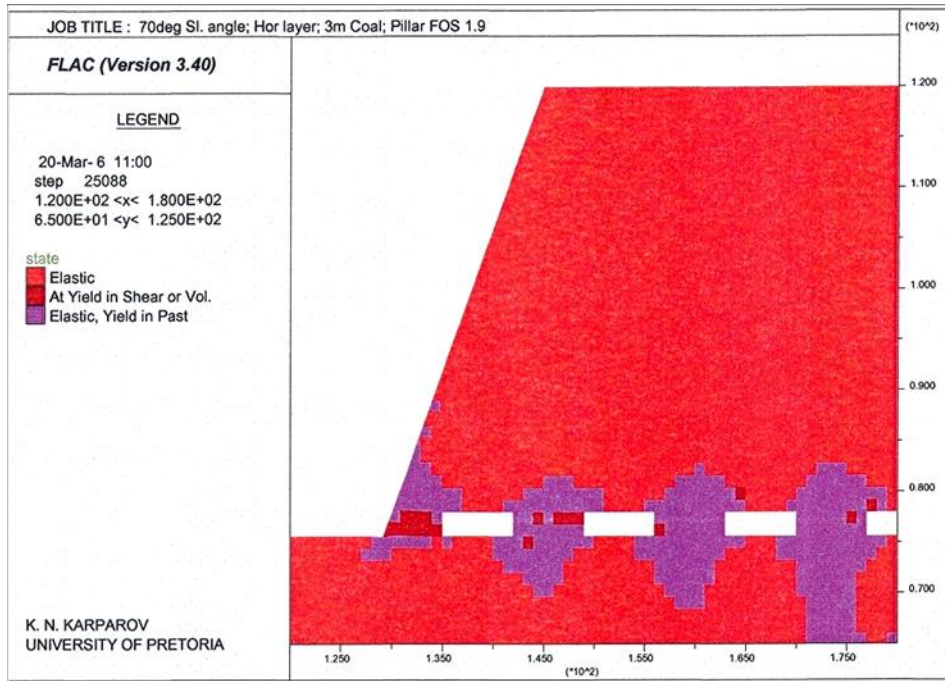


Figure A2.21

State in the profile with 70<sup>0</sup>-slope angle, pillar safety factor 1.9 and flat coal seam

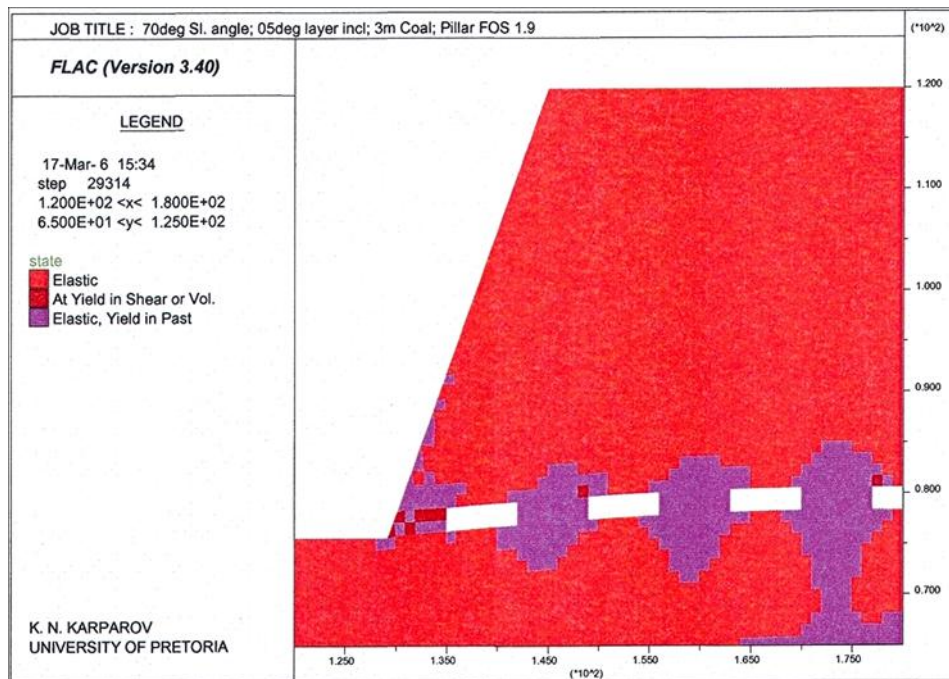


Figure A2.22

State in the profile with 70<sup>0</sup>-slope angle, pillar safety factor 1.9 at the anticline formation with 5<sup>0</sup>-limb inclination

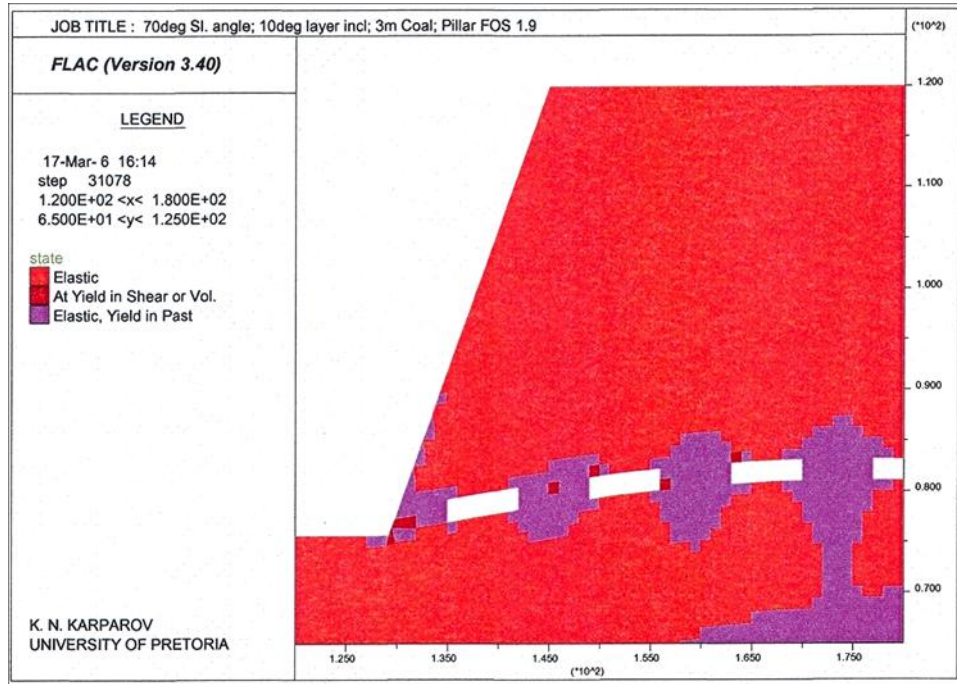


Figure A2.23

State in the profile with  $70^{\circ}$ -slope angle, pillar safety factor 1.9 at the anticline formation with  $10^{\circ}$ -limb inclination

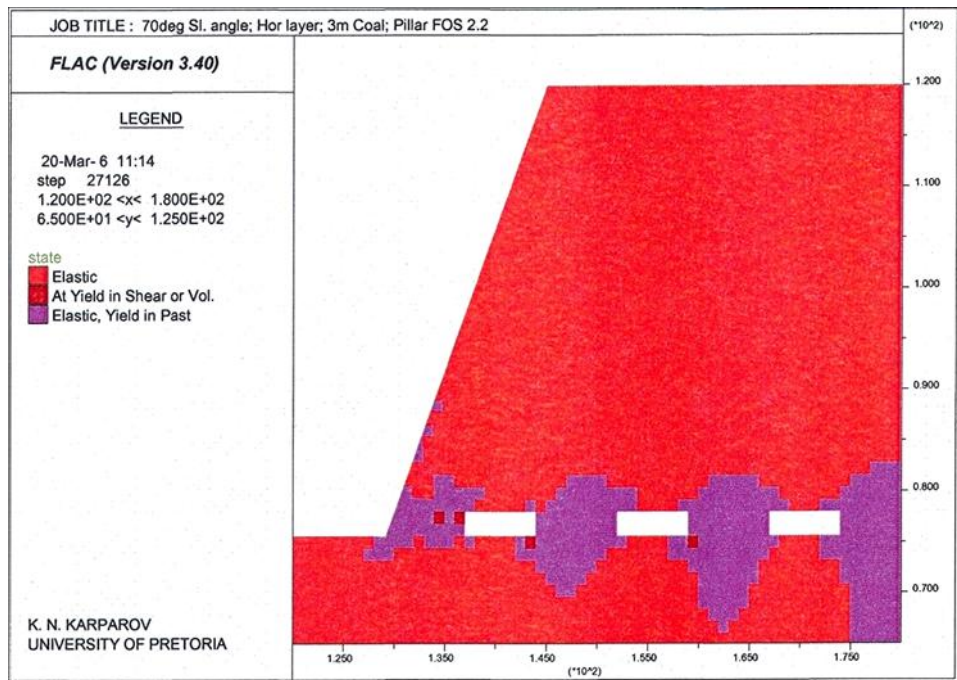


Figure A2.24

State in the profile with  $70^{\circ}$ -slope angle, pillar safety factor 2.2 and flat coal seam

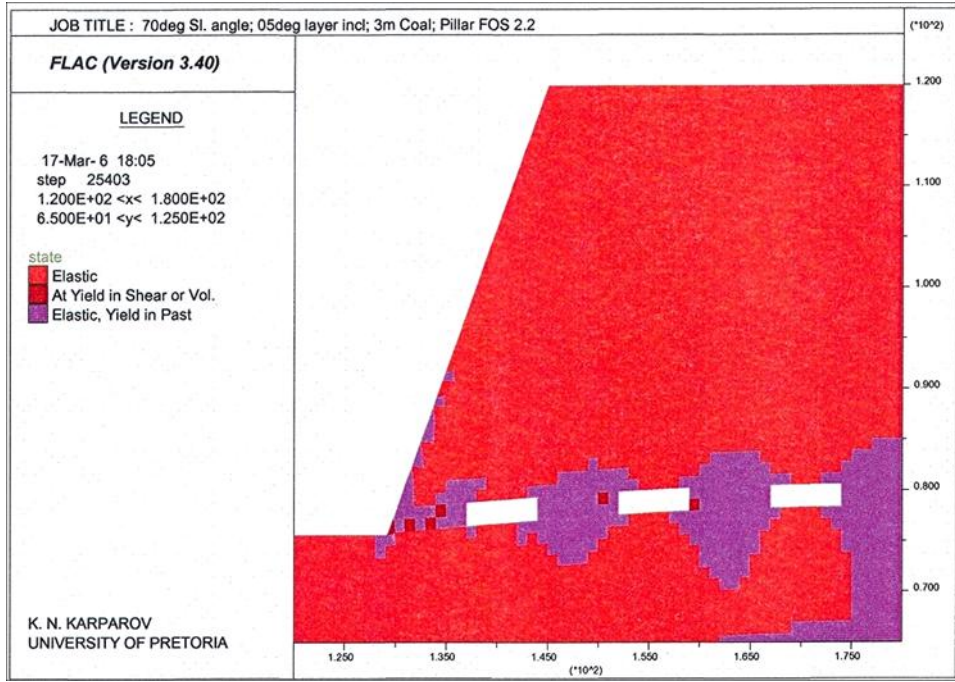


Figure A2.25

State in the profile with 70<sup>0</sup>-slope angle, pillar safety factor 2.2 at the anticline formation with 5<sup>0</sup>-limb inclination

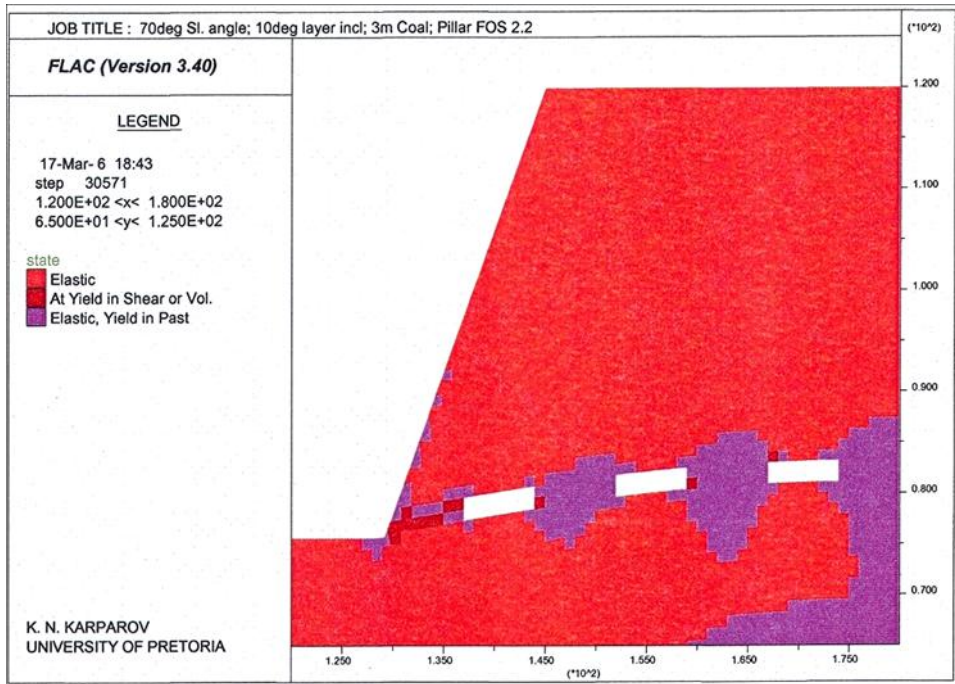


Figure A2.26

State in the profile with 70<sup>0</sup>-slope angle, pillar safety factor 2.2 at the anticline formation with 10<sup>0</sup>-limb inclination

Appendix 2. Figures

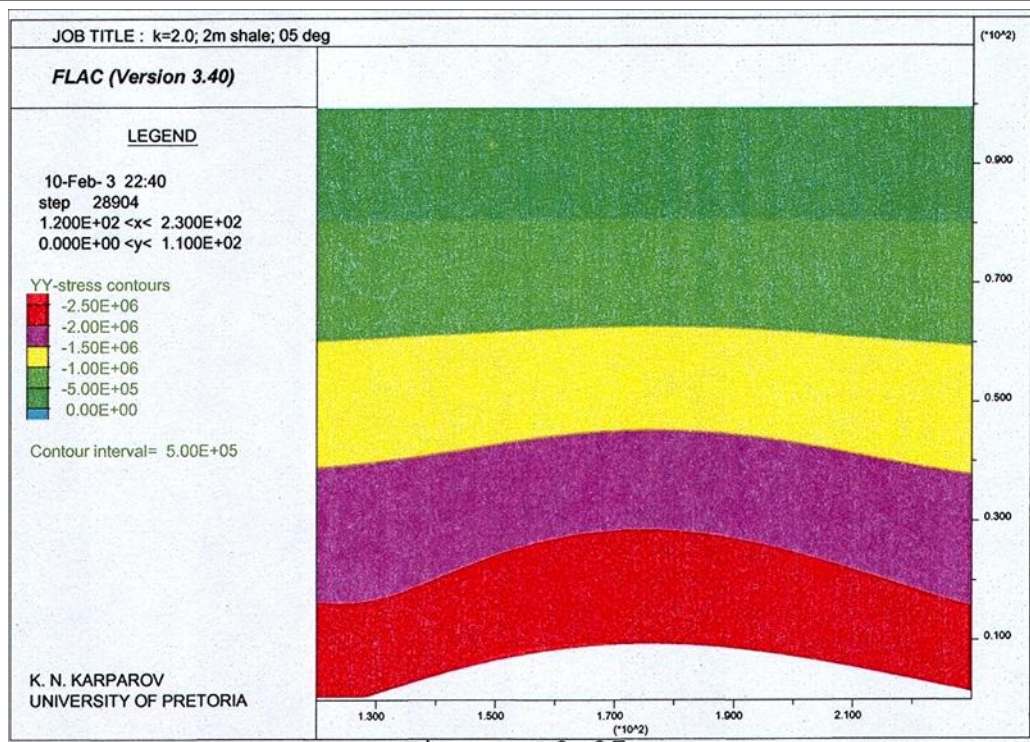


Figure A2.27

Vertical stress component of the FLAC model with 2m thick shale layer and 5<sup>0</sup>-layer inclination of the anticline formation

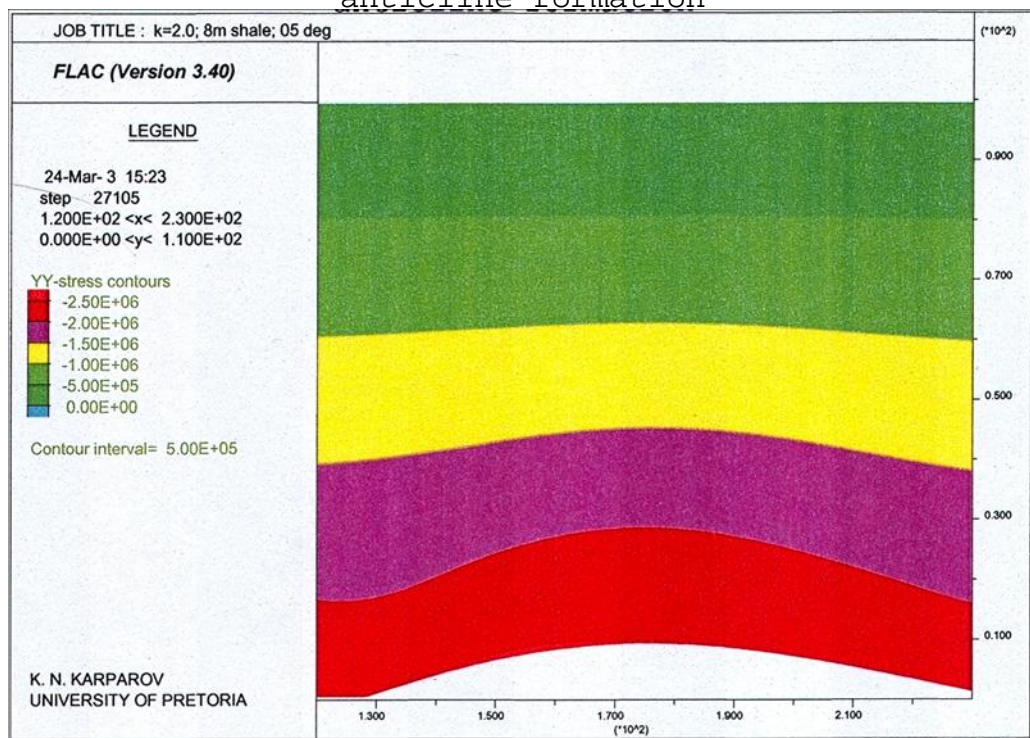


Figure A2.28

Vertical stress component of the FLAC model with 8m thick shale layer and 5<sup>0</sup>-layer inclination of the anticline formation

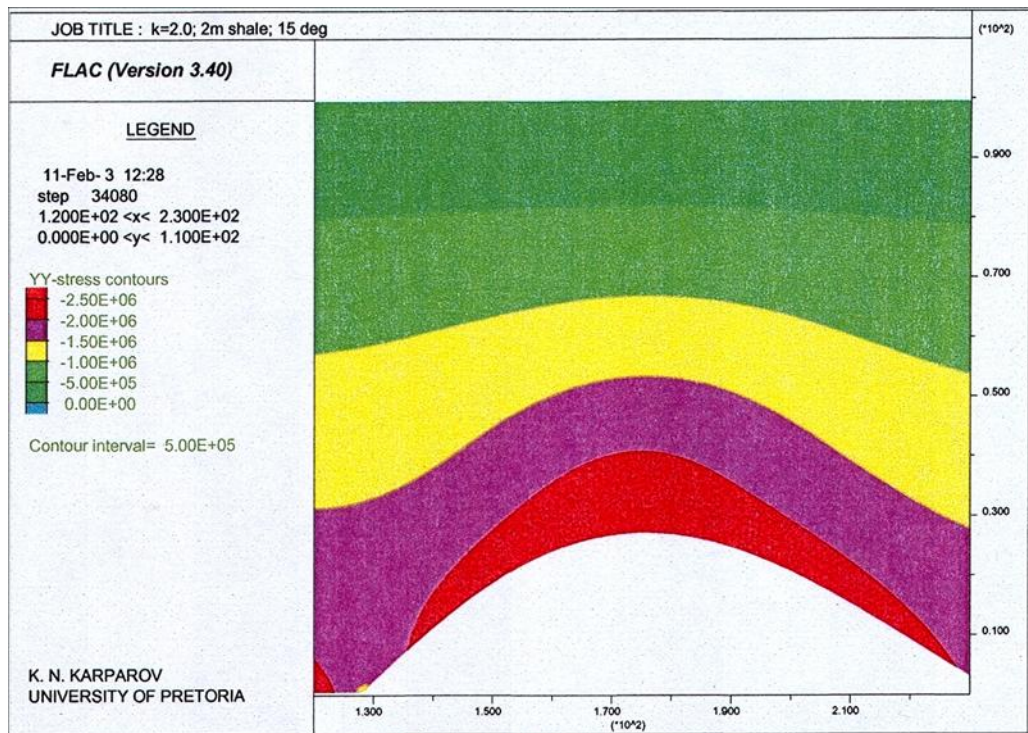


Figure A2.29

Vertical stress component of the FLAC model with 2m thick shale layer and 15<sup>0</sup>-layer inclination of the anticline formation

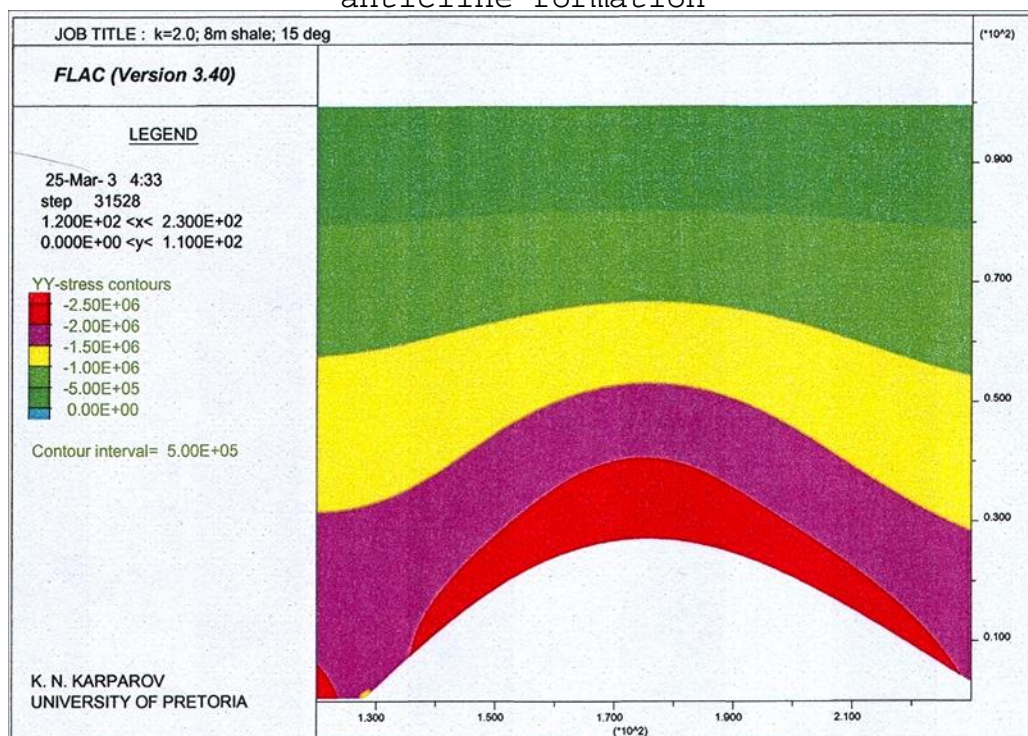


Figure A2.30

Vertical stress component of the FLAC model with 8m thick shale layer and 15<sup>0</sup>-layer inclination of the anticline formation

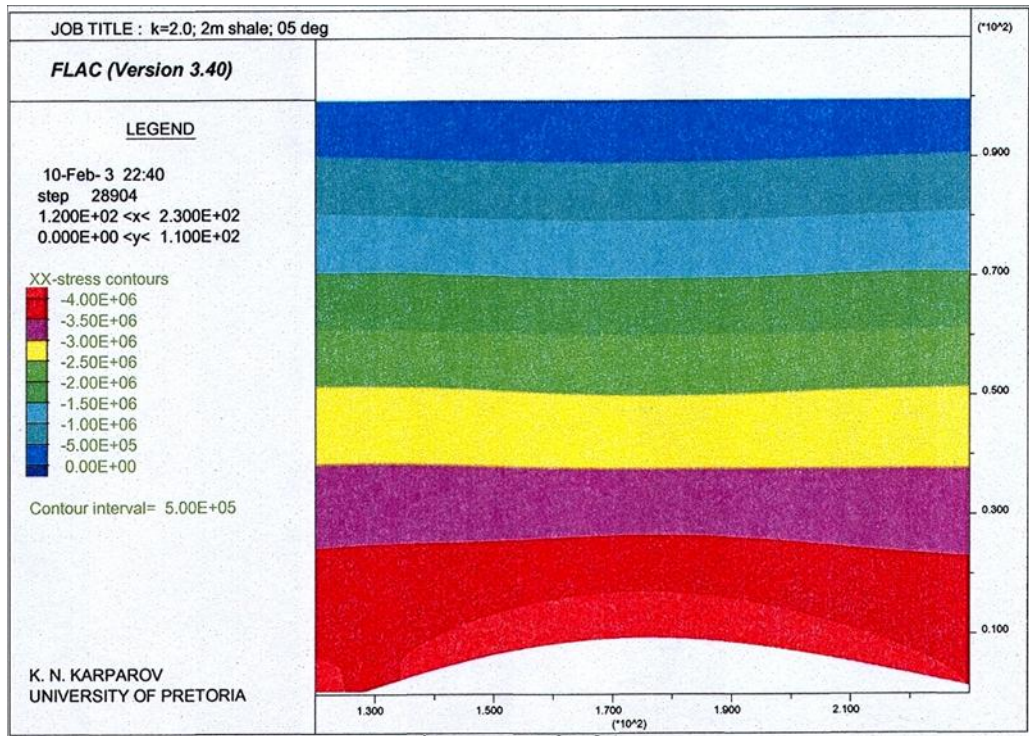


Figure A2.31

Horizontal stress component of the FLAC model with 2m thick shale layer and 5<sup>0</sup>-layer inclination of the anticline formation

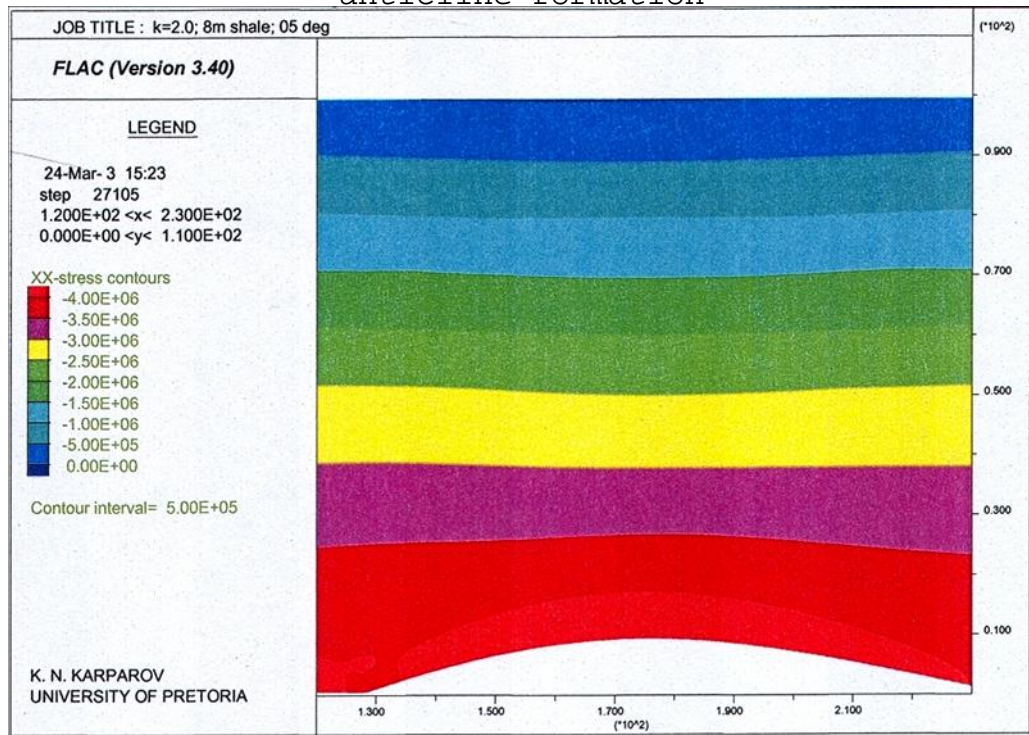


Figure A2.32

Horizontal stress component of the FLAC model with 8m thick shale layer and 5<sup>0</sup>-layer inclination of the anticline formation



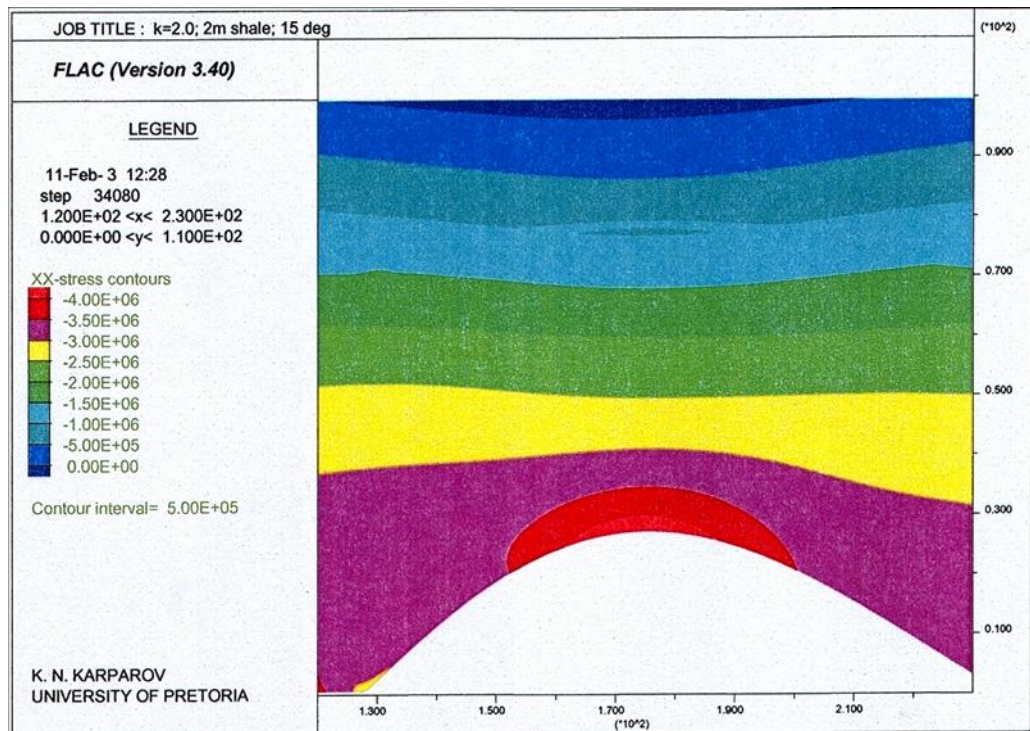


Figure A2.33

Horizontal stress component of the FLAC model with 2m thick shale layer and 15<sup>0</sup>-layer inclination of the anticline formation

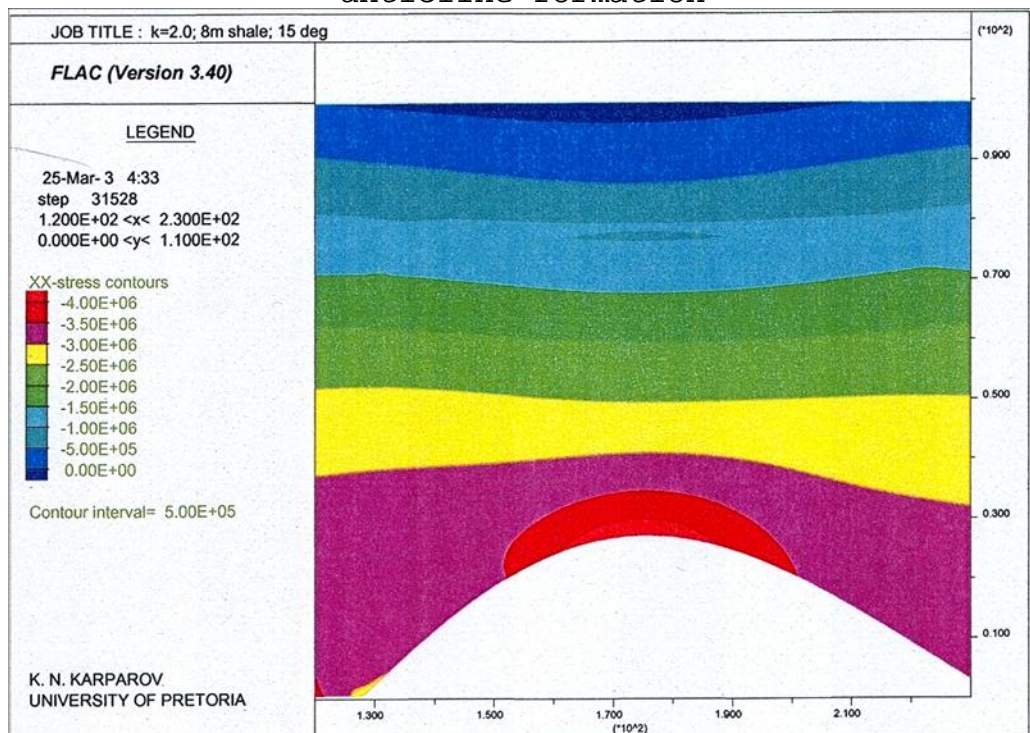


Figure A2.34

Horizontal stress component of the FLAC model with 8m thick shale layer and 15<sup>0</sup>-layer inclination of the anticline formation

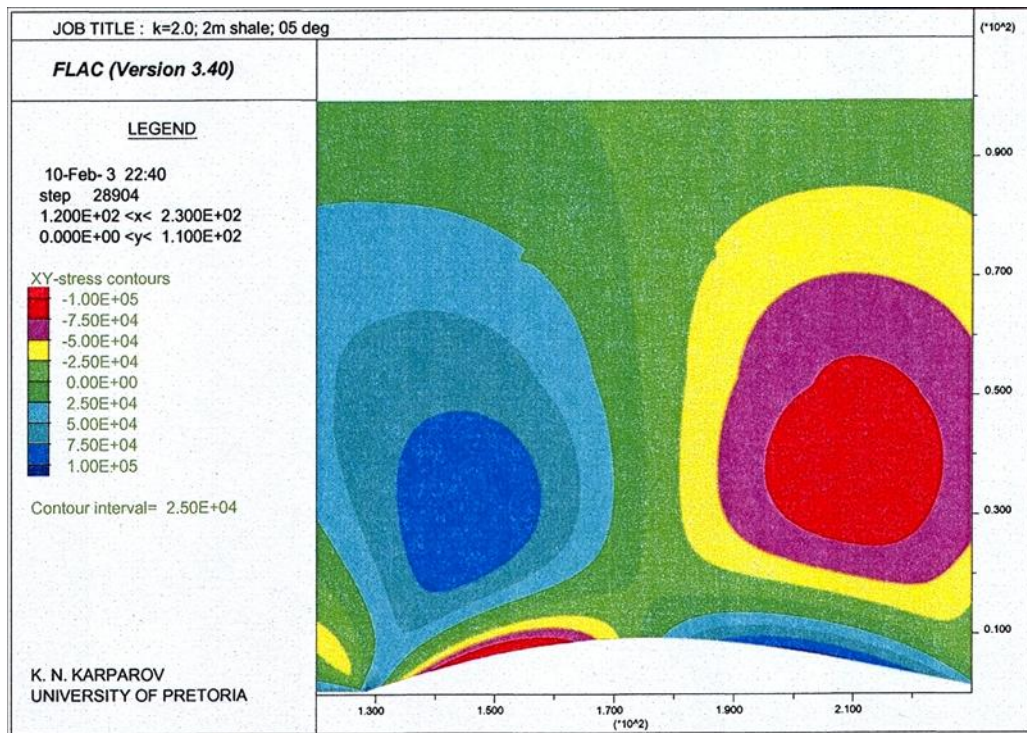


Figure A2.35

Shear stress component of the FLAC model with 2m thick shale layer and  $5^{\circ}$ -layer inclination of the anticline formation

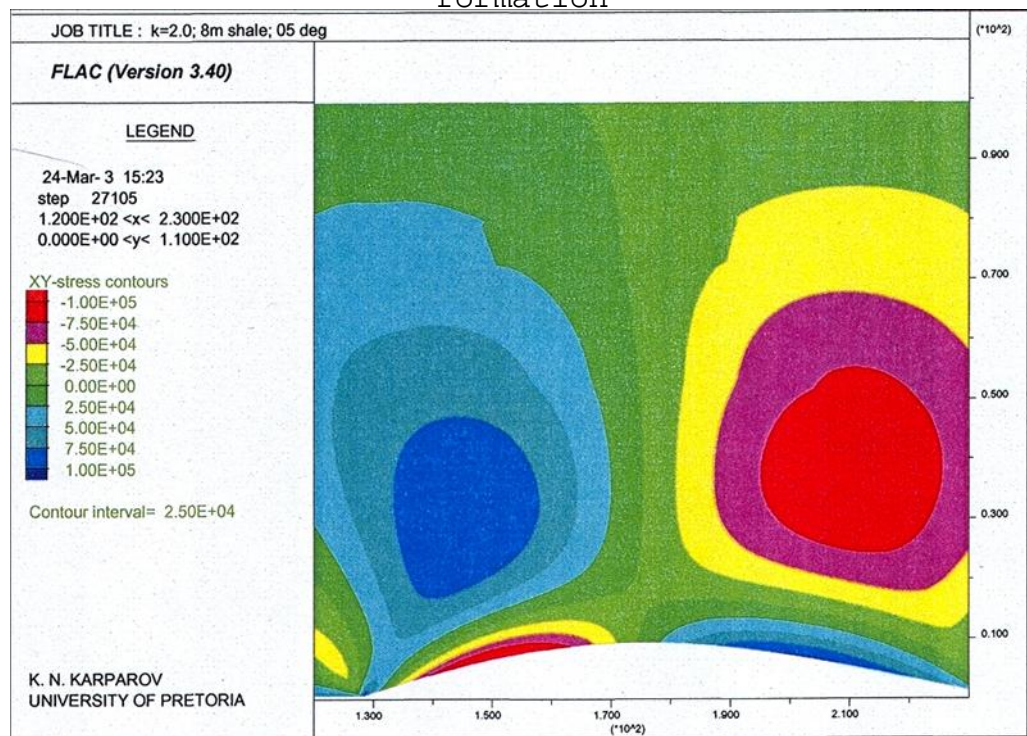


Figure A2.36

Shear stress component of the FLAC model with 8m thick shale layer and  $5^{\circ}$ -layer inclination of the anticline formation

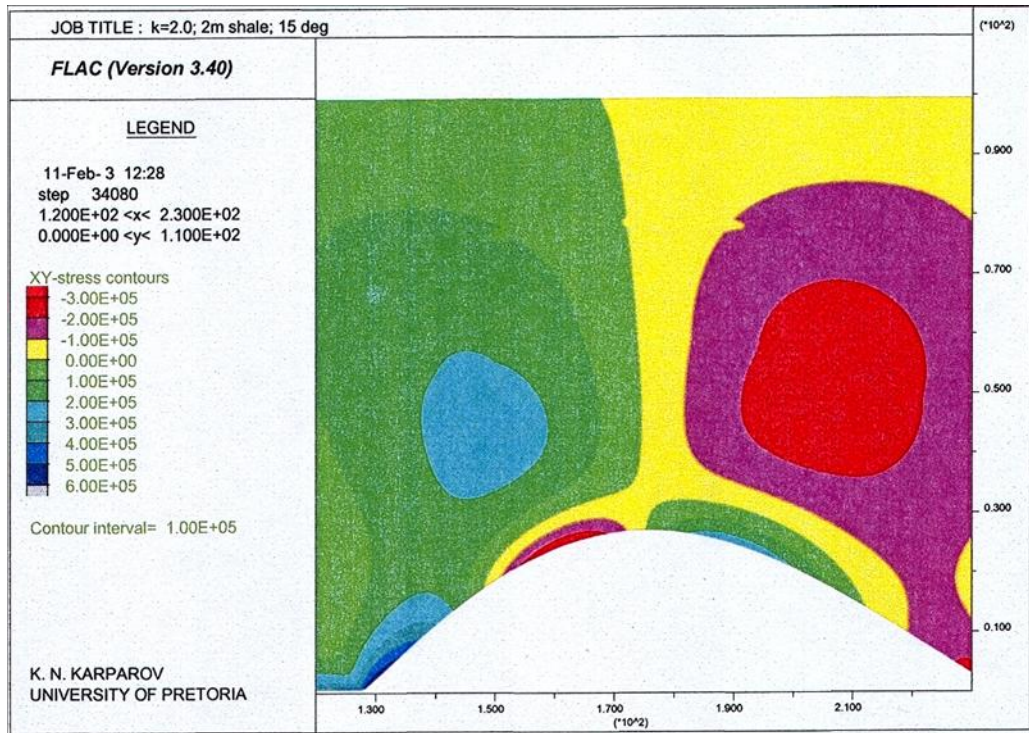


Figure A2.37

Shear stress component of the FLAC model with 2m thick shale layer and 15<sup>0</sup>-layer inclination of the anticline formation

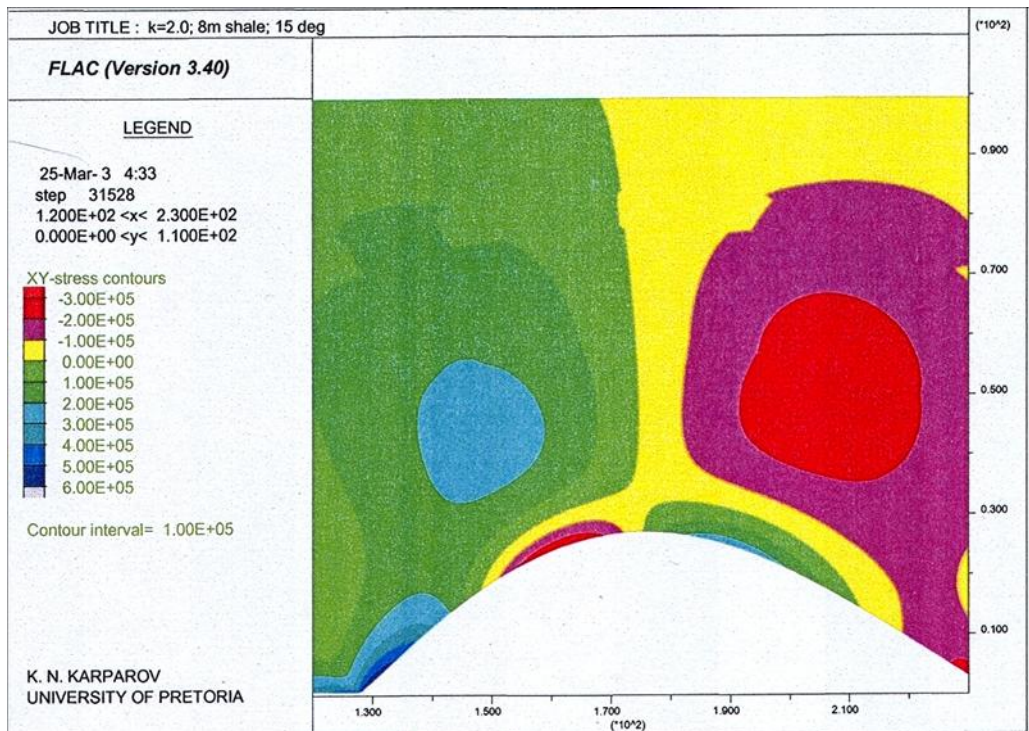


Figure A2.38

Shear stress component of the FLAC model with 8m thick shale layer and 15<sup>0</sup>-layer inclination of the anticline formation