

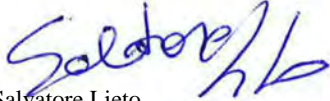


**ASSE VIARIO MARCHE-UMBRIA
E QUADRILATERO DI PENETRAZIONE INTERNA
MAXI LOTTO 2**

LAVORI DI COMPLETAMENTO DELLA DIRETTRICE PERUGIA ANCONA:
SS. 318 DI "VALFABBRICA", TRATTO PIANELLO - VALFABBRICA
SS. 76 "VAL D'ESINO", TRATTI FOSSATO VICO - CANCELLI E ALBACINA - SERRA SAN QUIRICO
"PEDEMONTANA DELLE MARCHE", TRATTO FABRIANO-MUCCIA-SFERCIA.

PROGETTO ESECUTIVO

<p>CONTRAENTE GENERALE:</p> 	<p><i>Il responsabile del Contraente Generale:</i></p>  Ing. Federico Montanari	<p><i>Il responsabile Integrazioni delle Prestazioni Specialistiche:</i></p>  Ing. Salvatore Lieto
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PROGETTAZIONE: Associazione Temporanea di Imprese

Mandataria: **PROGETTAZIONE GRANDI INFRASTRUTTURE PROGIN S.p.A.** Mandanti:

		
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Via Marche, 20 - 47833 Mercano di Romagna (RN) - ITALY
P.IVA 01194420485 - tel/fax +39 0541992777 - e-mail: sgai@sgai.com pec: sgai@sgai.pec.com

<p>RESPONSABILE DELLA PROGETTAZIONE PER L'A.T.I. Prof. Ing. Antonio Grimaldi</p> <p>GEOLOGO Dott. Geol. Fabrizio Pontoni</p> <p>COORDINATORE DELLA SICUREZZA IN FASE DI PROGETTAZIONE Ing. Michele Curiale</p>			
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<p>IL RESPONSABILE DEL PROCEDIMENTO Ing. Iginio Farotti</p>	<p>IL COORDINATORE DELLA SICUREZZA IN FASE DI ESECUZIONE Ing. Vincenzo Pardo</p>	<p>IL DIRETTORE DEI LAVORI Ing. Peppino Marascio</p>
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<p>2.1.3 - PEDEMONTANA DELLE MARCHE 3° stralcio funzionale: Castelraimondo nord - Castelraimondo sud 4° stralcio funzionale: Castelraimondo sud - innesto S.S.77 a Muccia OPERE D'ARTE MAGGIORI : GALLERIE NATURALI GALLERIA NATURALE MECCIANO Relazione Tecnica e di Calcolo della Galleria Naturale - Appendice 1</p>	<p>SCALA: -</p> <p>DATA: Marzo 2020</p>
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Codice Unico di Progetto (CUP) **F12C03000050021** (Assegnato CIPE 23-12-2015)

Codice elaborato:

Opera	Tratto	Settore	CEE	WBS	Id. doc.	N. prog.	Rev.
L 0 7 0 3	2 1 3	E	1 3	G N 3 6 0 0	R E L	0 2	A

REV.	DATA	DESCRIZIONE	Redatto		Controllato	Approvato
A	Marzo 2020	Emissione Progetto Esecutivo	PROGIN	PROGIN	S. Lieto	A. Grimaldi

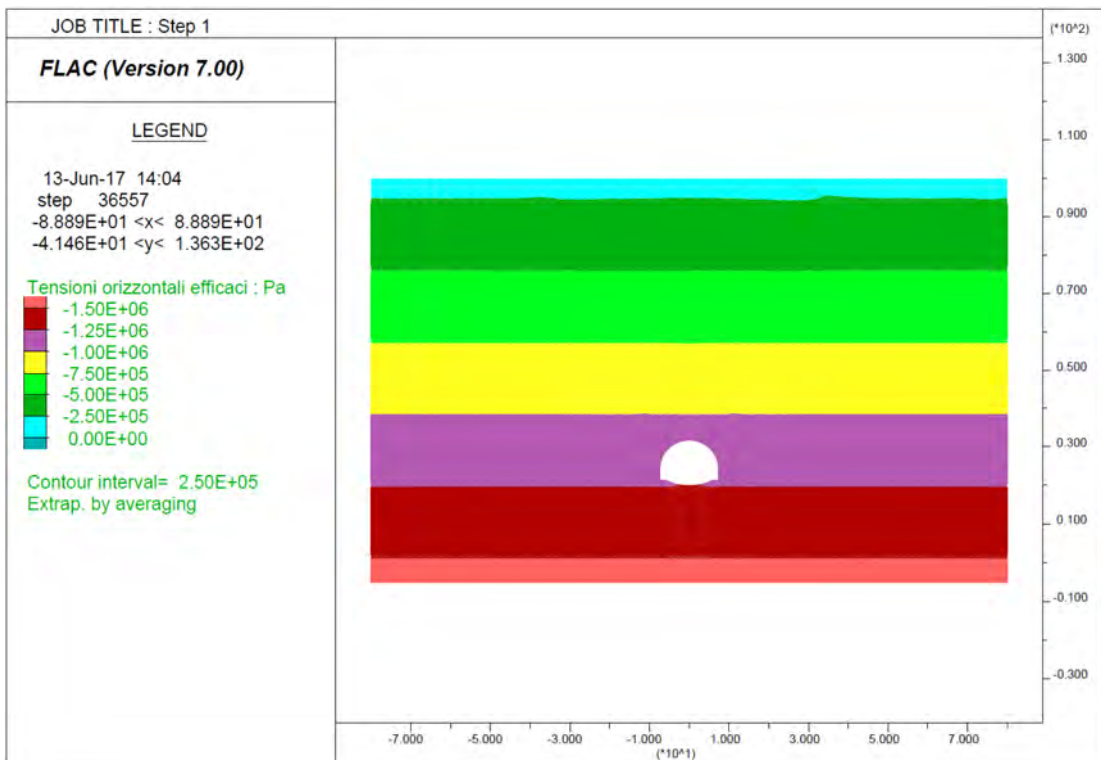
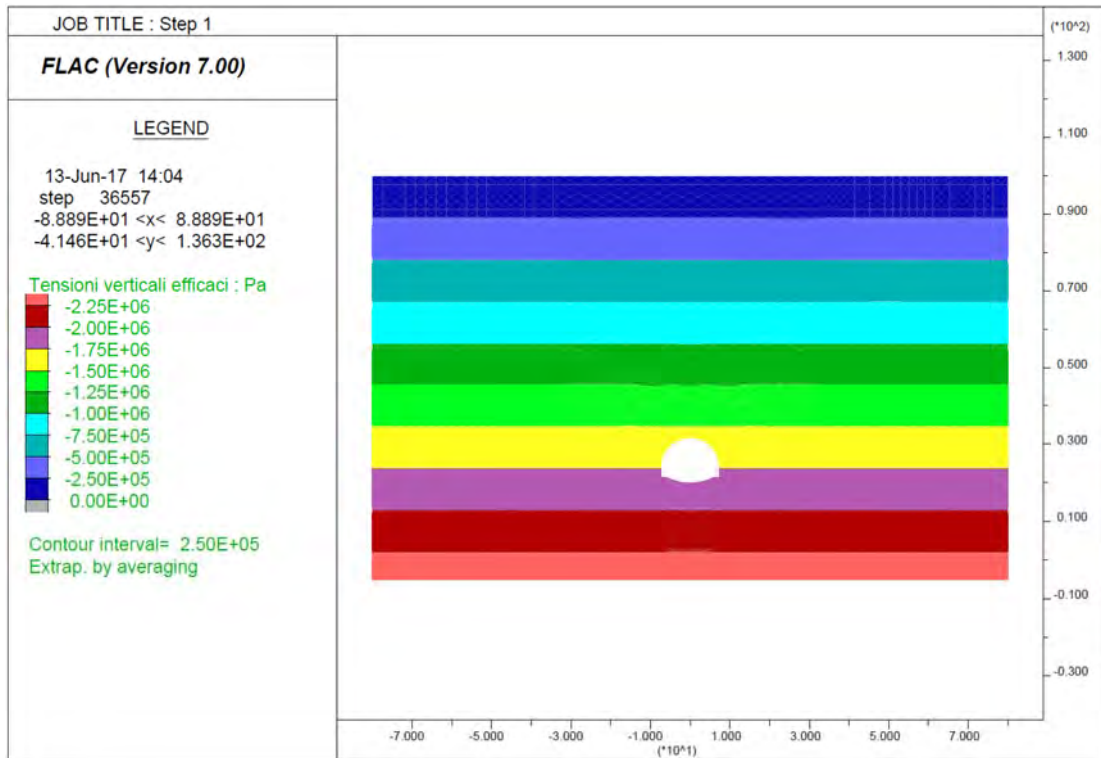
APPENDICE:

Output di calcolo FLAC

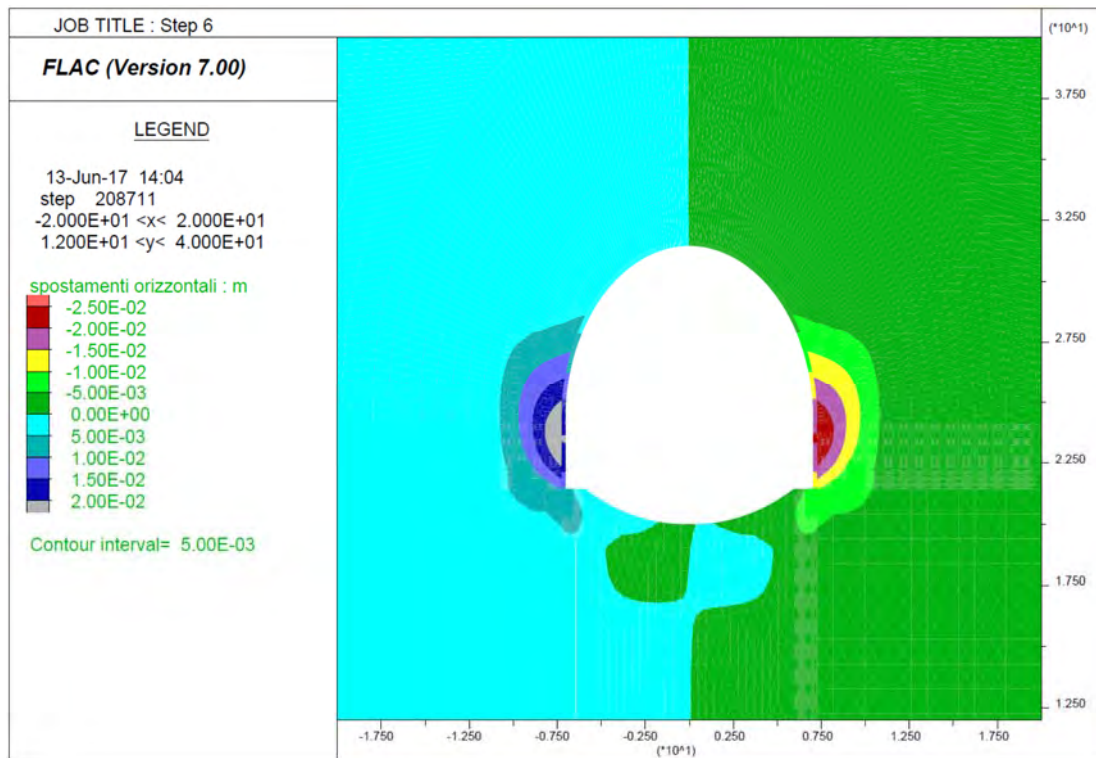
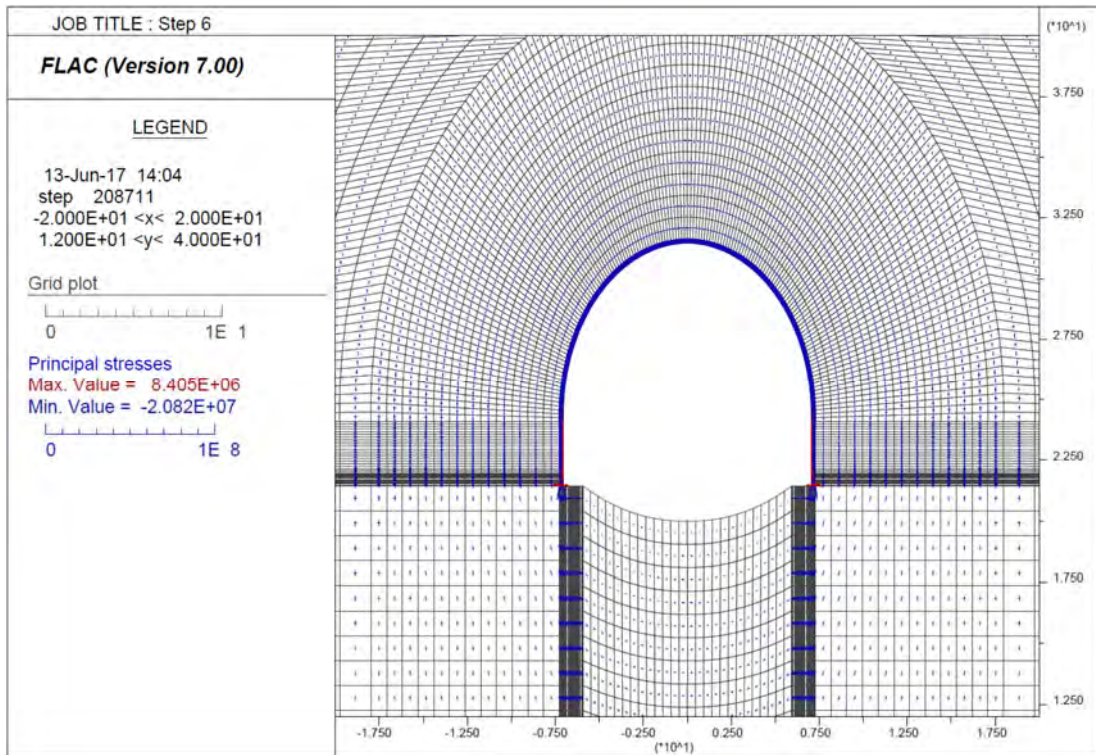
- **Sezione tipo B2 - Parametri res min** – *Copertura di calcolo = 70 m*
- **Sezione tipo B2 - Parametri res max** – *Copertura di calcolo = 70 m*
- **Sezione tipo B0 - Parametri res min** – *Copertura di calcolo = 70 m*
- **Sezione tipo B0 - Parametri res max** – *Copertura di calcolo = 70 m*
- **Sezione tipo B2 - Parametri res min** – *Copertura di calcolo = 50 m*
- **Sezione tipo B2 - Parametri res max** – *Copertura di calcolo = 50 m*
- **Sezione tipo B0 - Parametri res min** – *Copertura di calcolo = 50 m*
- **Sezione tipo B0 - Parametri res max** – *Copertura di calcolo = 50 m*
- **Sezione tipo B2** – *Copertura di calcolo = 25 m*
- **Sezione tipo B2V** – *Copertura di calcolo = 25 m*
- **Sezione tipo B2V** – *Copertura di calcolo = 15 m*

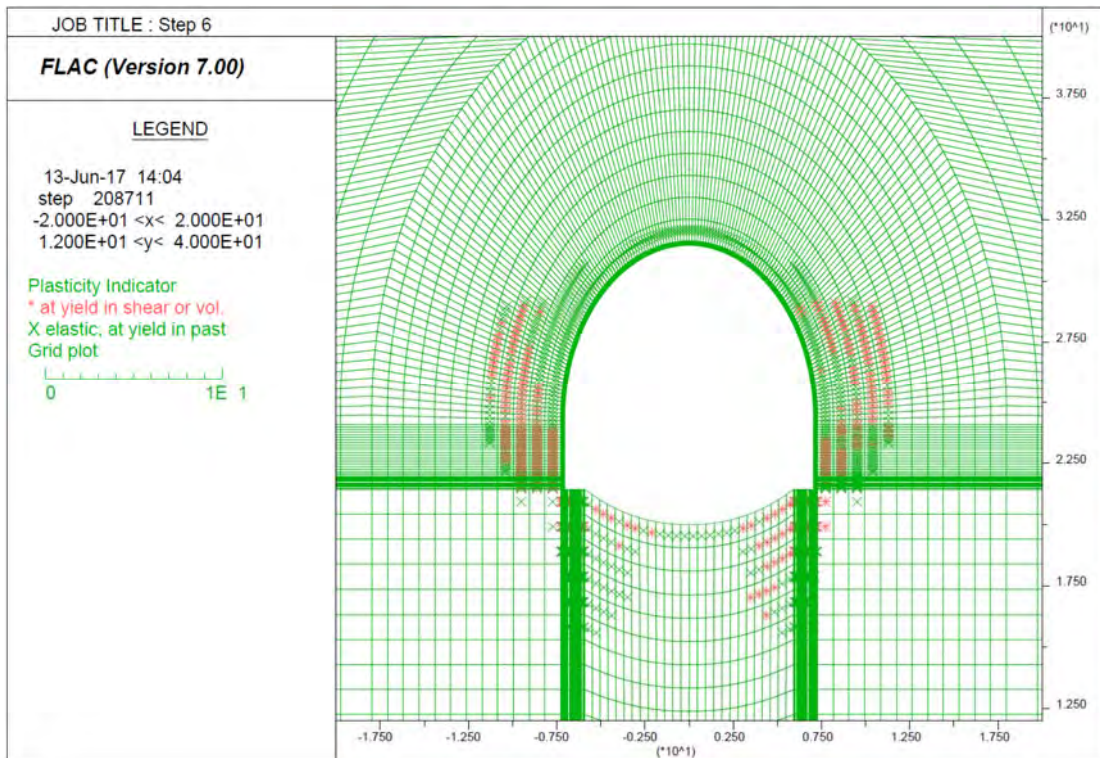
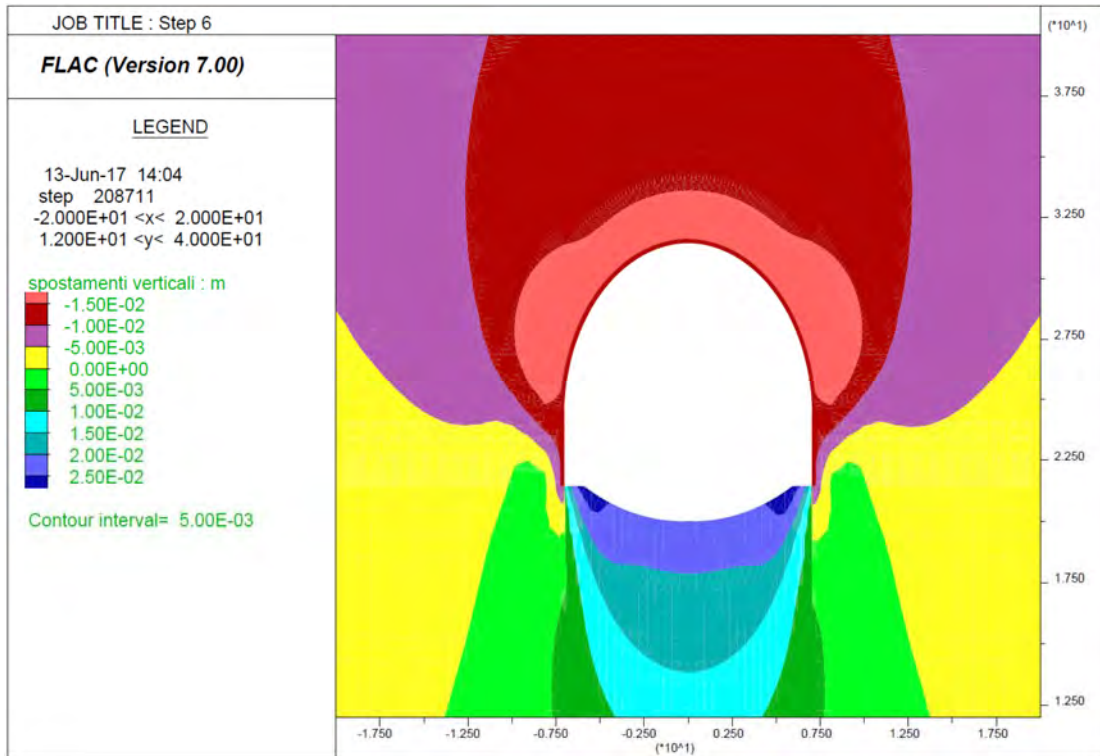
Output Flac – Sezione tipo B2 – Parametri res min – Copertura di calcolo = 70 m

Step 1 – Tensioni litostatiche

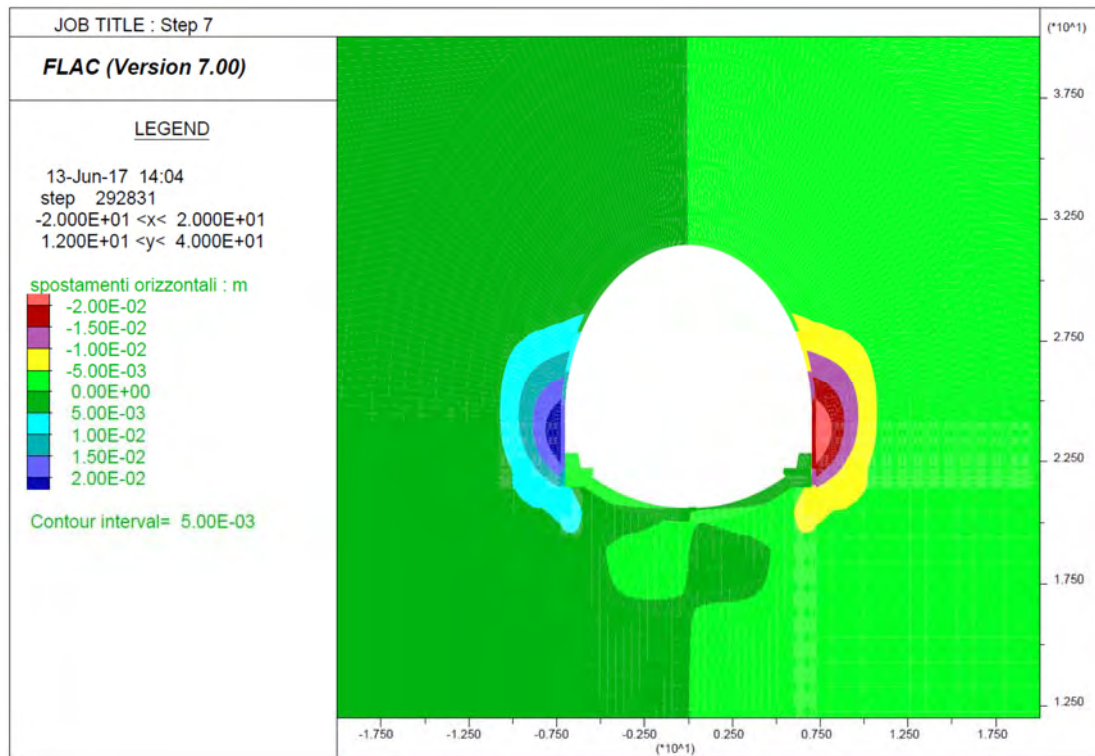
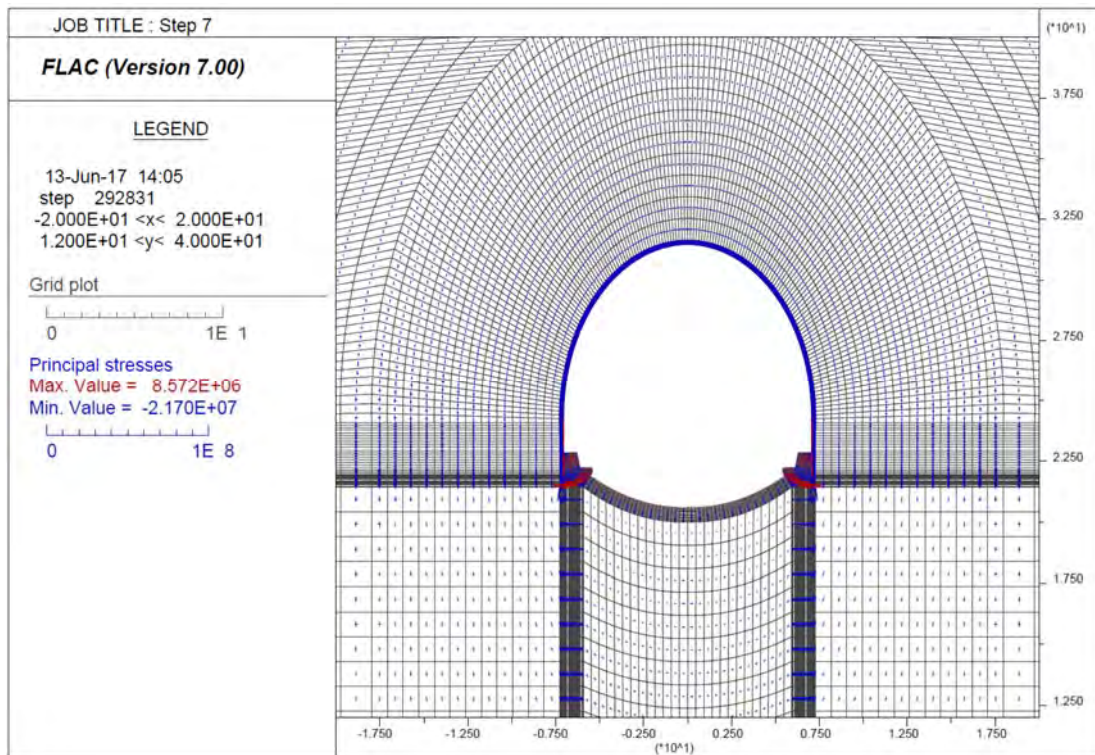


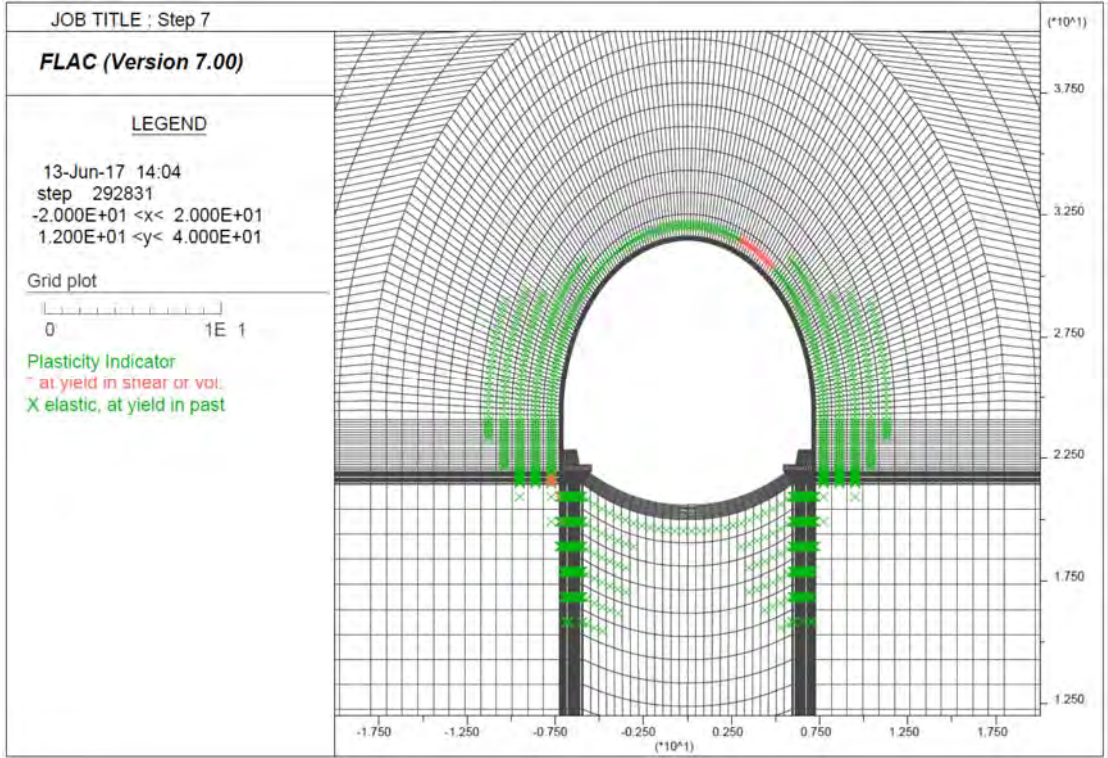
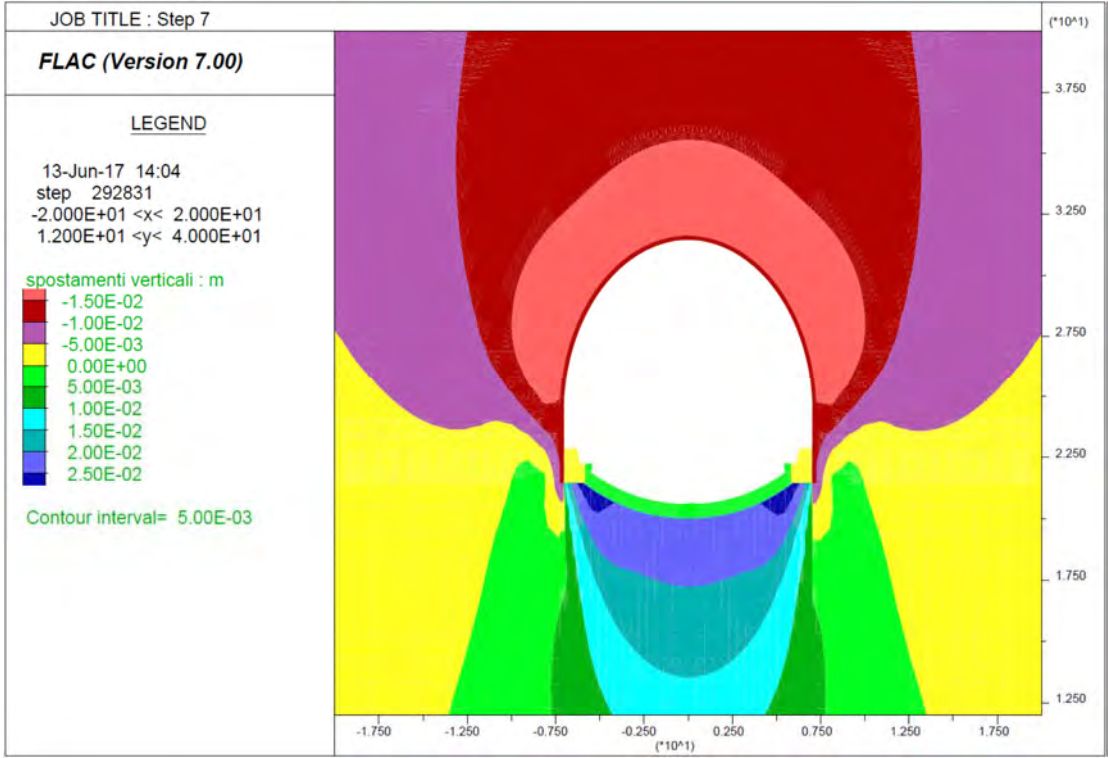
Step 6 – Avanzamento fino a 2D



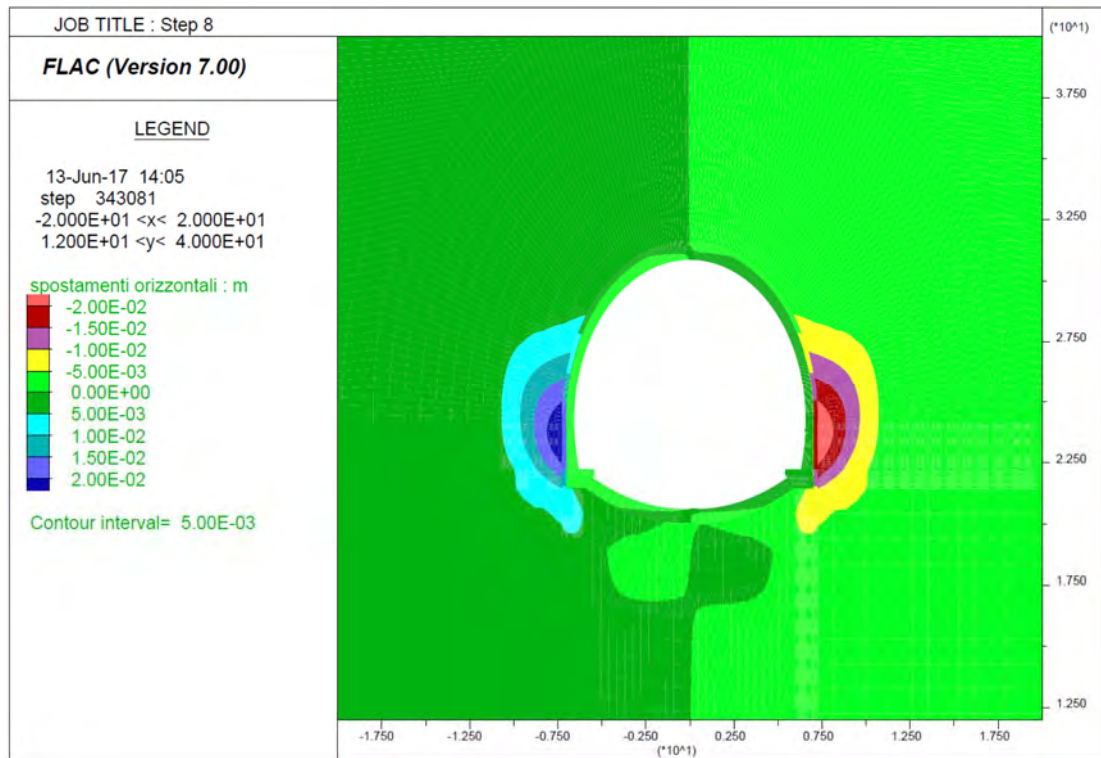
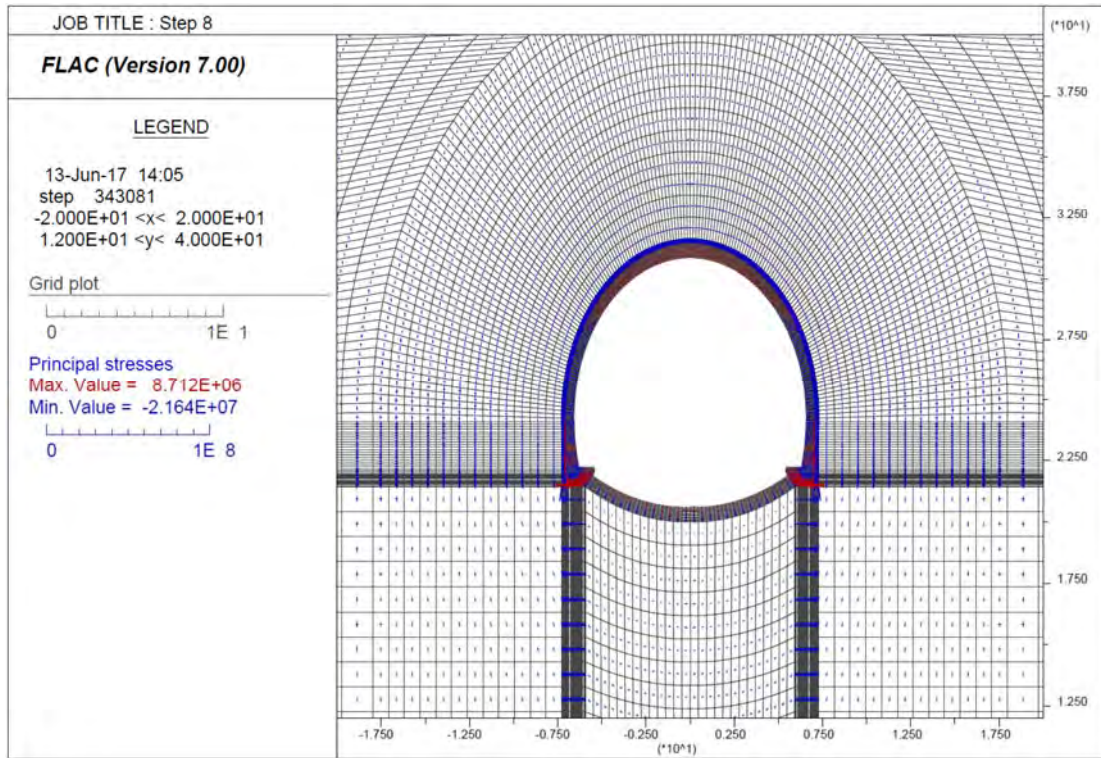


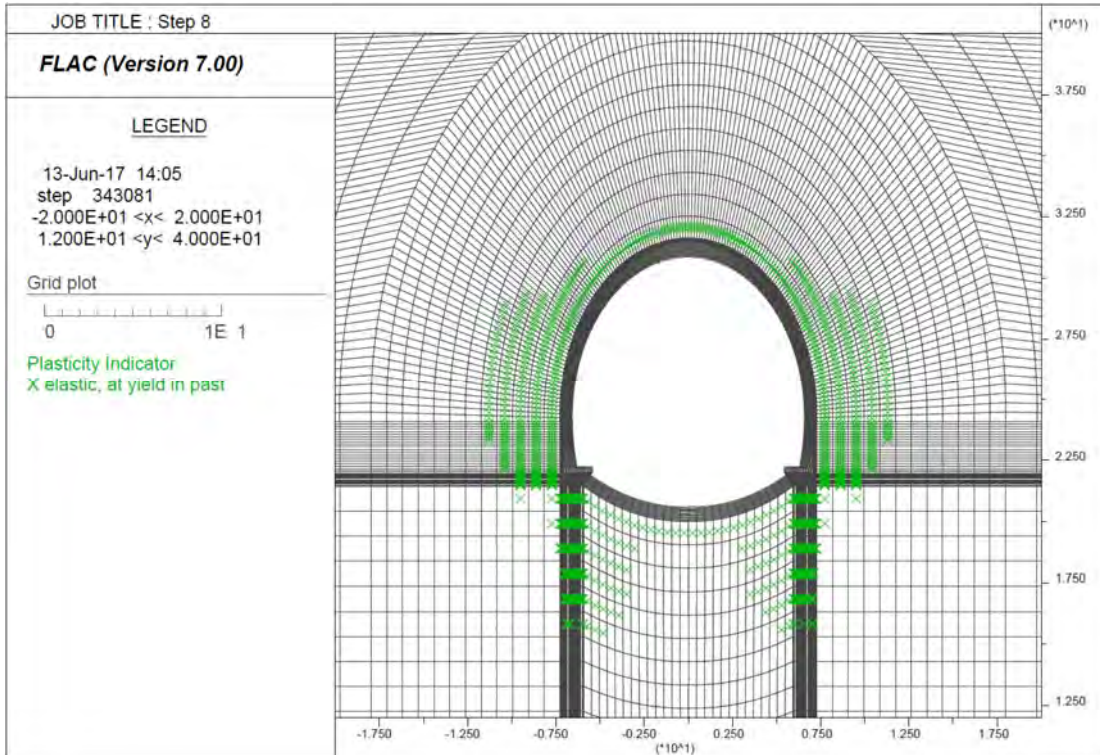
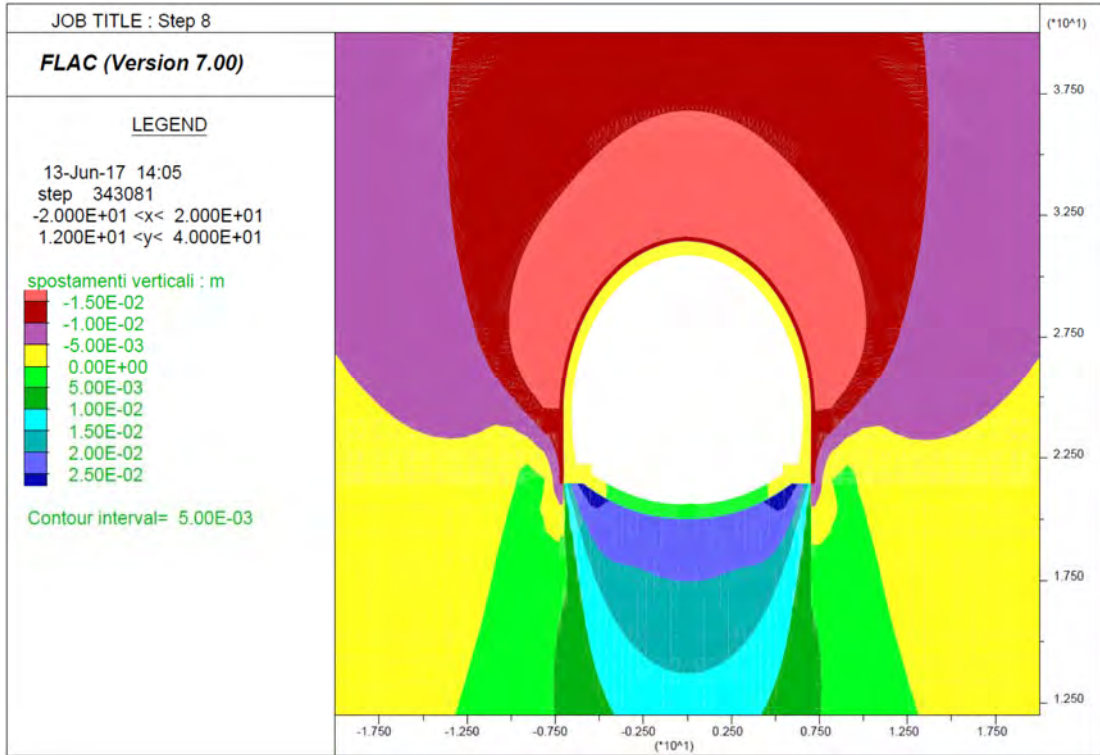
Step 7 - Getto arco rovescio e muretta a 2D e avanzamento fino a deformazioni esaurite



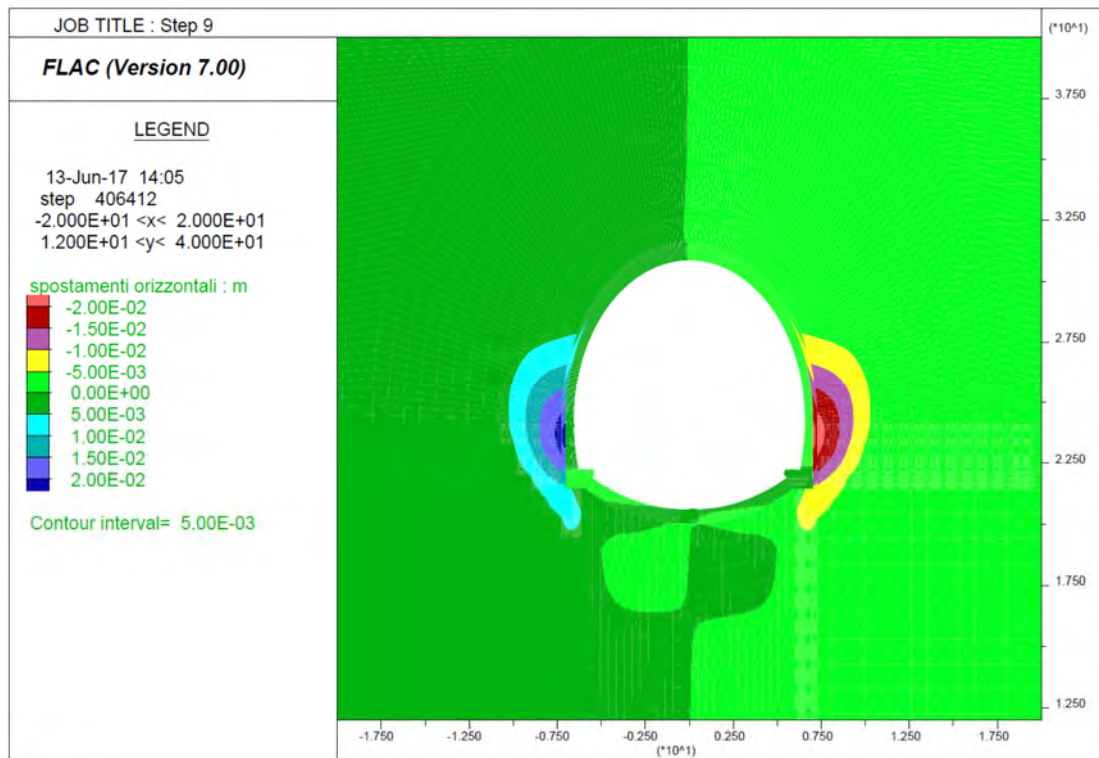
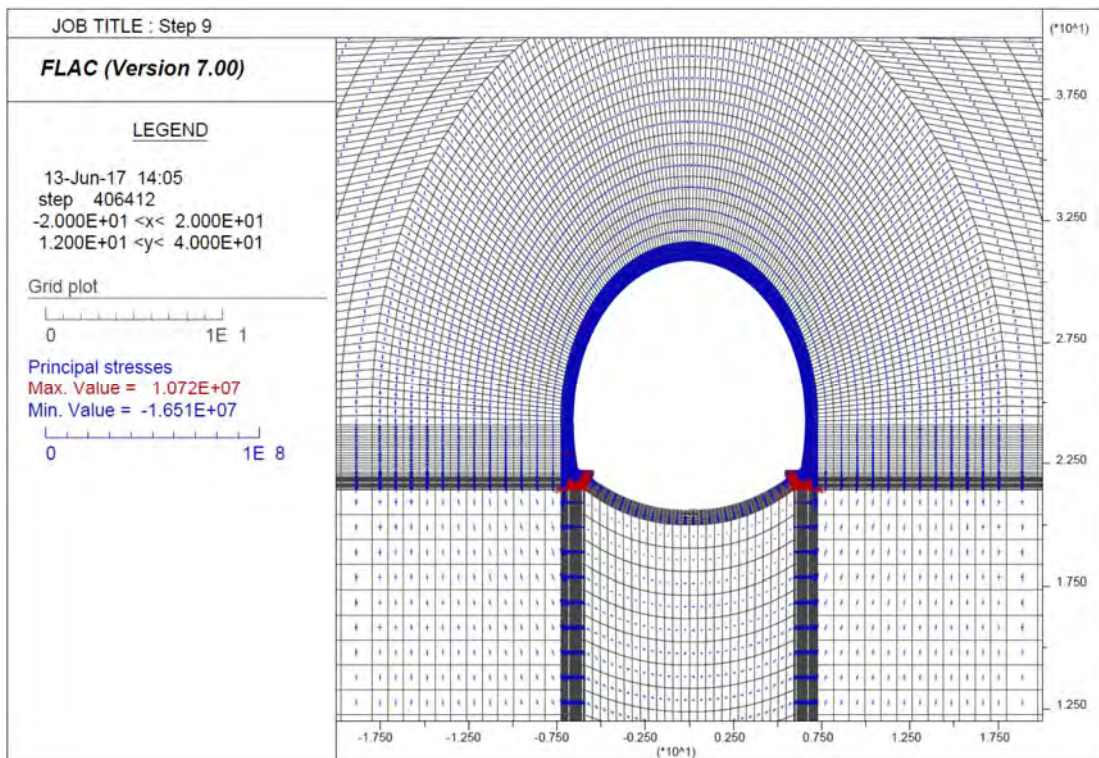


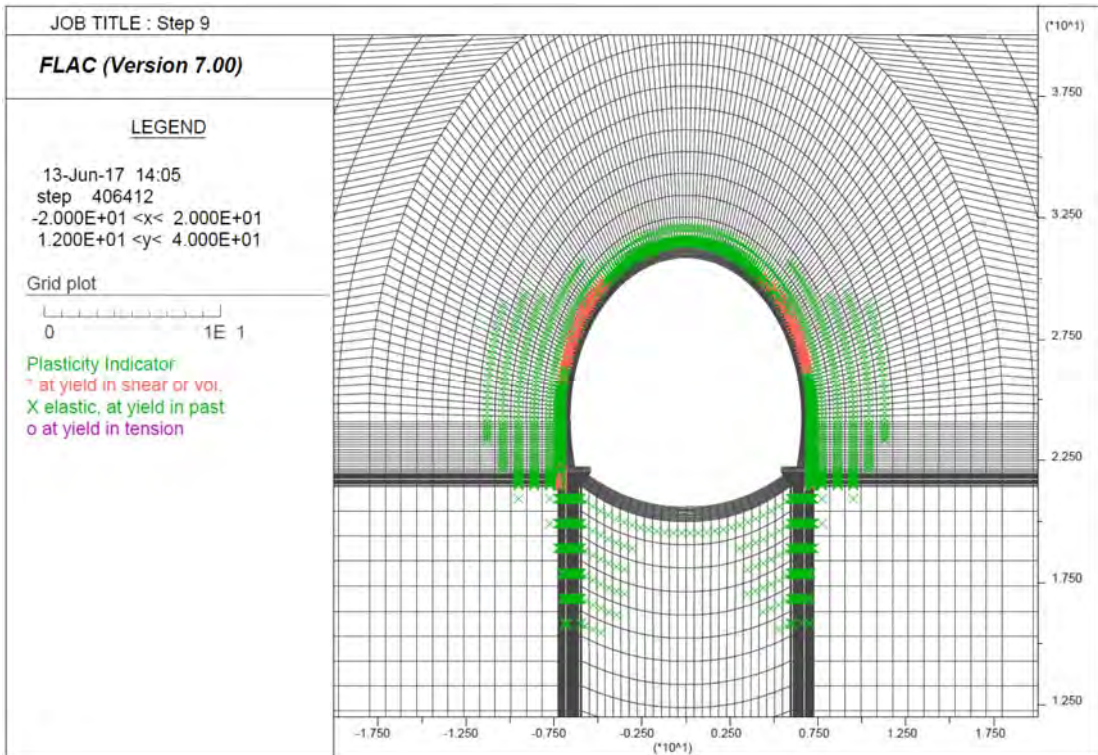
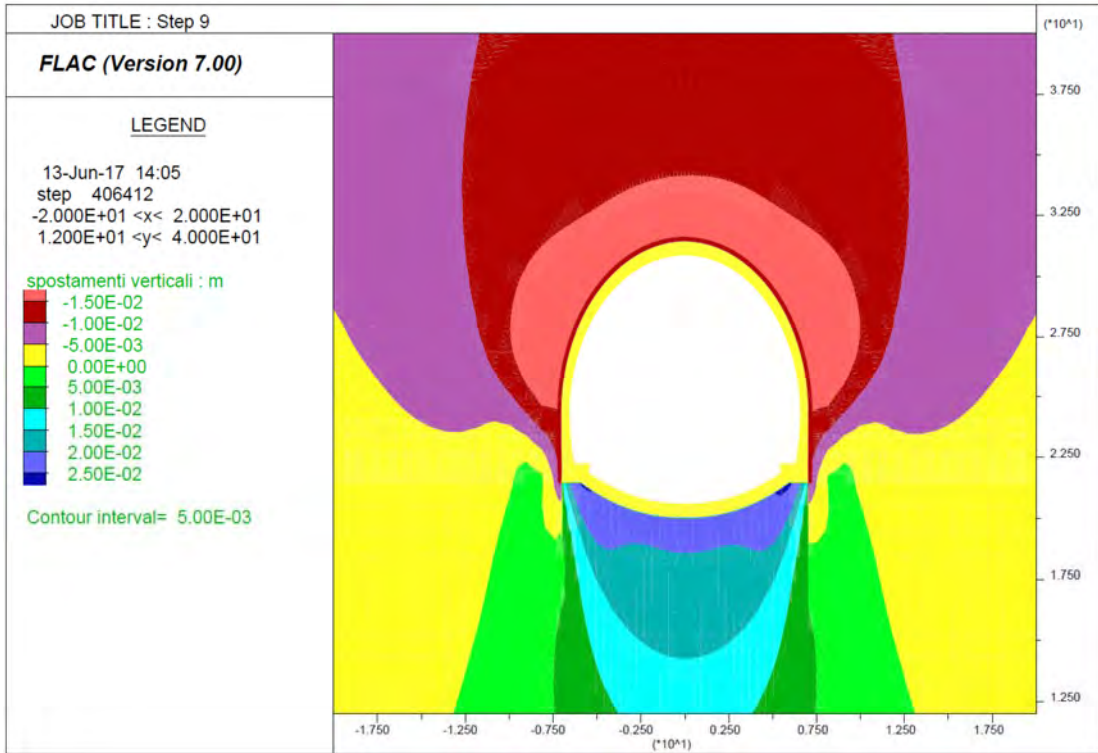
Step 8 - Getto Calotta





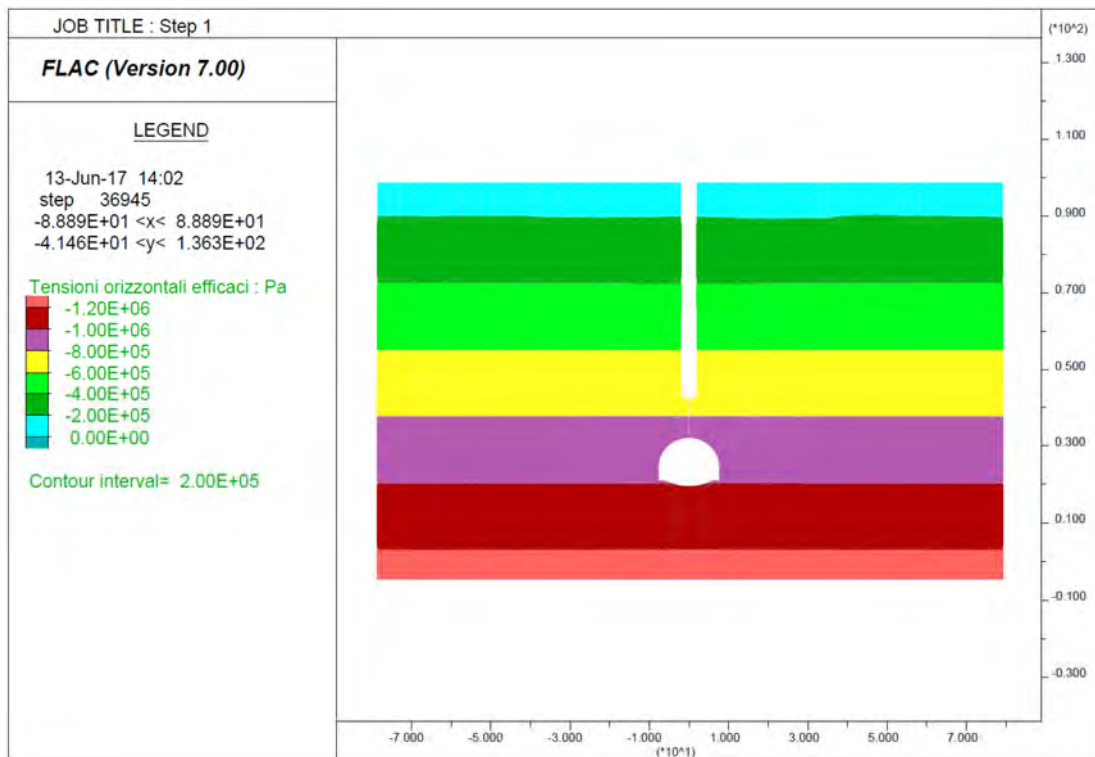
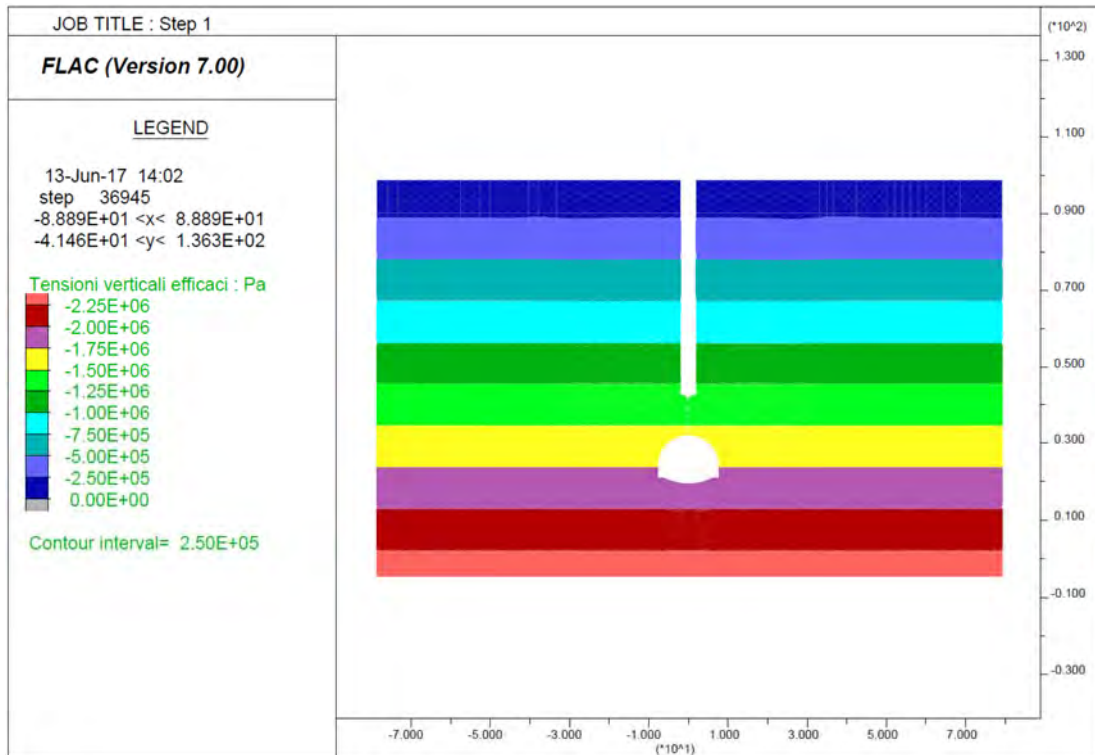
Step 9 - Decadimento dei parametri di resistenza del rivestimento provvisorio



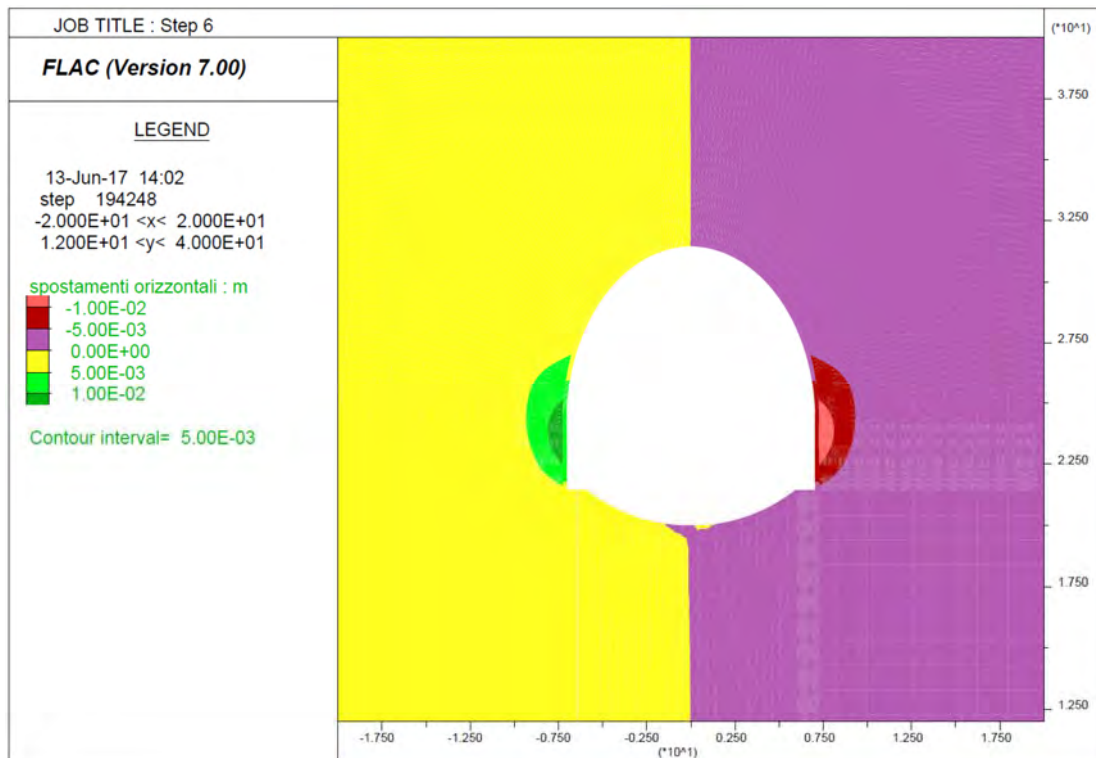
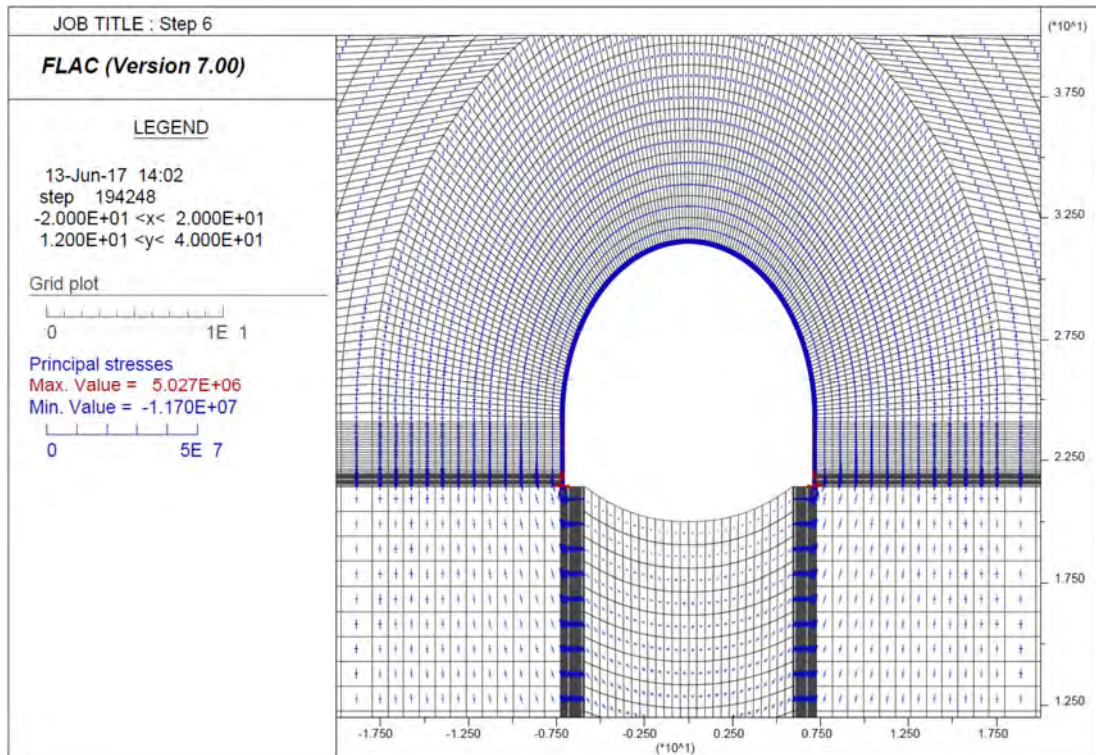


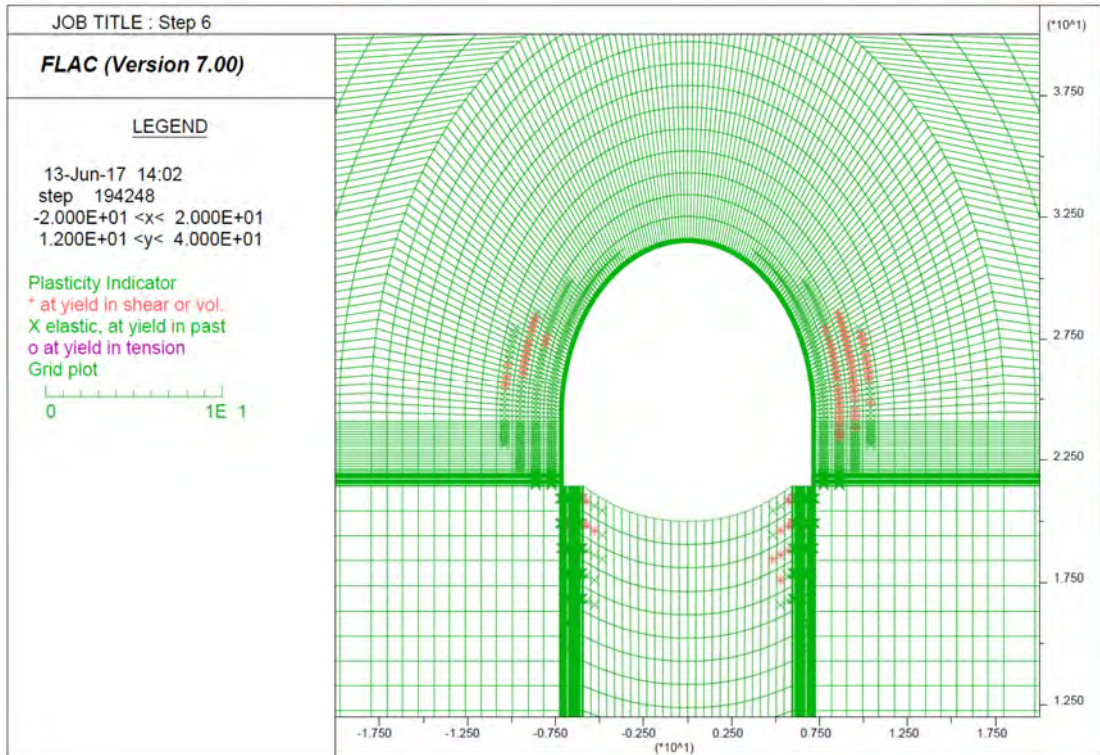
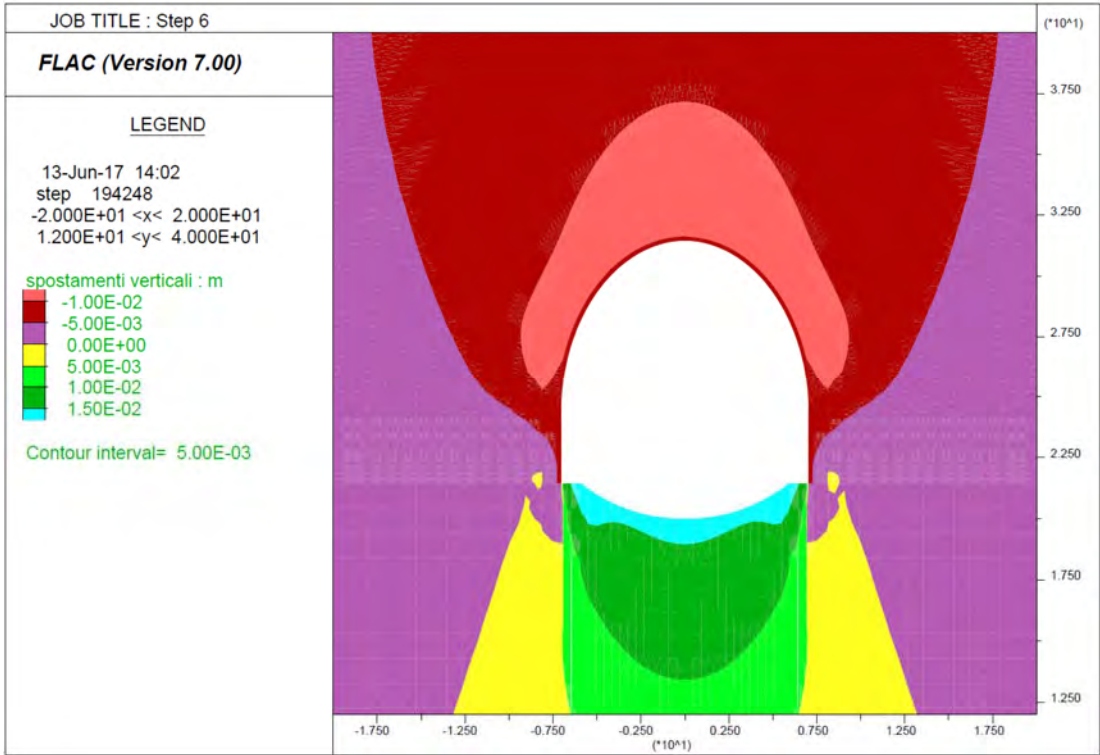
Output Flac – Sezione tipo B2 – Parametri res max – Copertura di calcolo = 70 m

Step 1 – Tensioni litostatiche

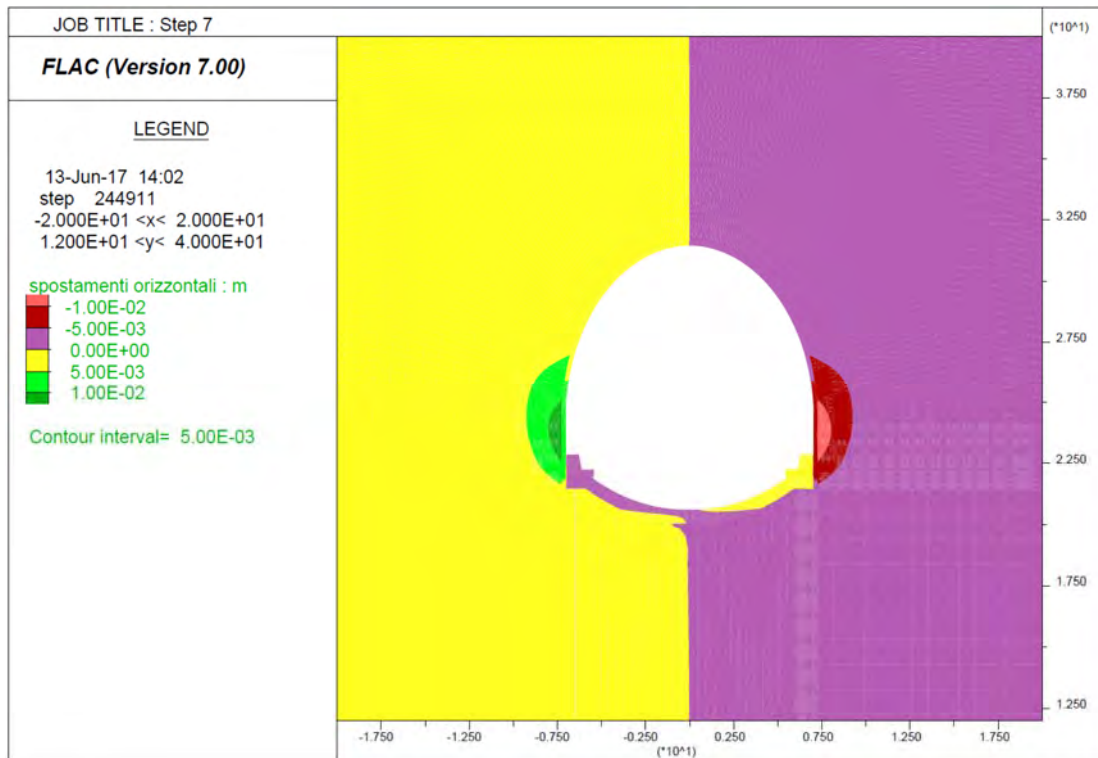
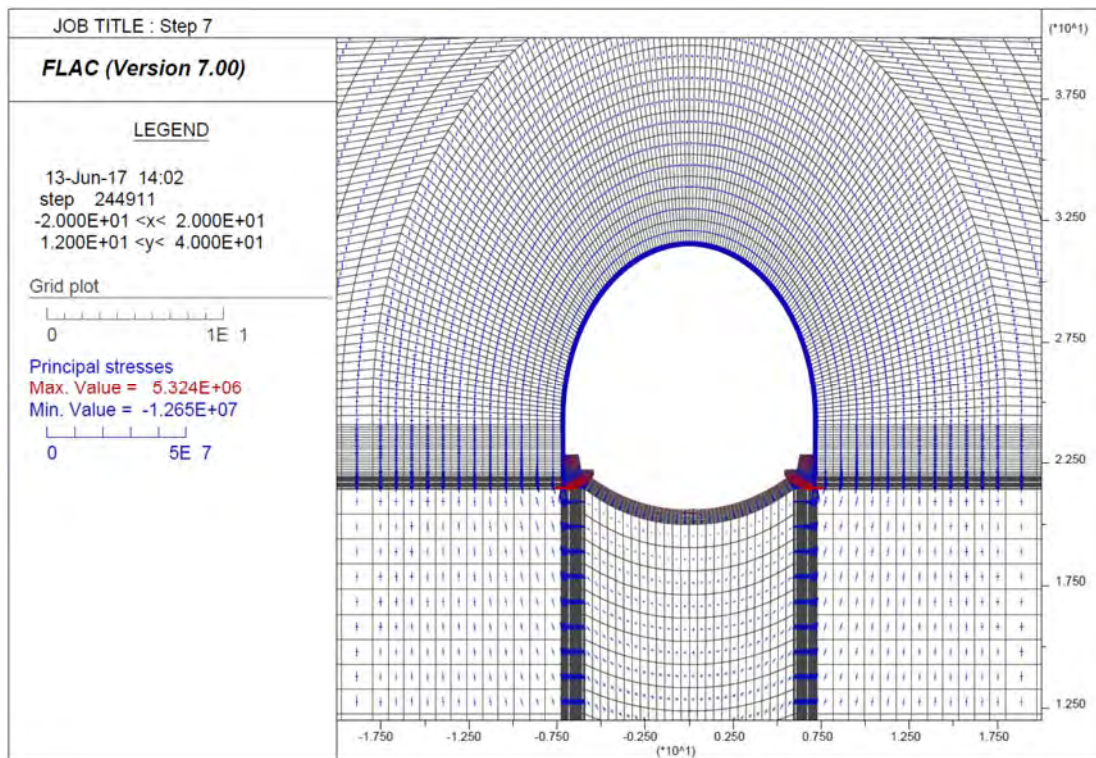


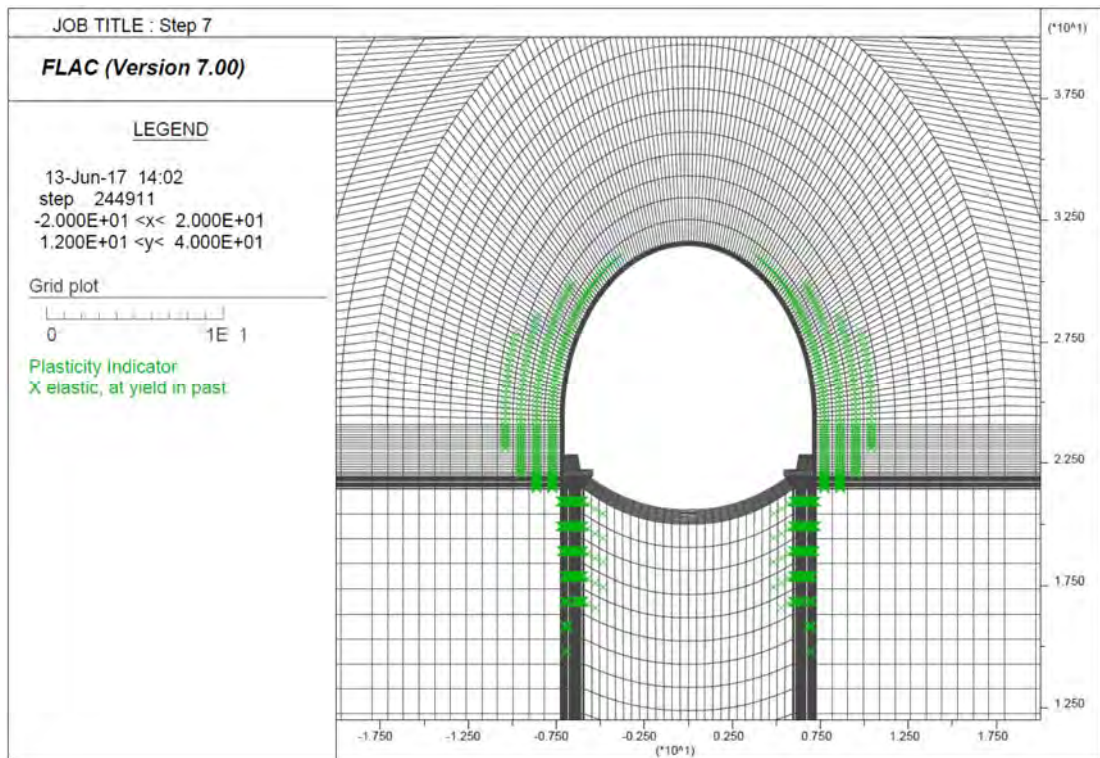
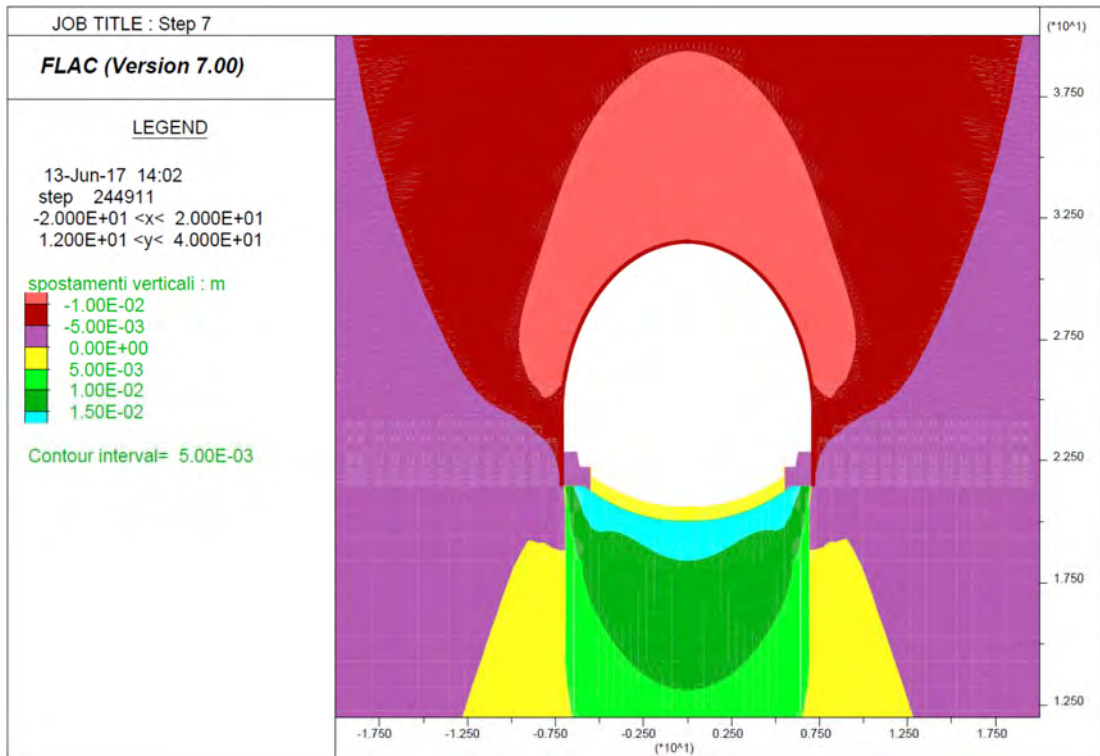
Step 6 – Avanzamento fino a 2D



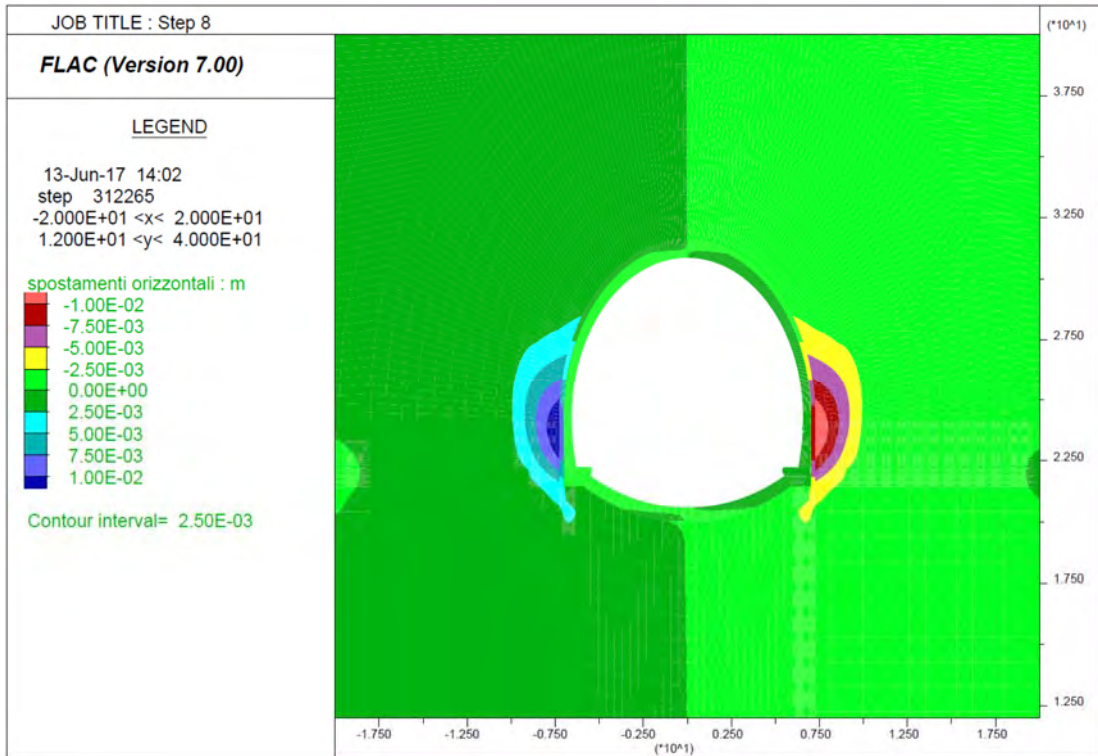
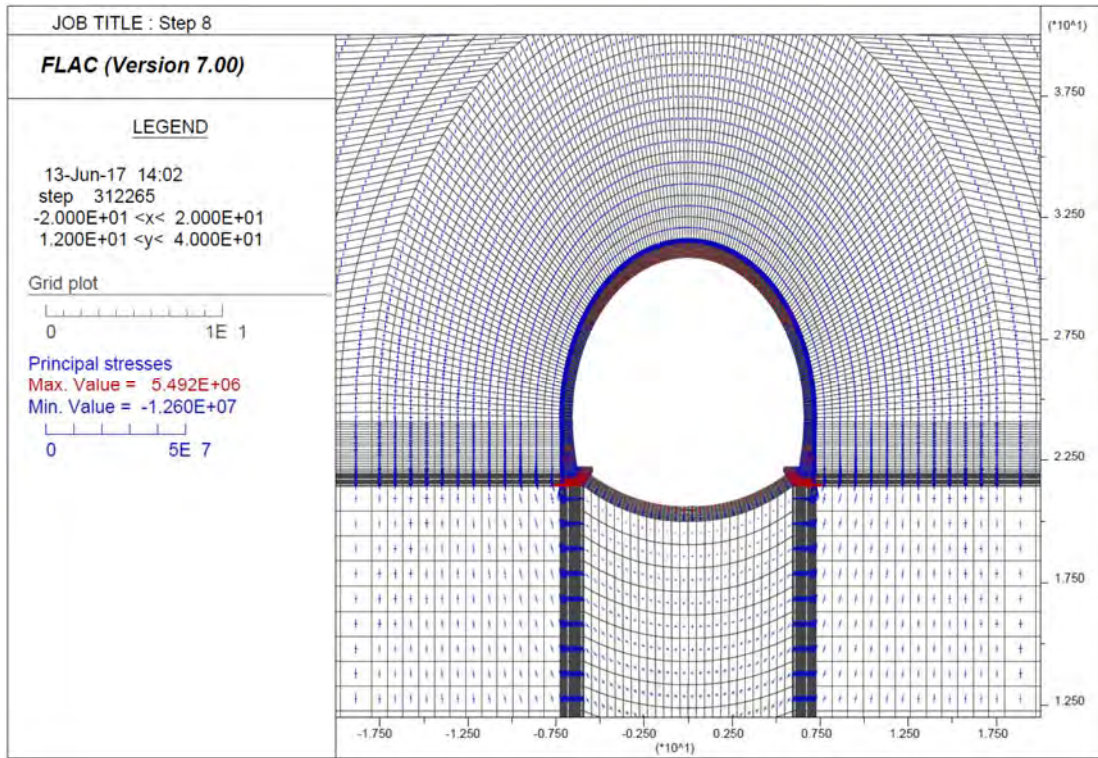


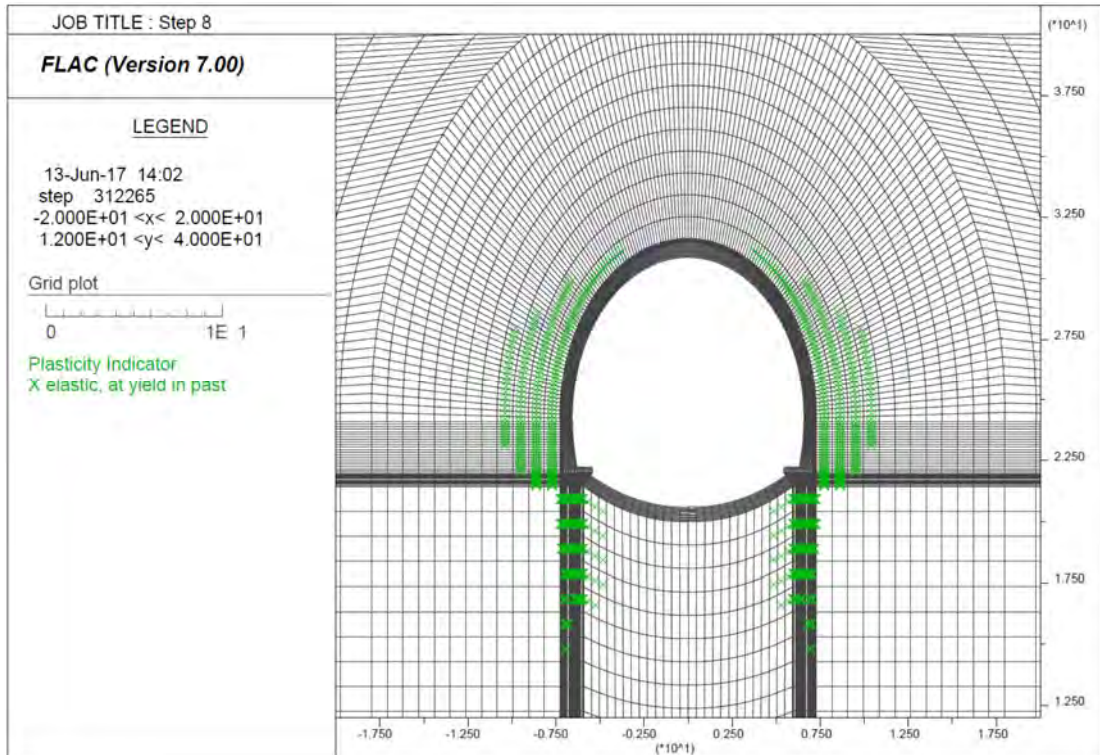
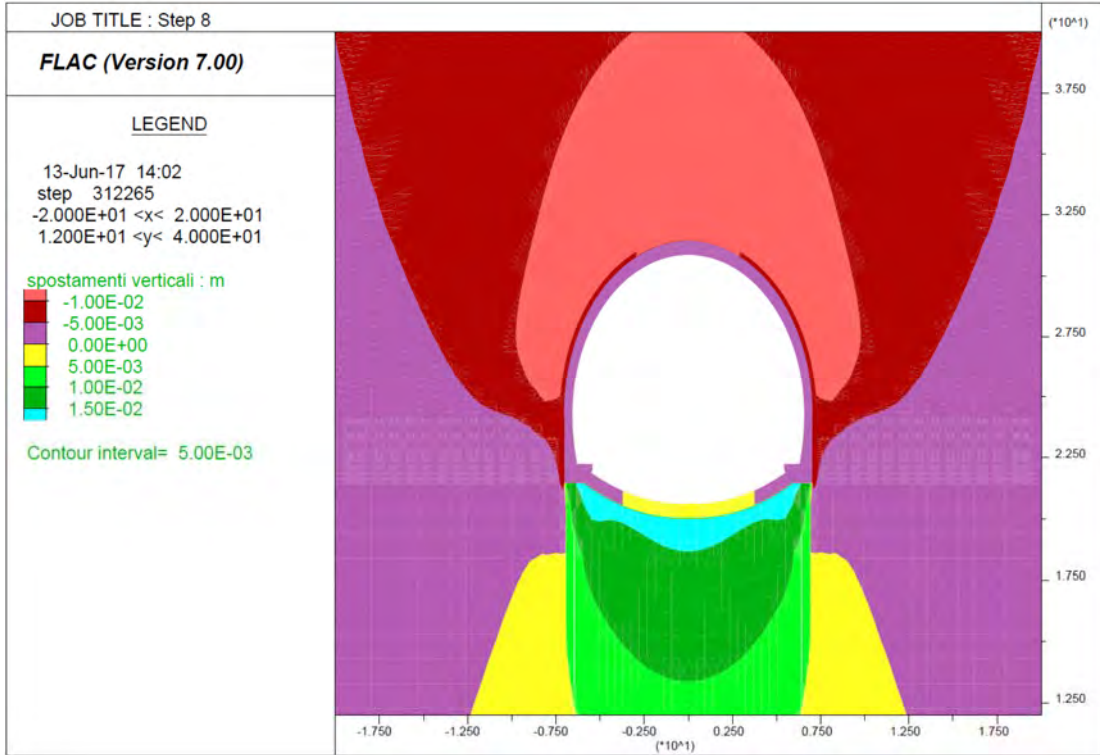
Step 7 - Getto arco rovescio e muretta a 2D e avanzamento fino a deformazioni esaurite



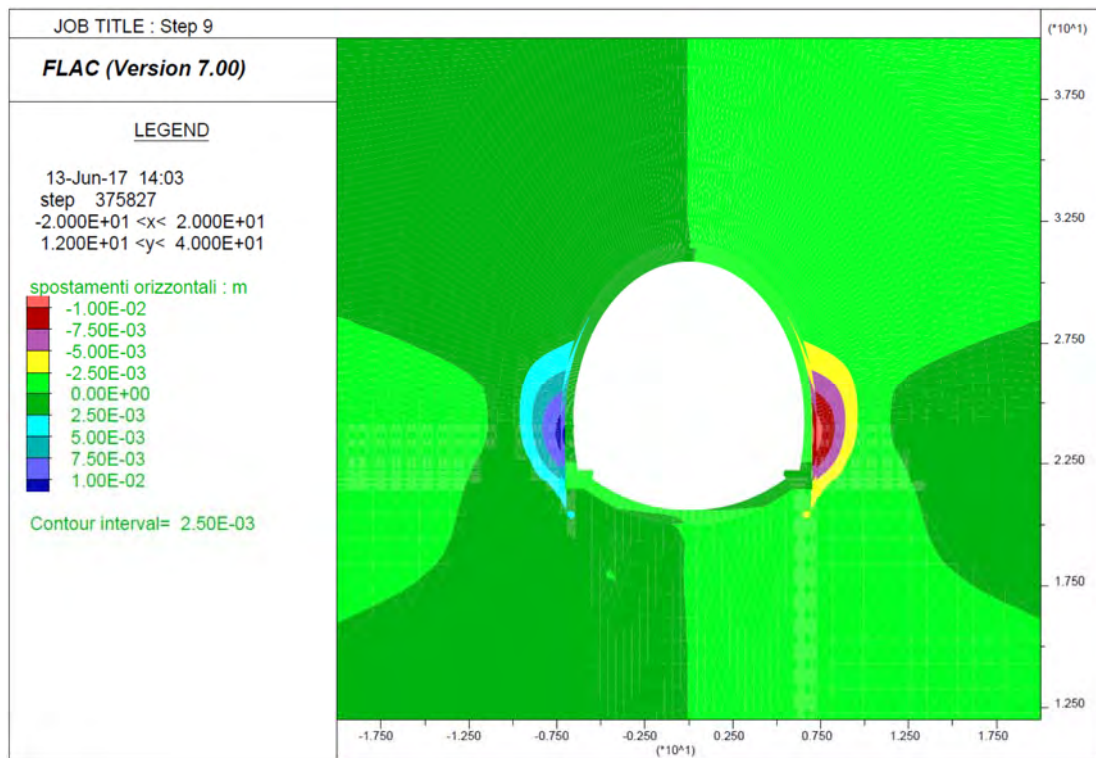
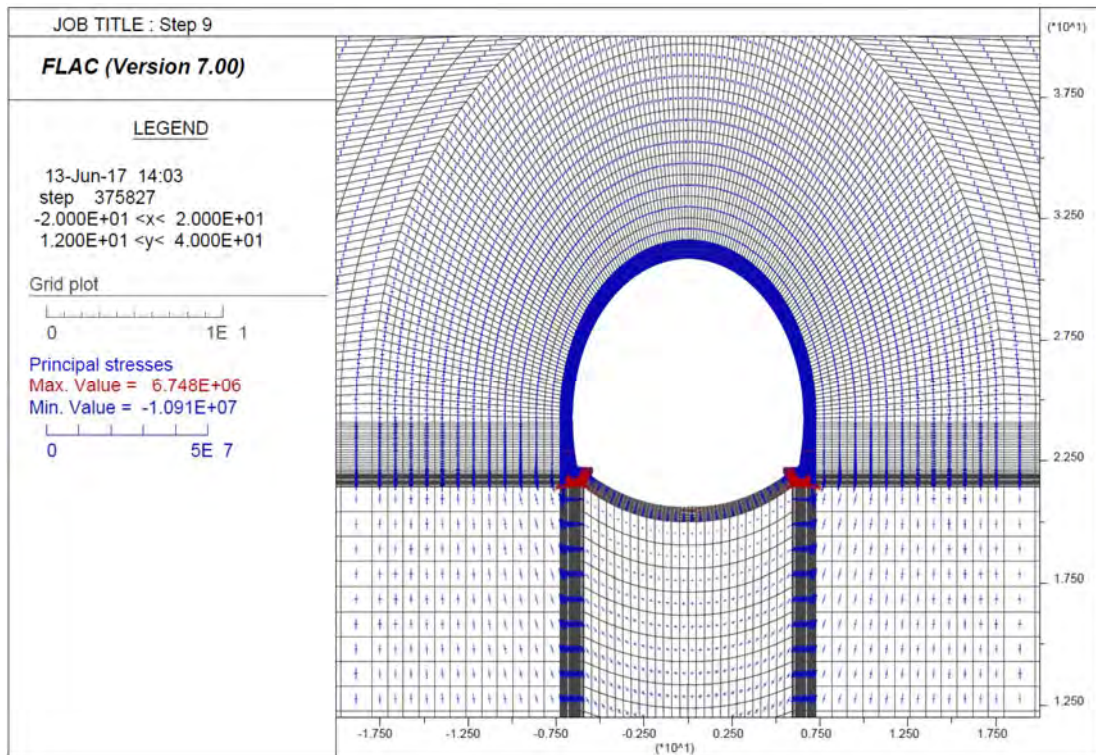


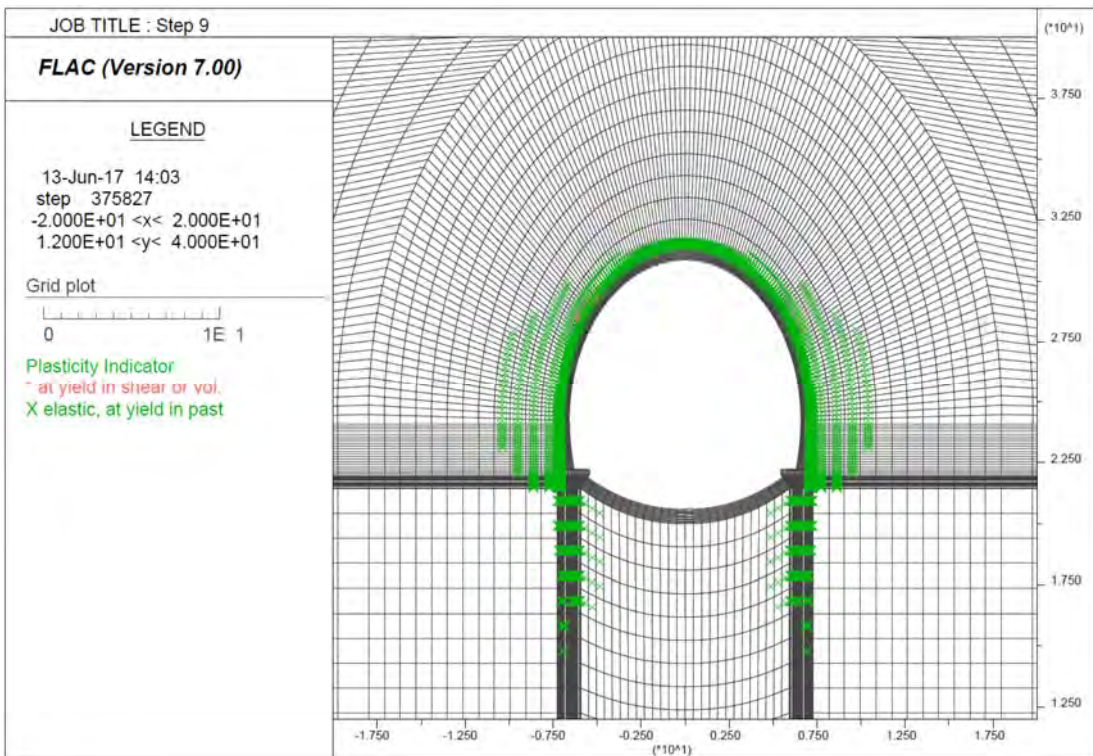
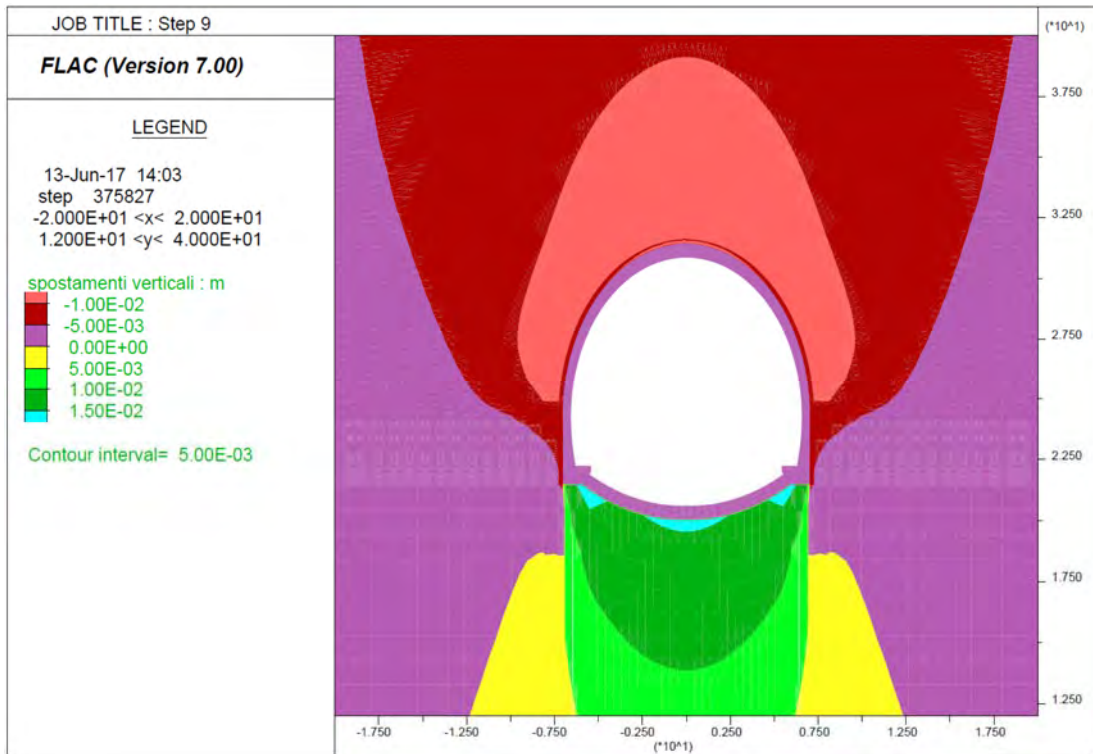
Step 8 - Getto Calotta





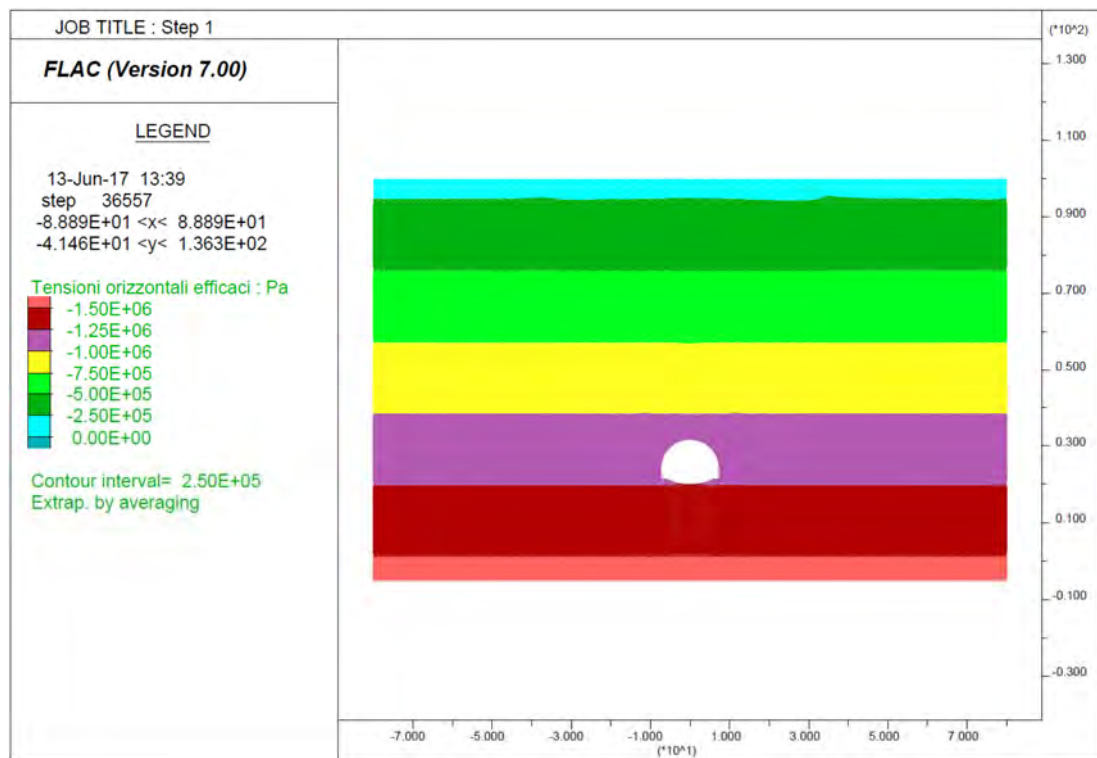
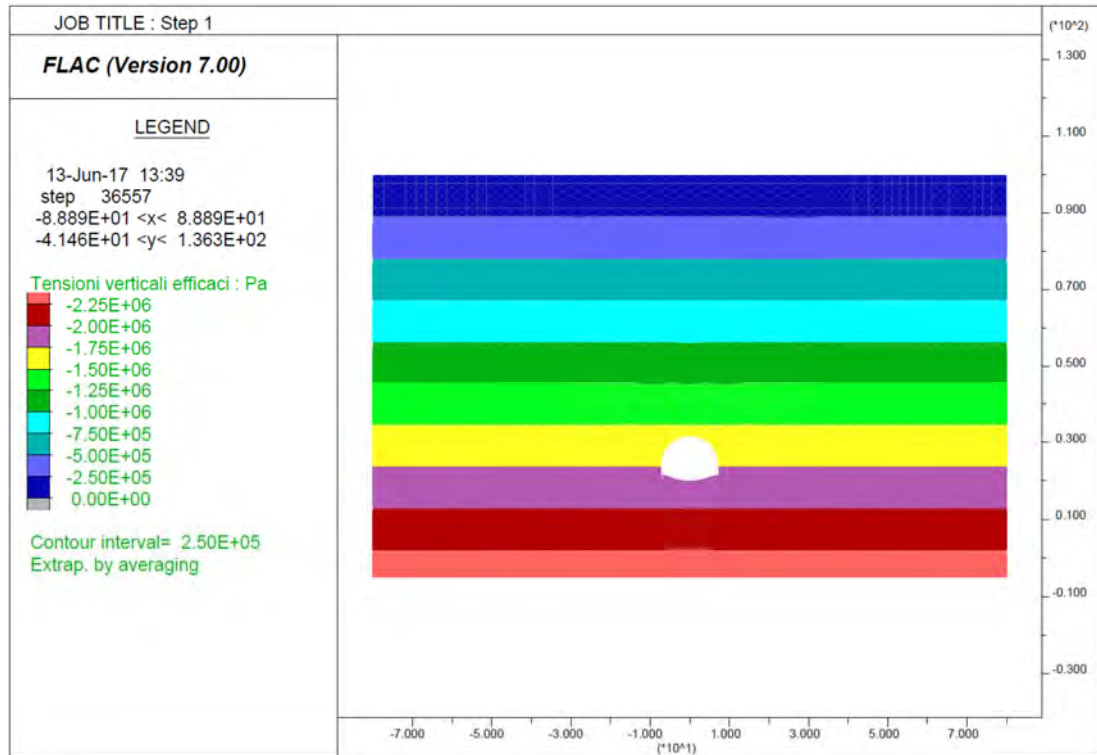
Step 9 - Decadimento dei parametri di resistenza del rivestimento provvisorio



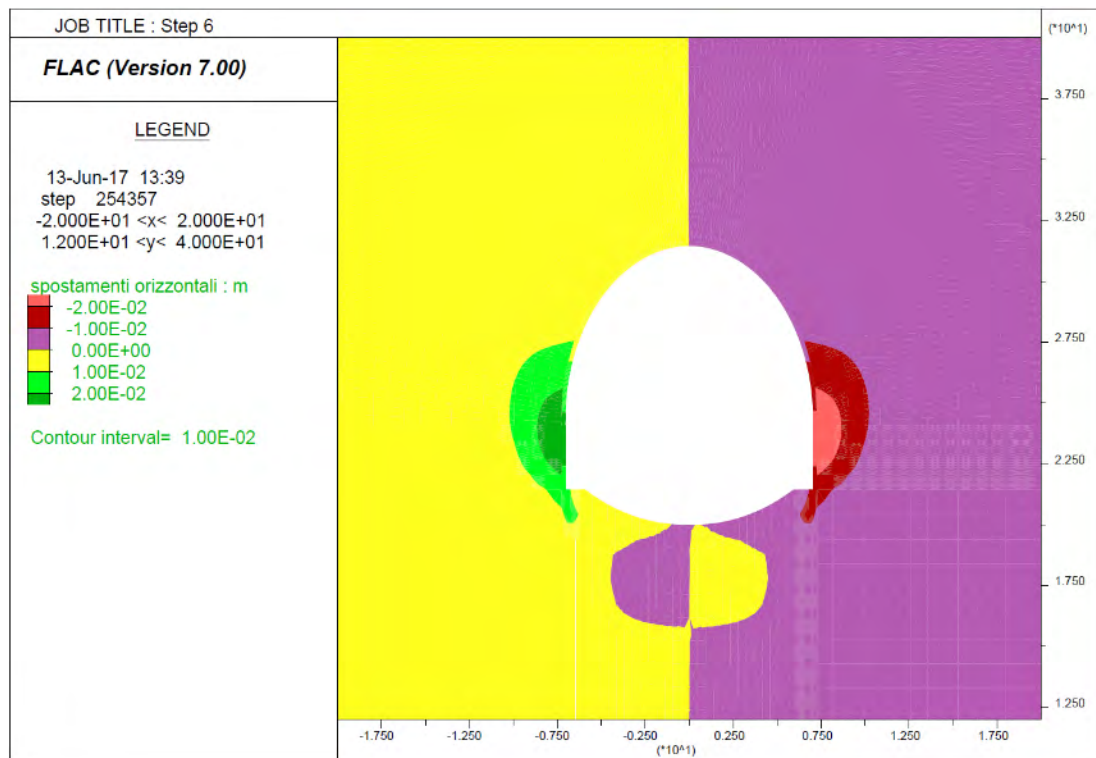
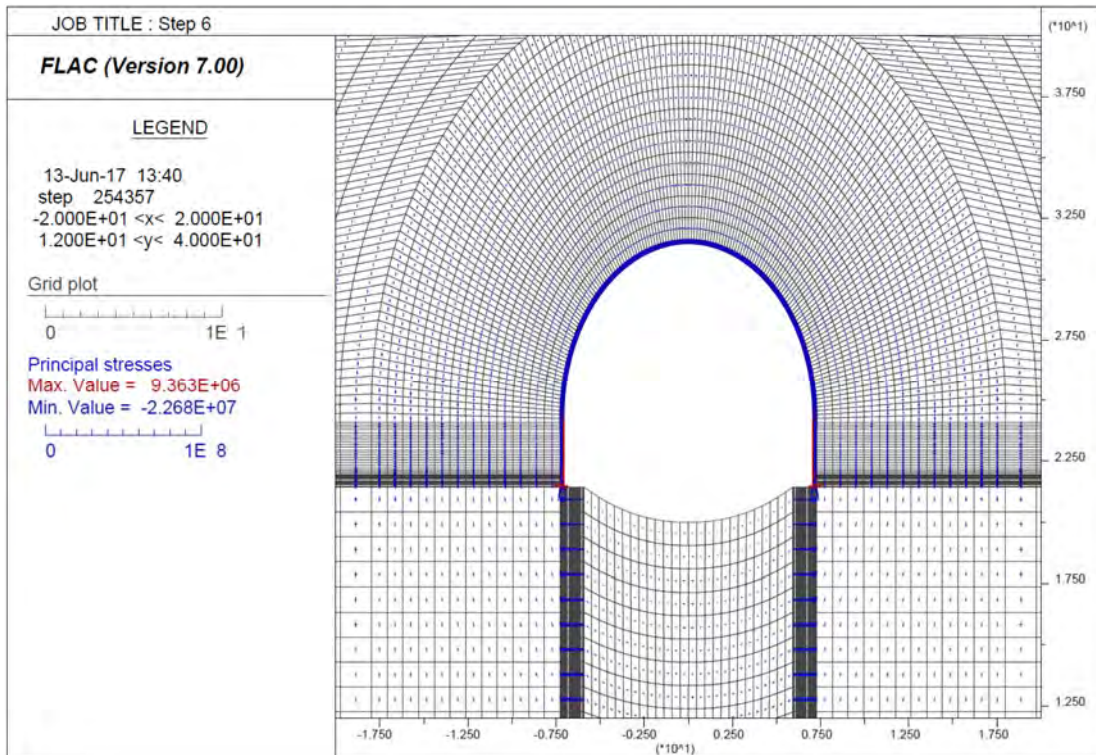


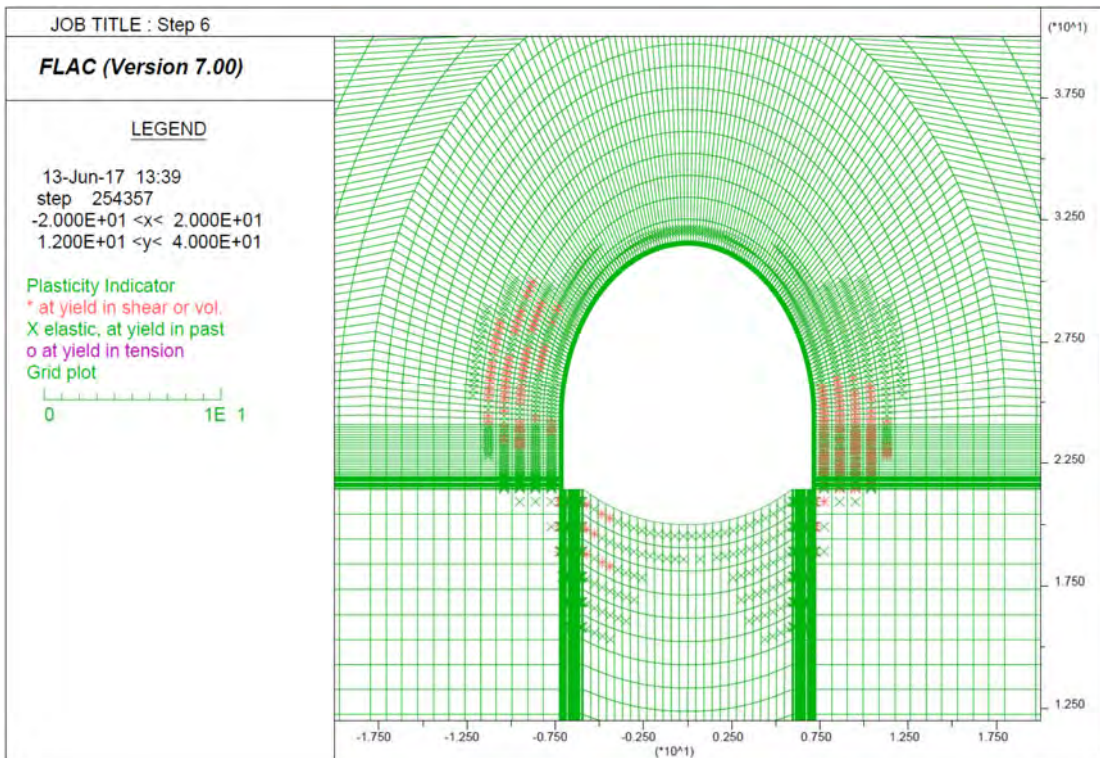
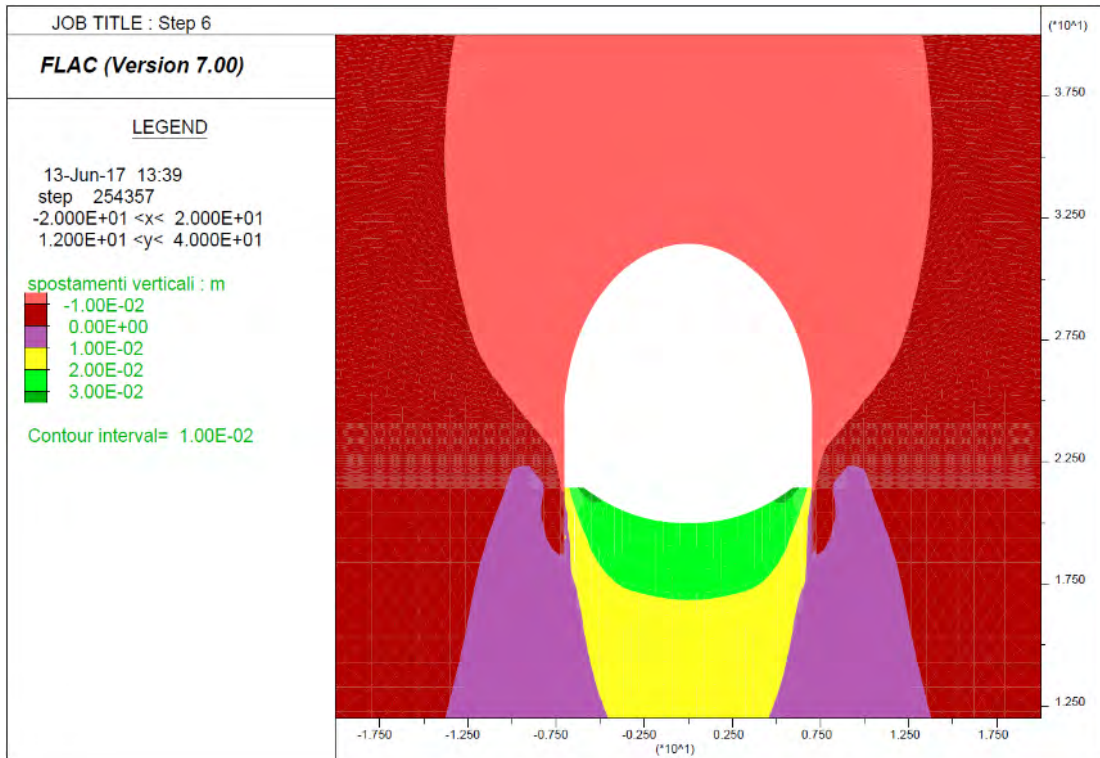
Output Flac – Sezione tipo B0 – Parametri res min – Copertura di calcolo = 70 m

Step 1 – Tensioni litostatiche

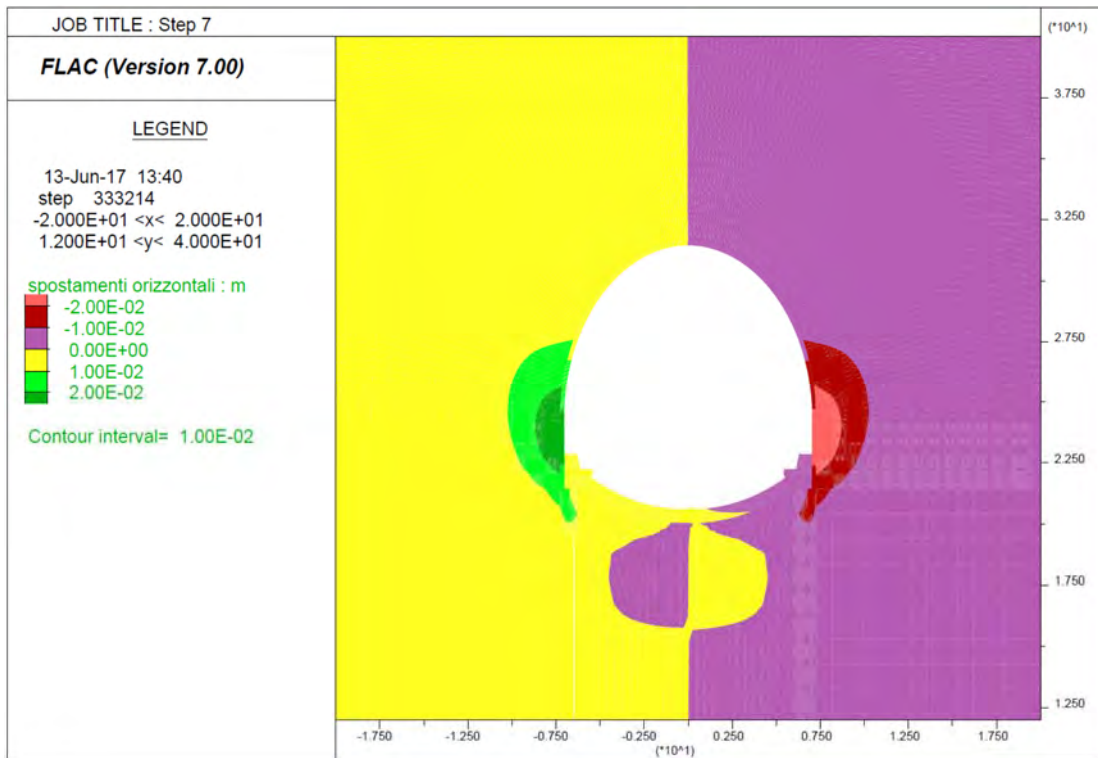
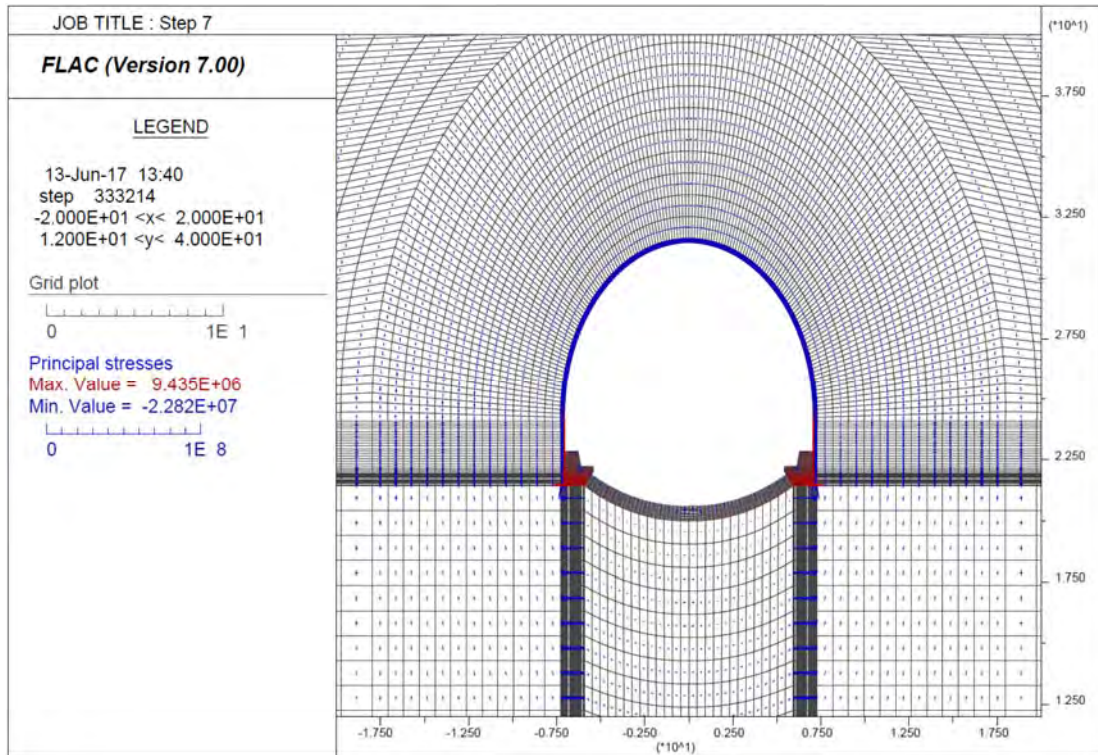


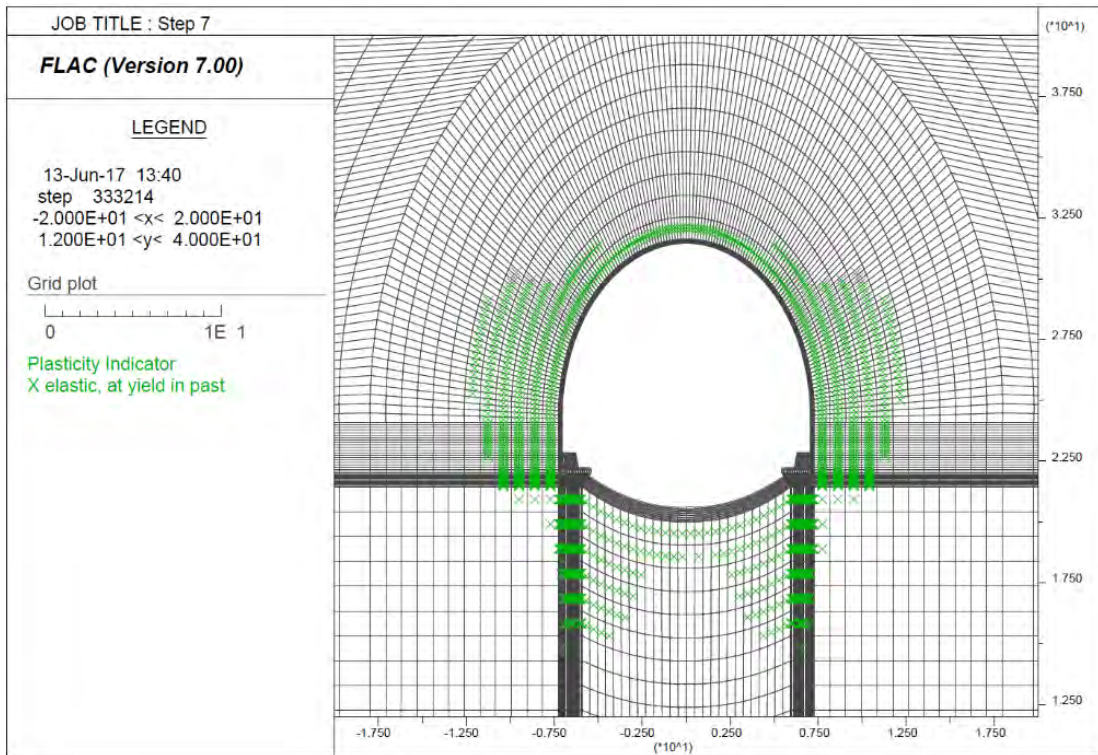
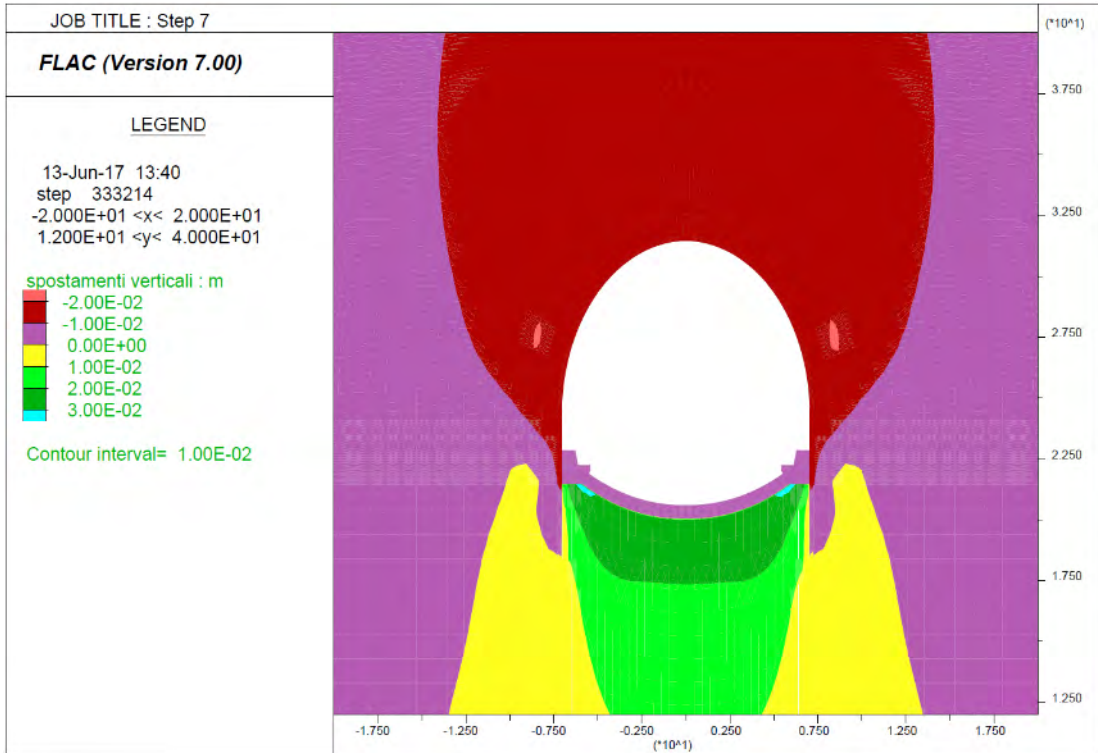
Step 6 – Avanzamento fino a deformazioni esaurite



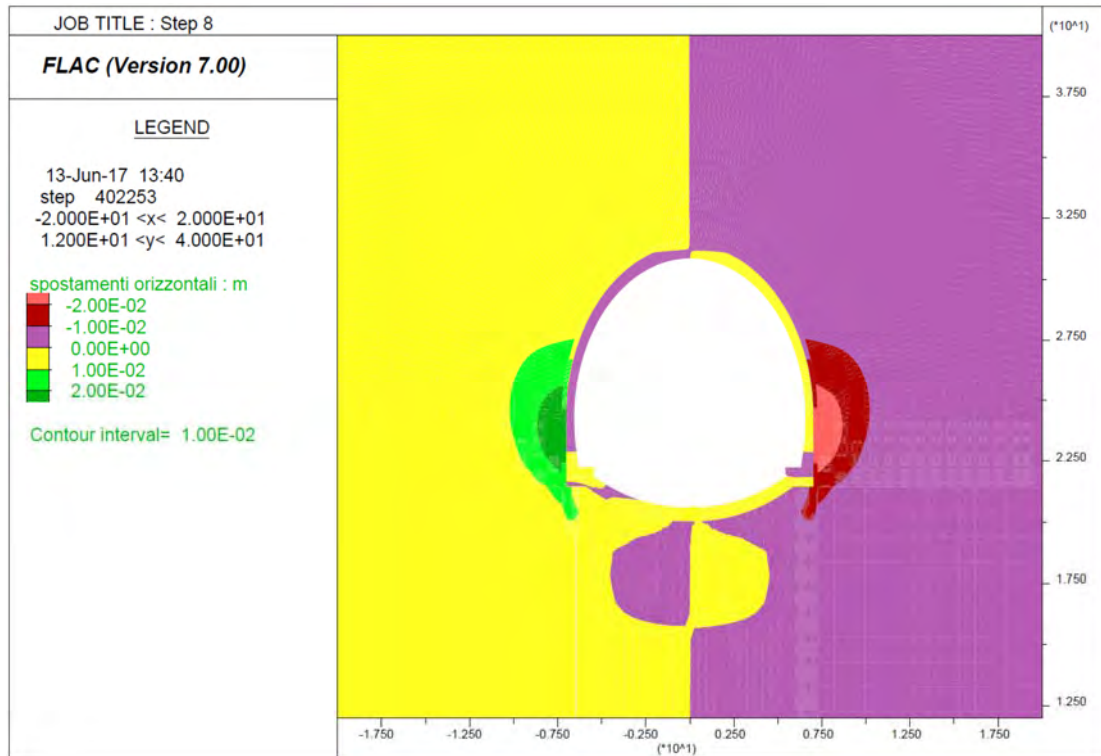
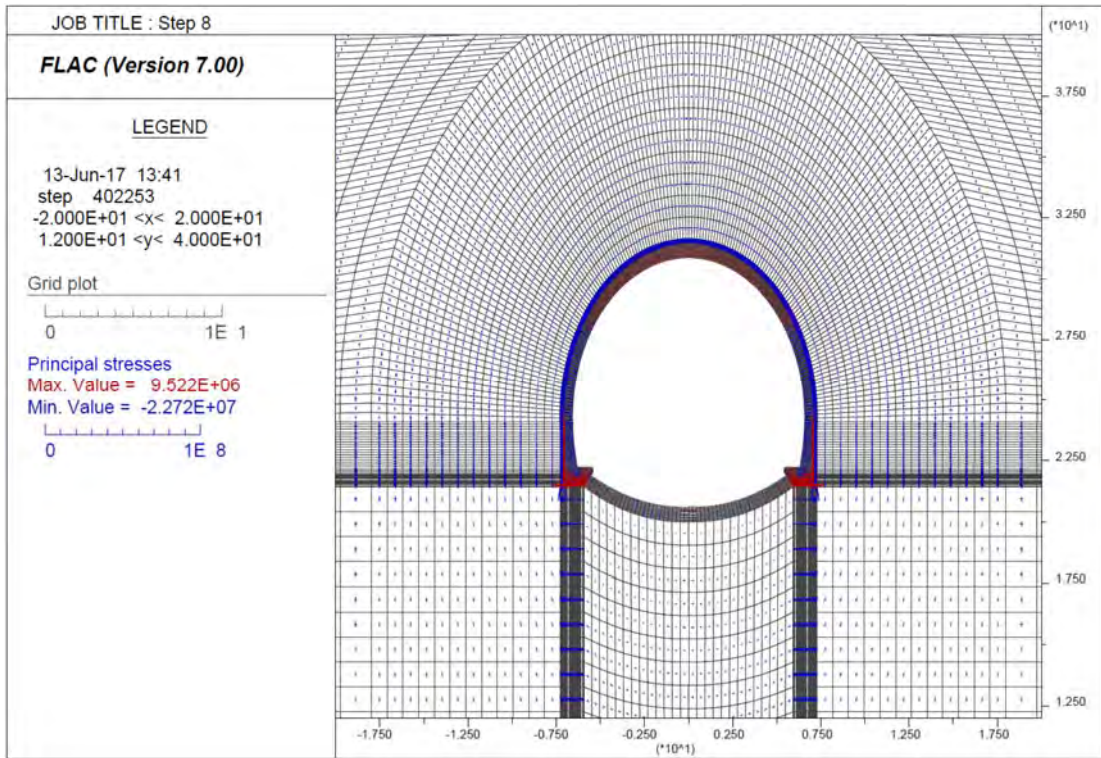


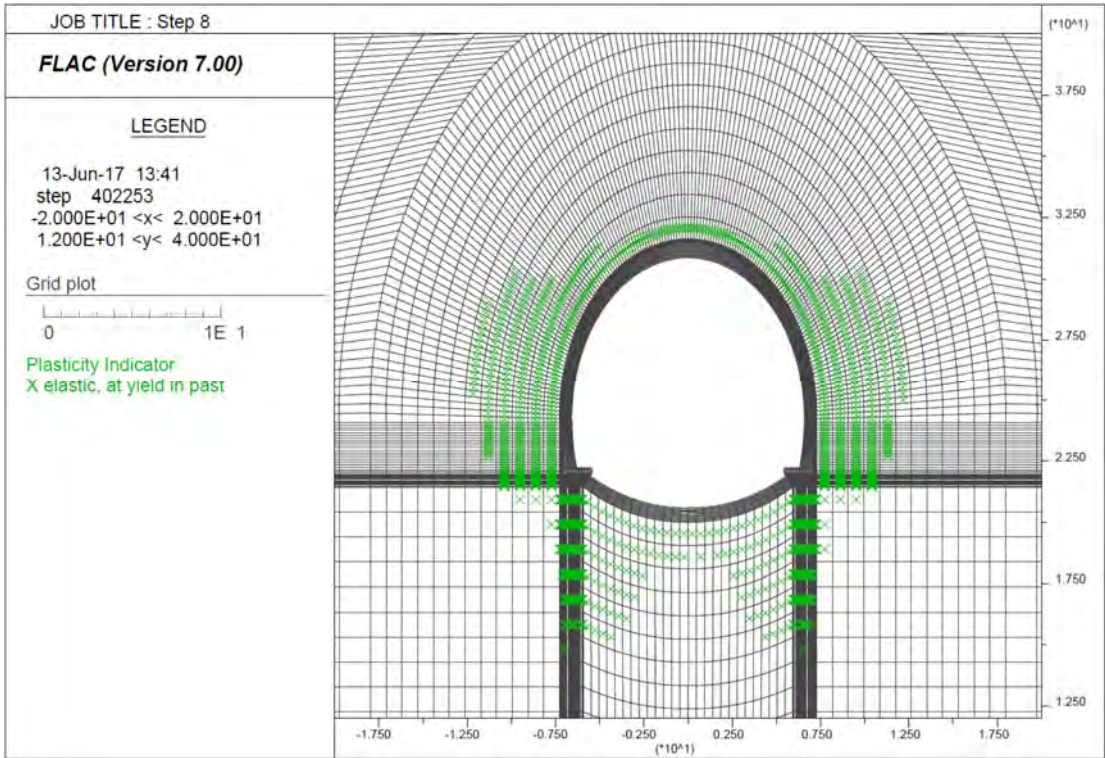
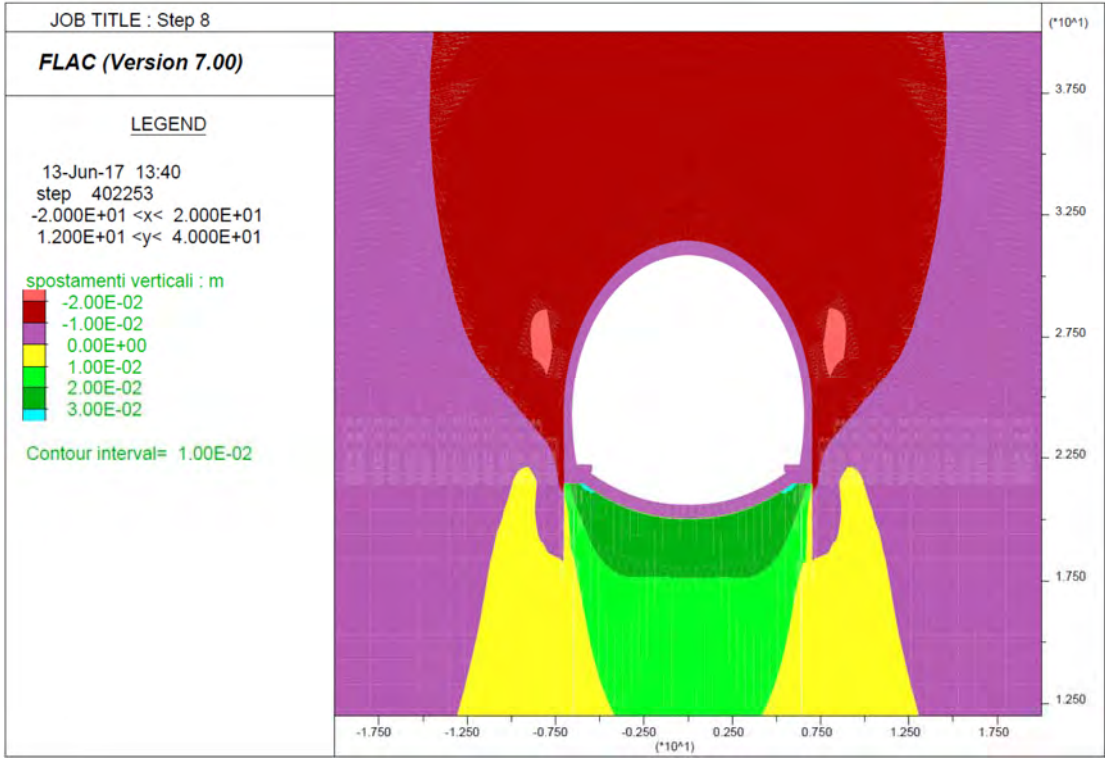
Step 7 - Getto arco rovescio e muretta



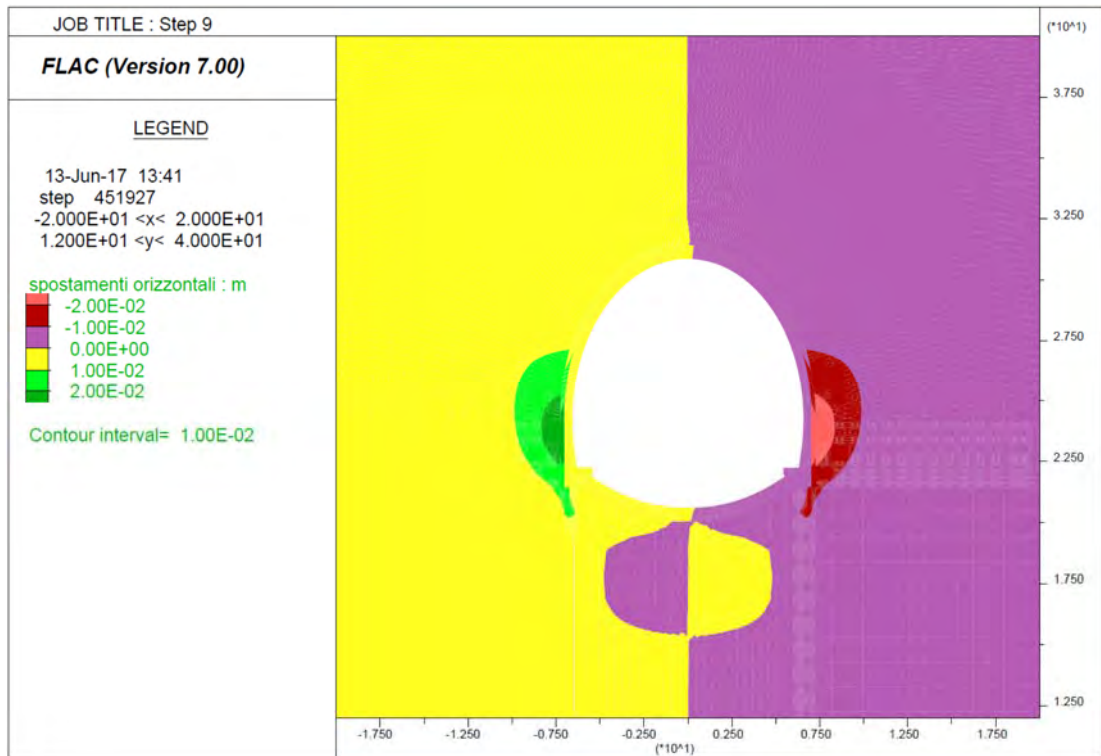
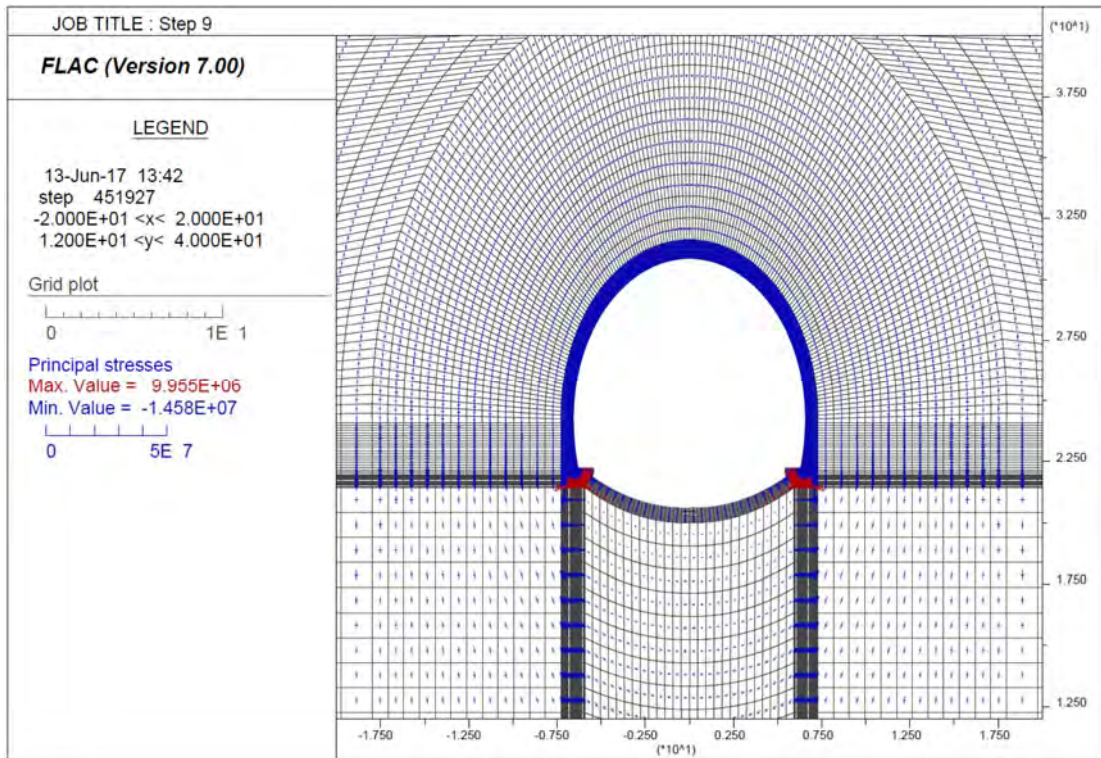


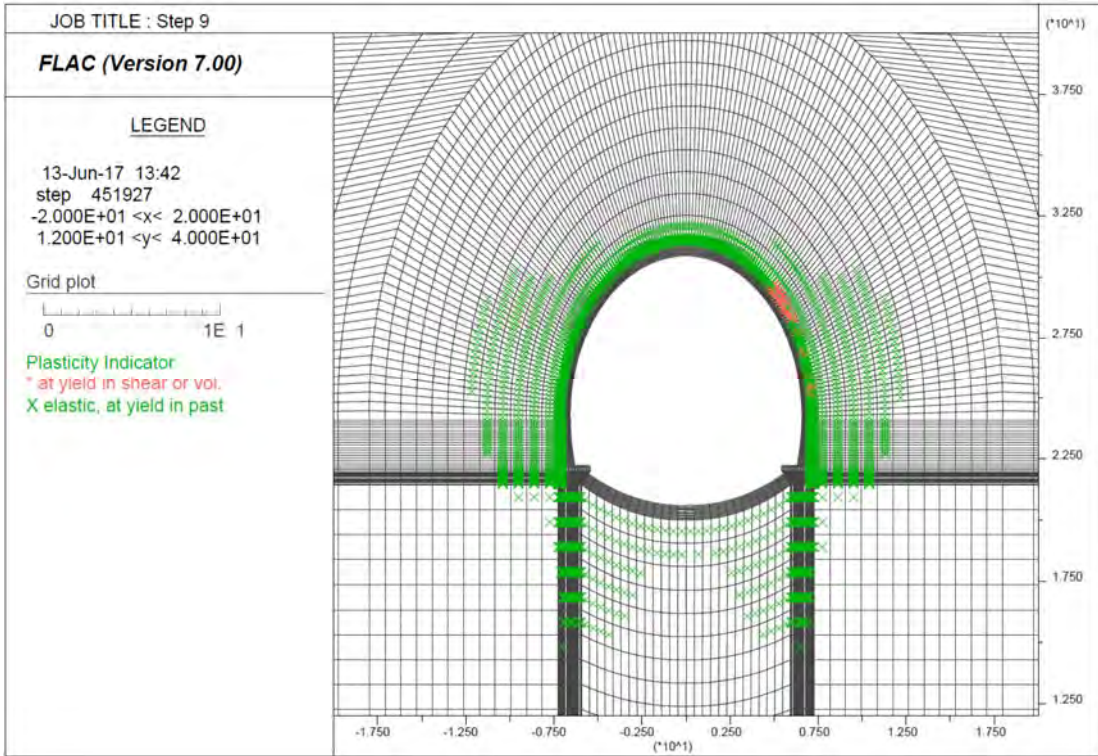
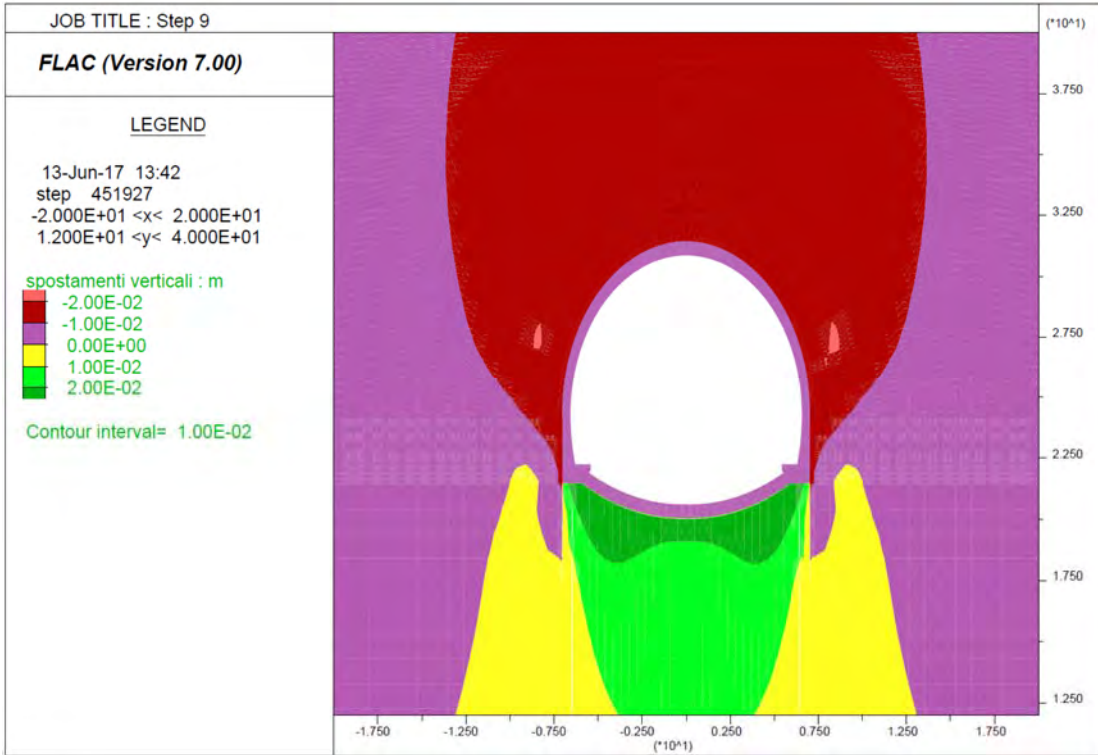
Step 8 - Getto Calotta





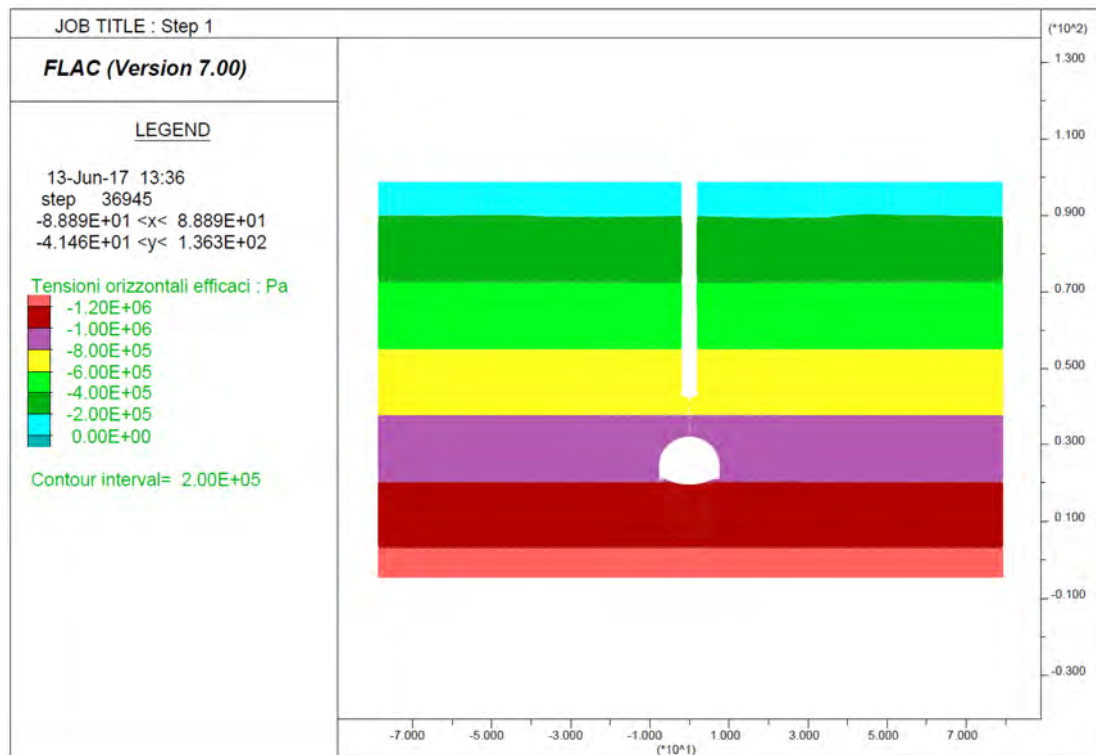
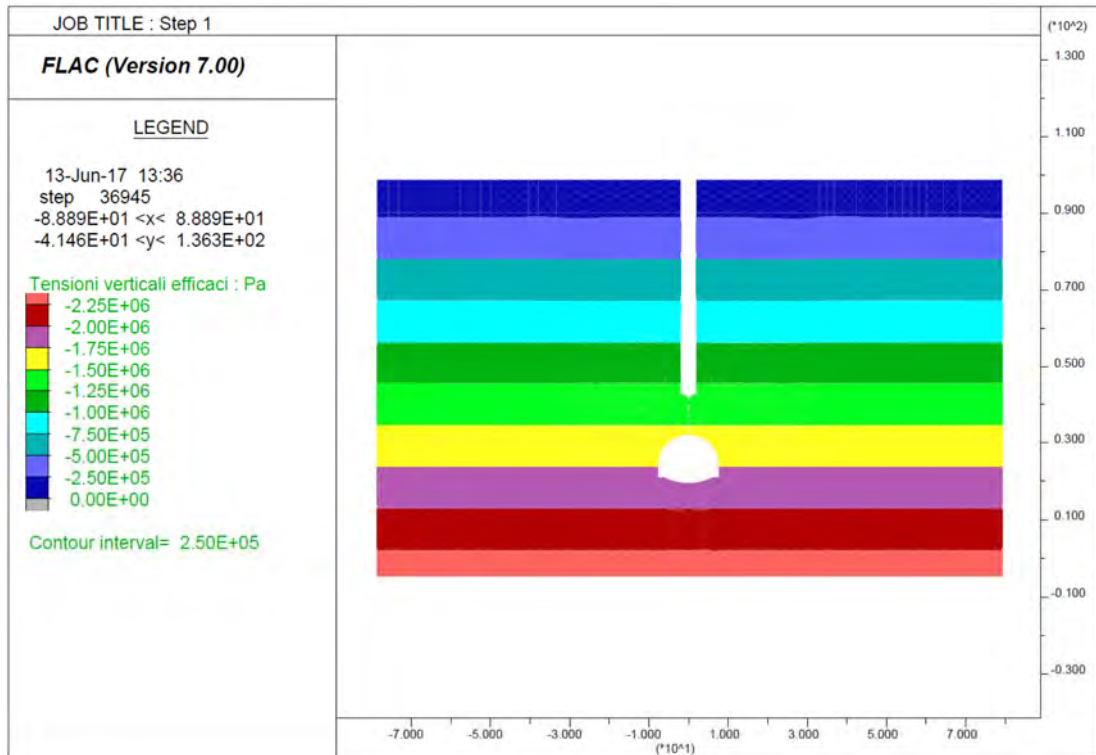
Step 9 - Decadimento dei parametri di resistenza del rivestimento provvisorio



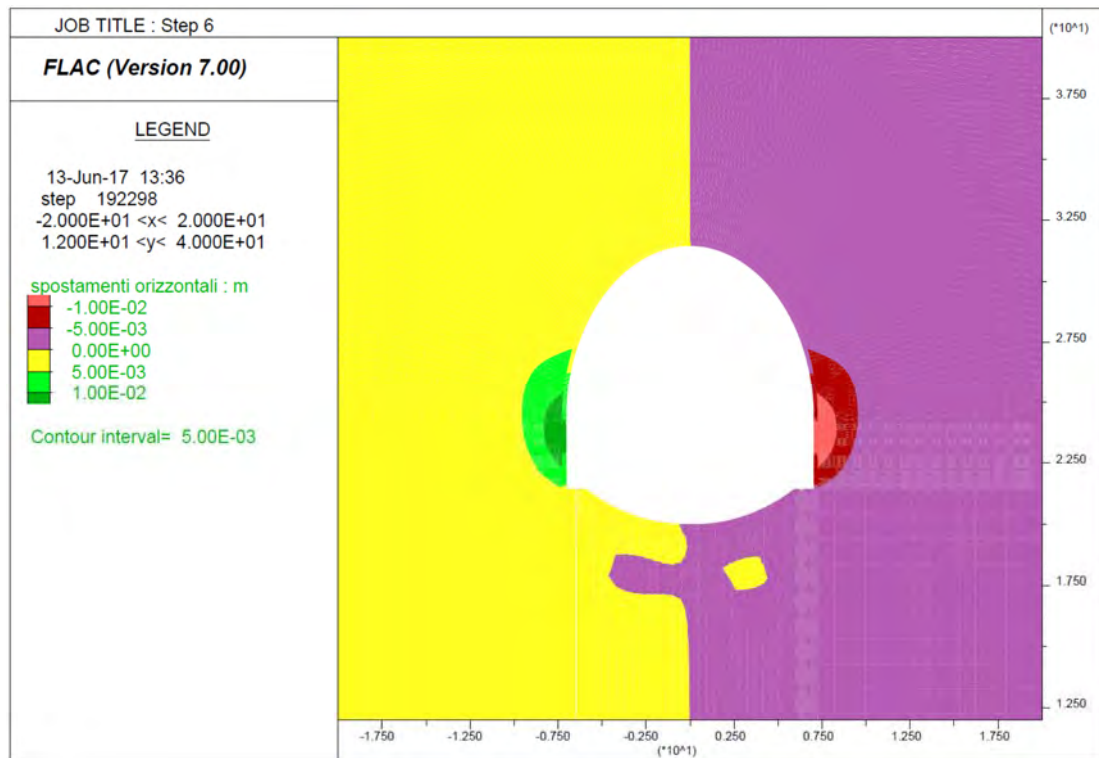
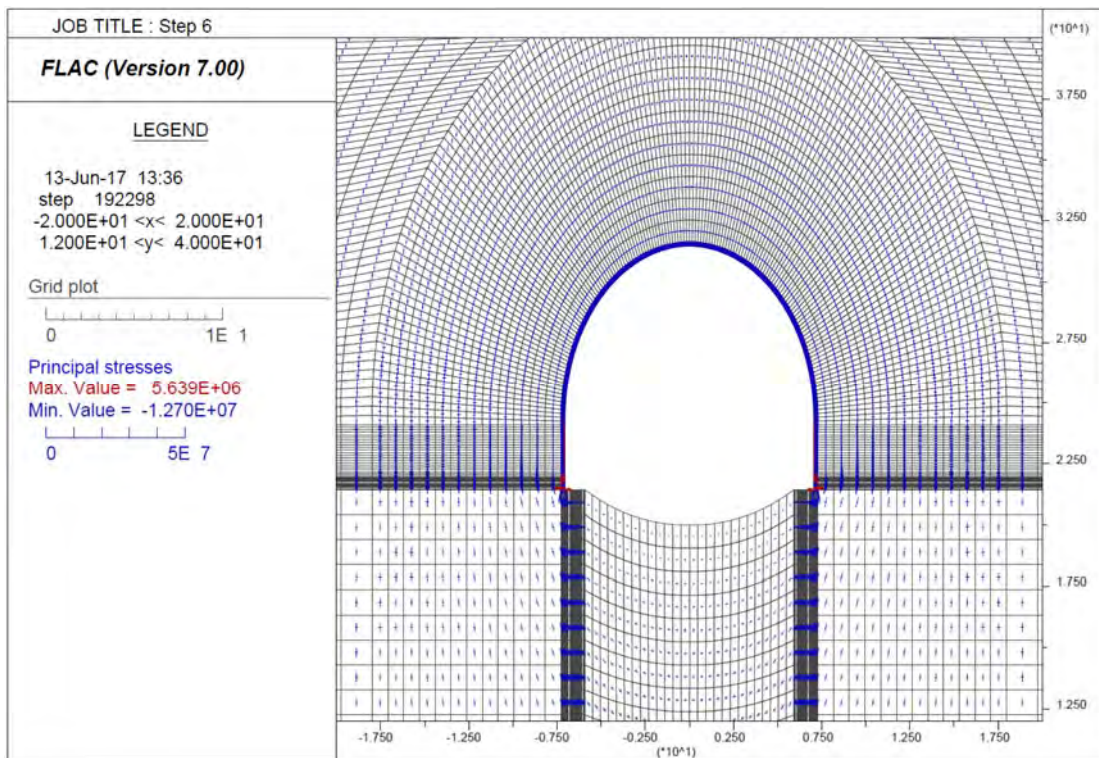


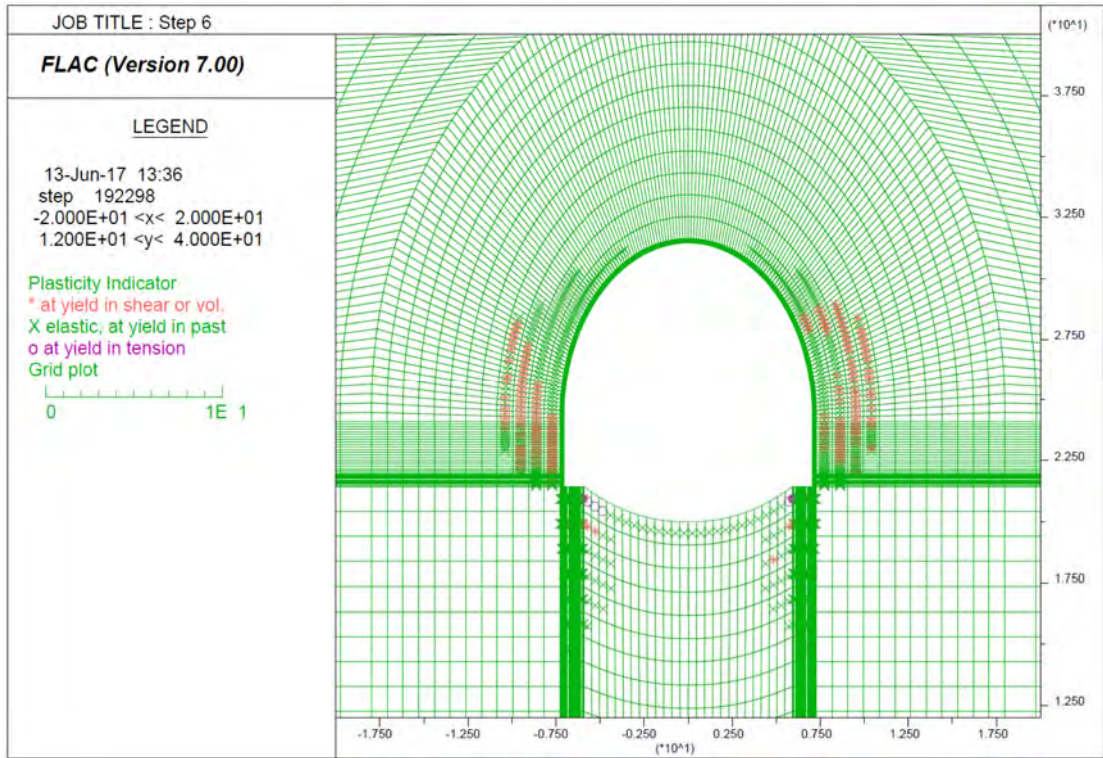
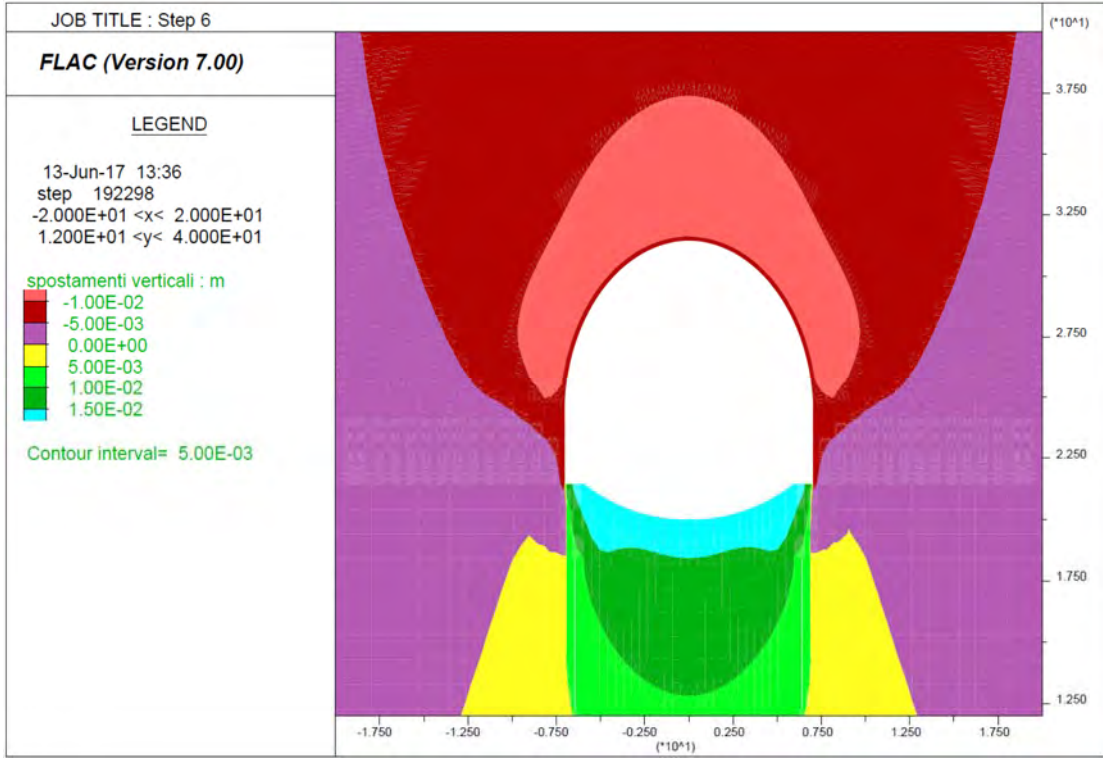
Output Flac – Sezione tipo B0 – Parametri res max – Copertura di calcolo = 70 m

Step 1 – Tensioni litostatiche

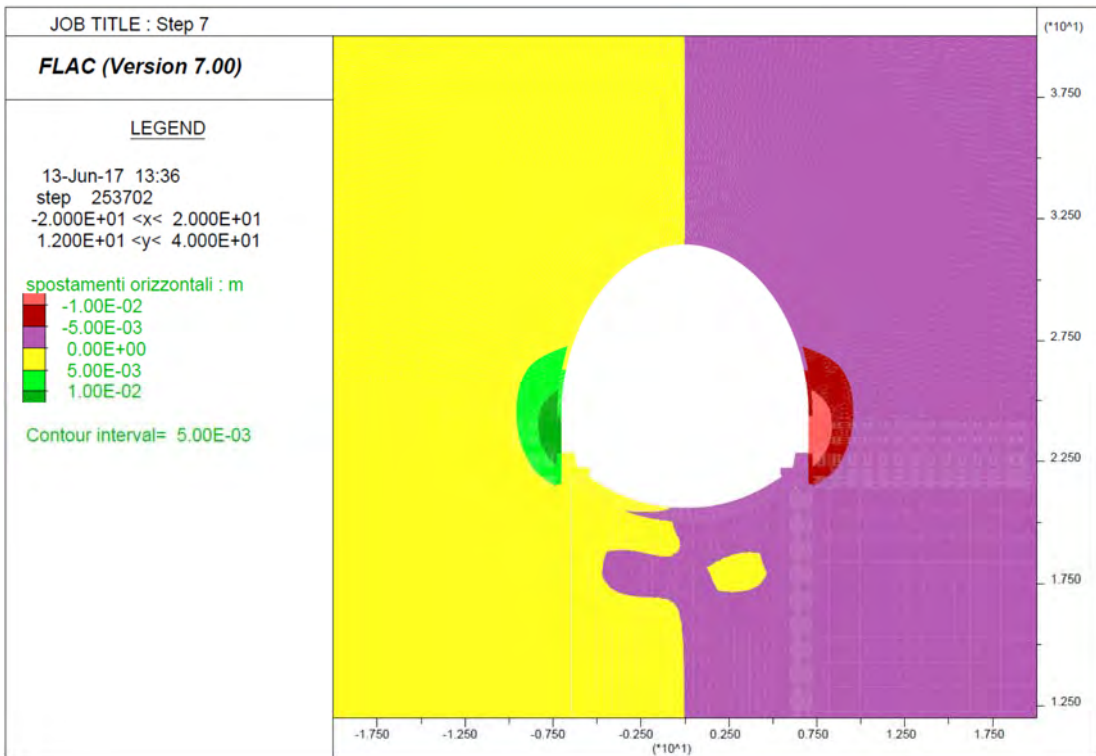
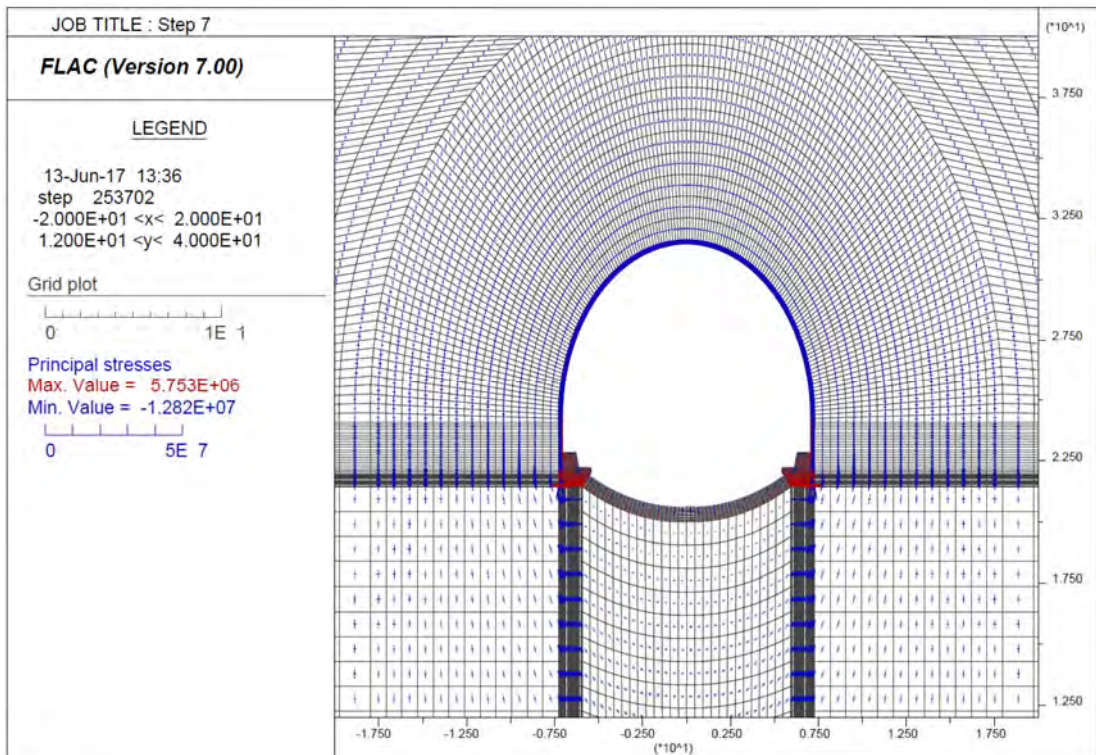


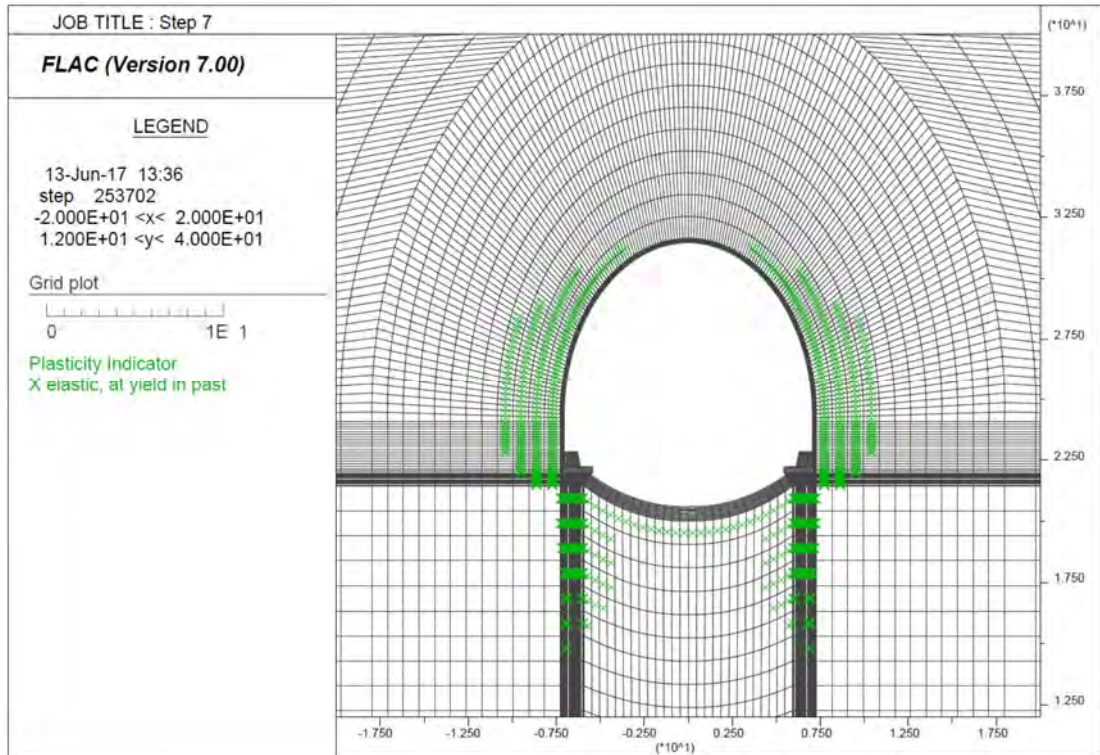
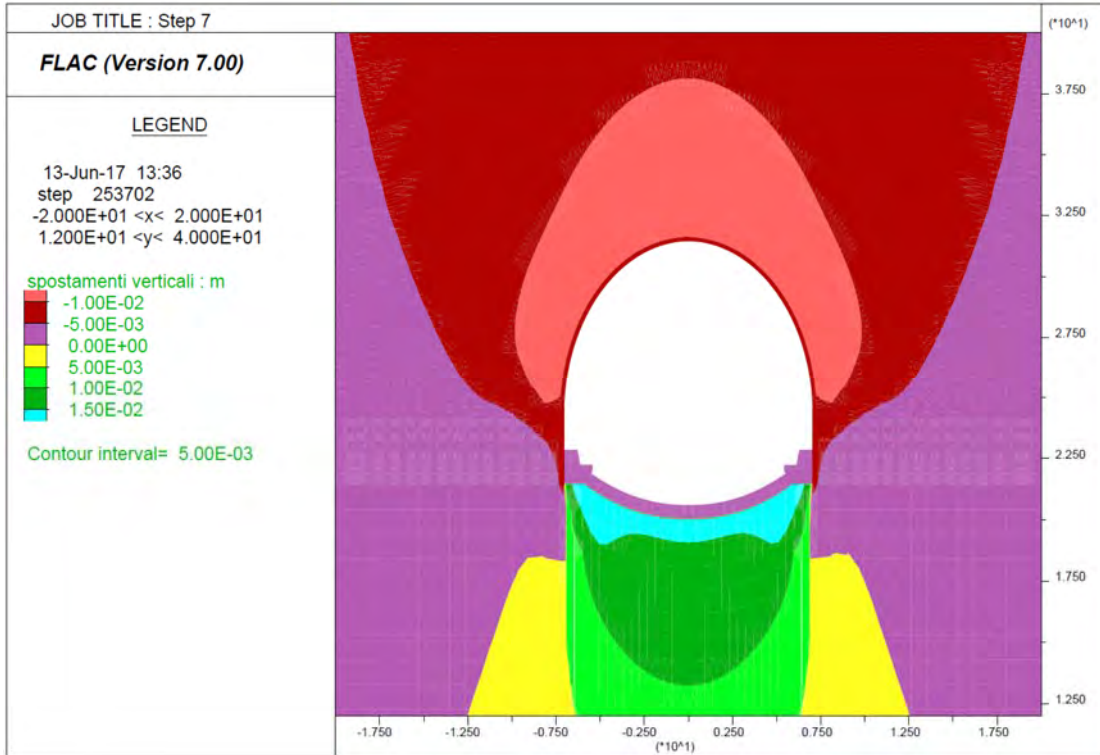
Step 6 – Avanzamento fino a deformazioni esaurite



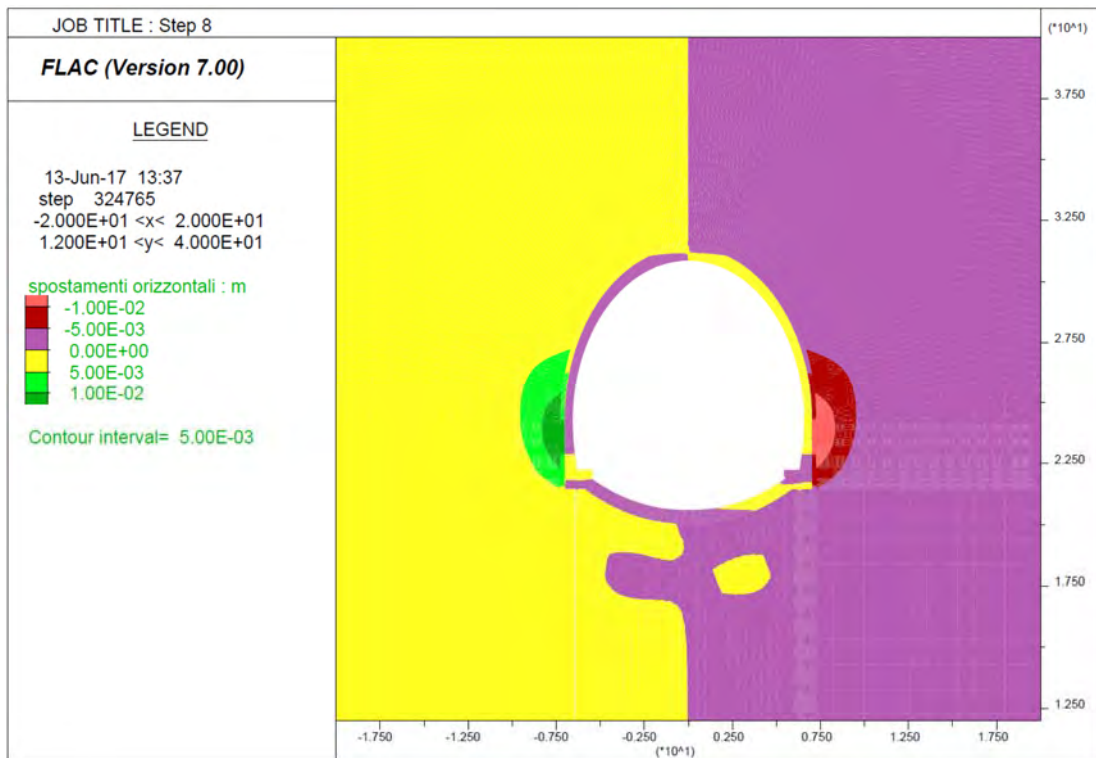
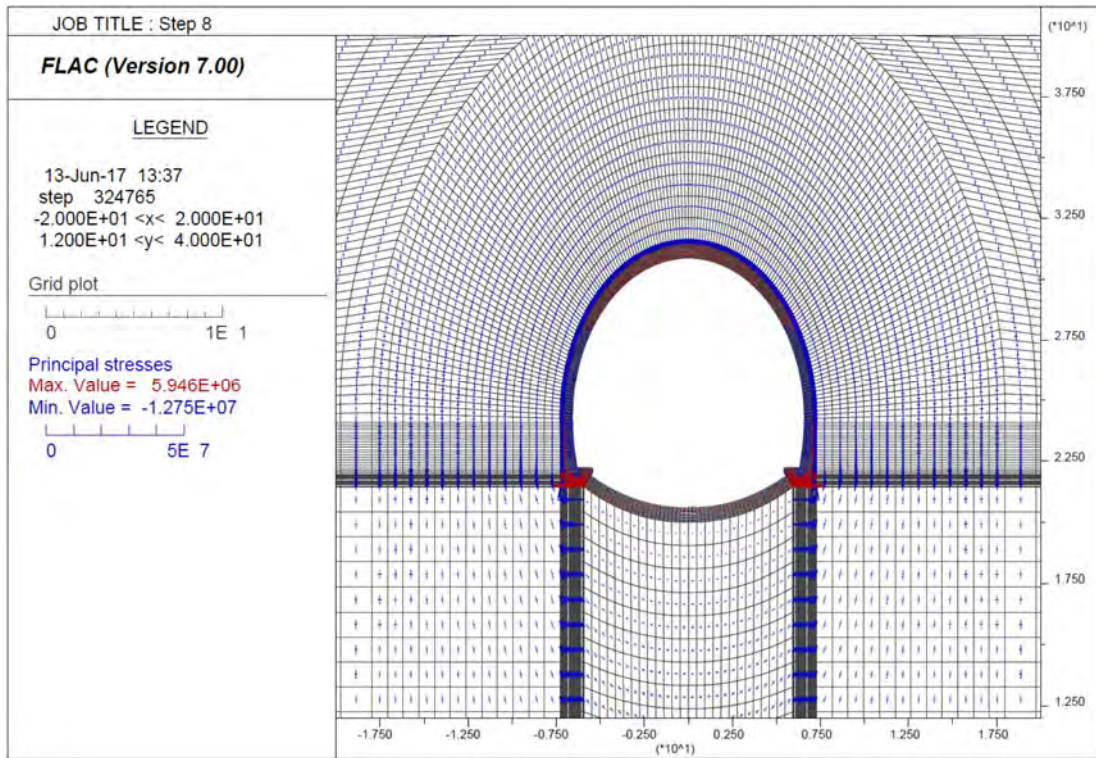


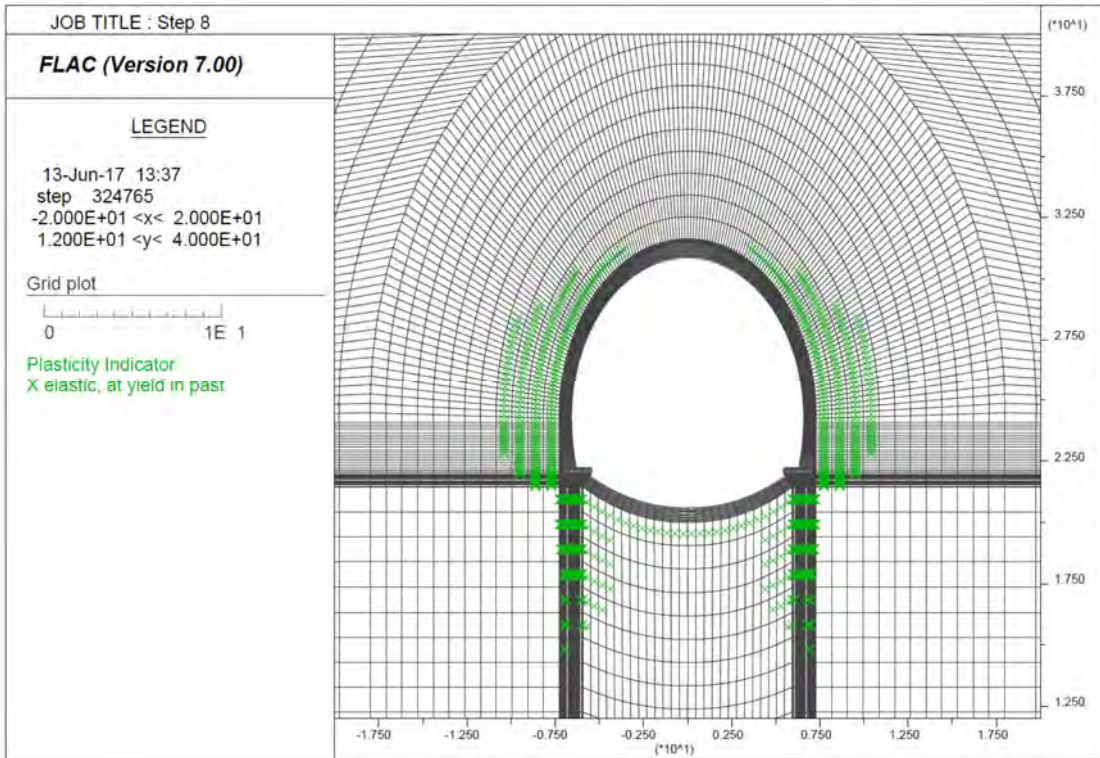
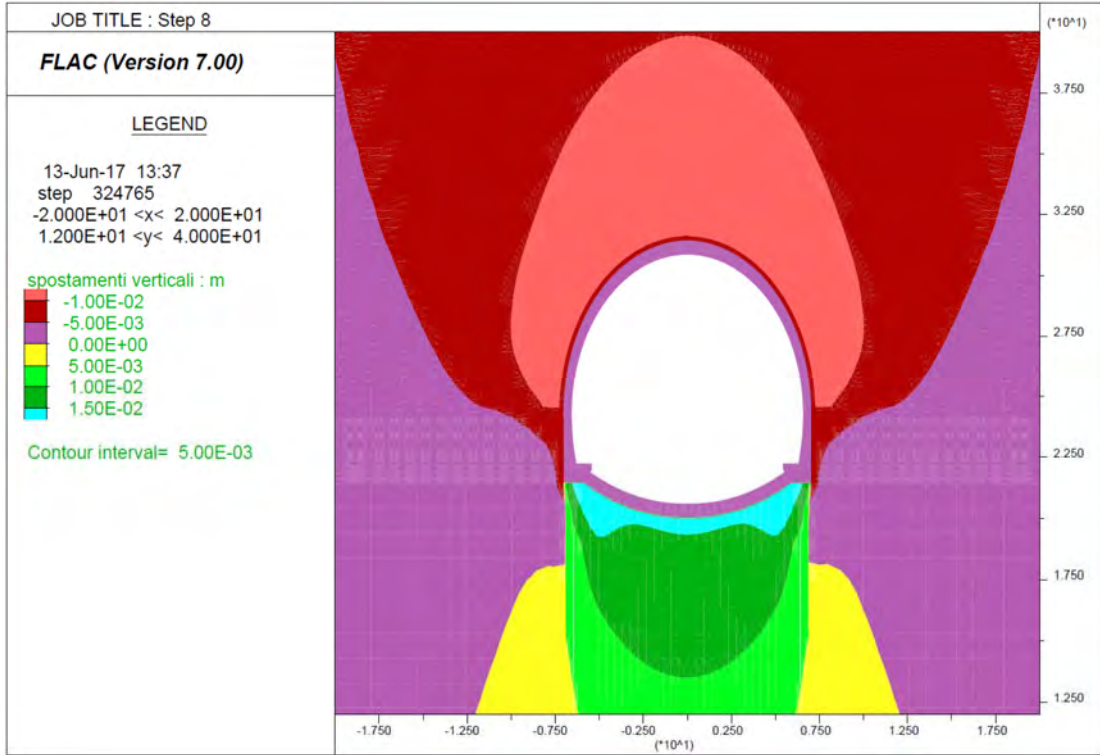
Step 7 - Getto arco rovescio e muretta



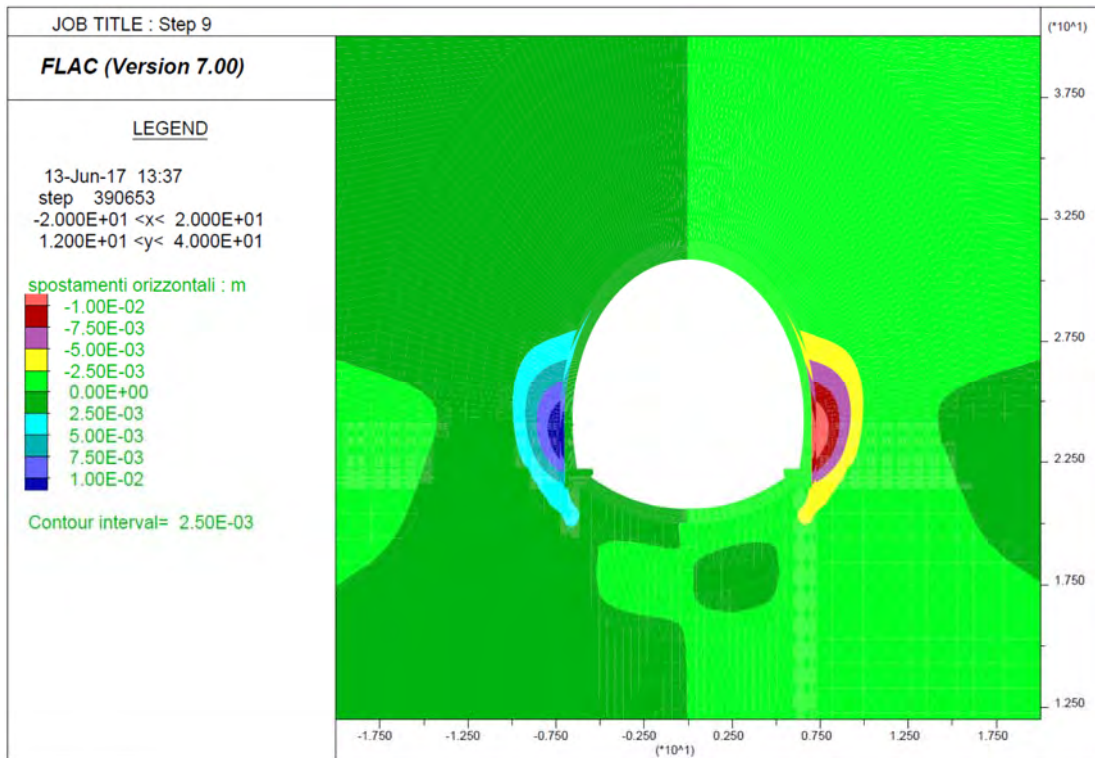
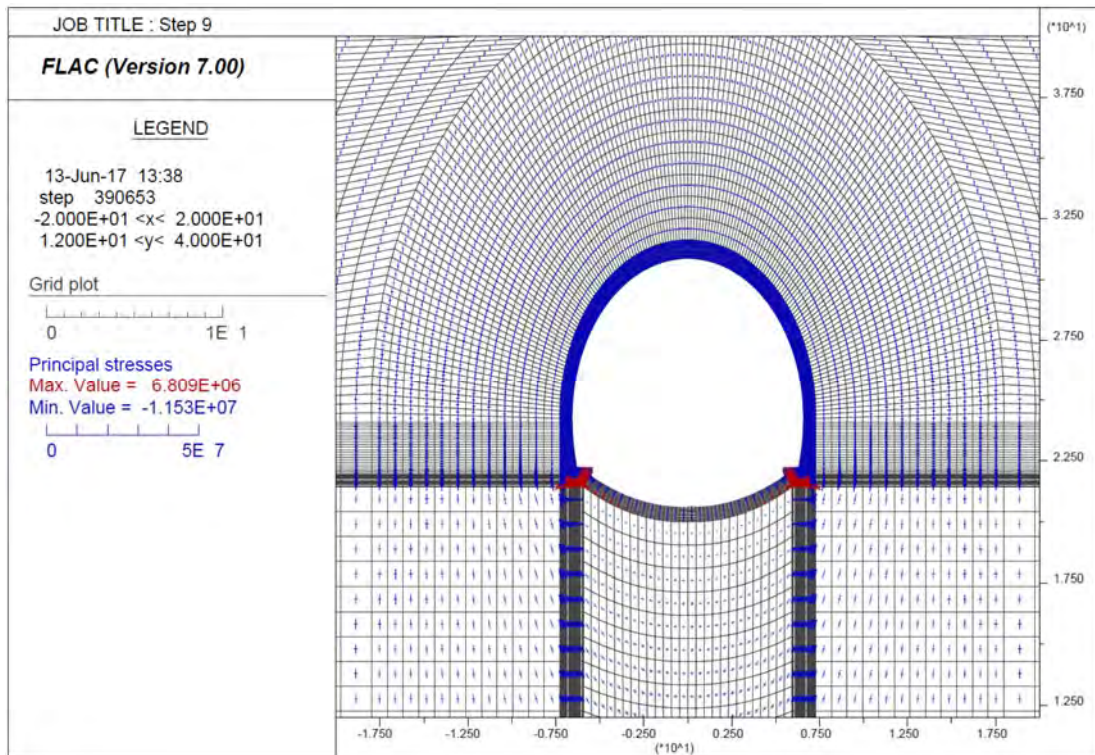


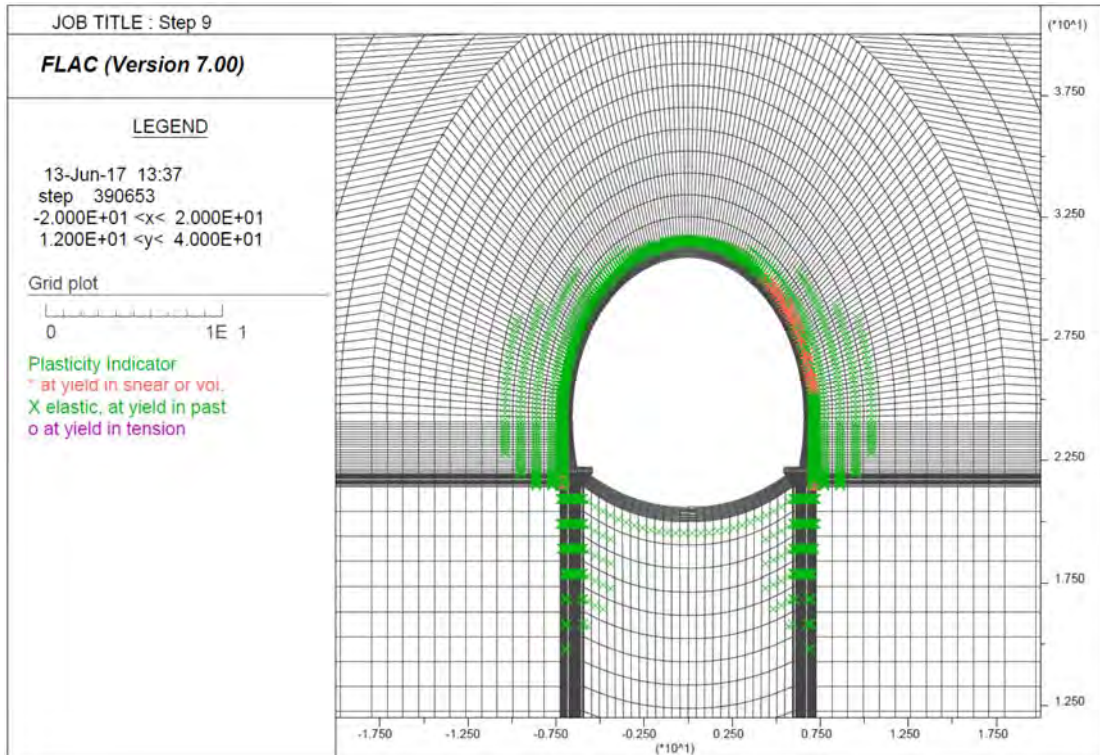
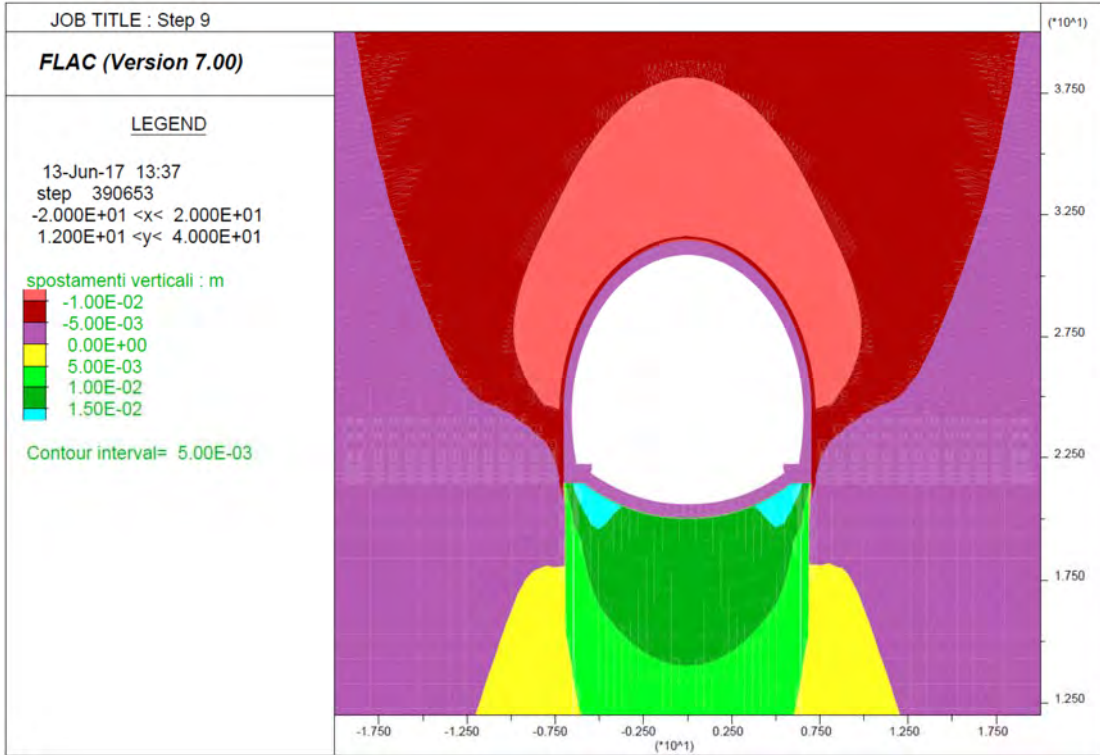
Step 8 - Getto Calotta





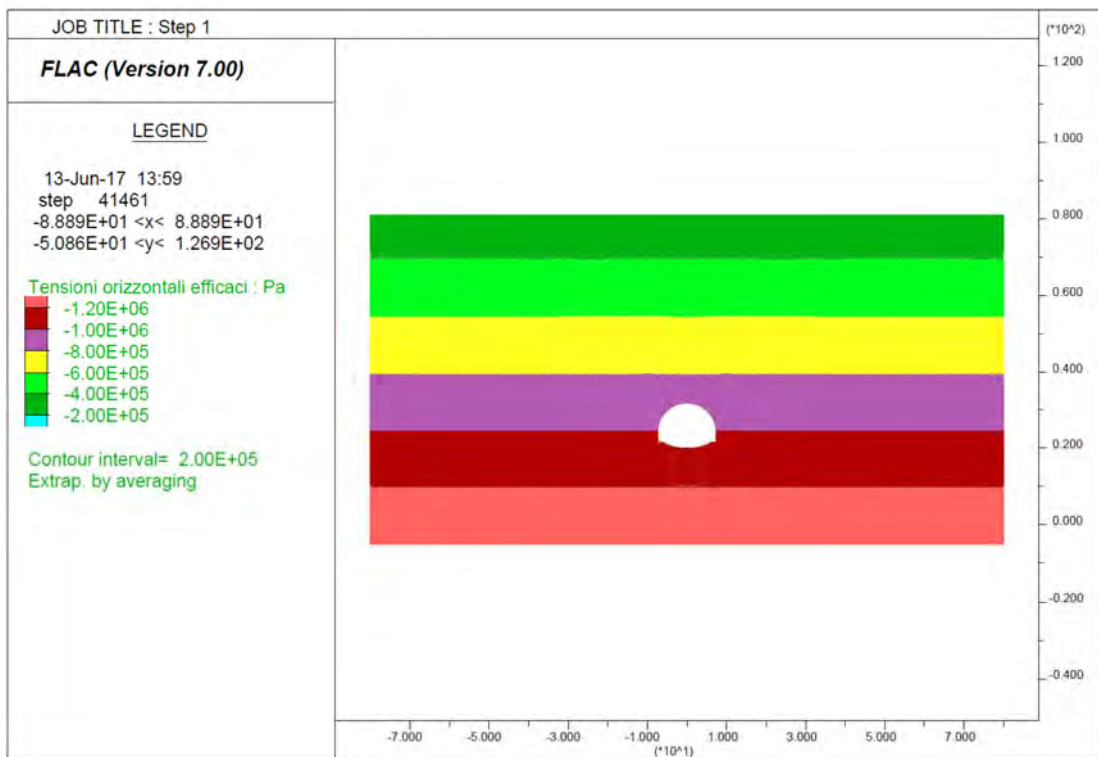
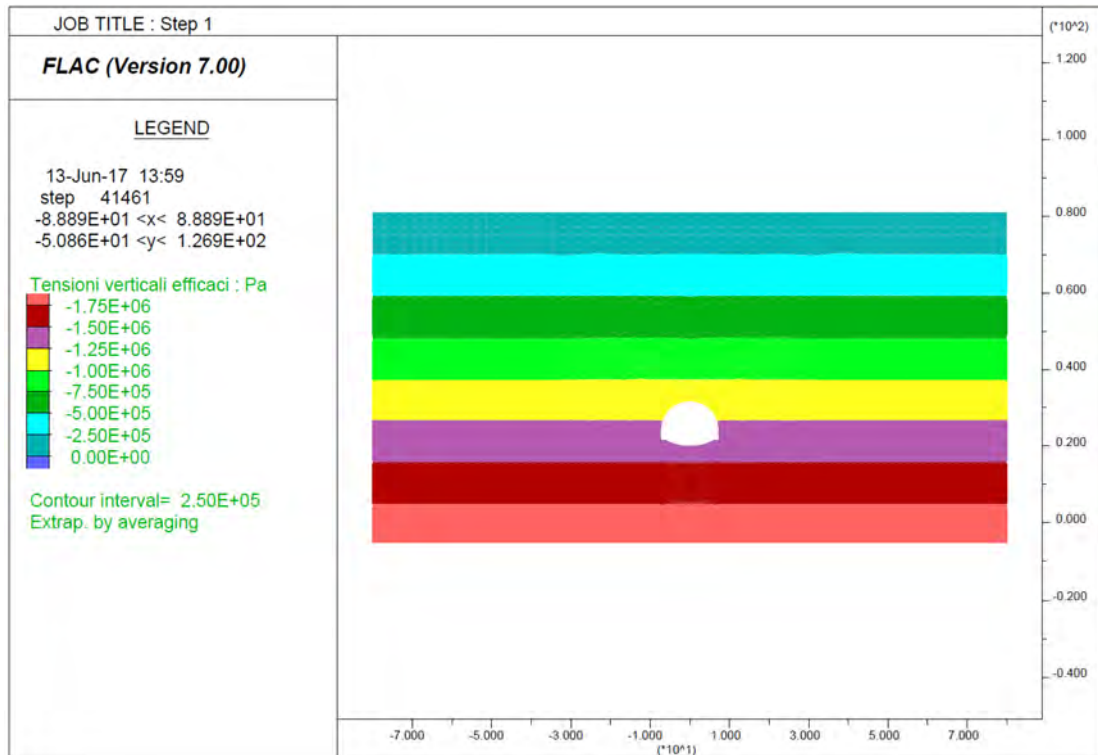
Step 9 - Decadimento dei parametri di resistenza del rivestimento provvisorio



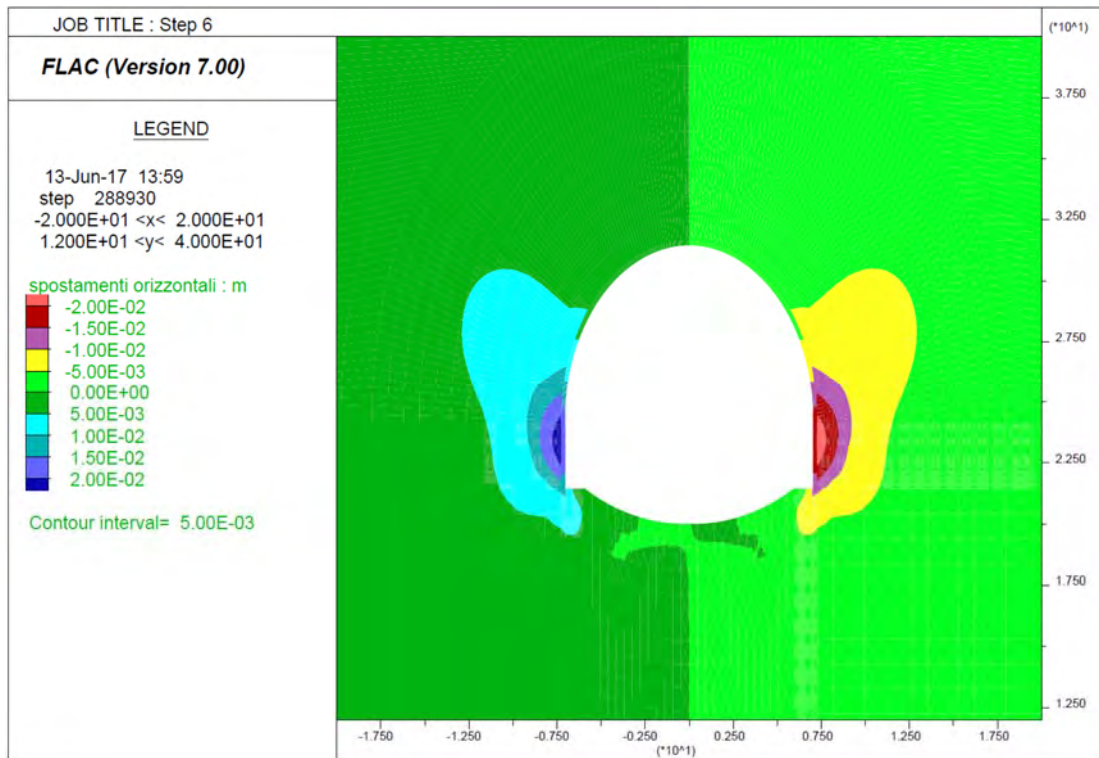
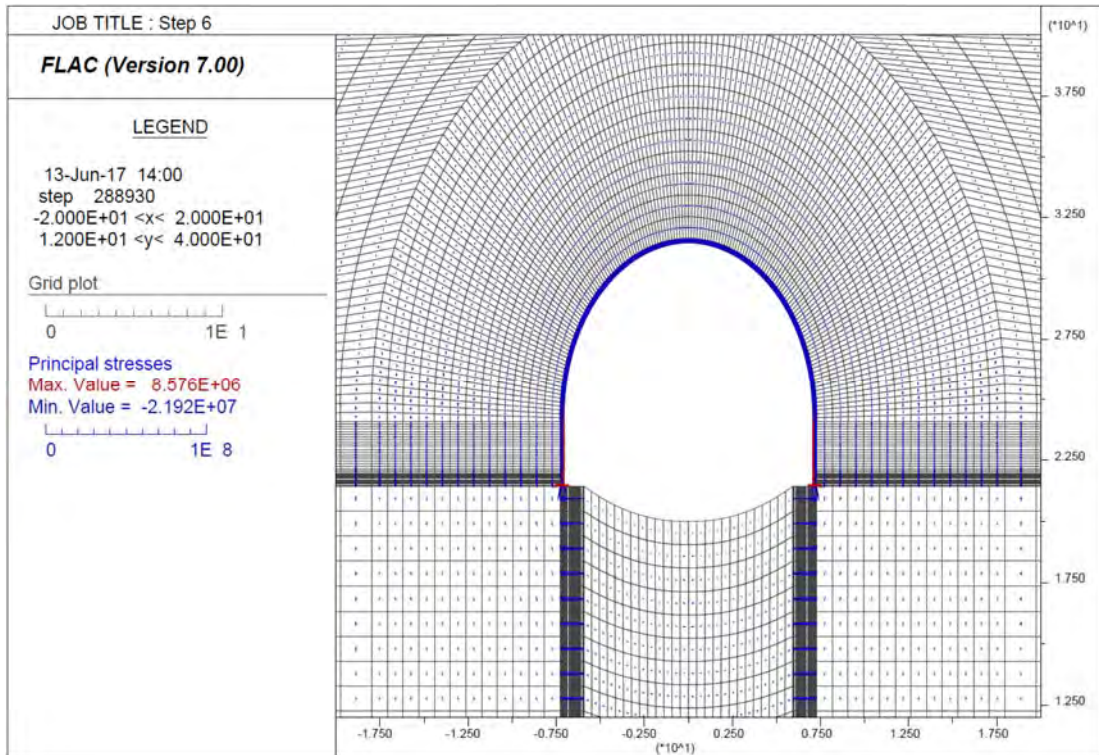


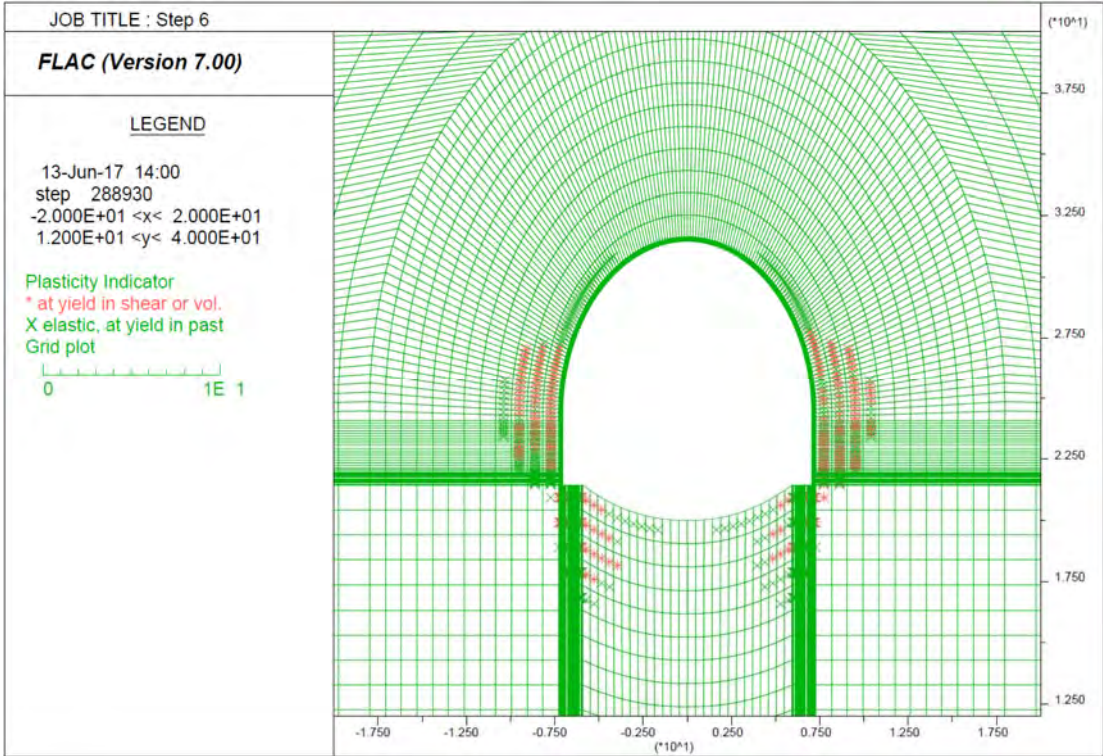
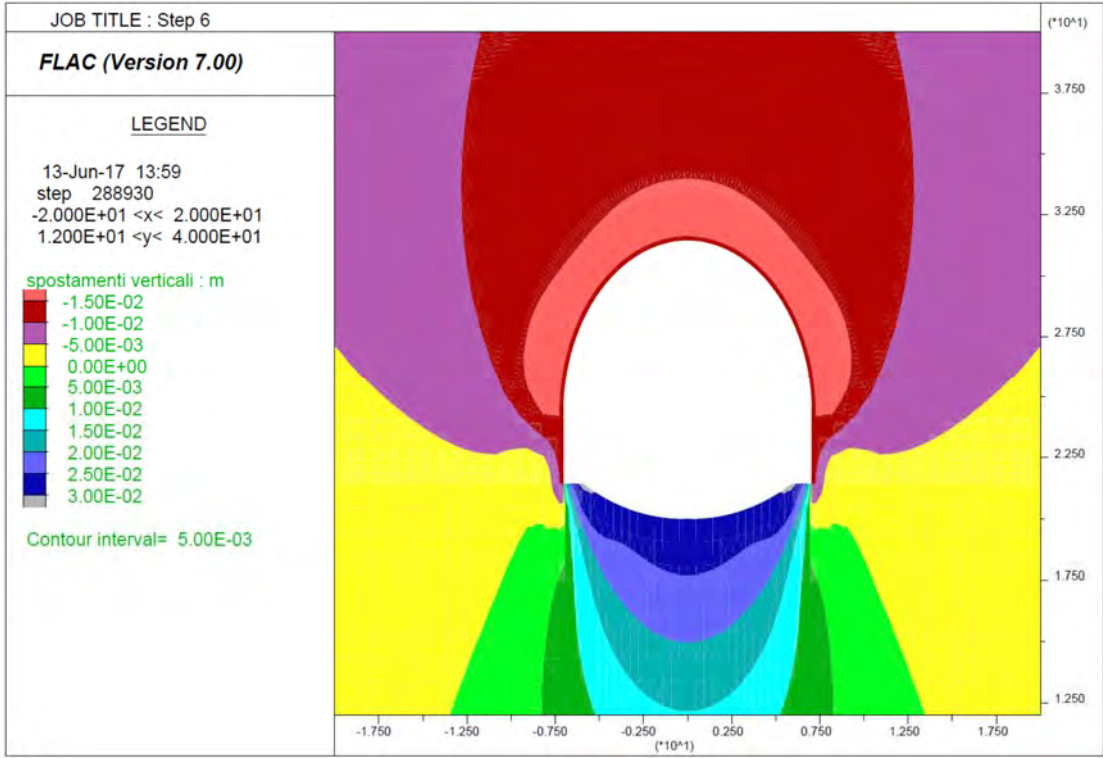
Output Flac – Sezione tipo B2 – Parametri res min – Copertura di calcolo = 50 m

Step 1 – Tensioni litostatiche

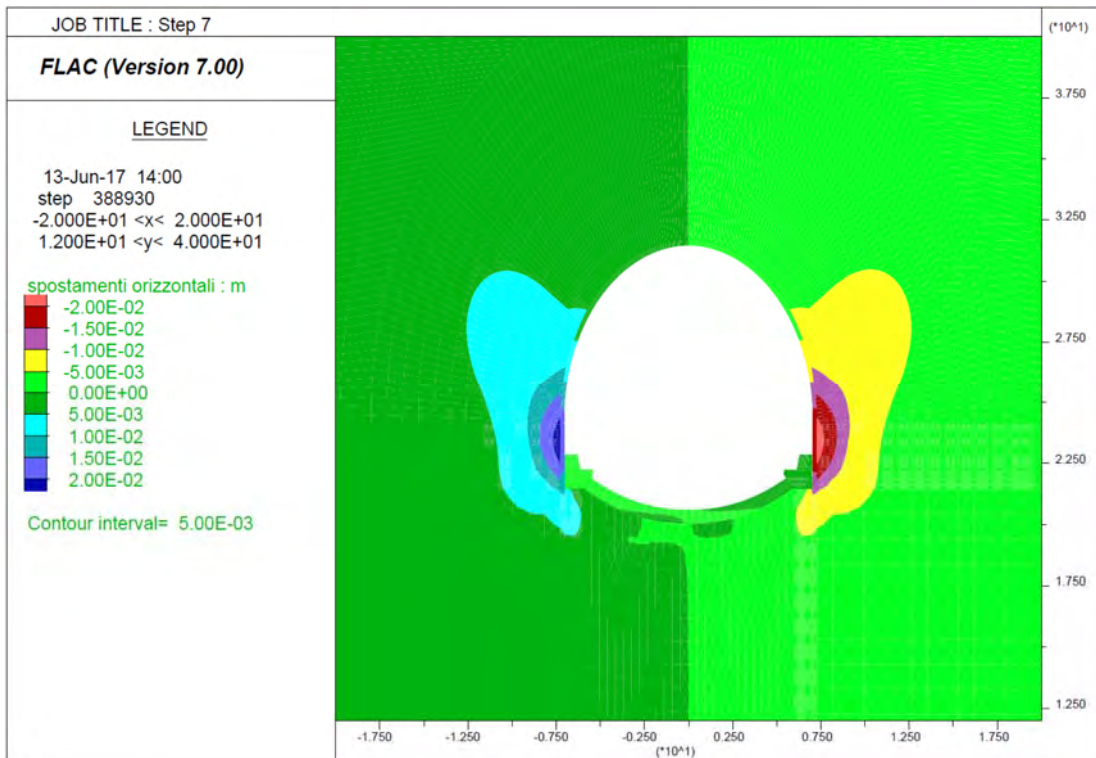
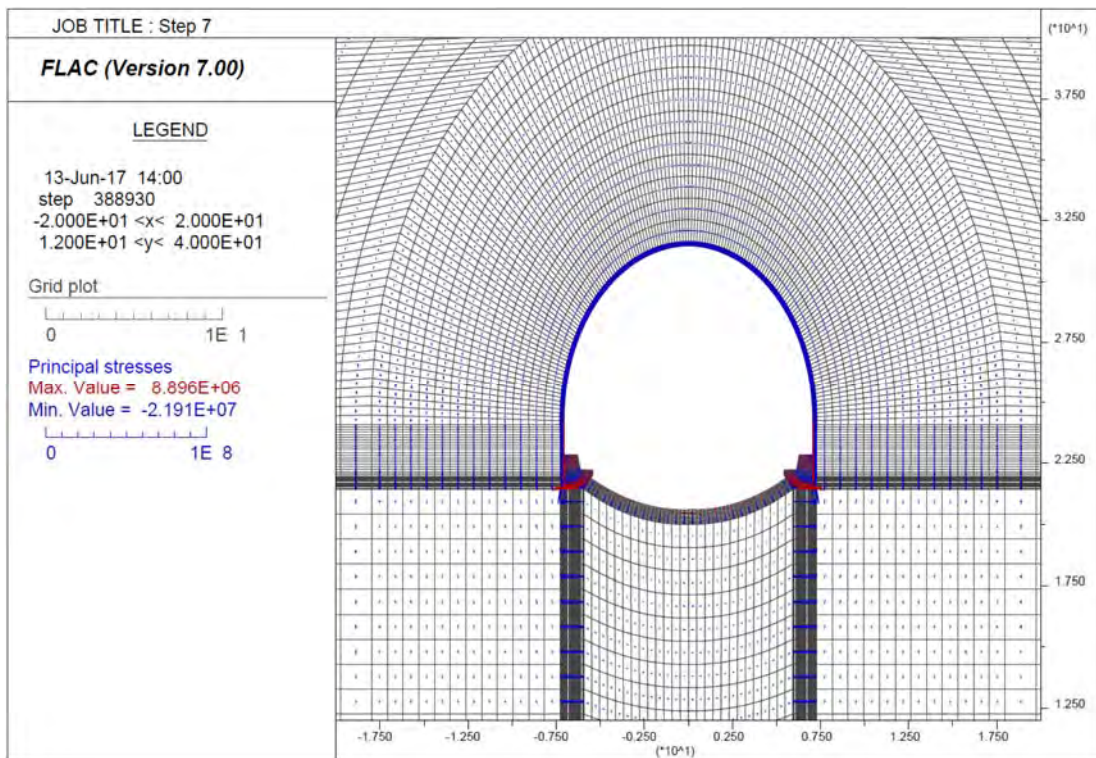


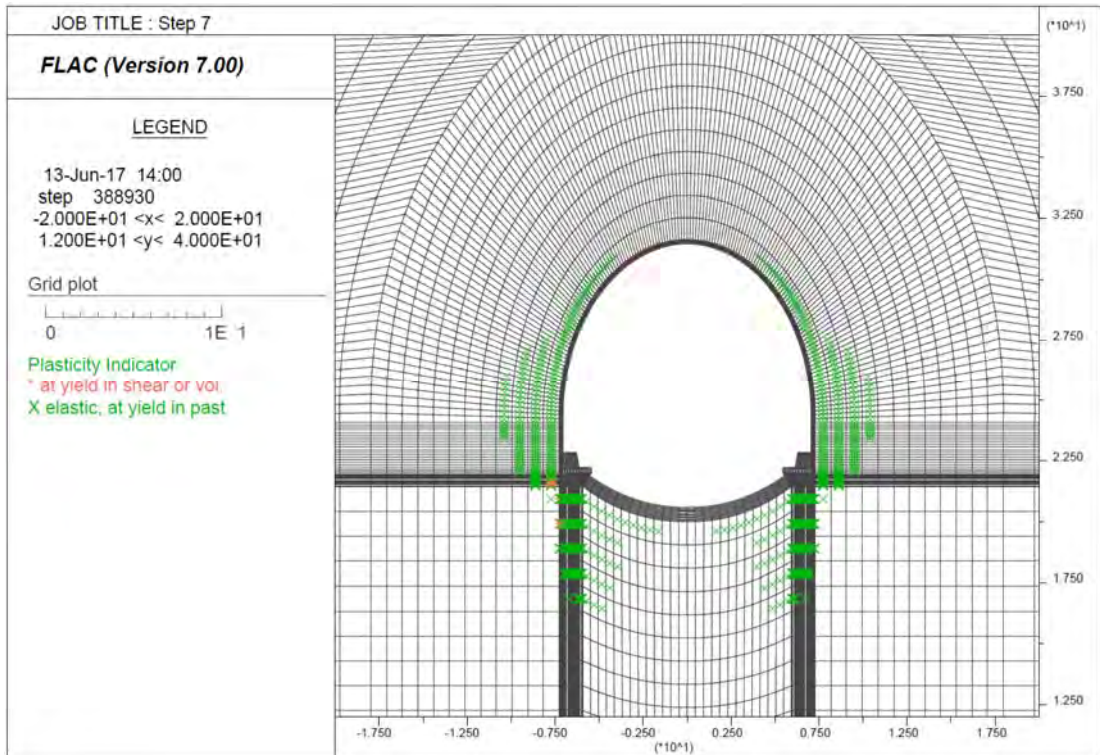
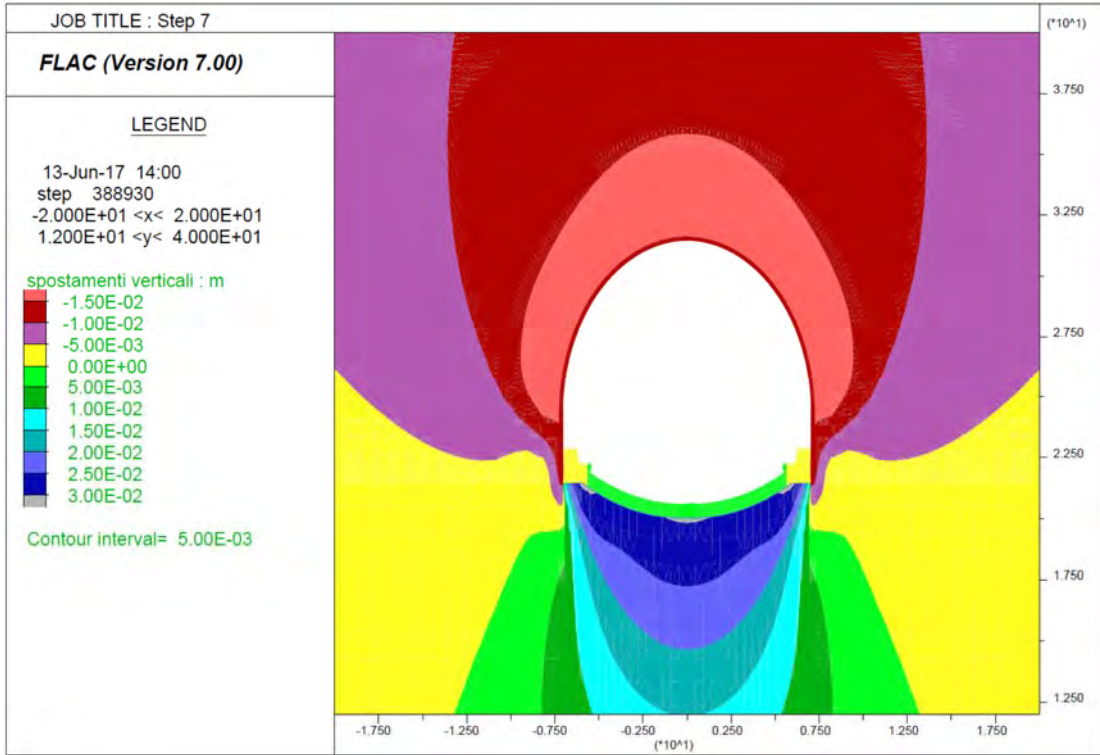
Step 6 – Avanzamento fino a 2D



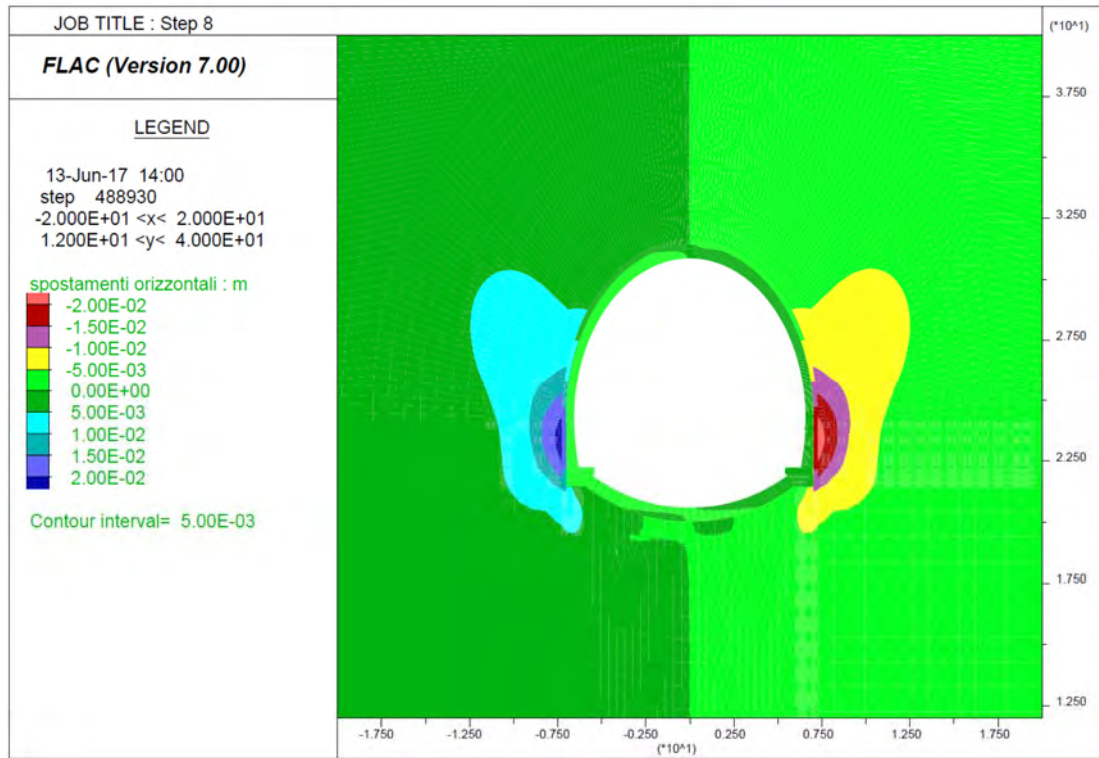
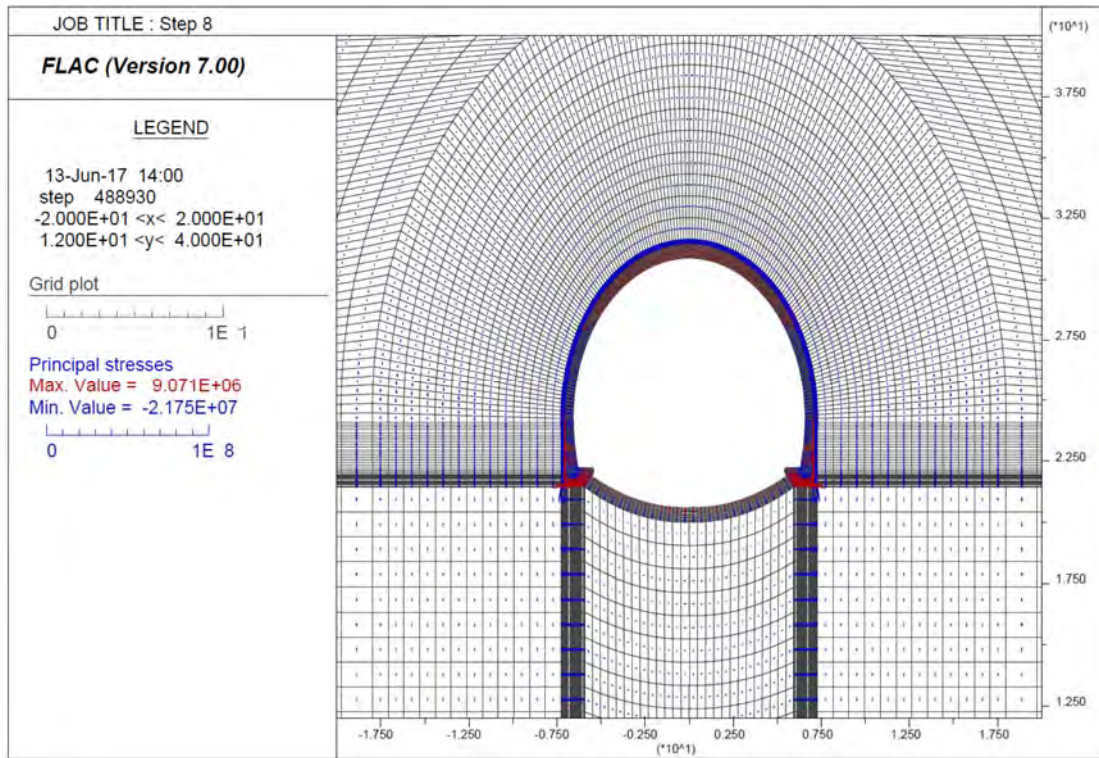


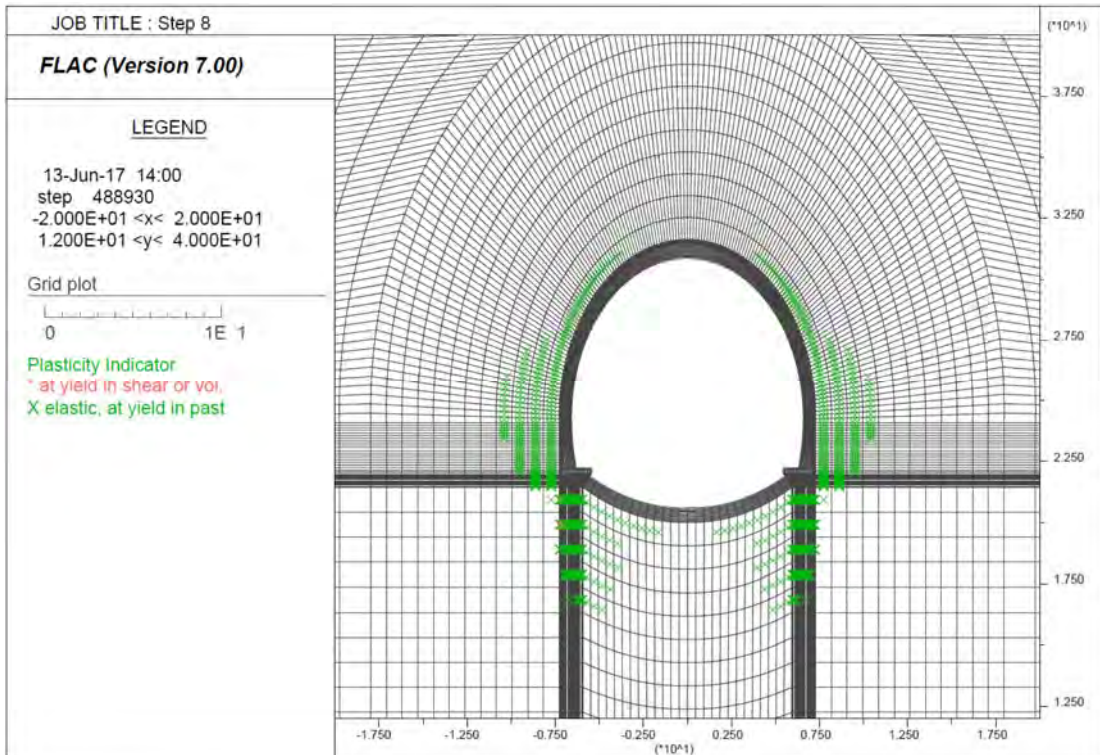
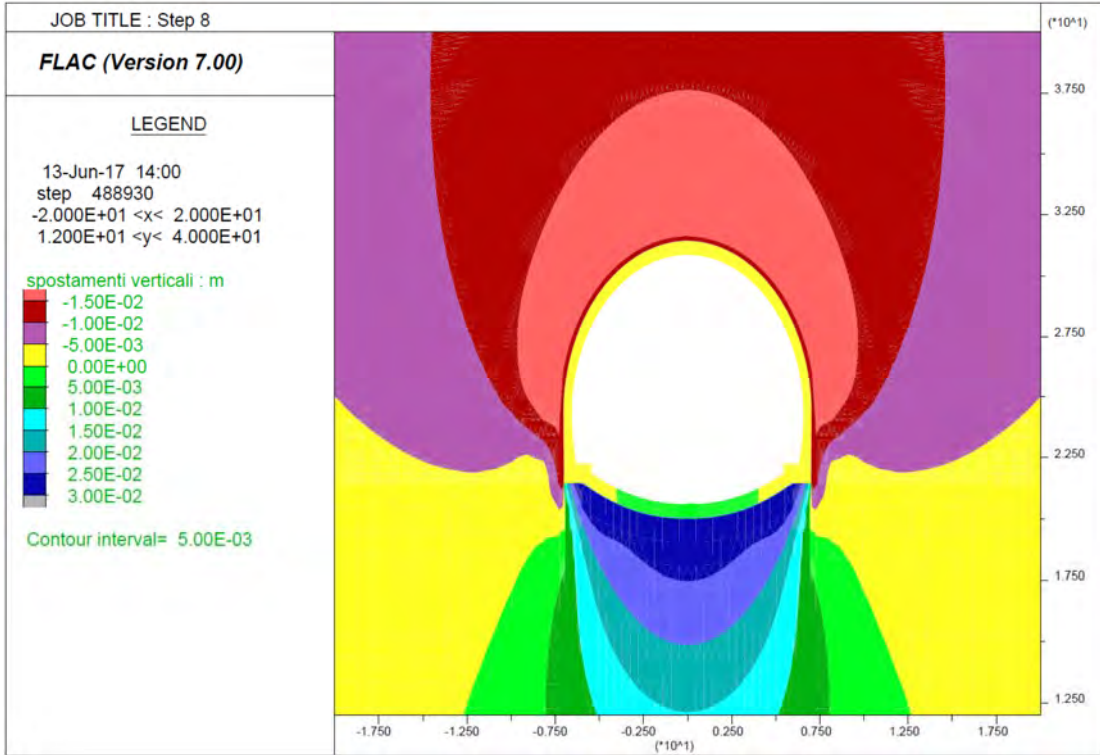
Step 7 - Getto arco rovescio e muretta a 2D e avanzamento fino a deformazioni esaurite



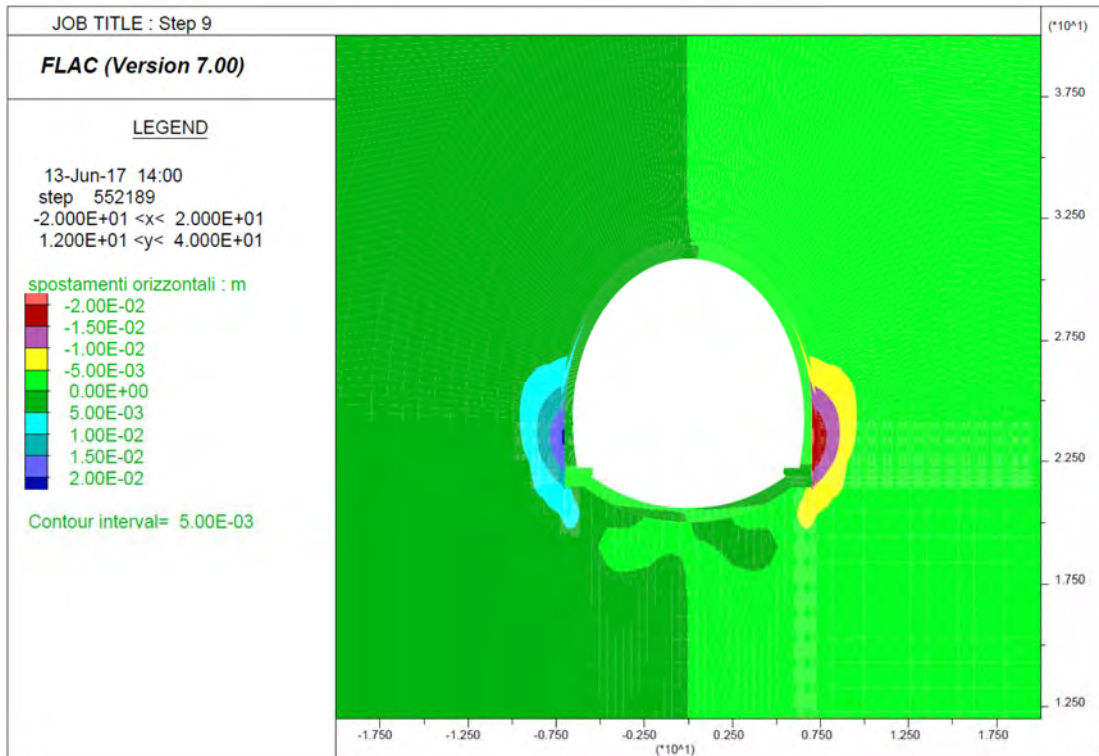
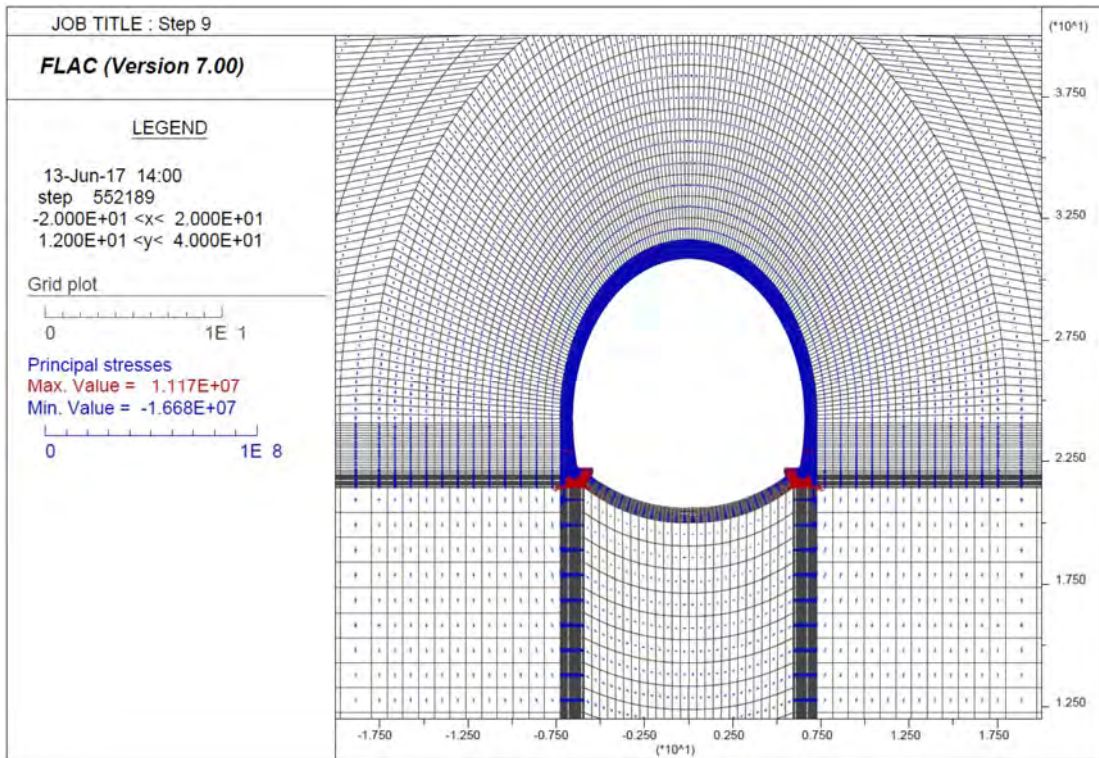


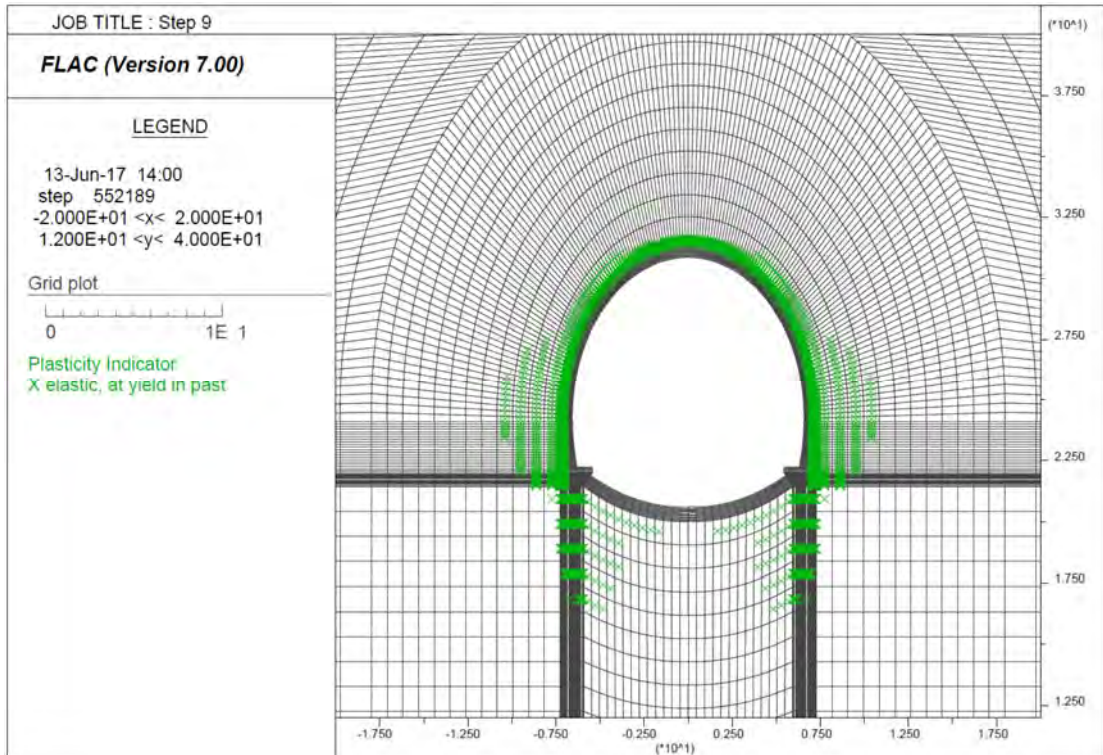
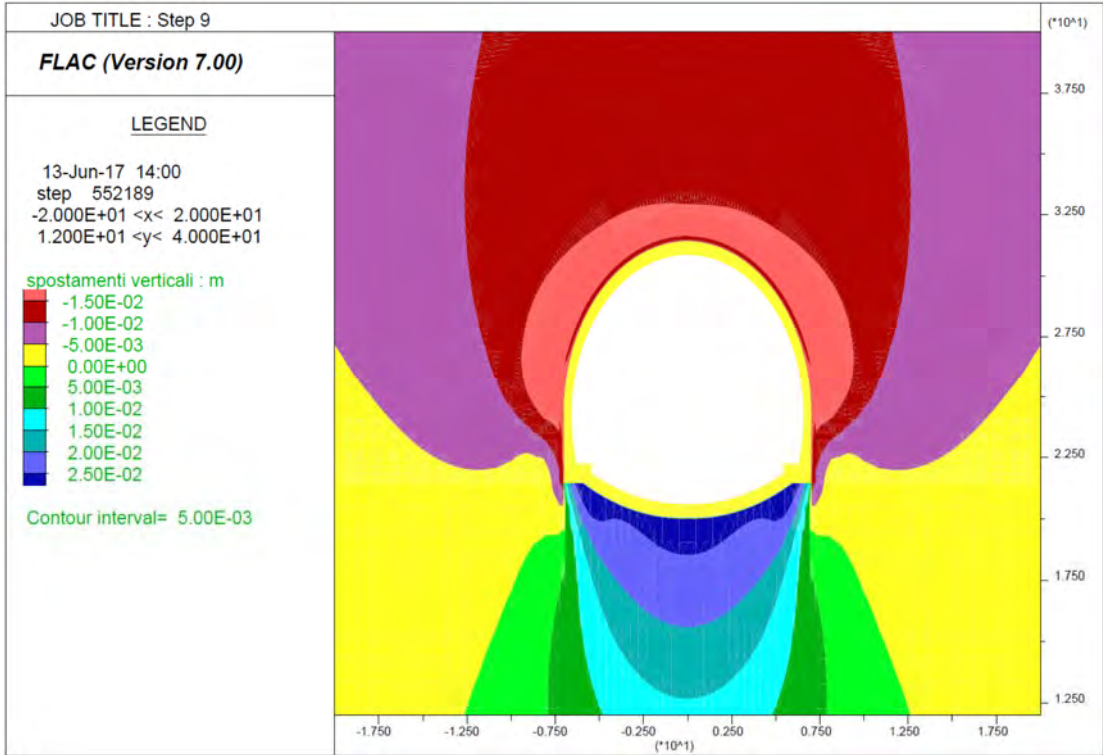
Step 8 - Getto Calotta





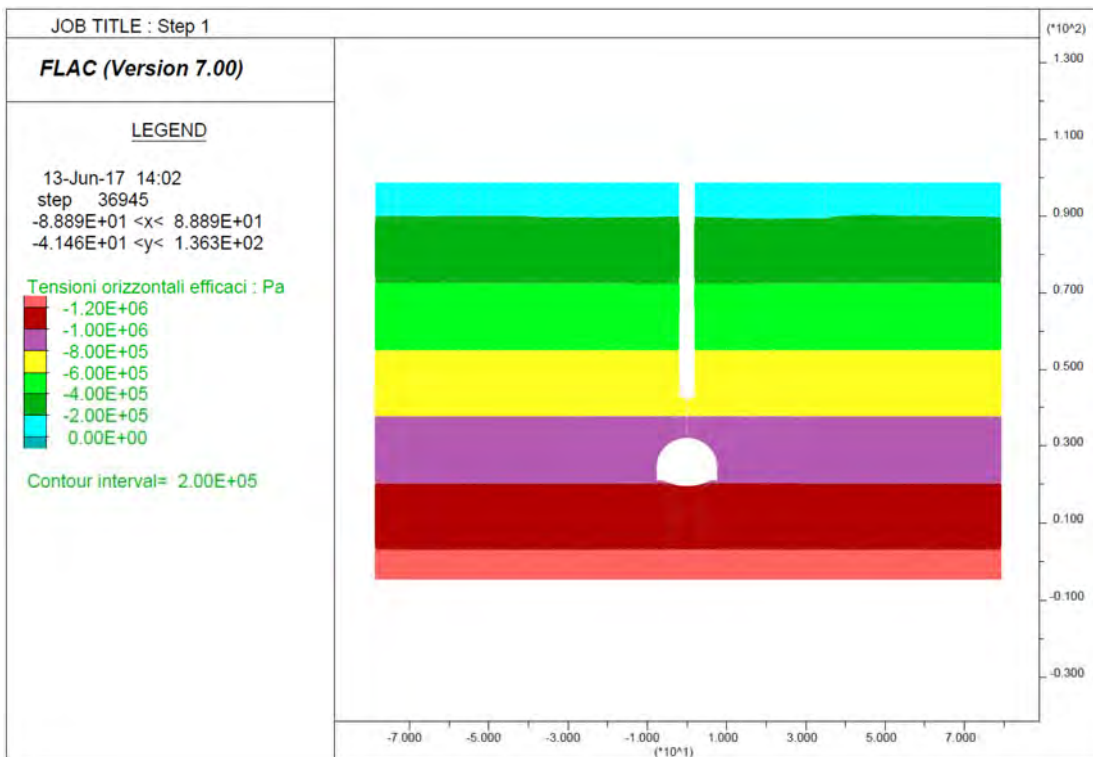
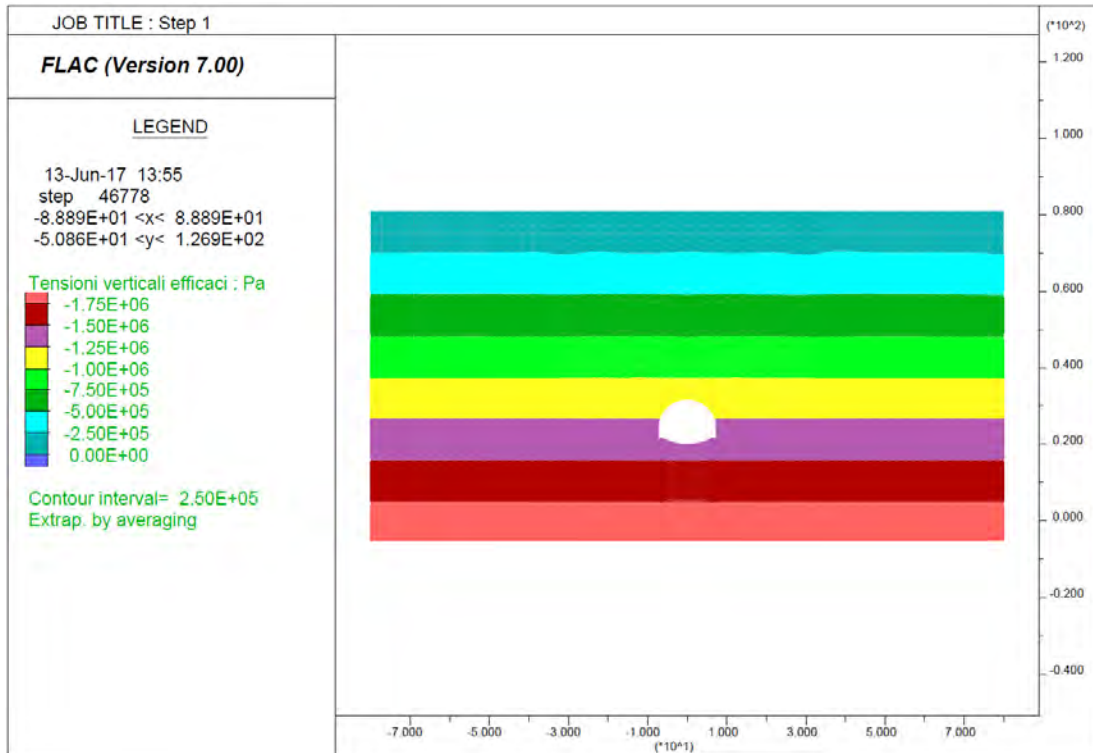
Step 9 - Decadimento dei parametri di resistenza del rivestimento provvisorio



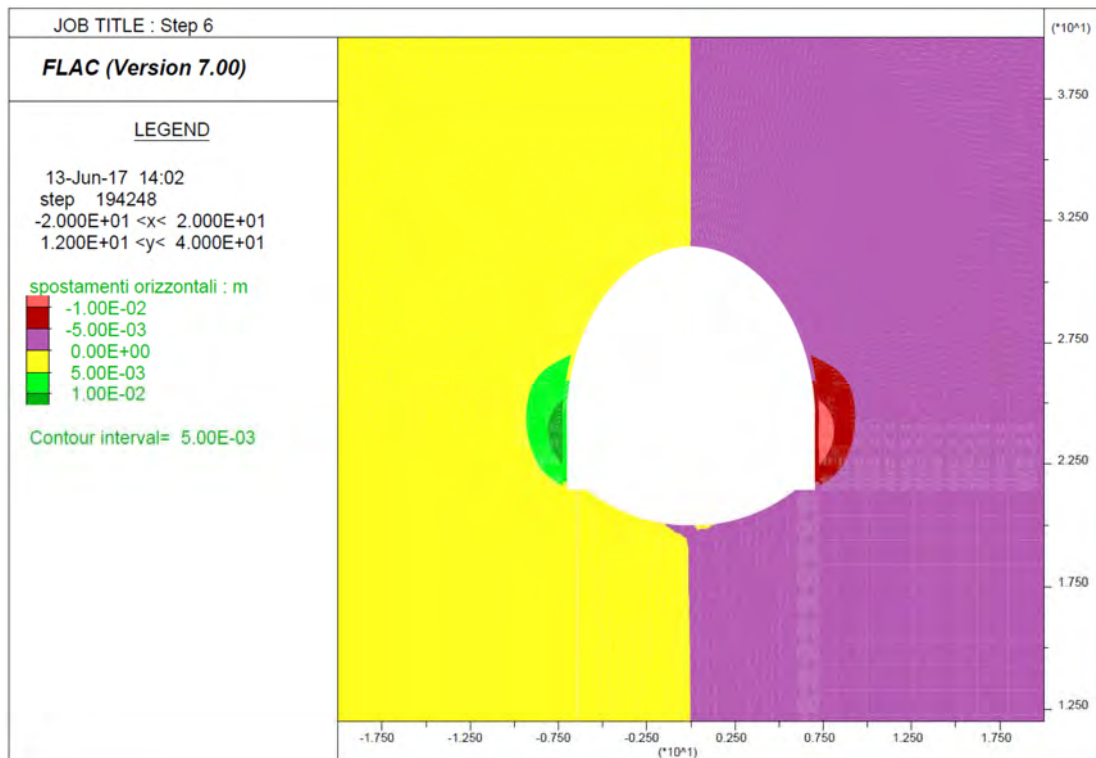
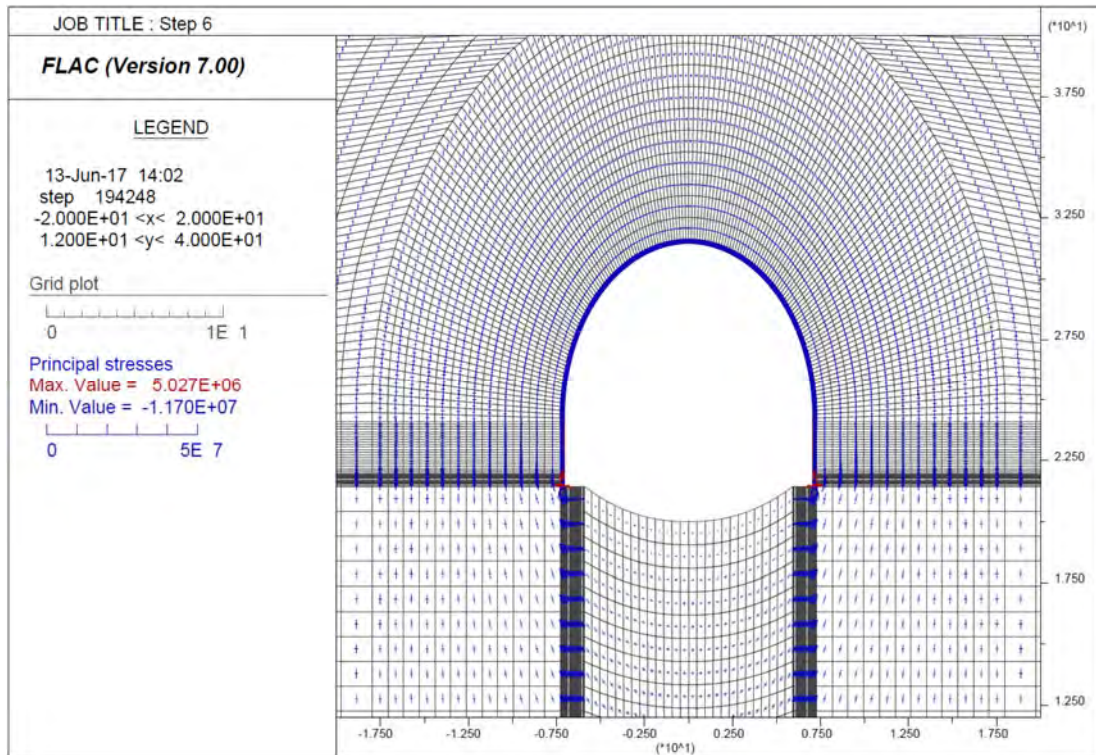


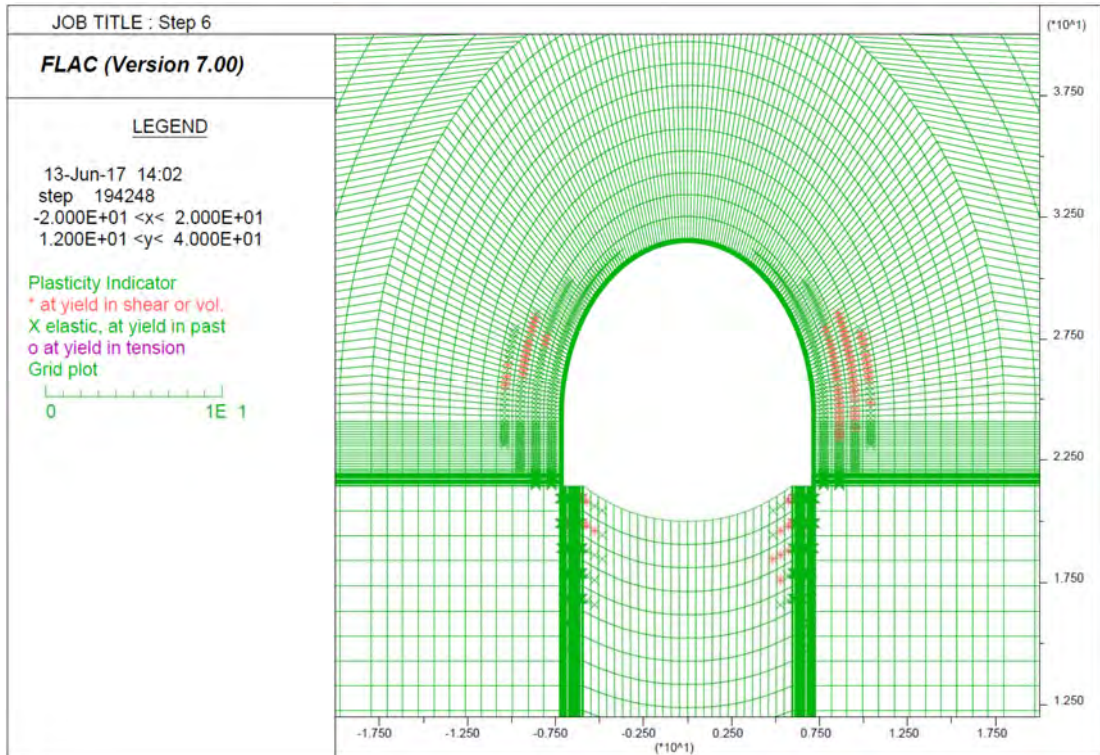
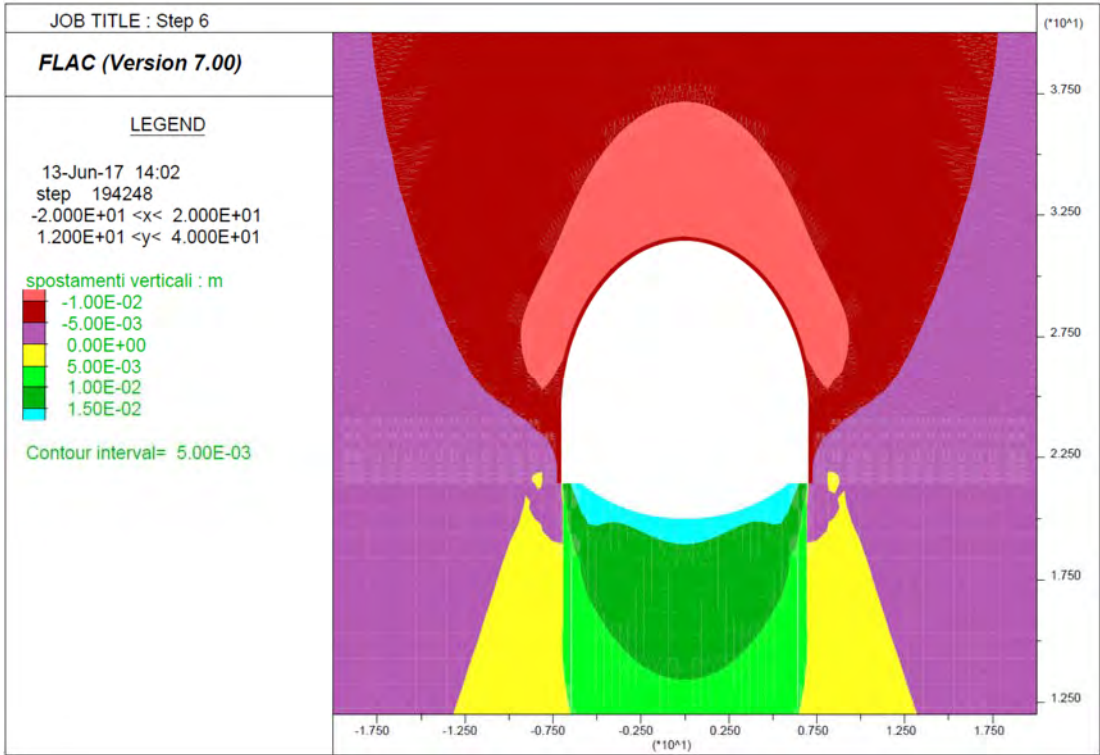
Output Flac – Sezione tipo B2 – Parametri res max – Copertura di calcolo = 50 m

Step 1 – Tensioni litostatiche

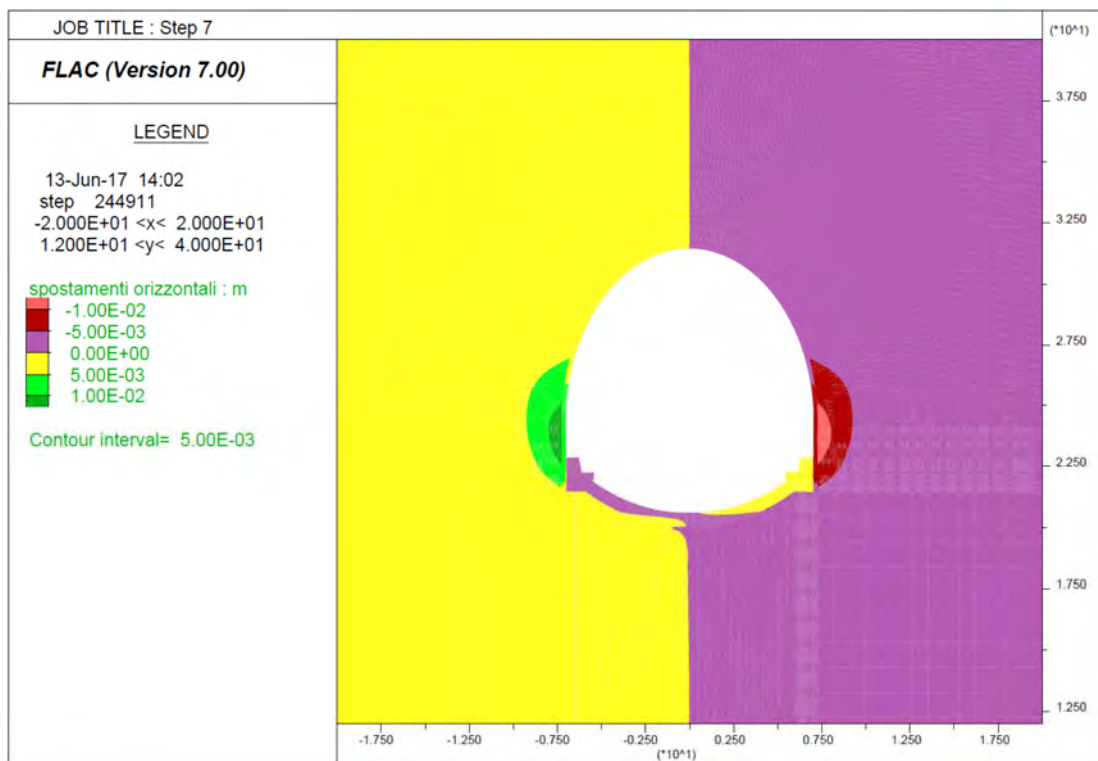
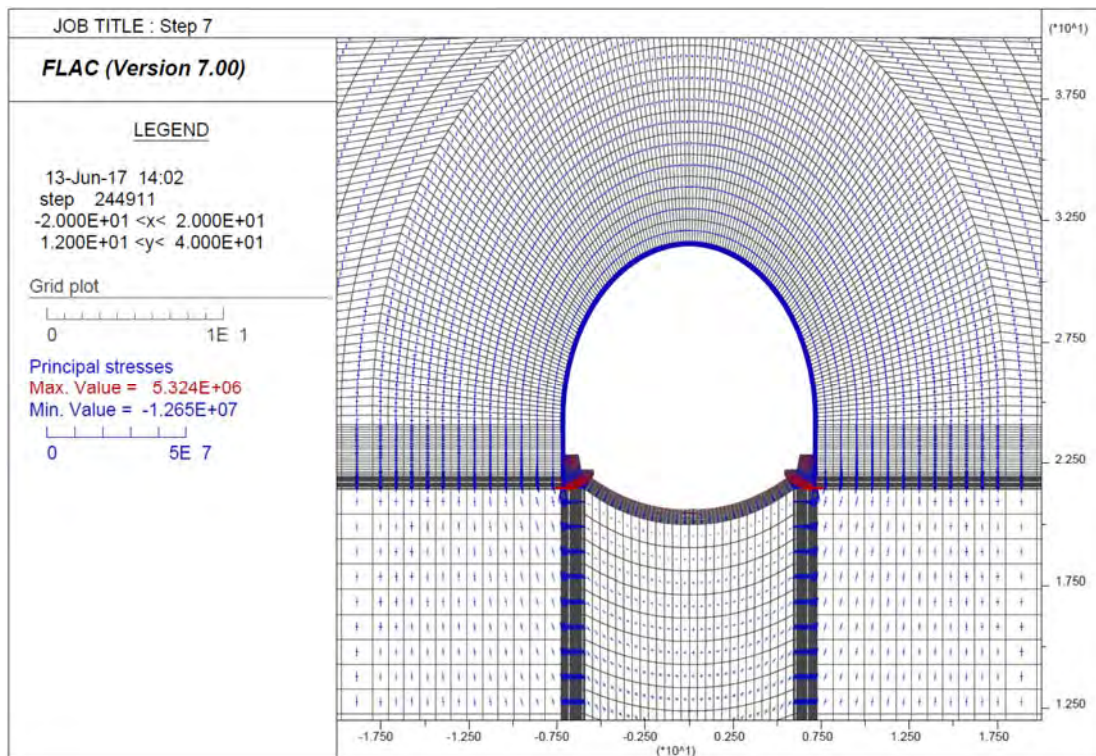


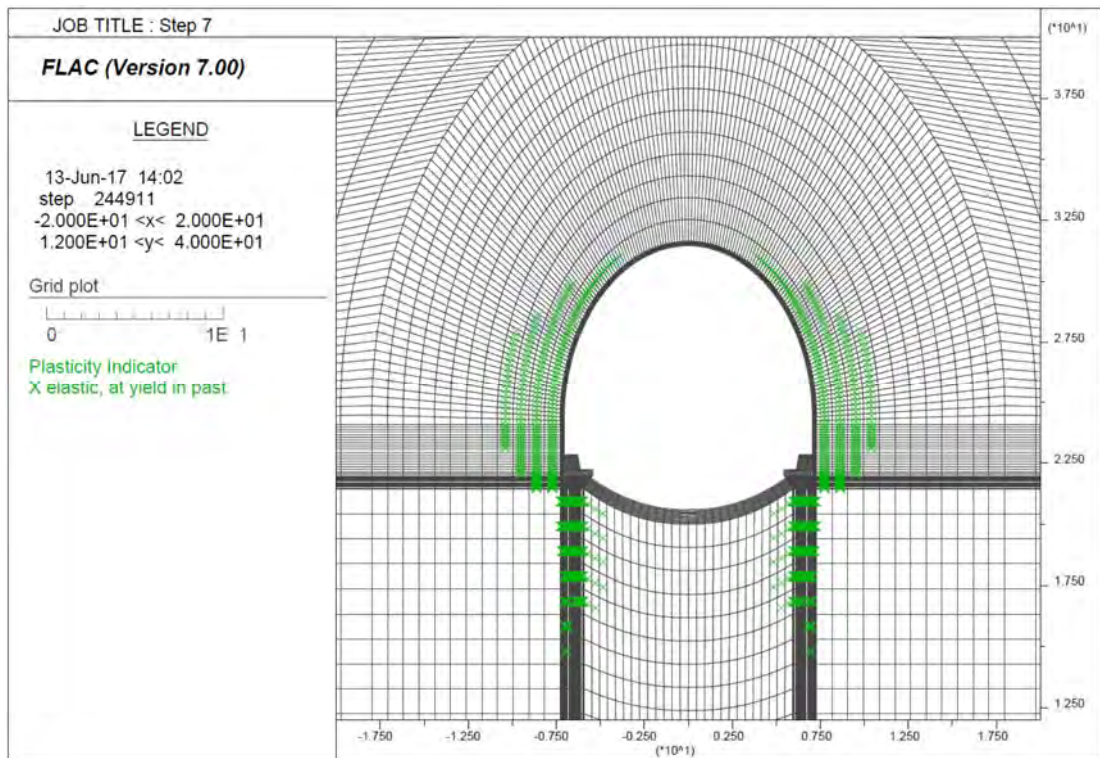
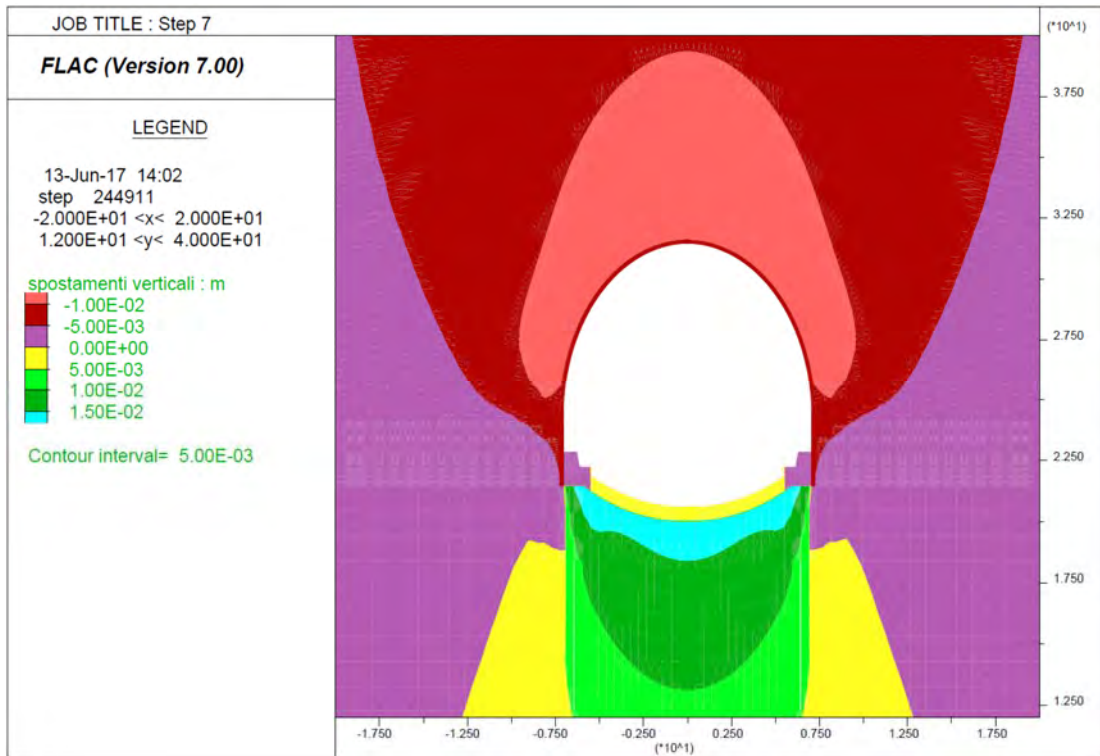
Step 6 – Avanzamento fino a 2D



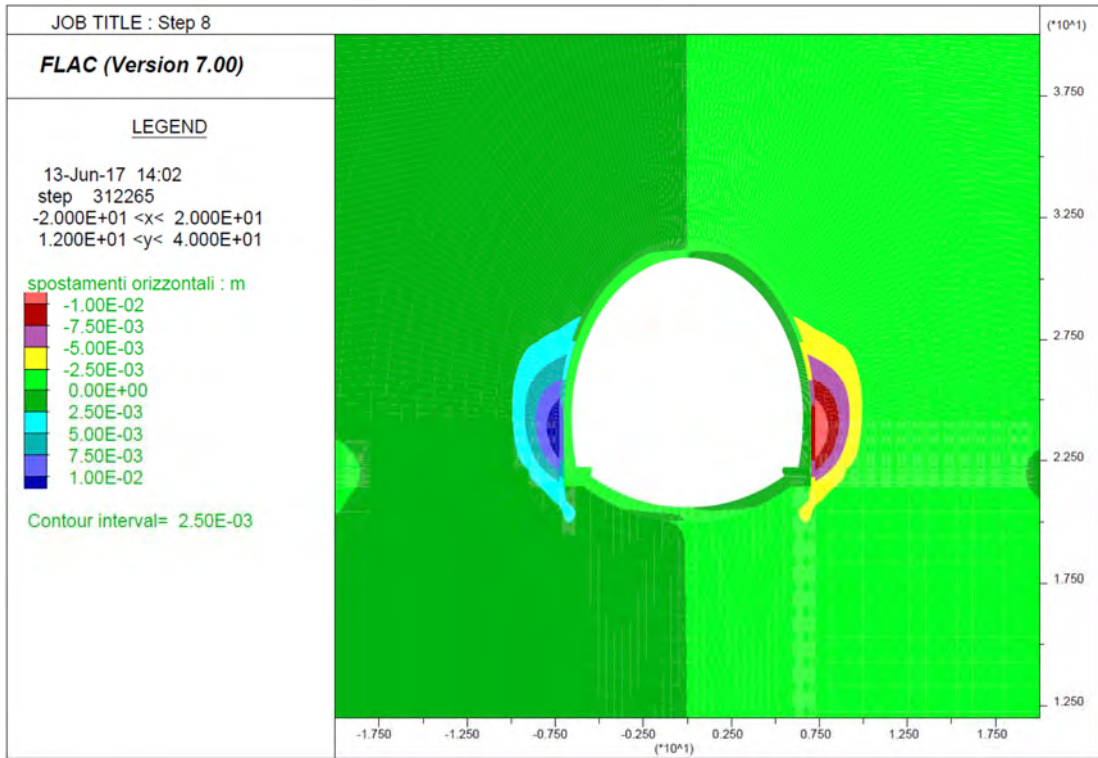
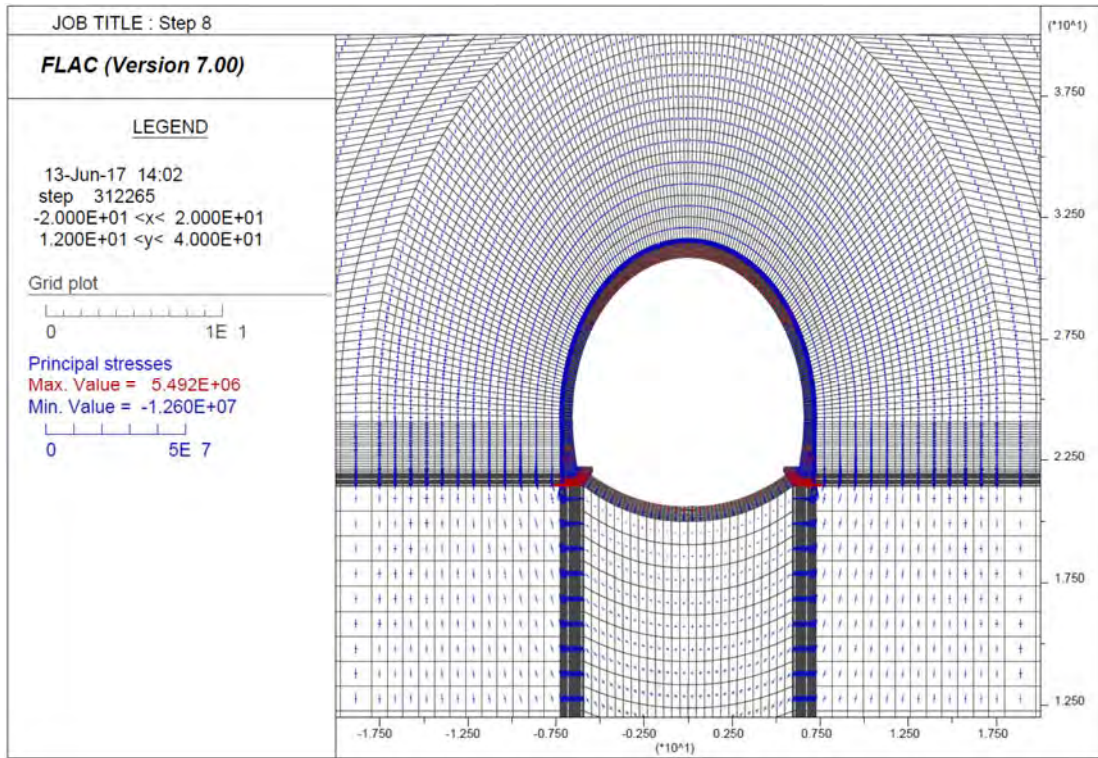


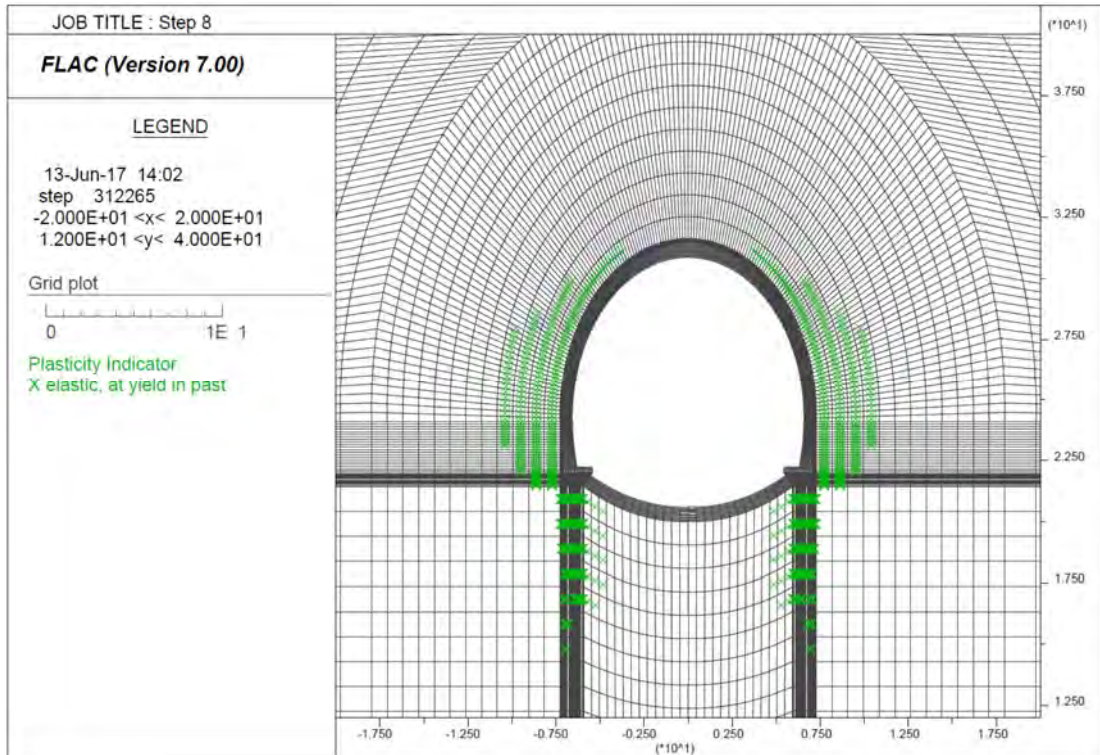
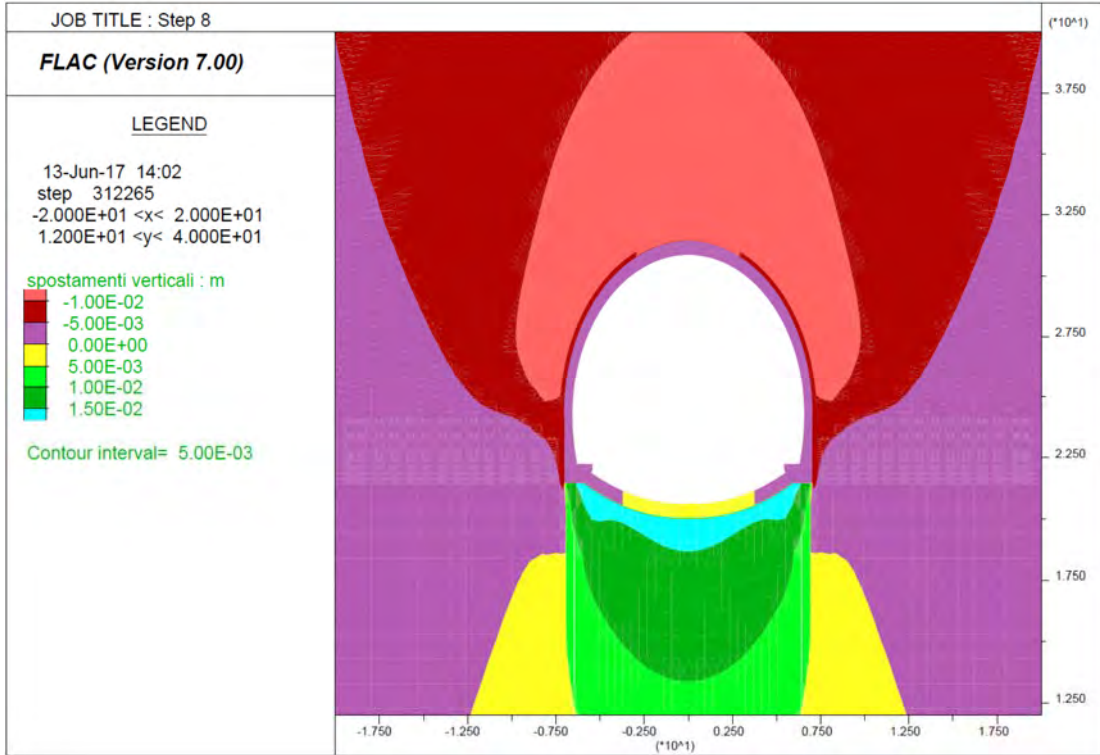
Step 7 - Getto arco rovescio e muretta a 2D e avanzamento fino a deformazioni esaurite



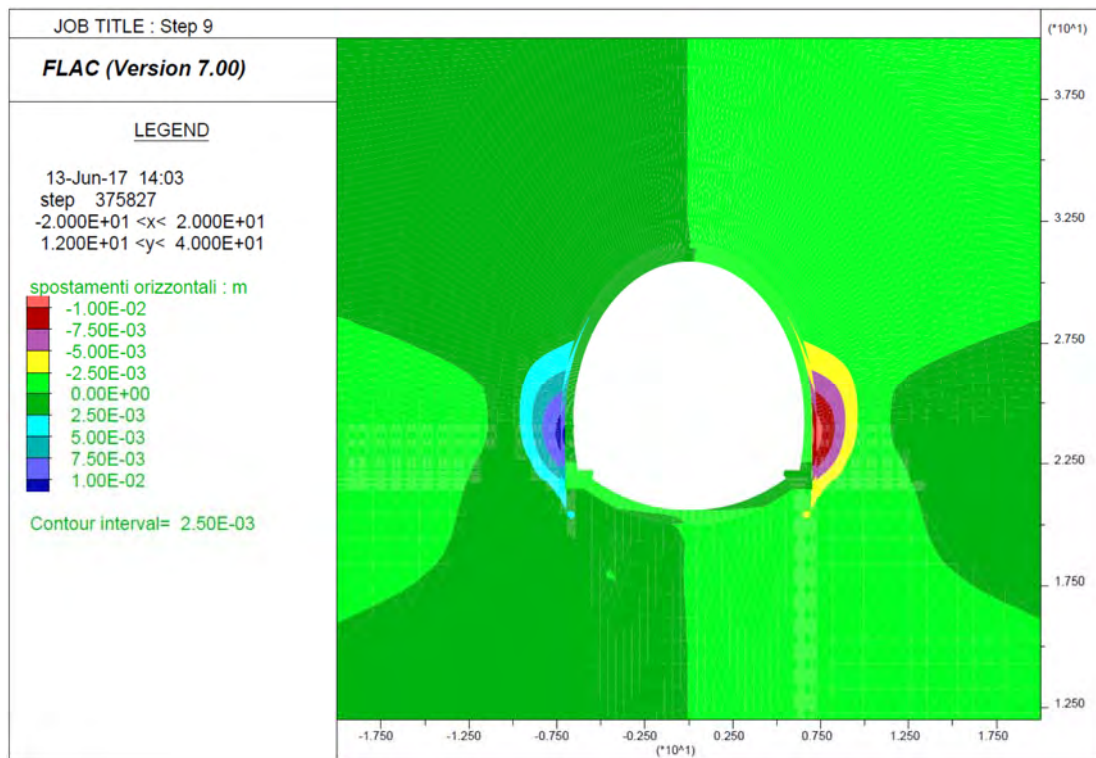
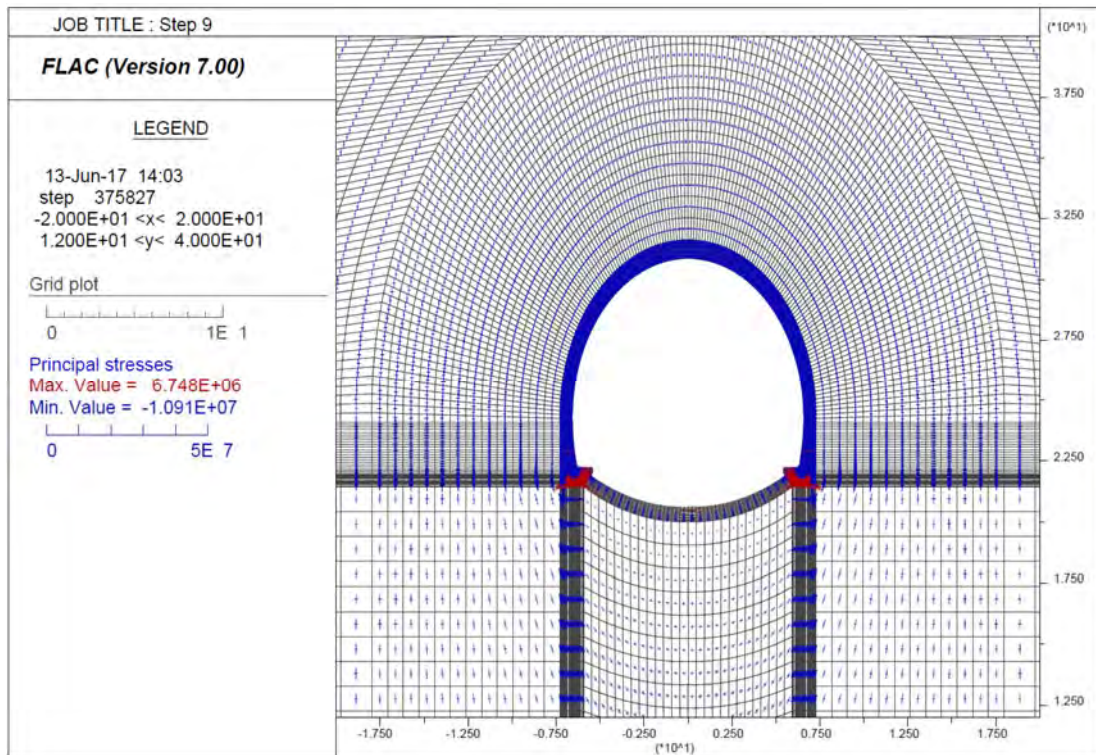


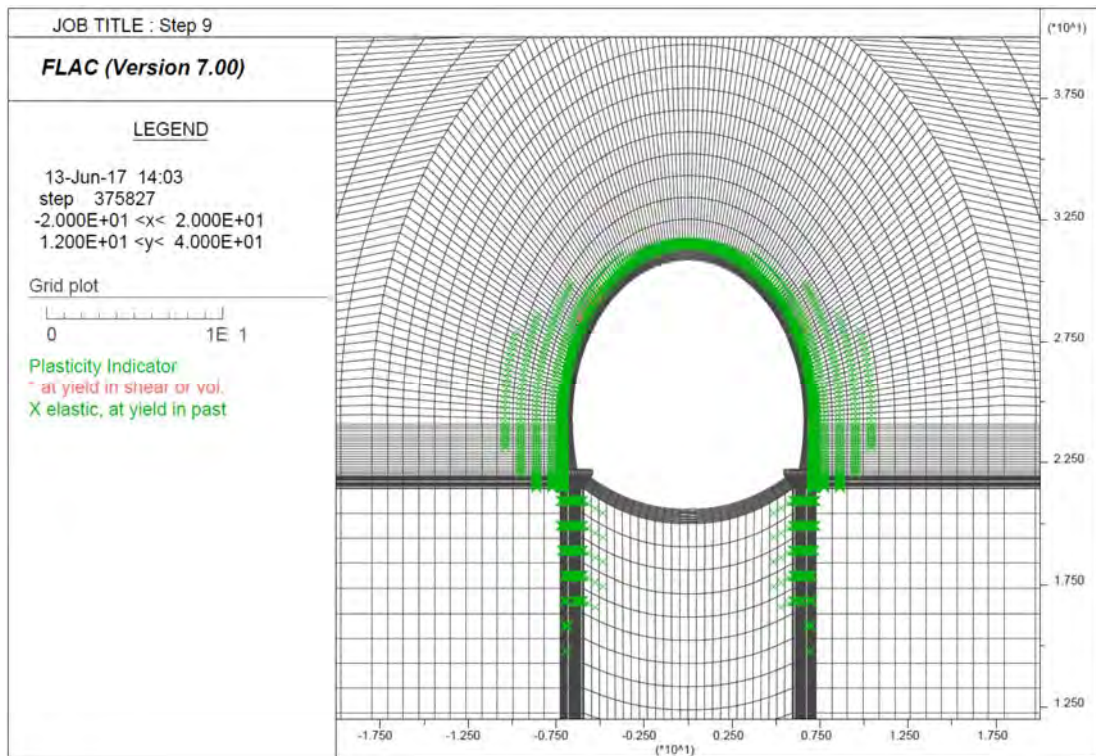
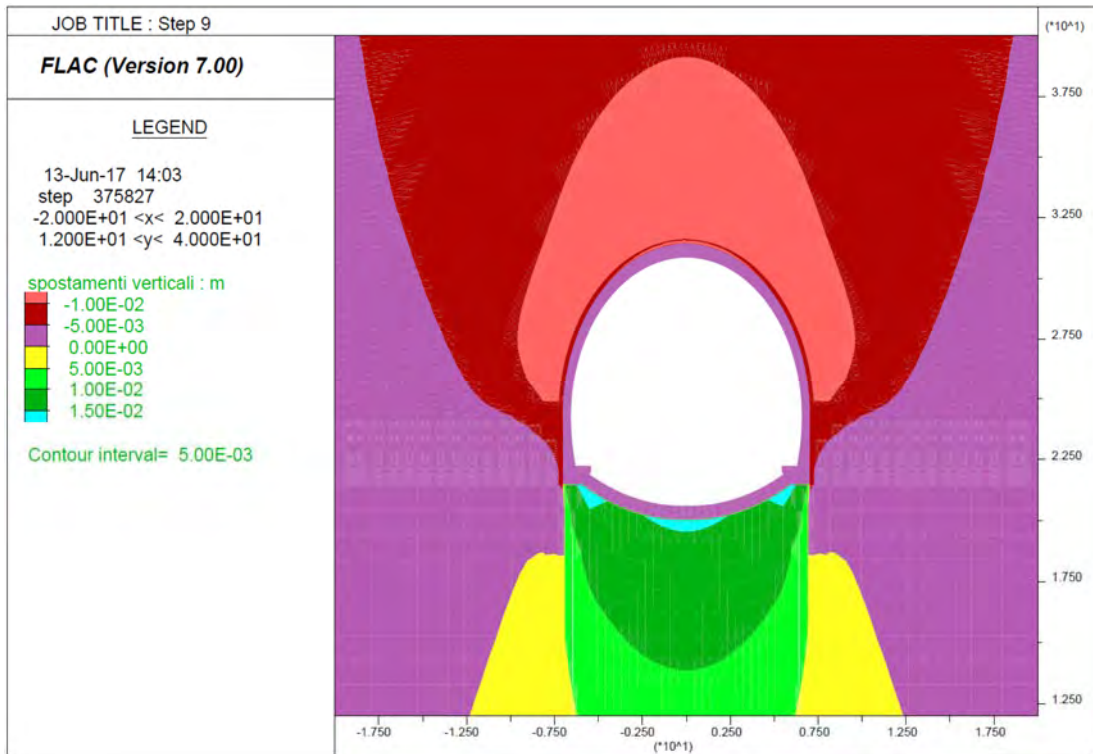
Step 8 - Getto Calotta





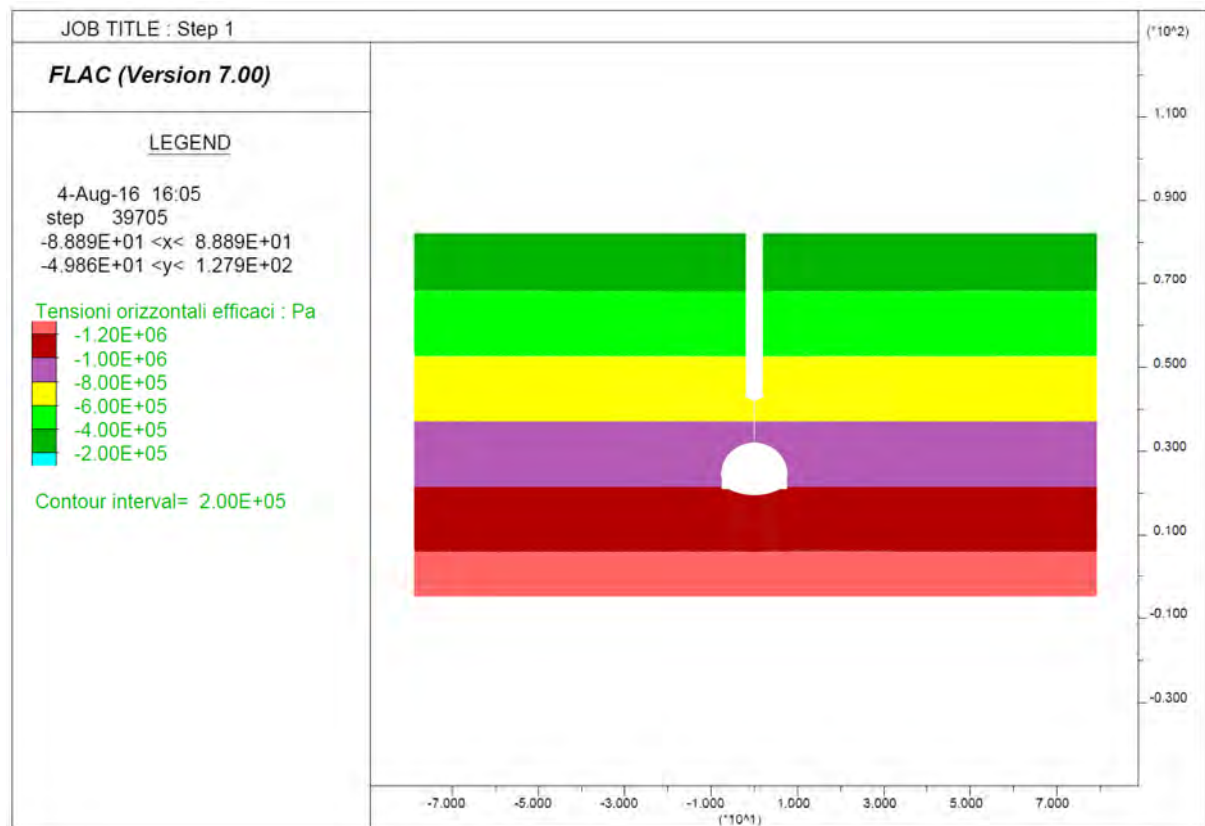
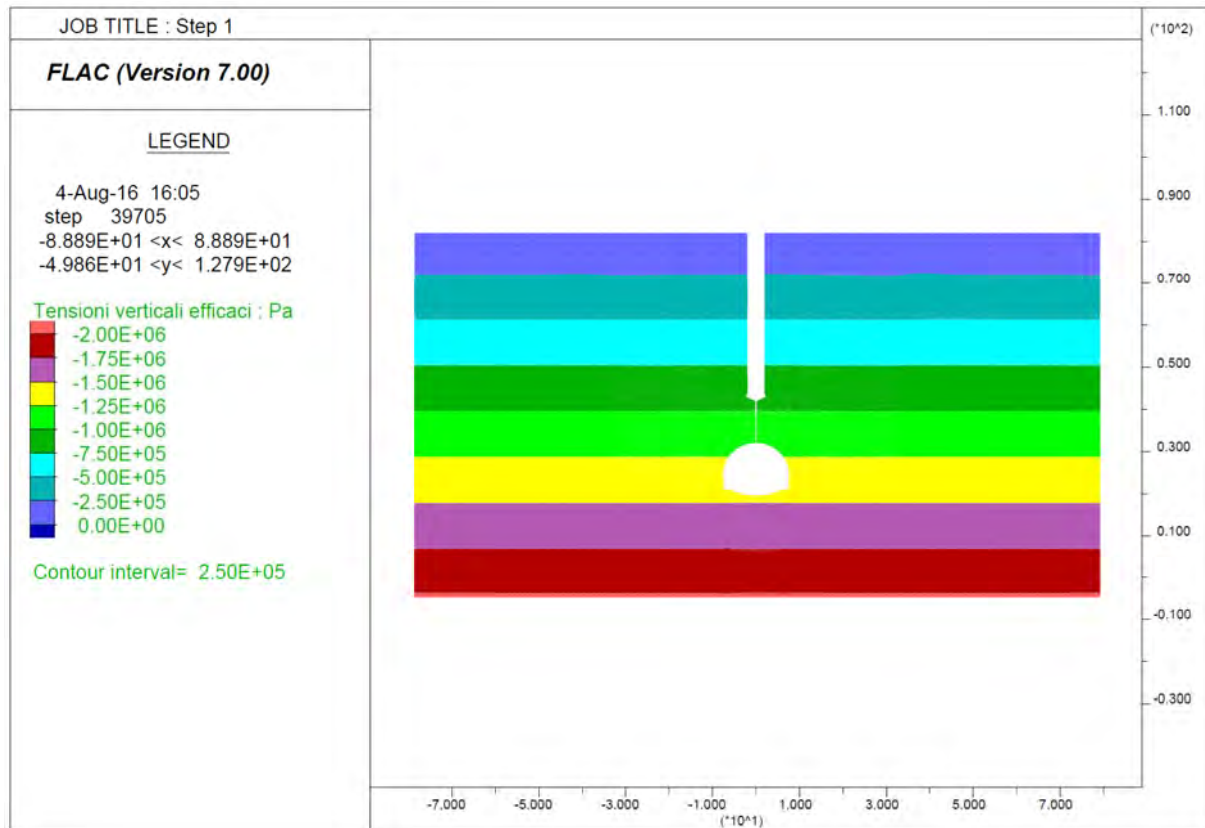
Step 9 - Decadimento dei parametri di resistenza del rivestimento provvisorio



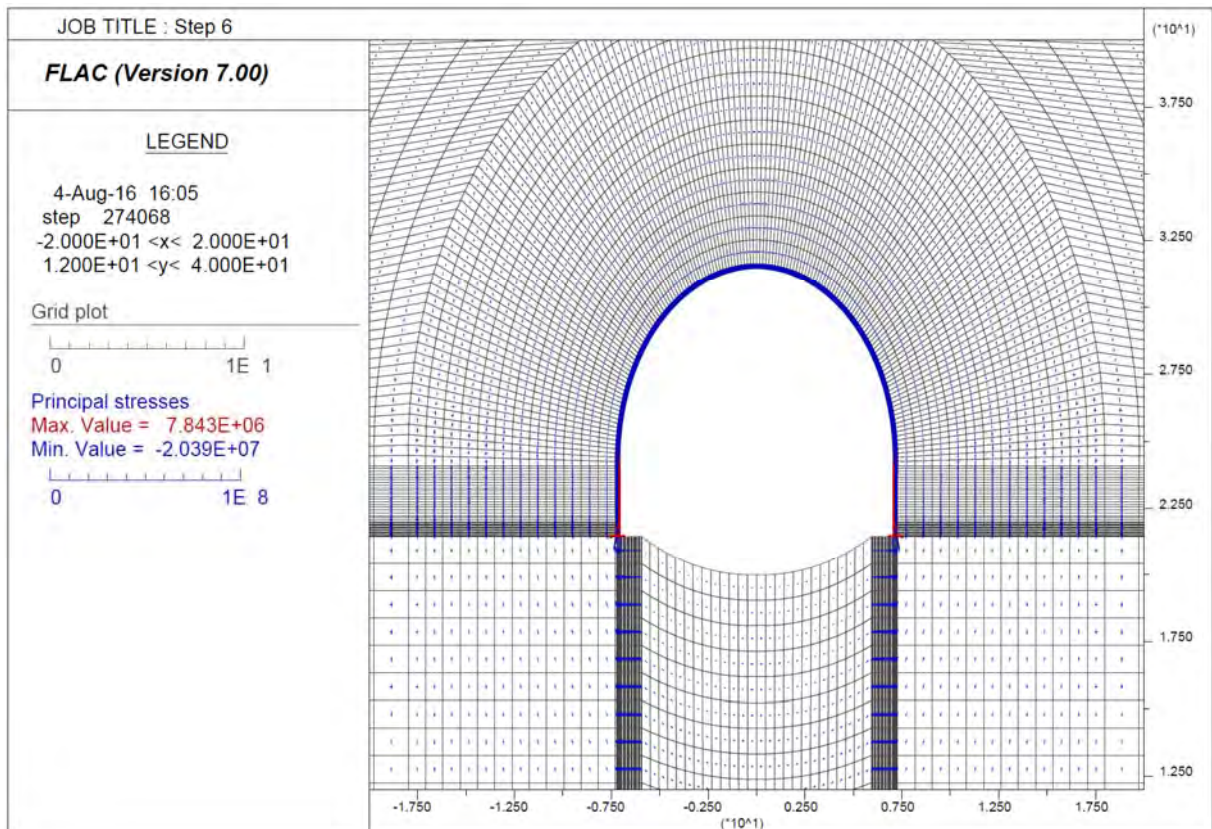


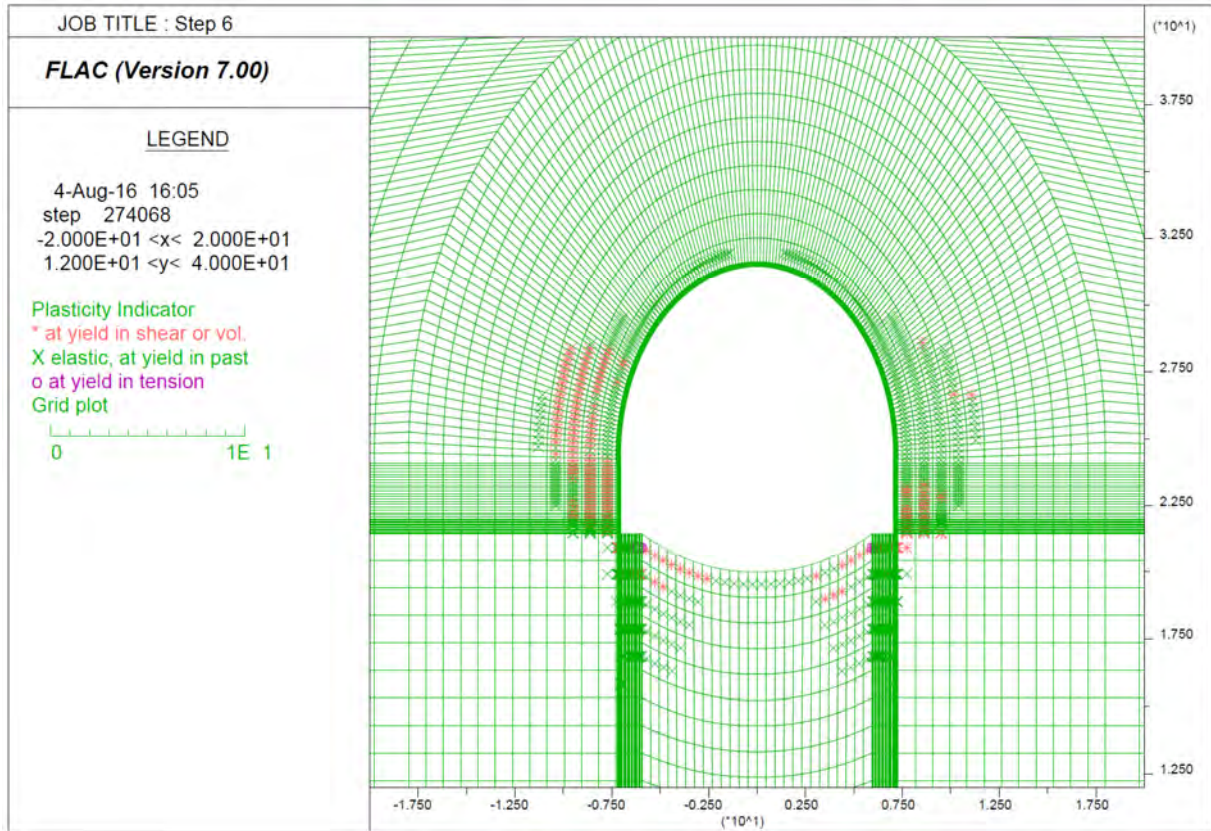
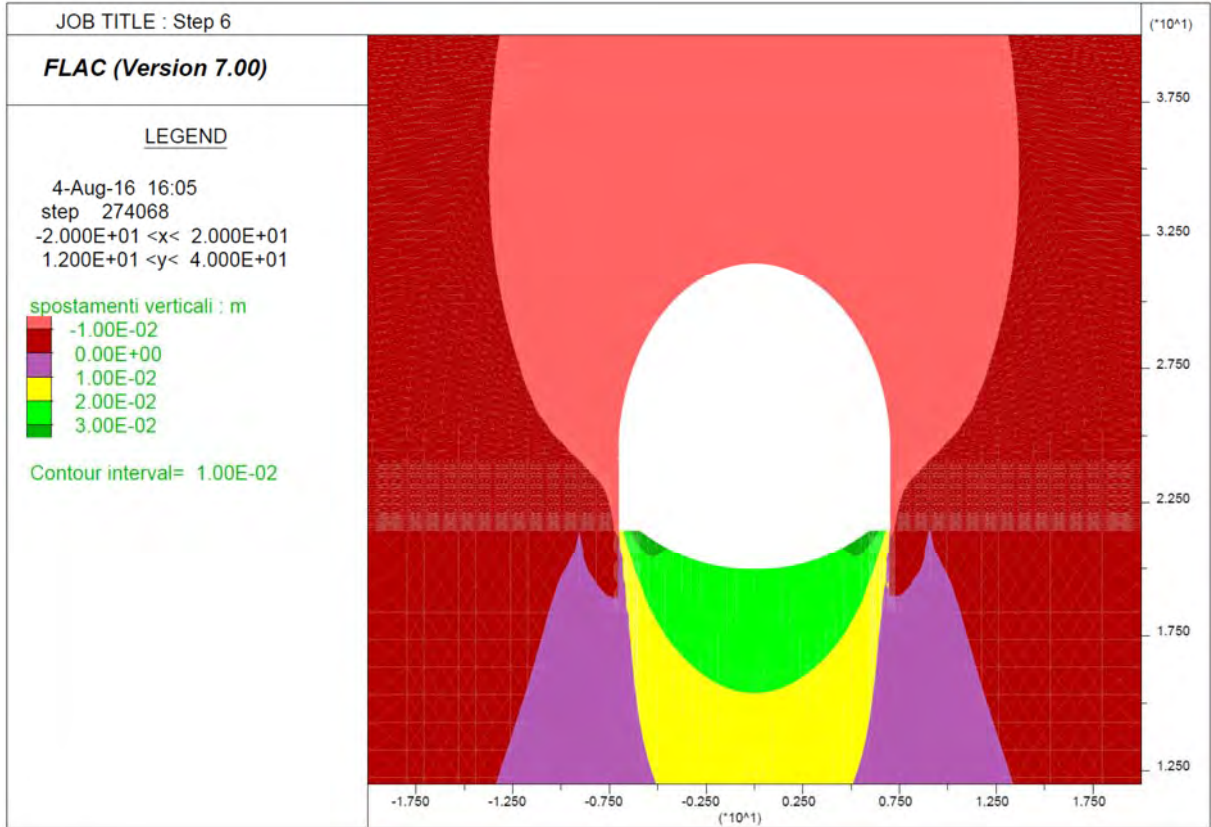
Output Flac – Sezione tipo B0 – Parametri res min – Copertura di calcolo = 50 m

Step 1 – Tensioni litostatiche

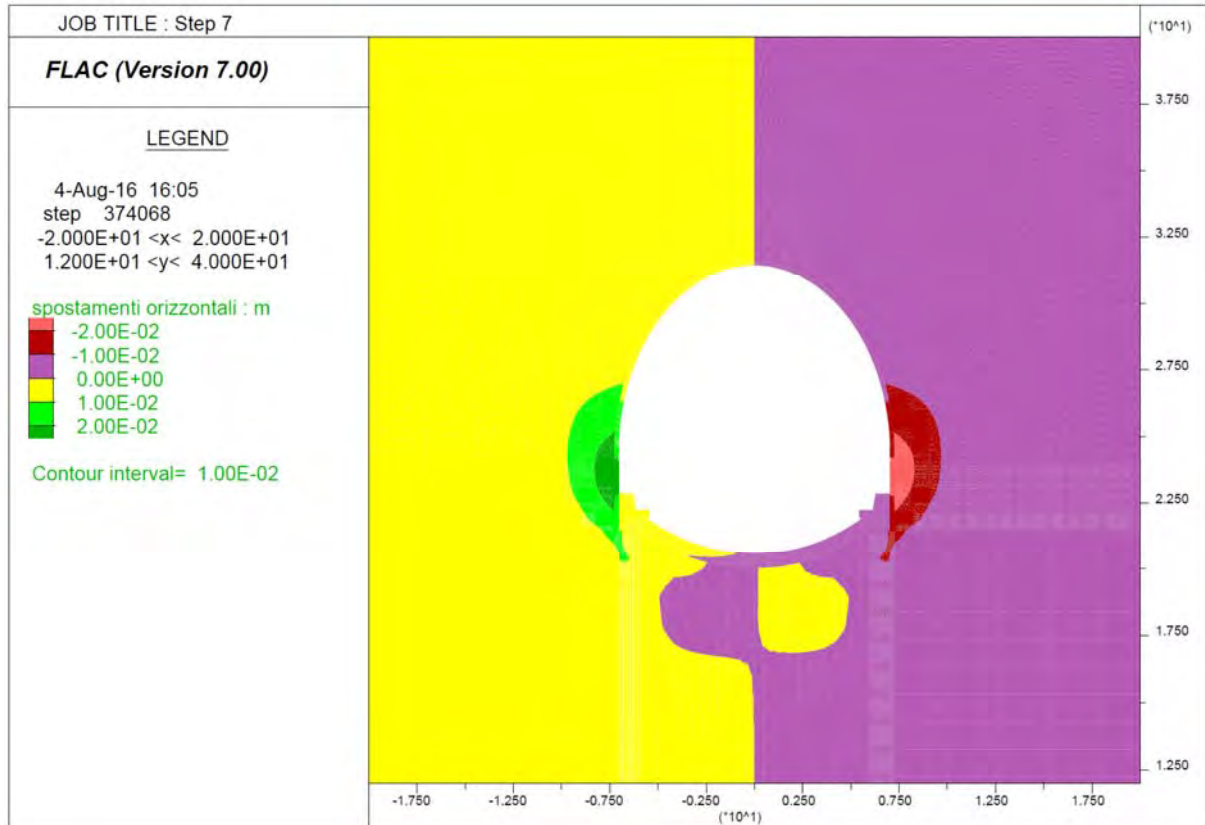
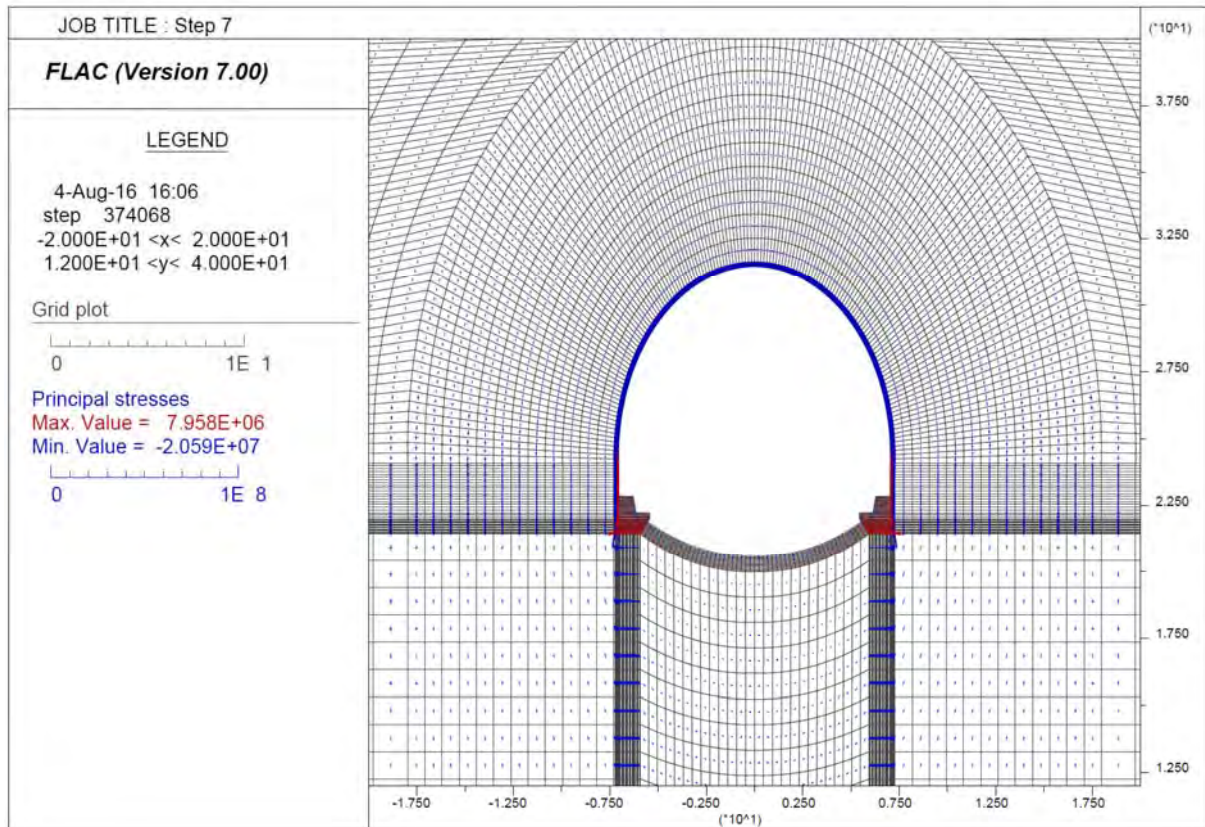


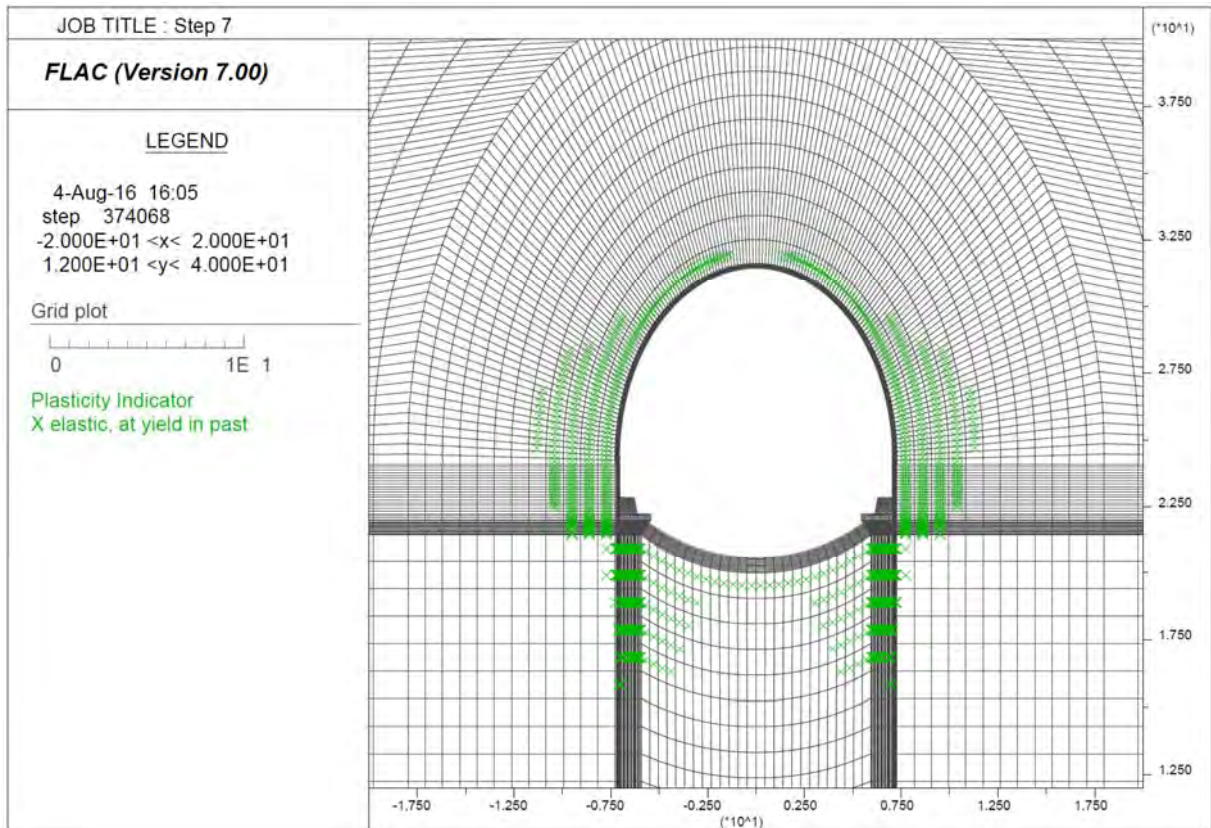
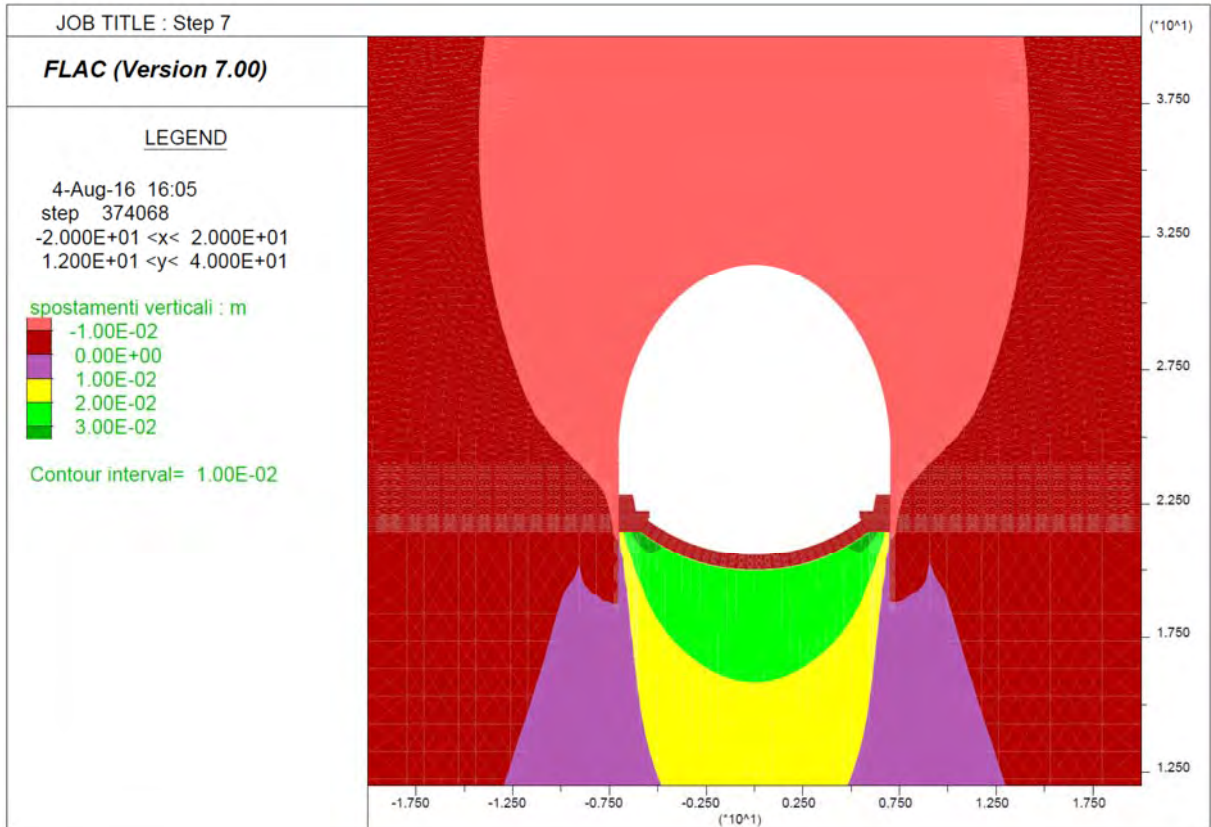
Step 6 – Avanzamento fino a deformazioni esaurite



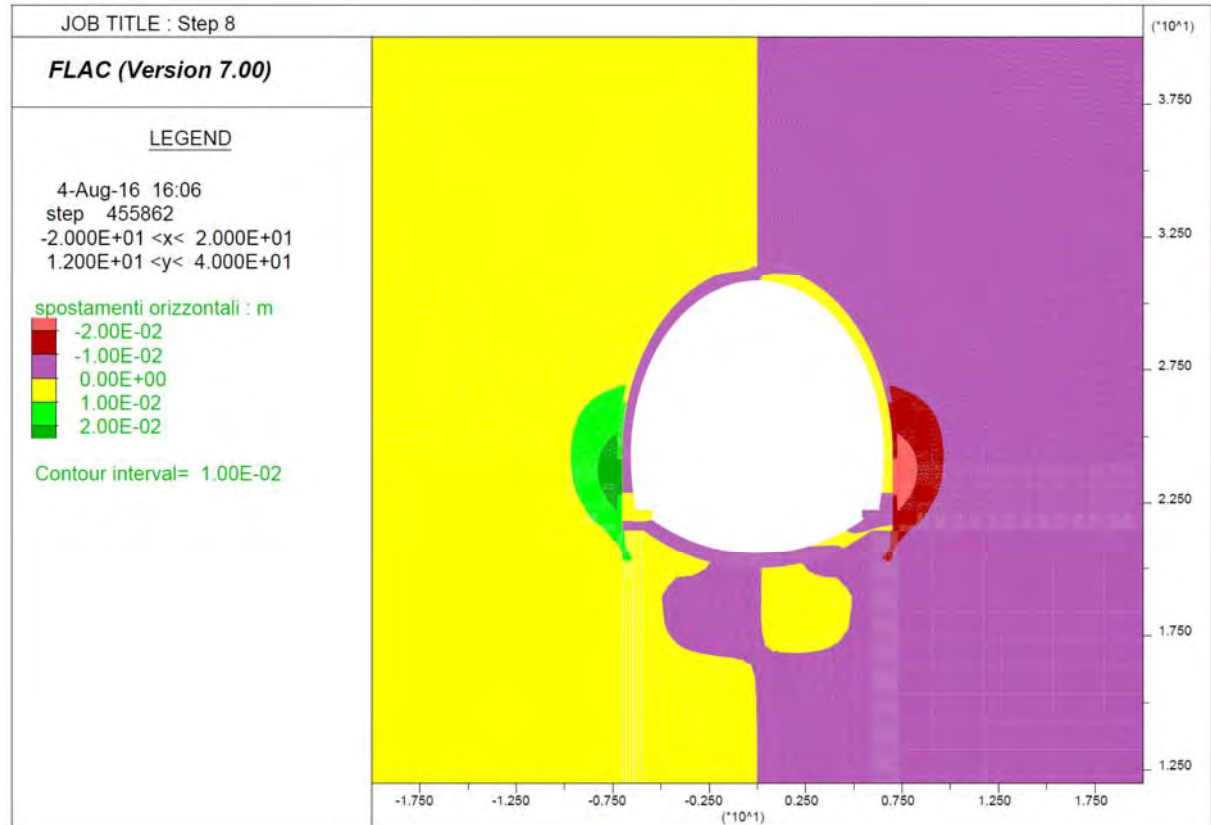
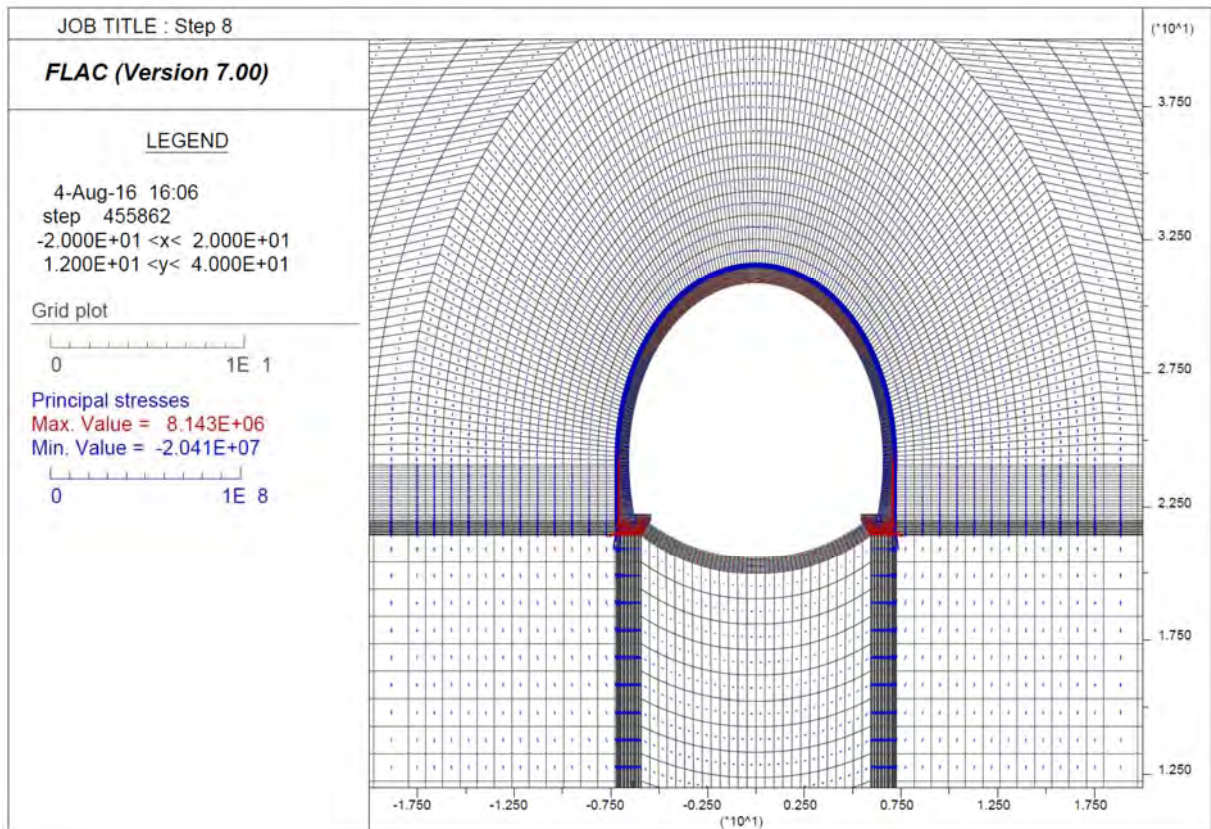


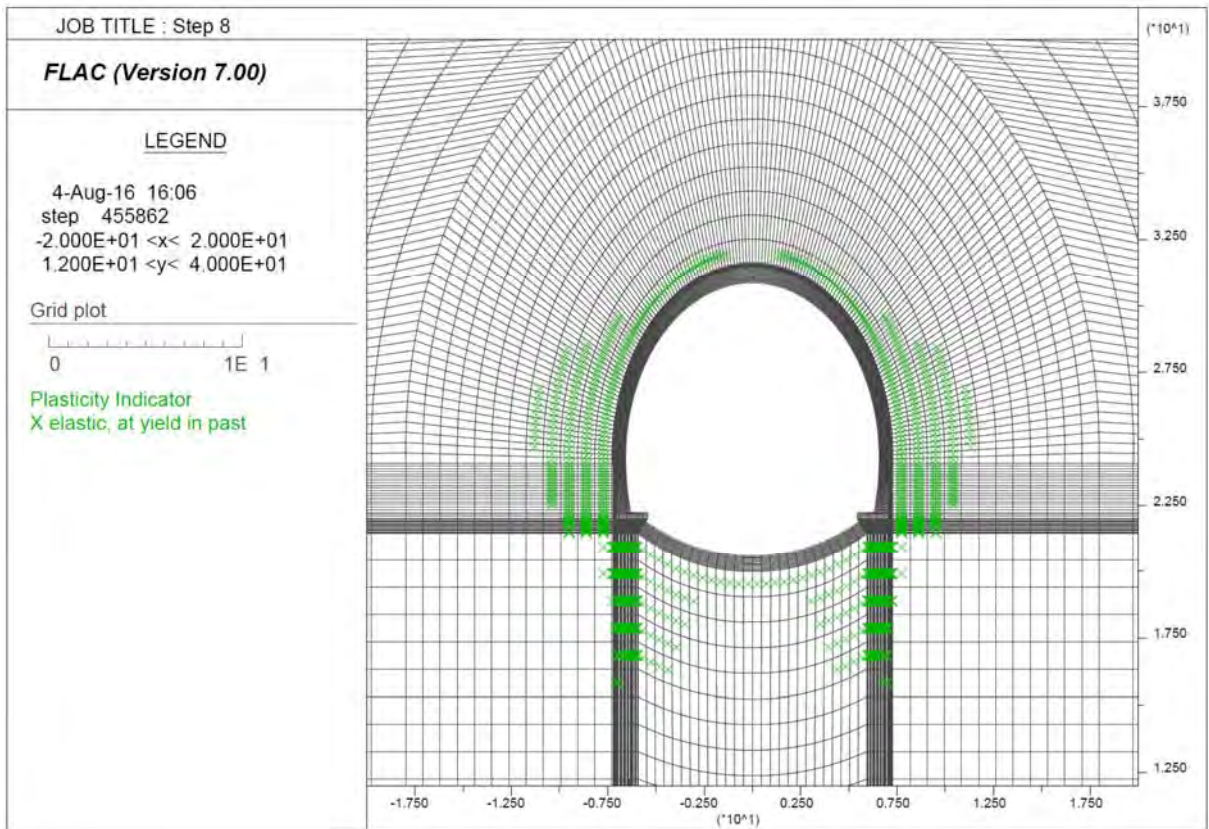
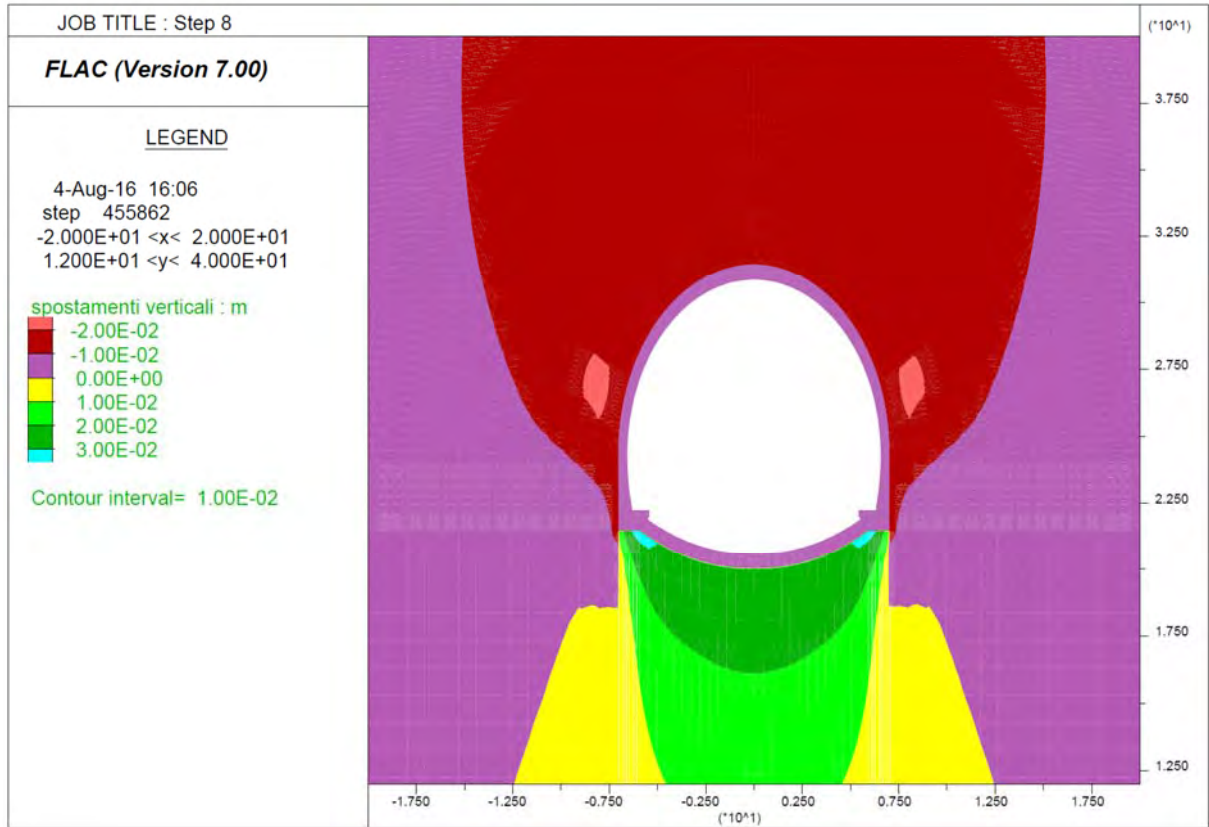
Step 7 - Getto arco rovescio e muretta



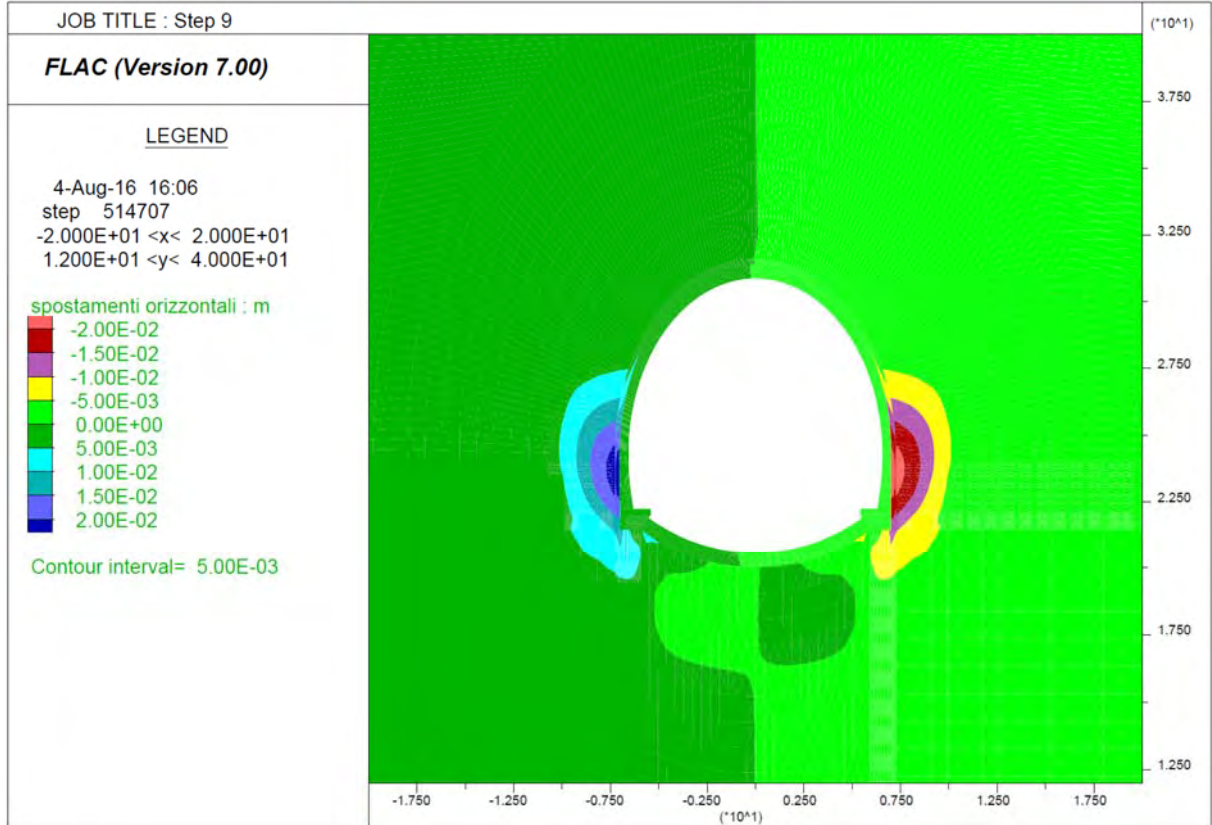
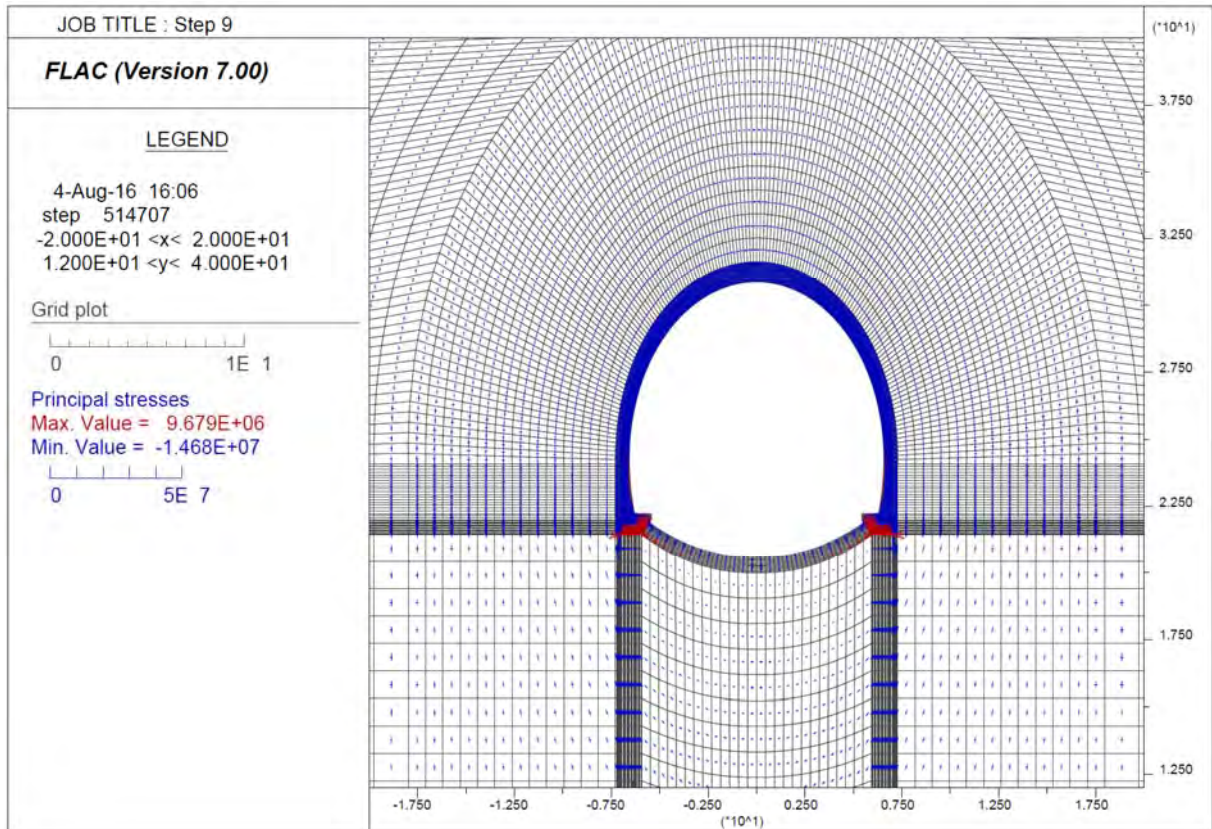


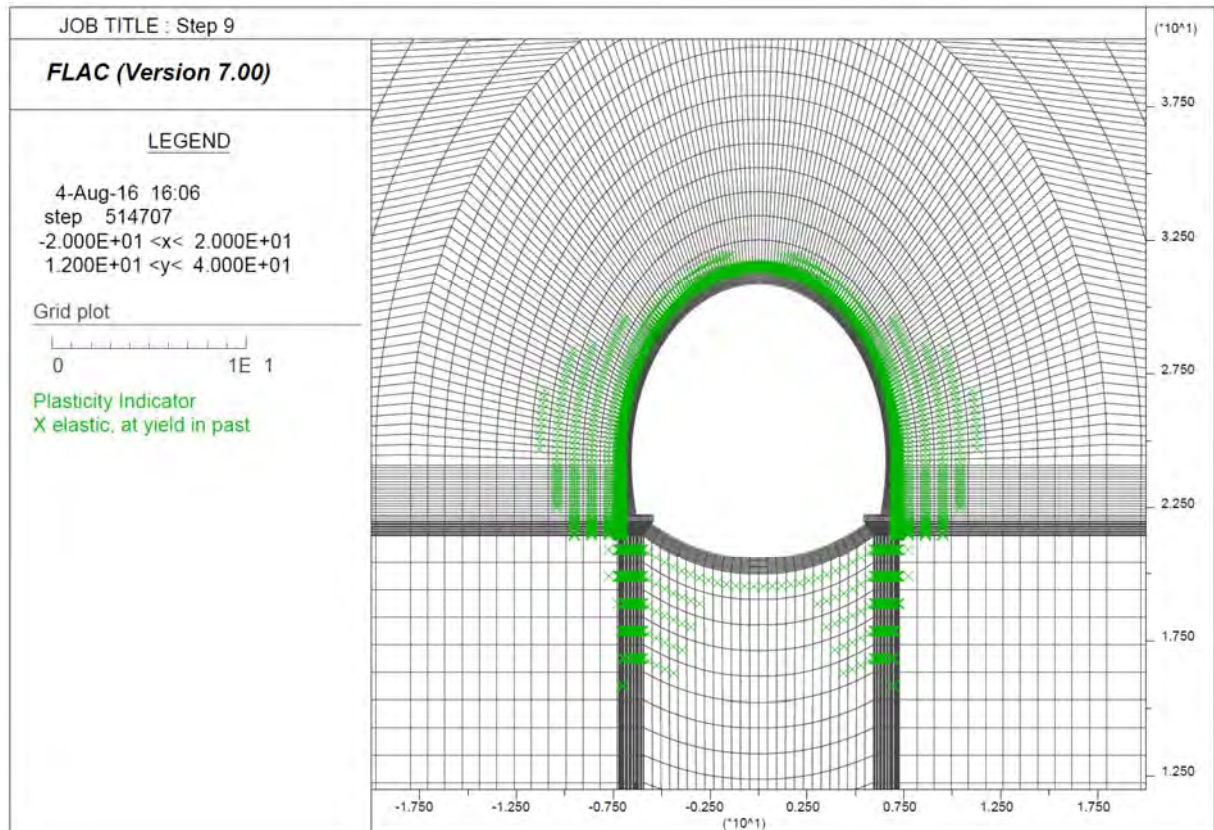
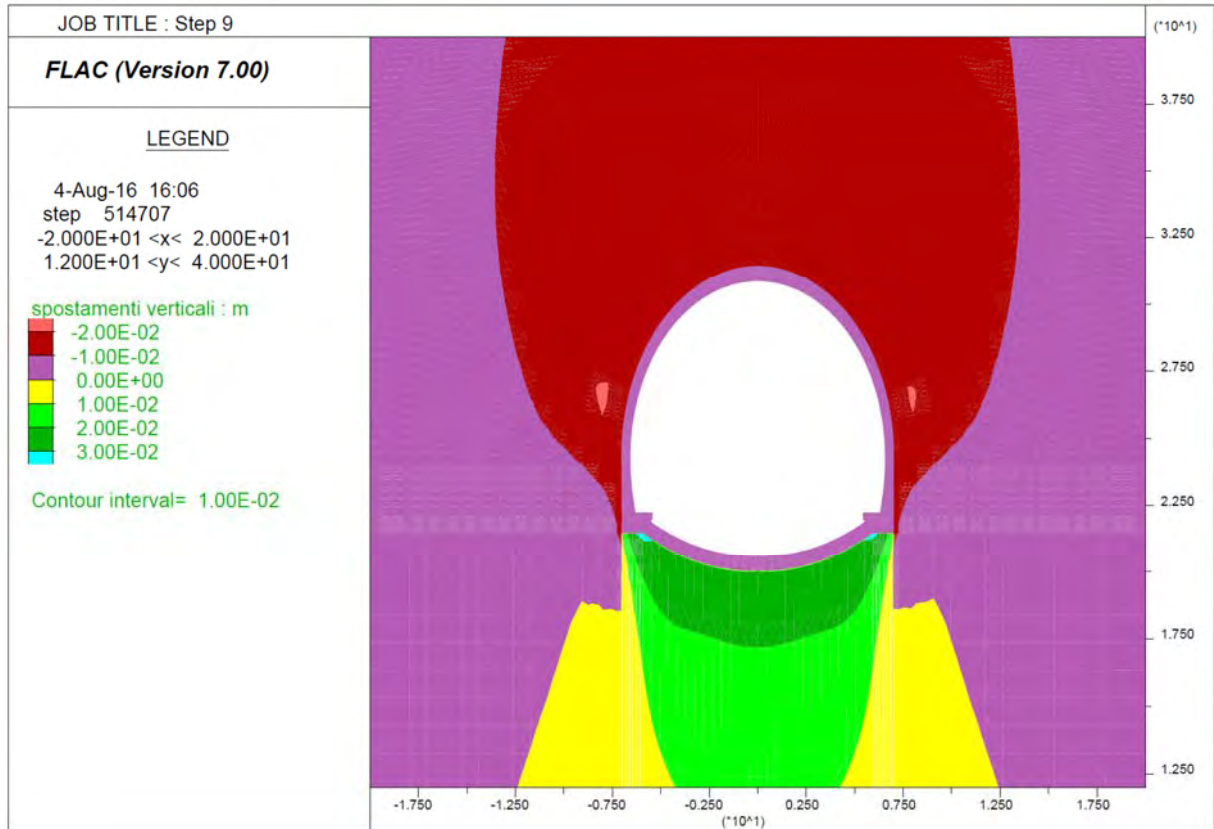
Step 8 - Getto Calotta





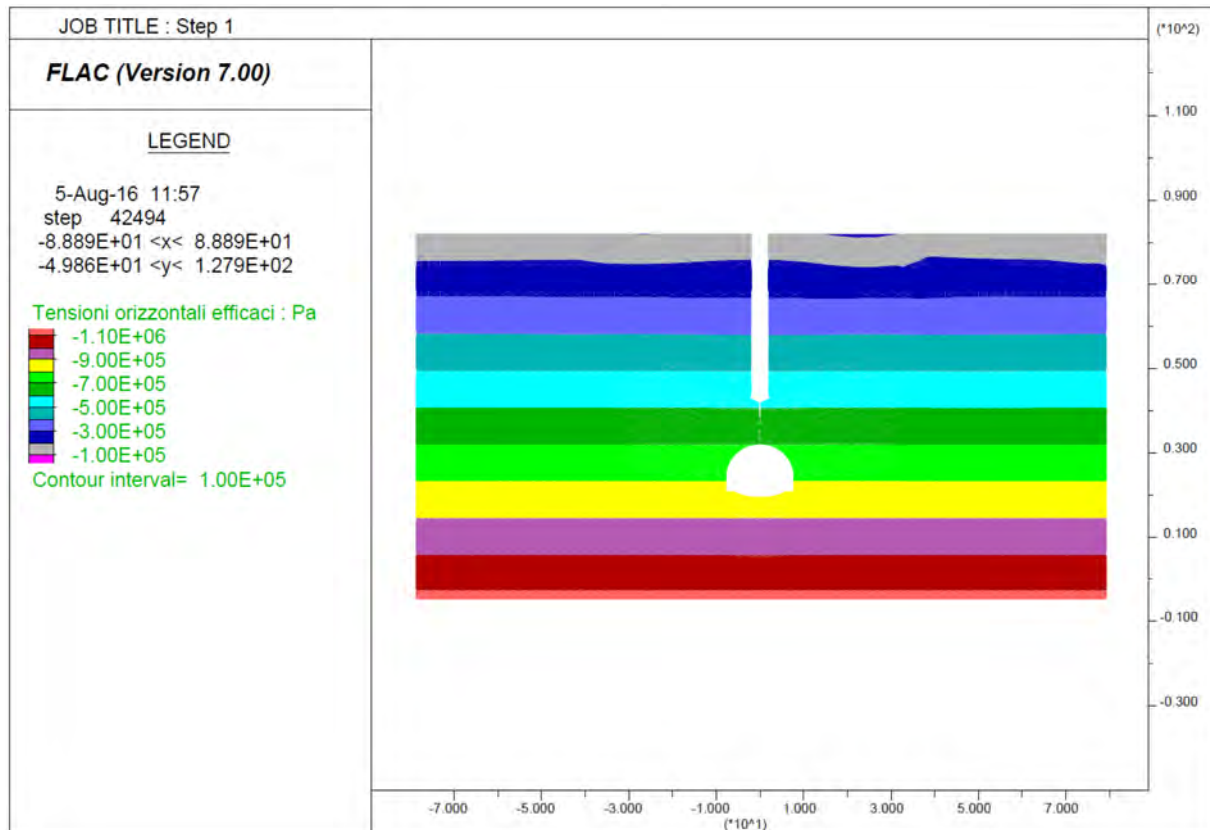
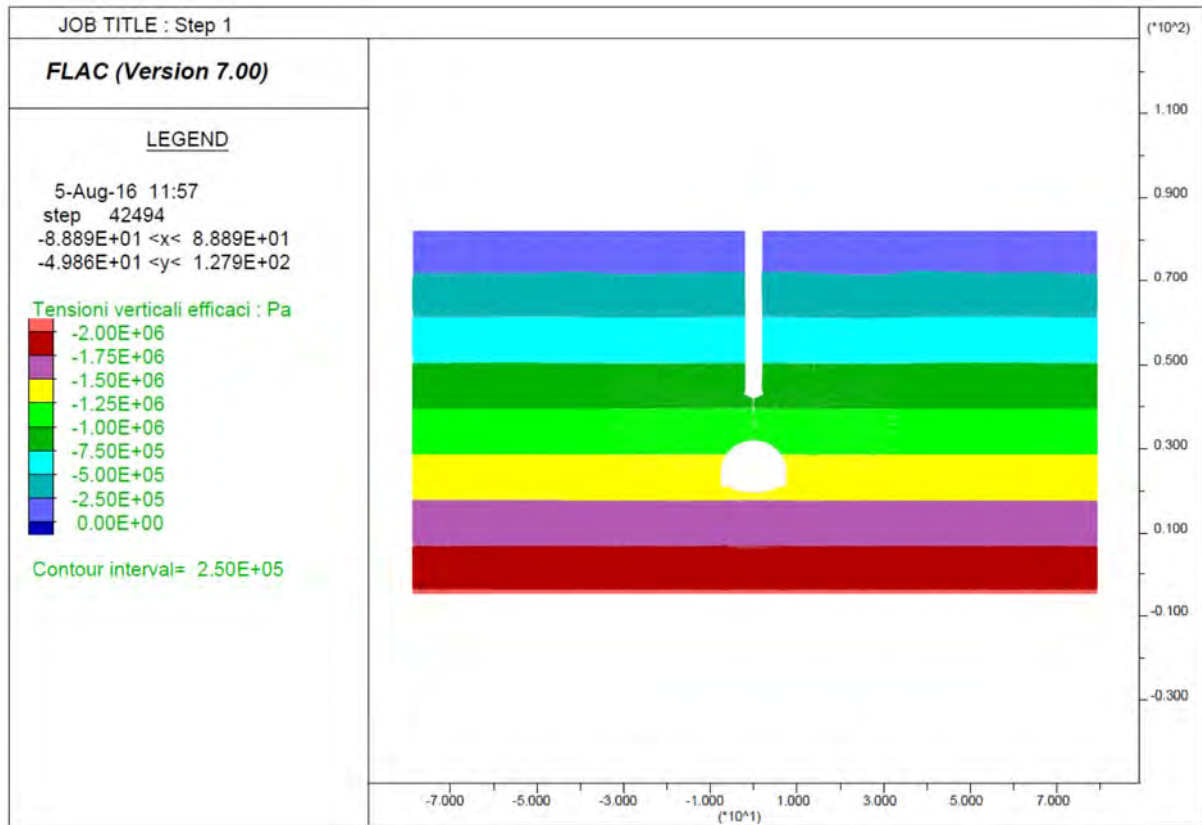
Step 9 - Decadimento dei parametri di resistenza del rivestimento provvisorio



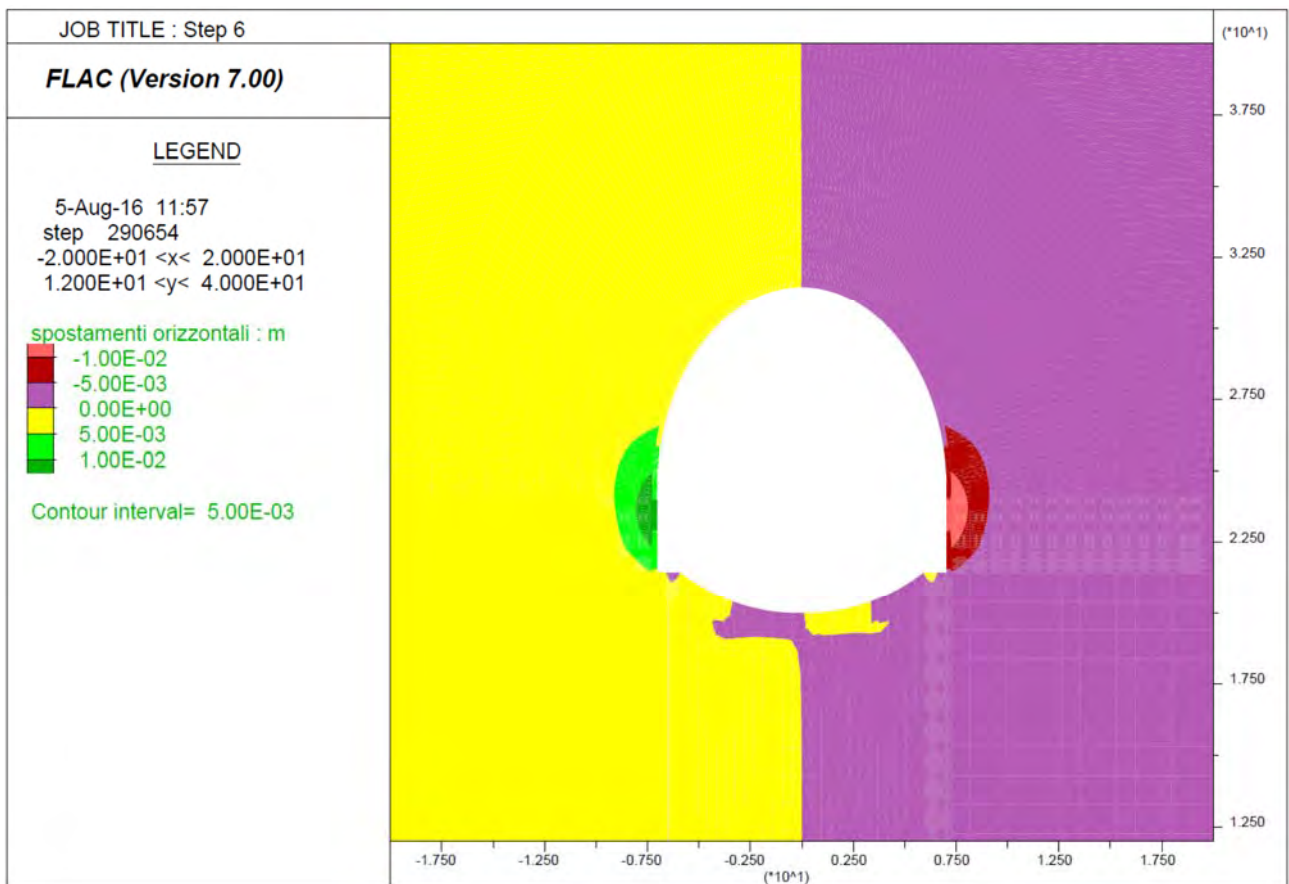
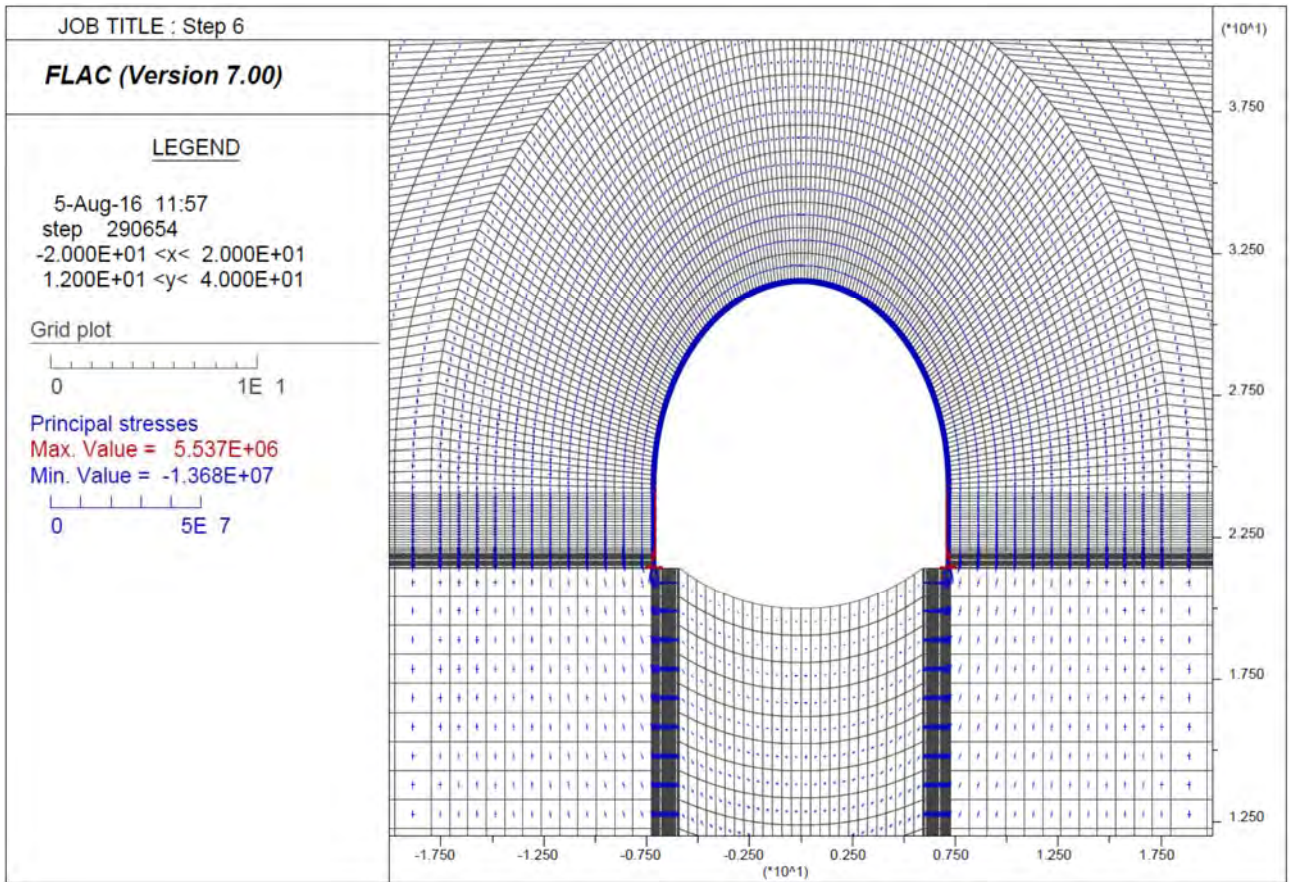


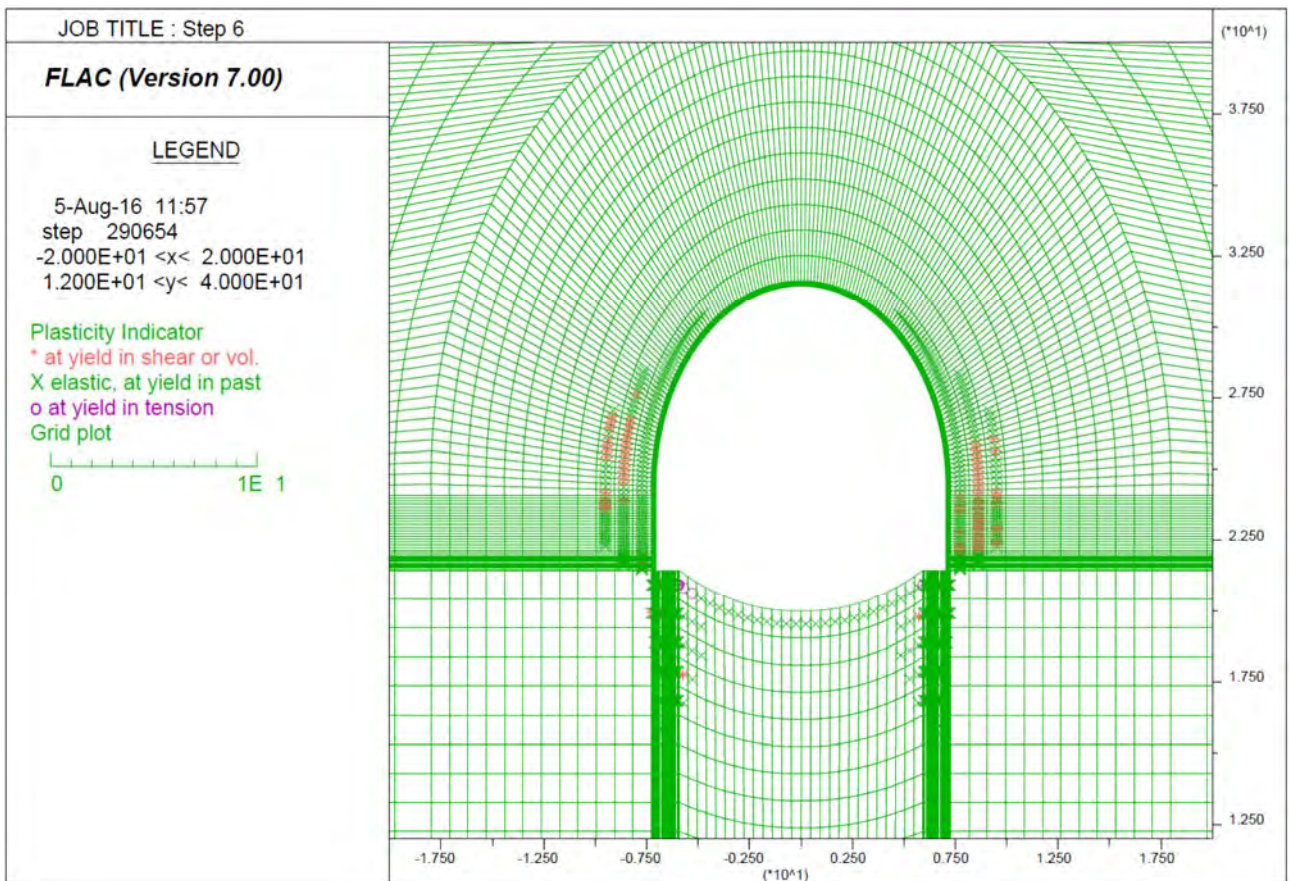
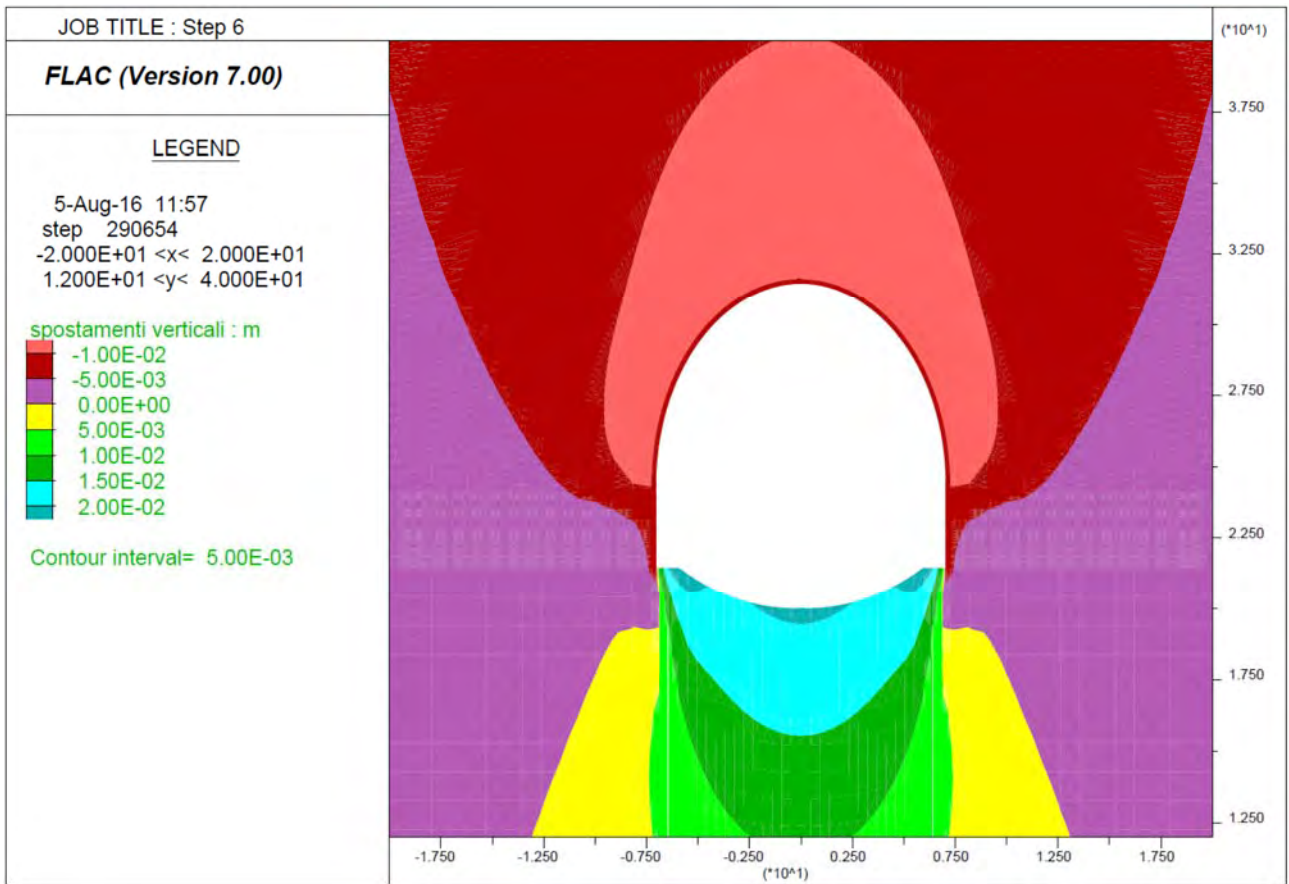
Output Flac – Sezione tipo B0 – Parametri res max – Copertura di calcolo = 50 m

Step 1 – Tensioni litostatiche

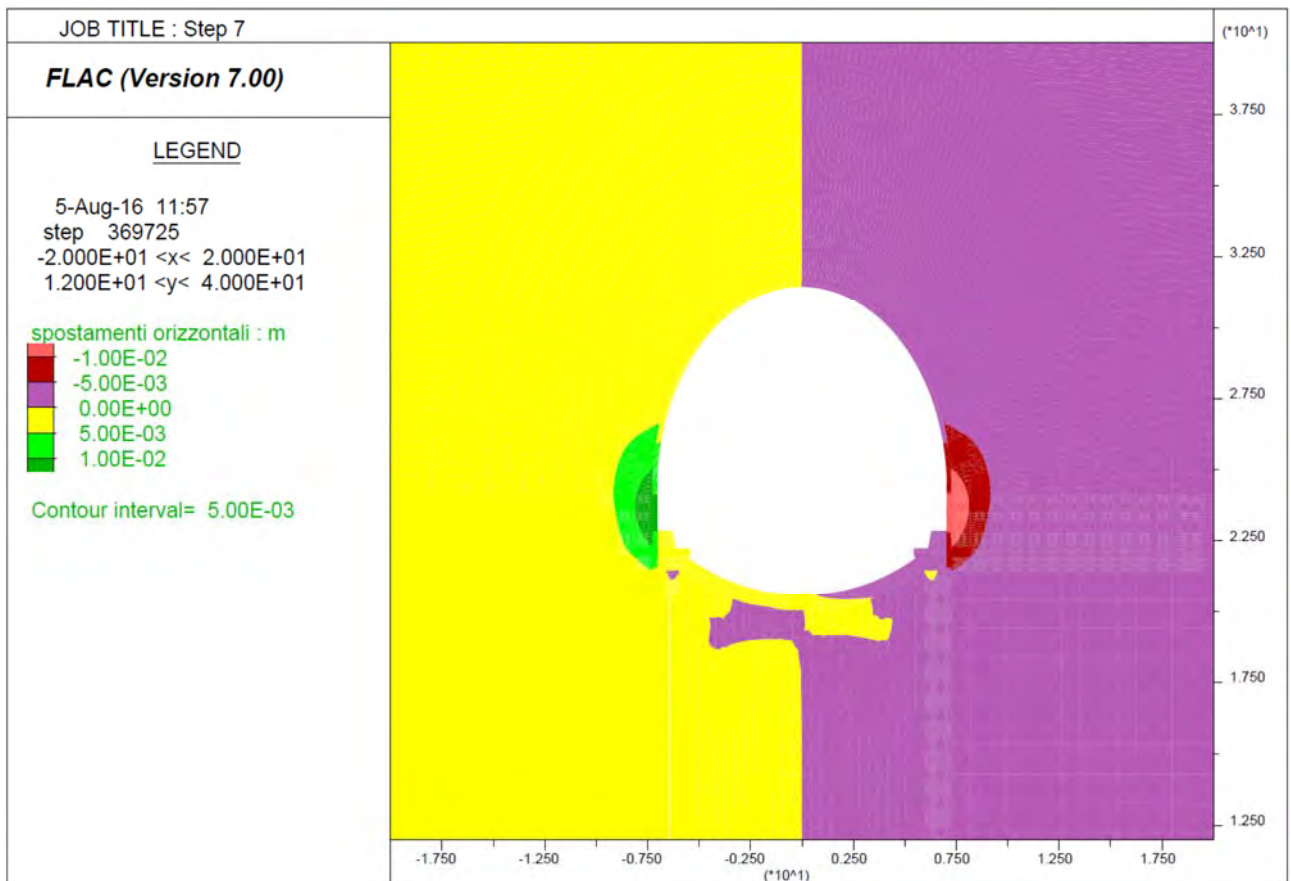
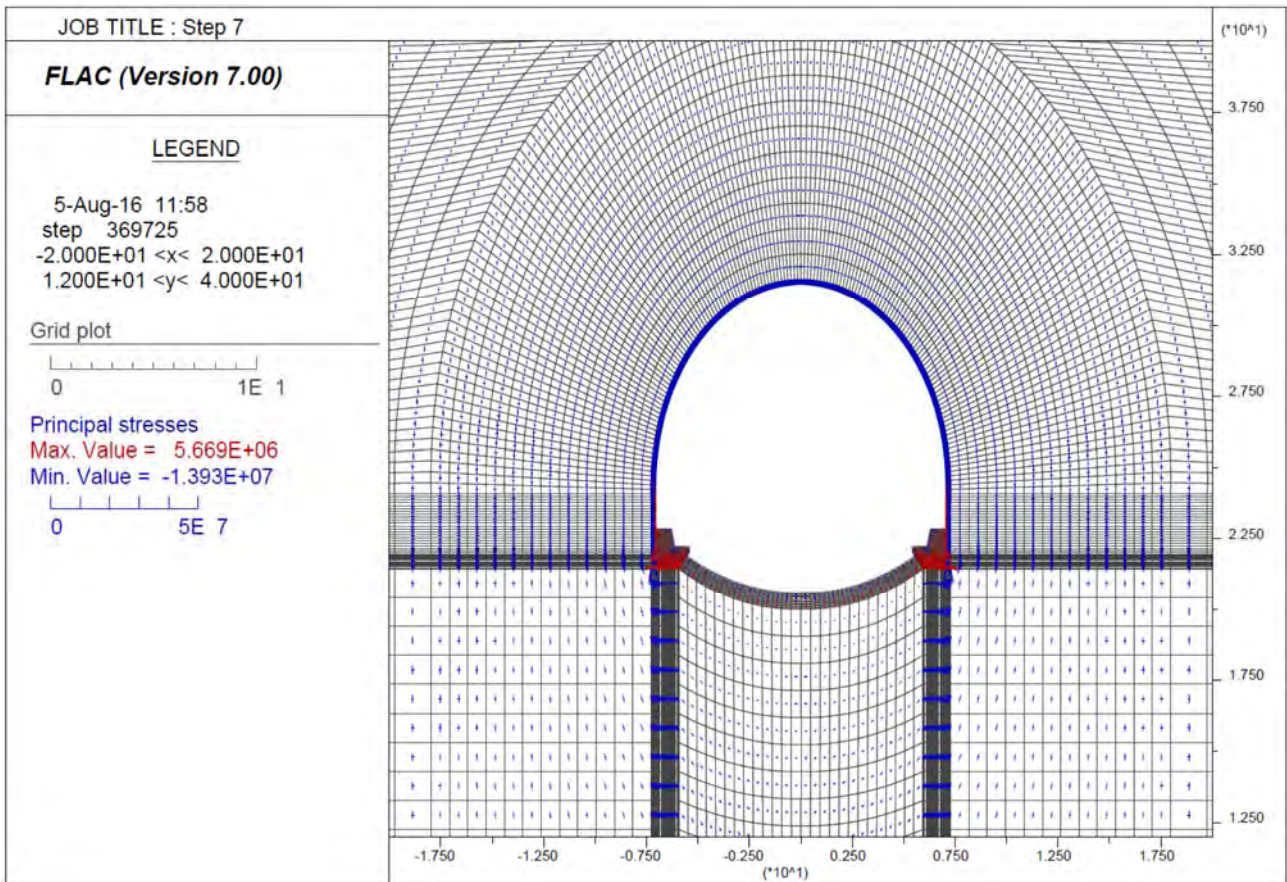


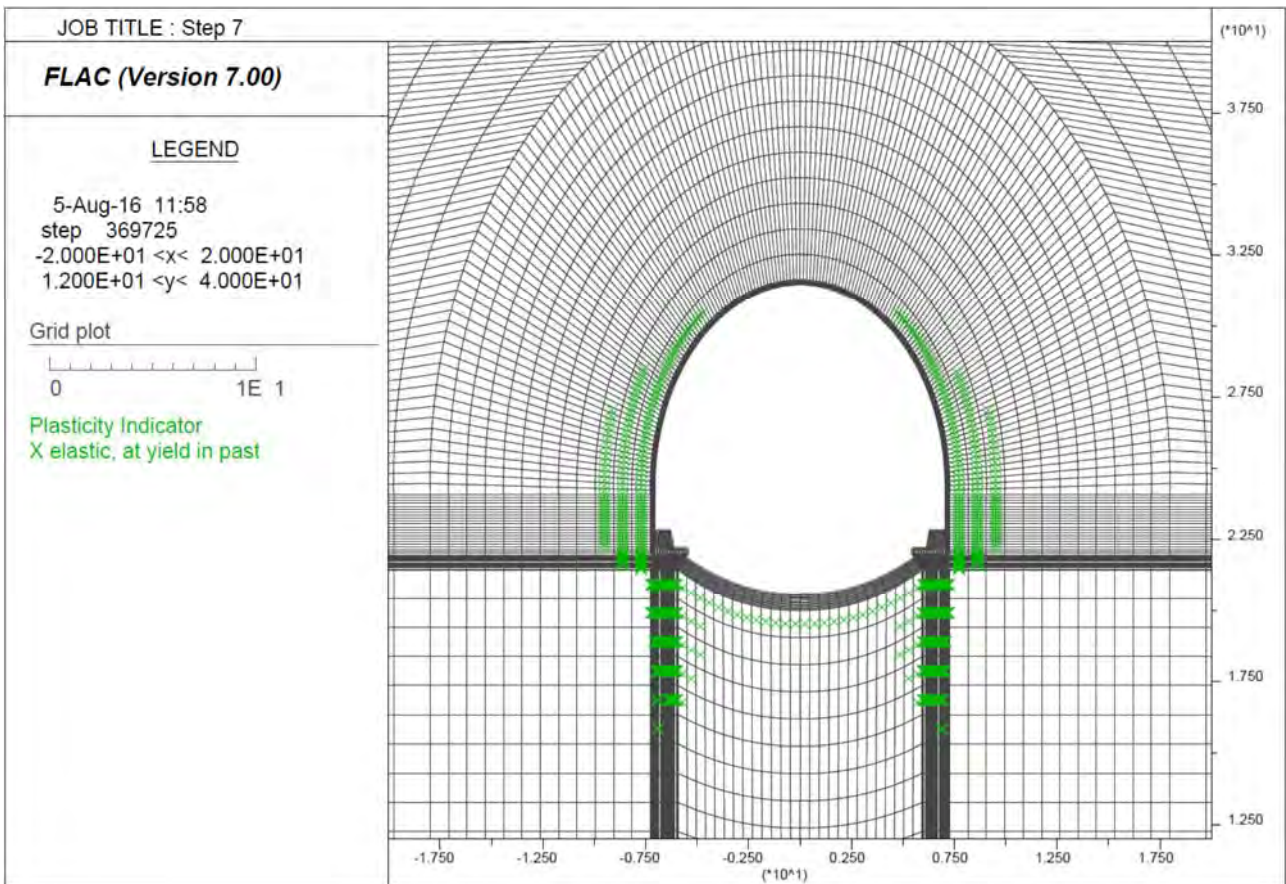
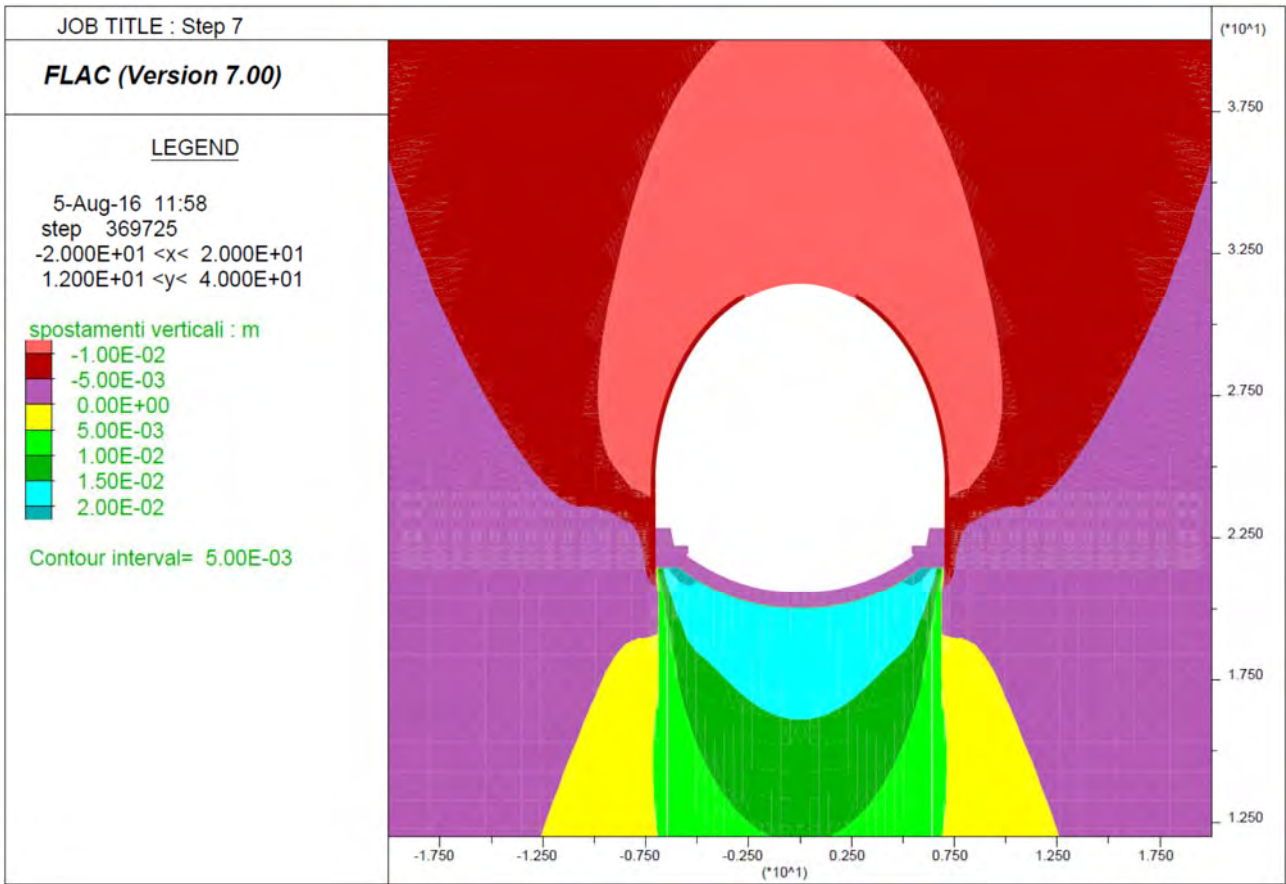
Step 6 – Avanzamento fino a 2D



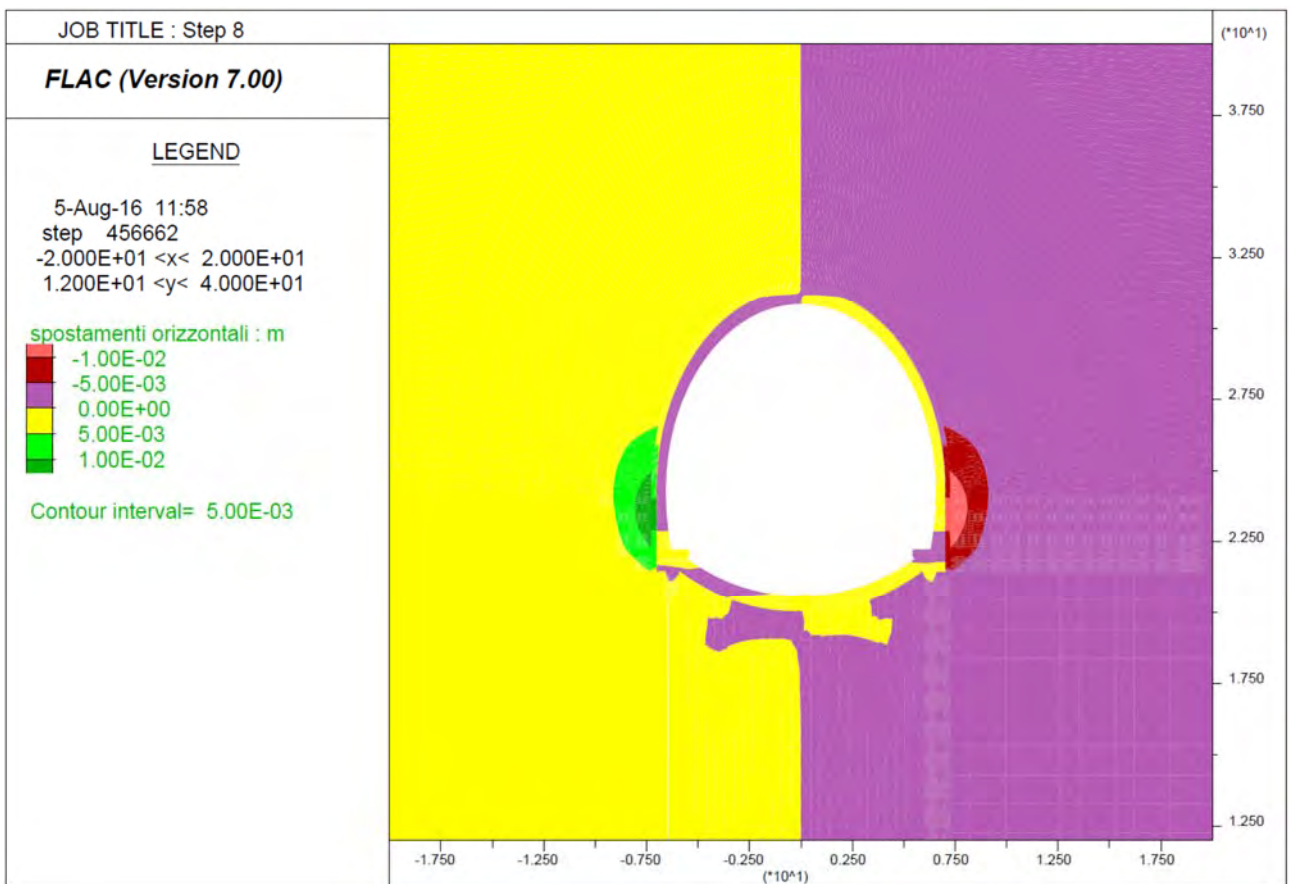
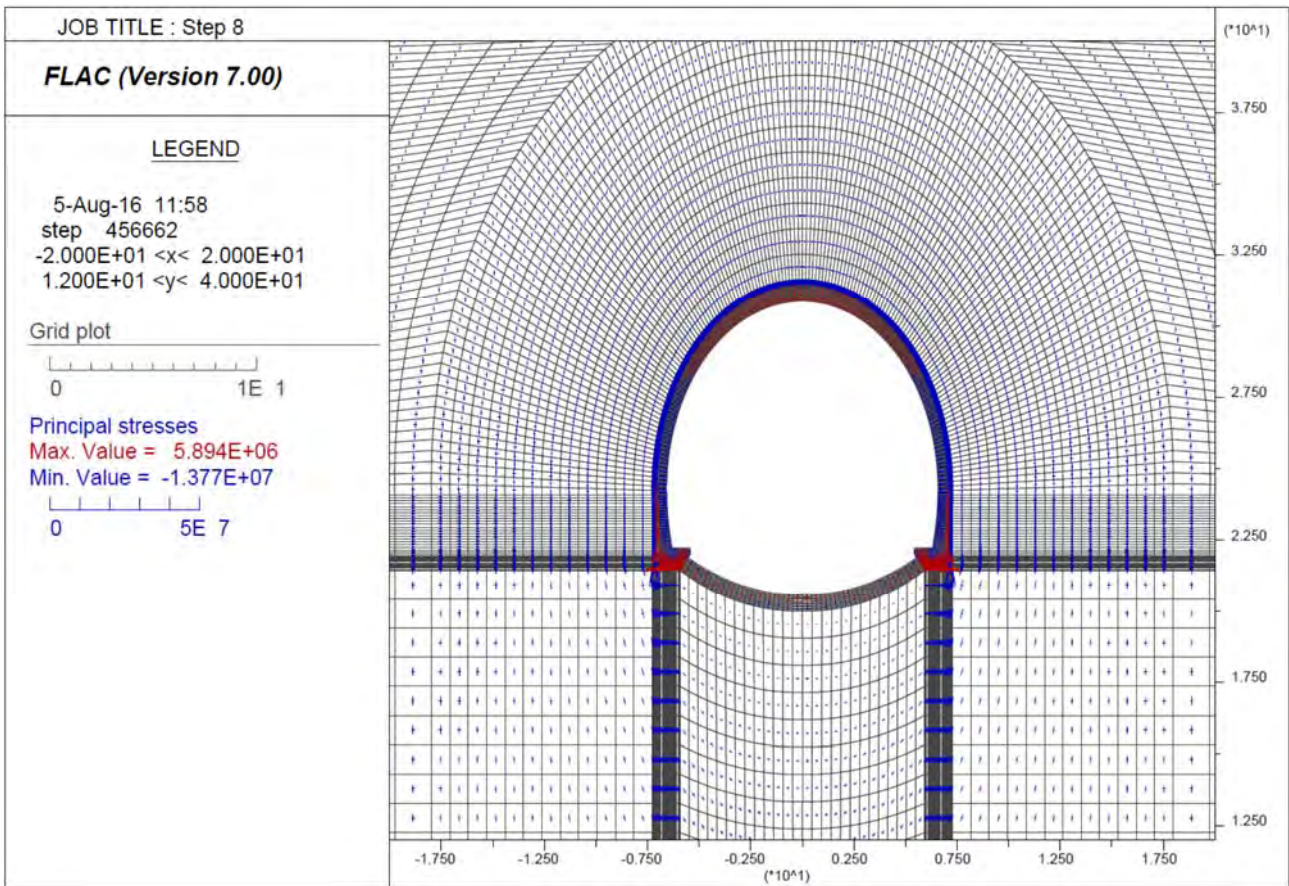


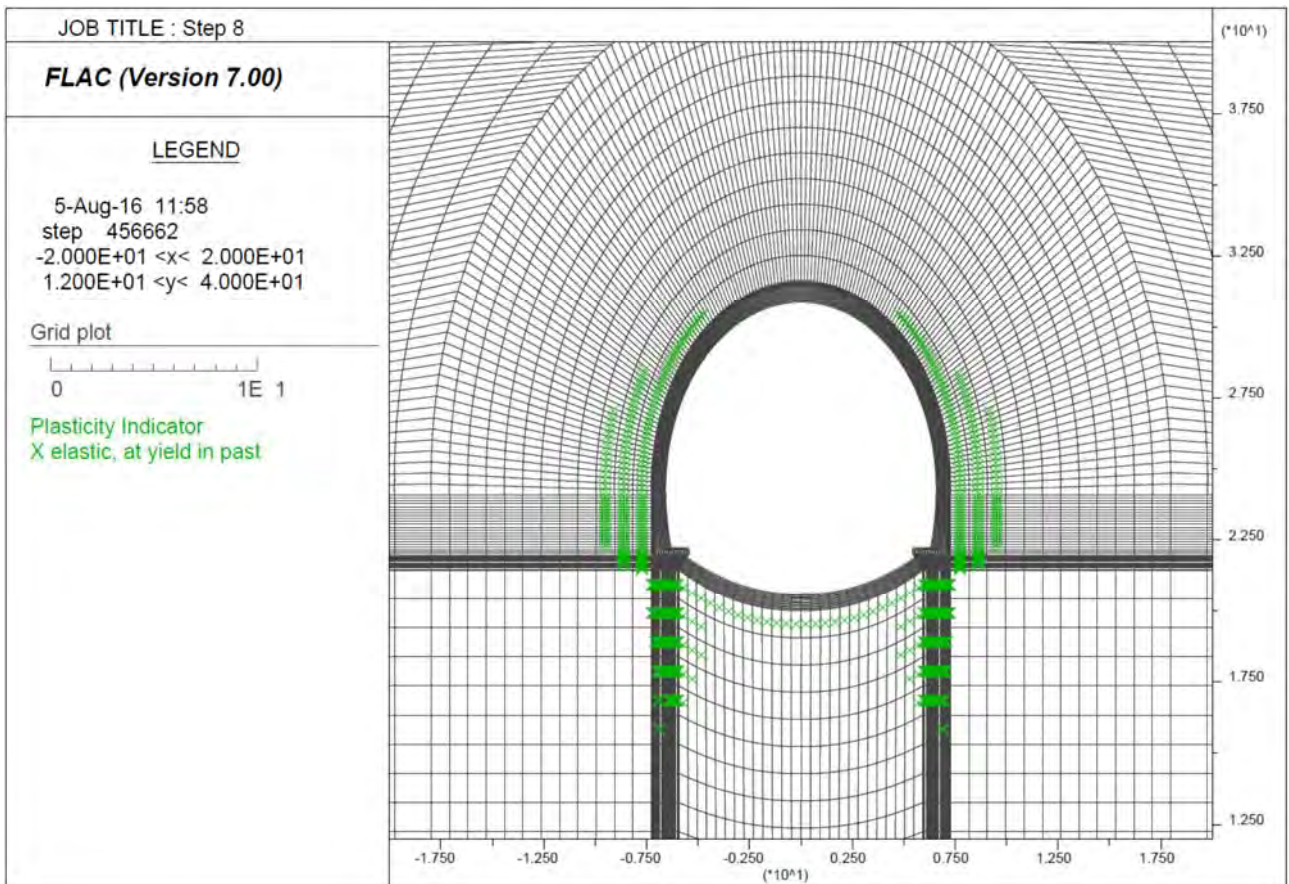
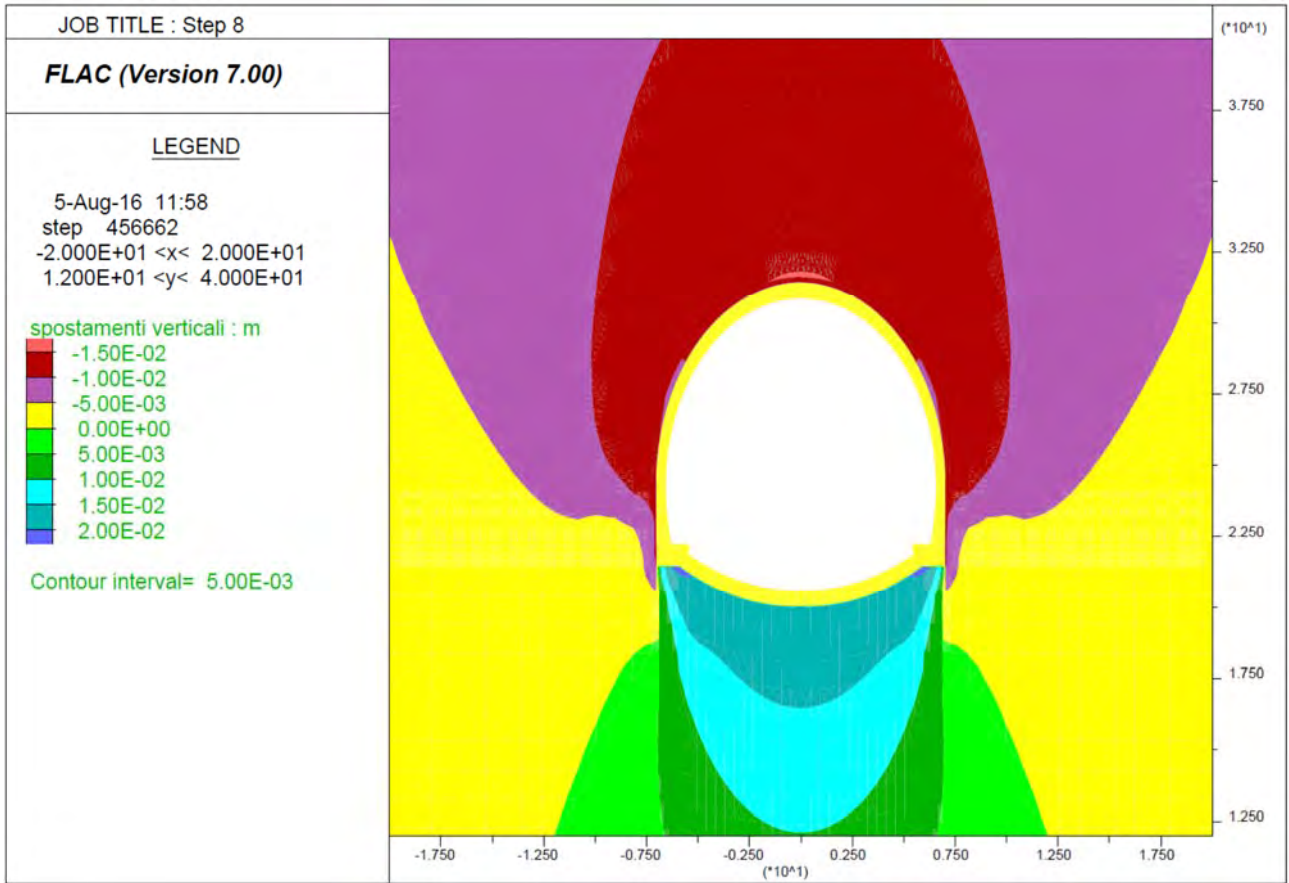
Step 7 - Getto arco rovescio e muretta a 2D e avanzamento fino a deformazioni esaurite



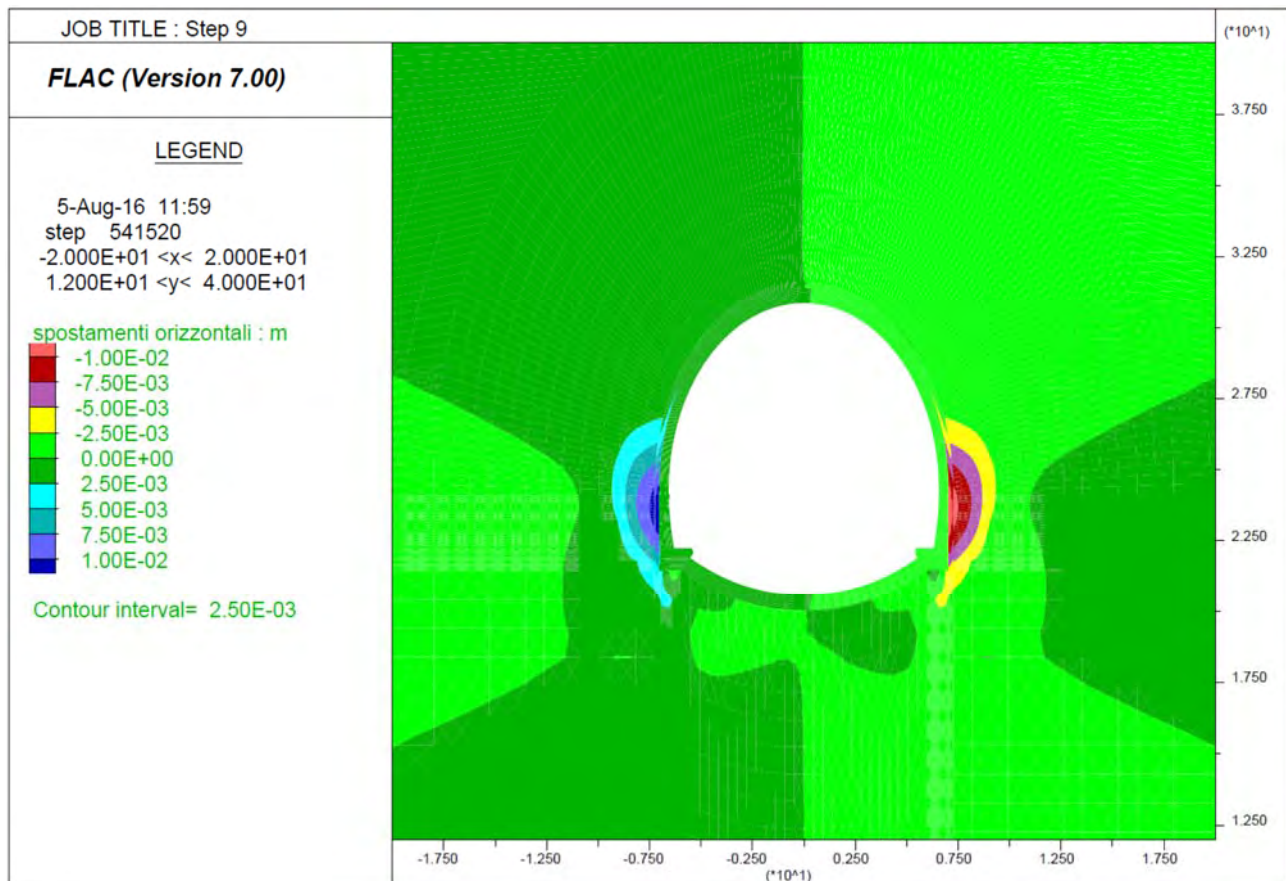
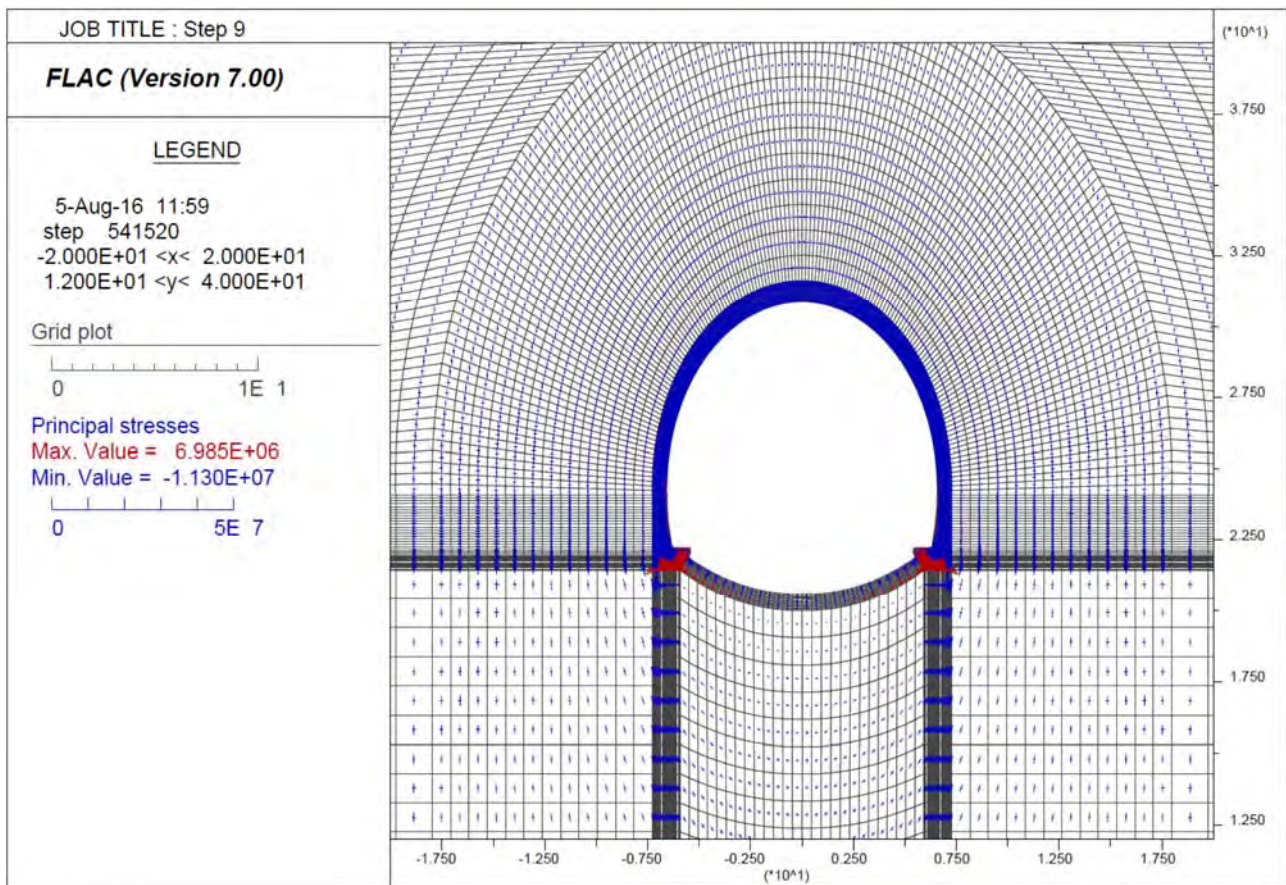


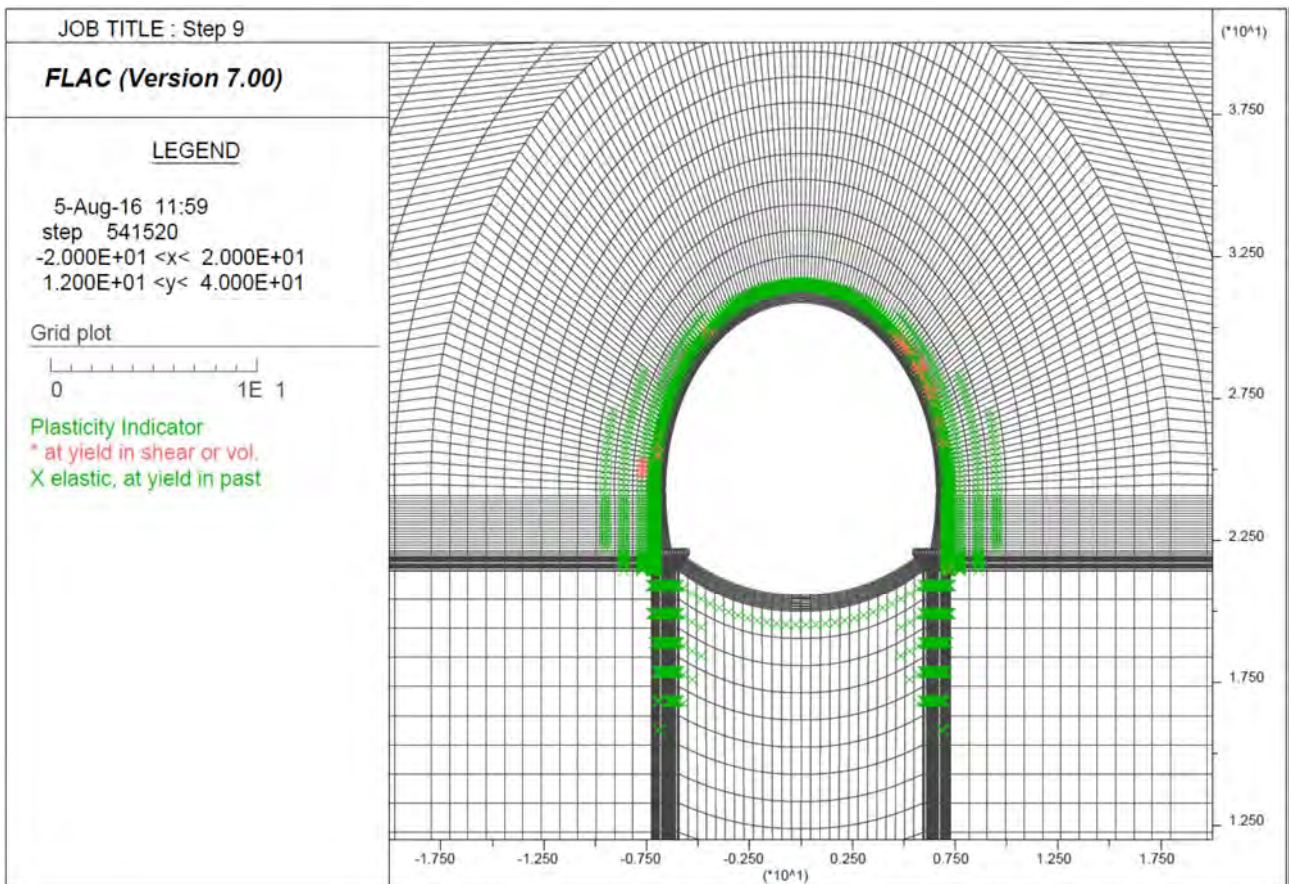
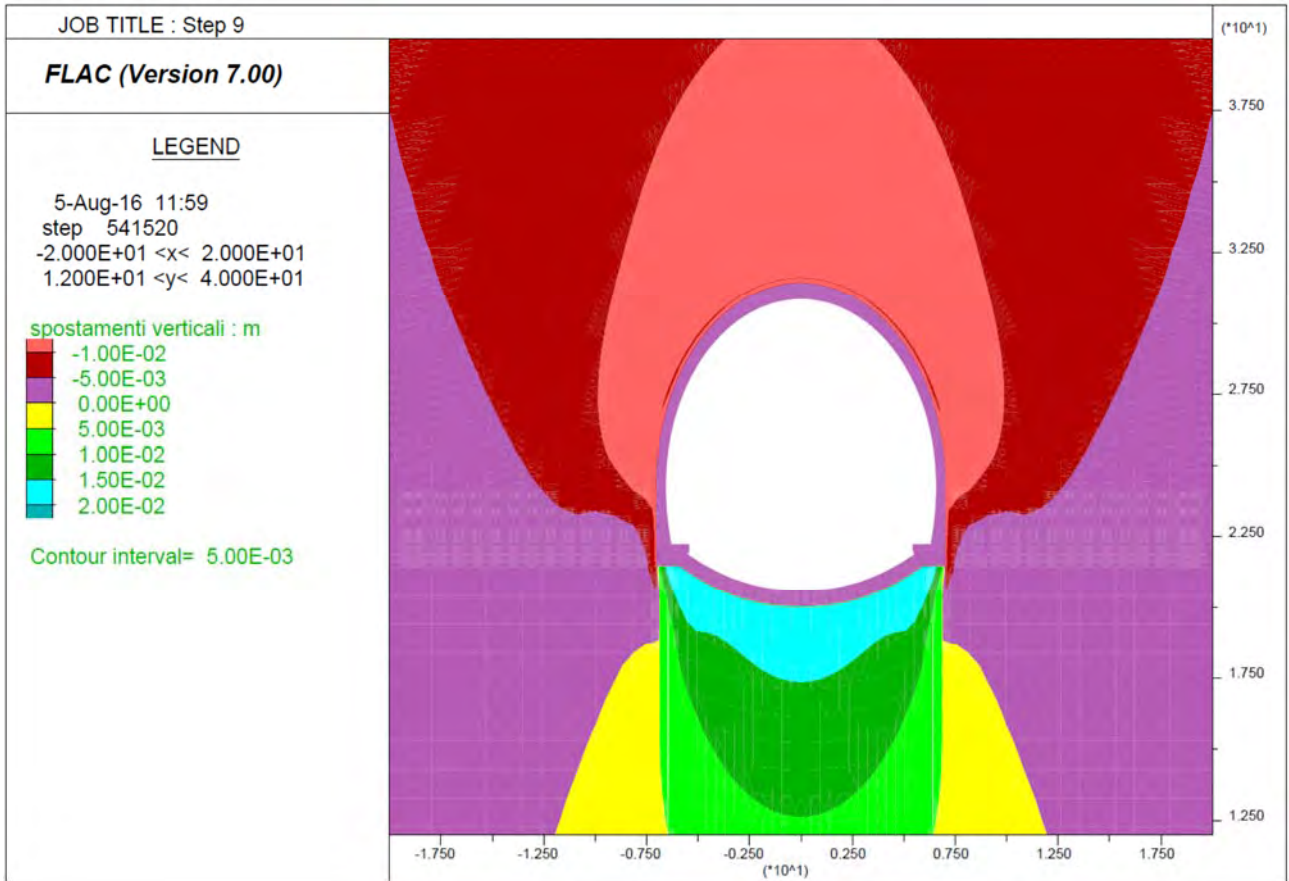
Step 8 - Getto Calotta





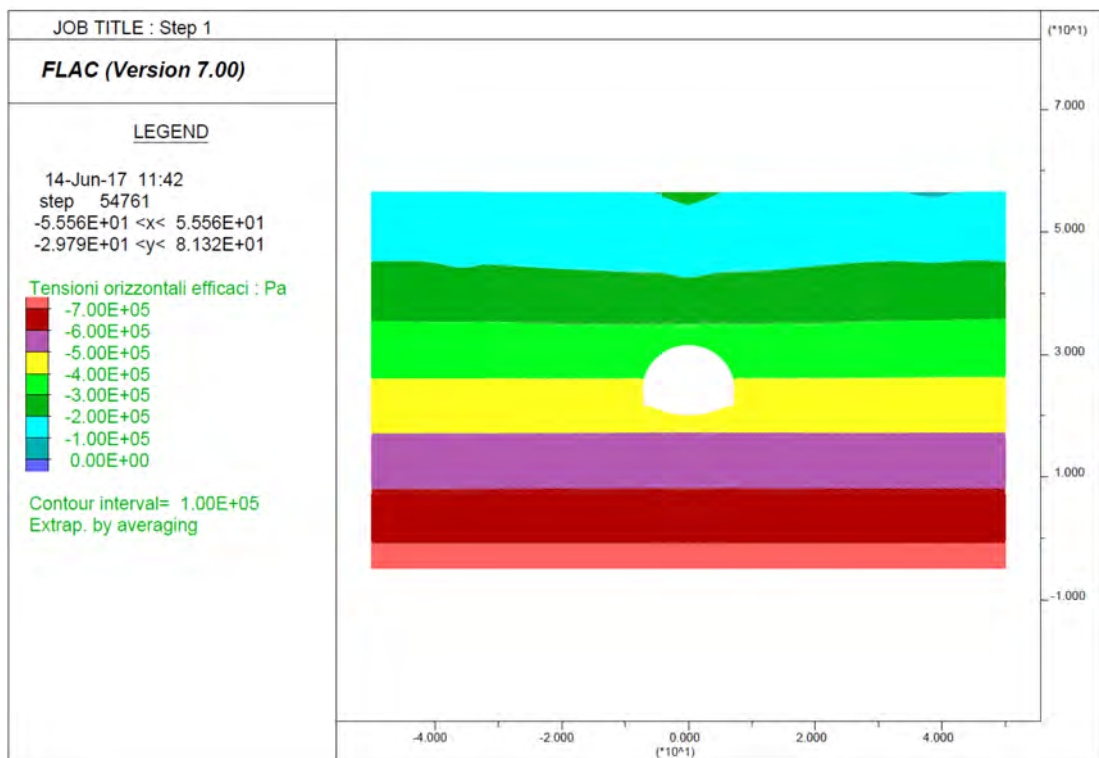
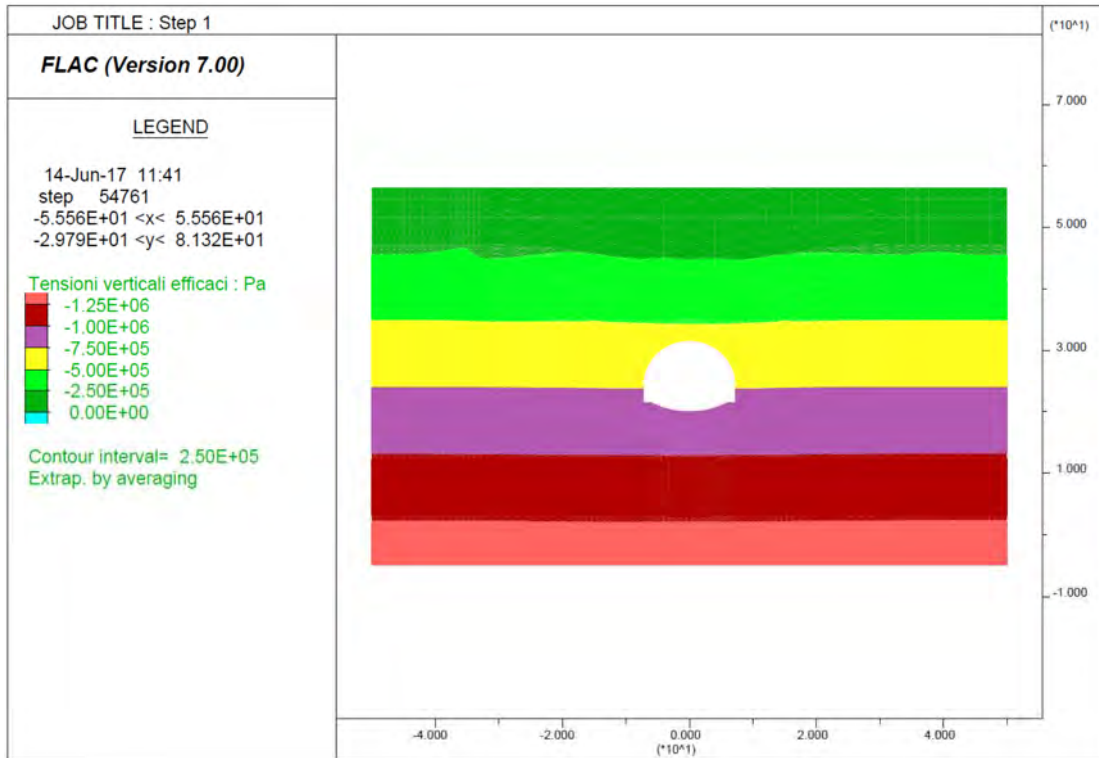
Step 9 - Decadimento dei parametri di resistenza del rivestimento provvisorio



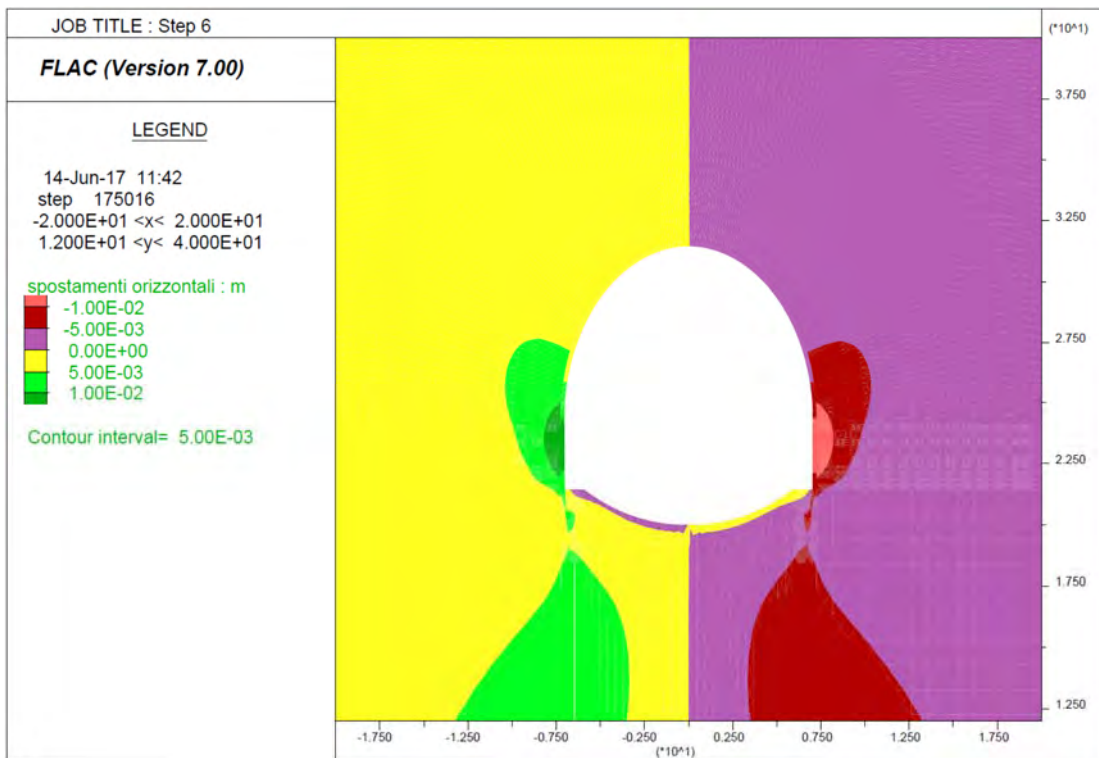
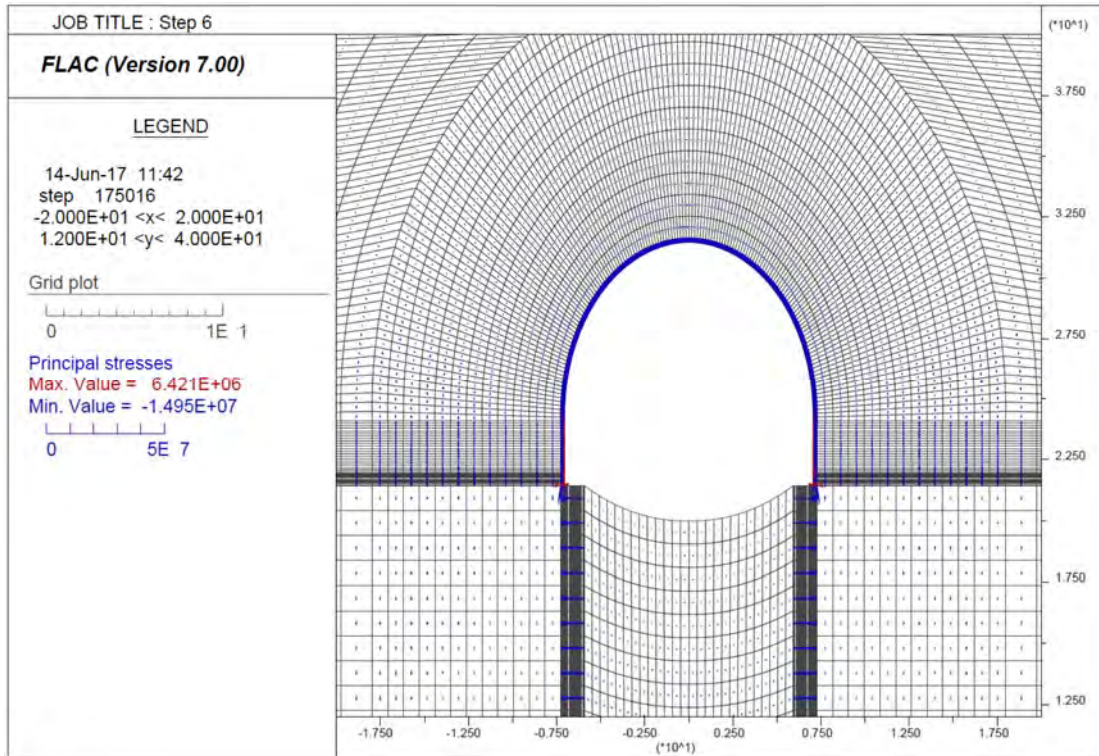


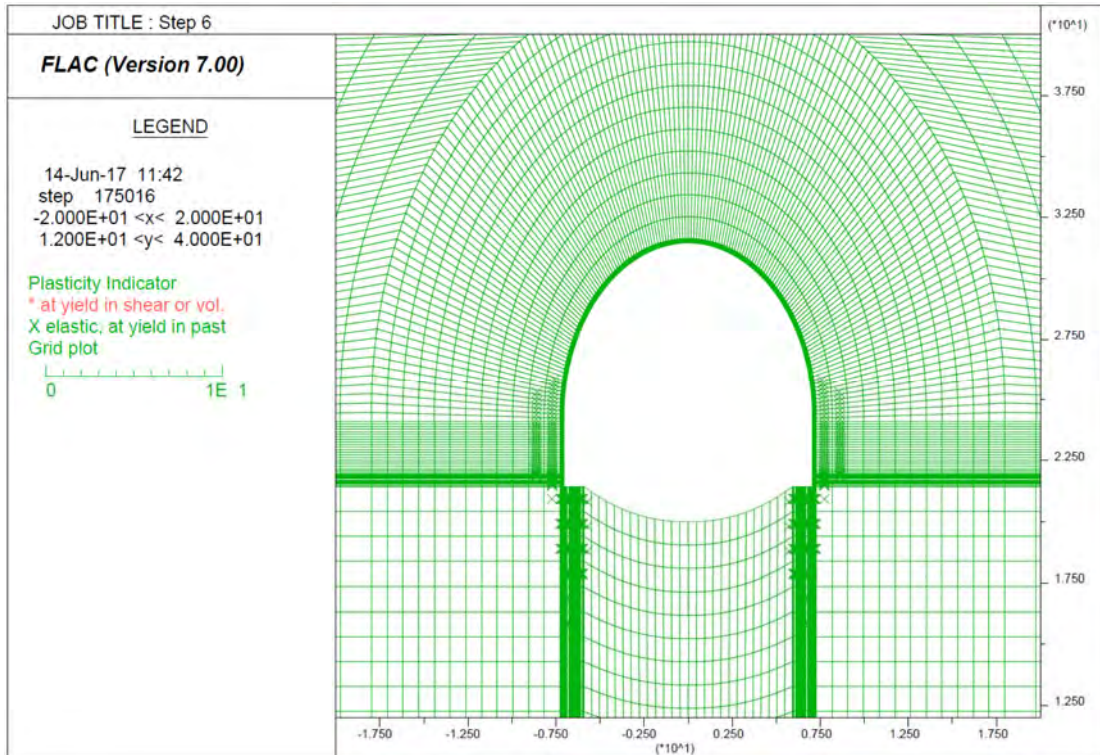
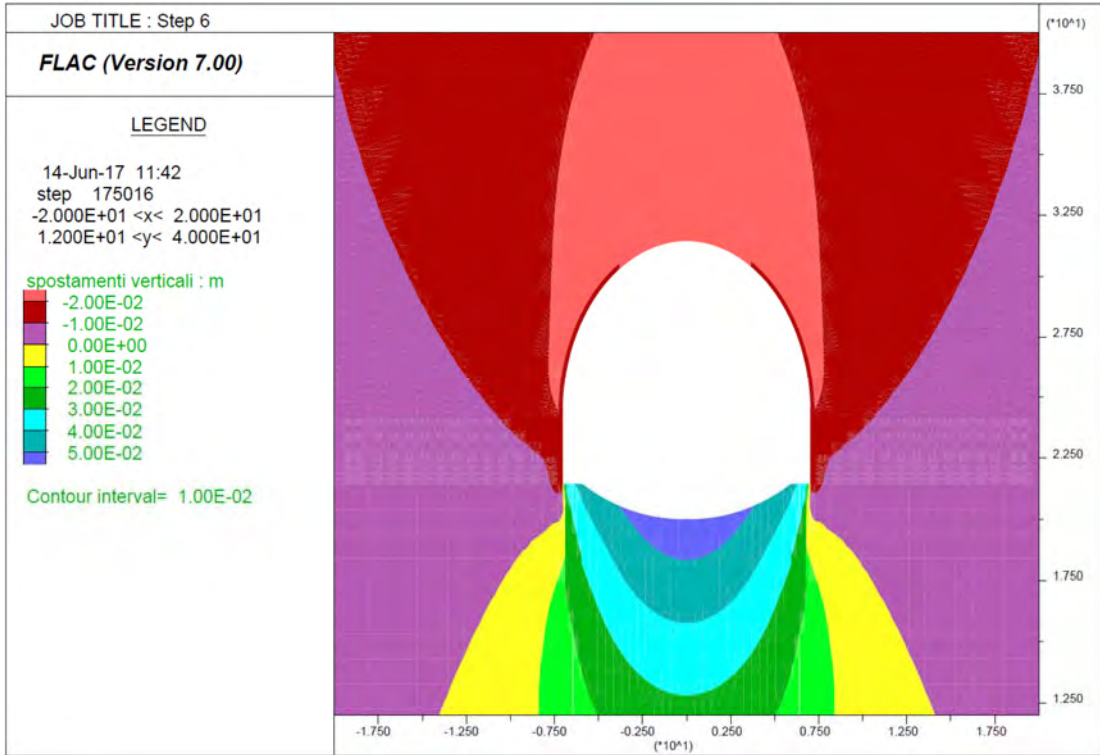
Output Flac – Sezione tipo B2 - Copertura di calcolo = 25 m

Step 1 – Tensioni litostatiche

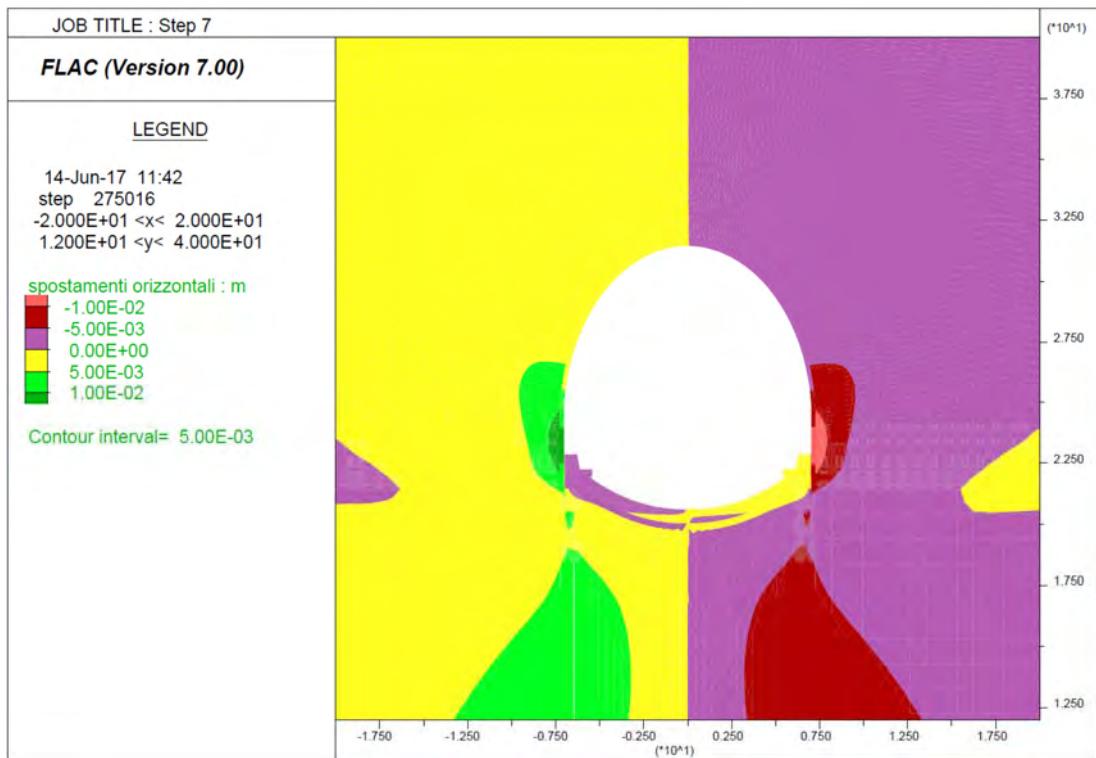
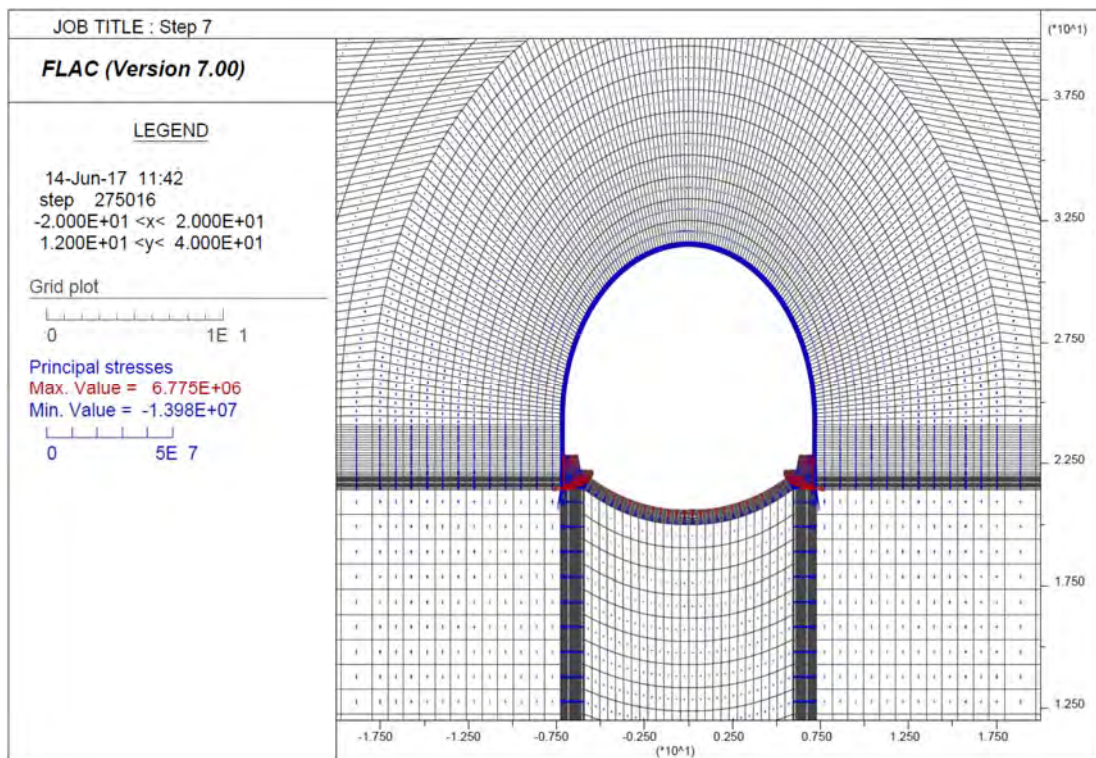


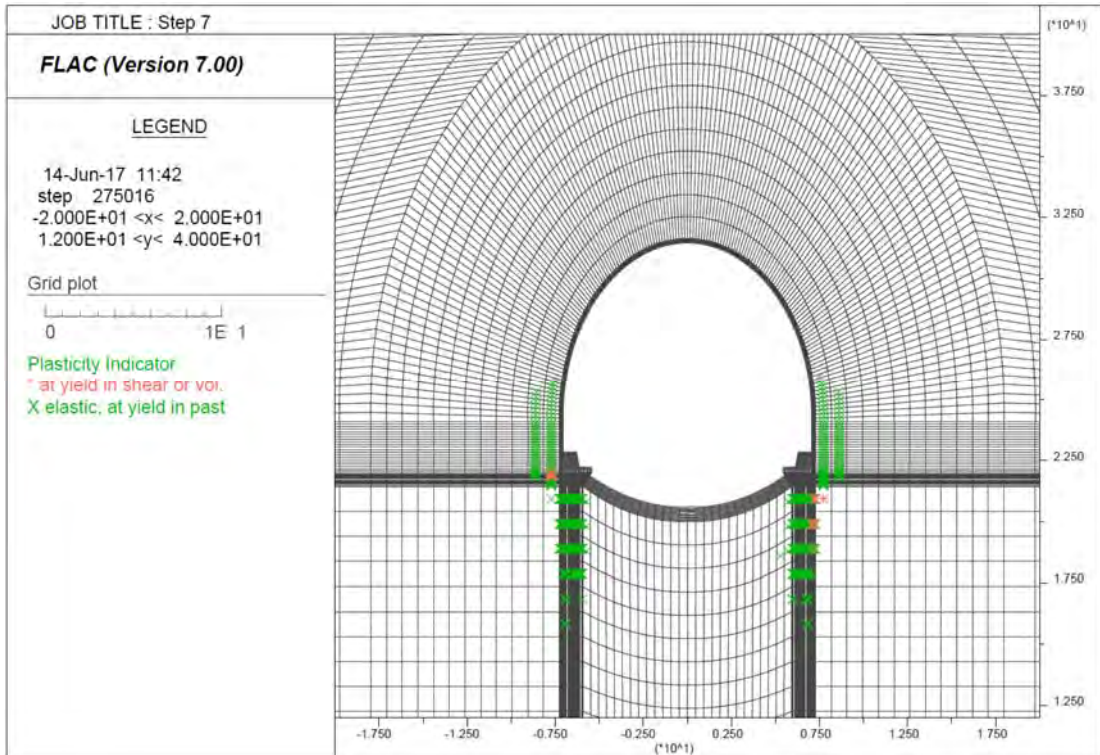
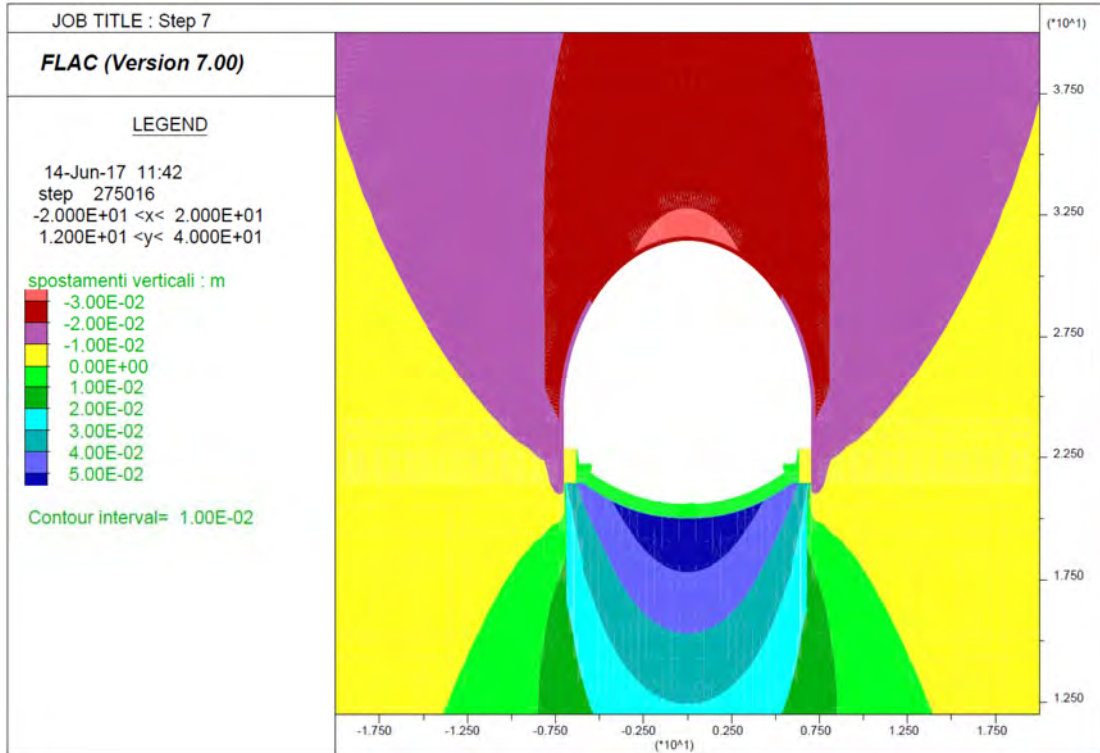
Step 6 – Avanzamento fino a 2D



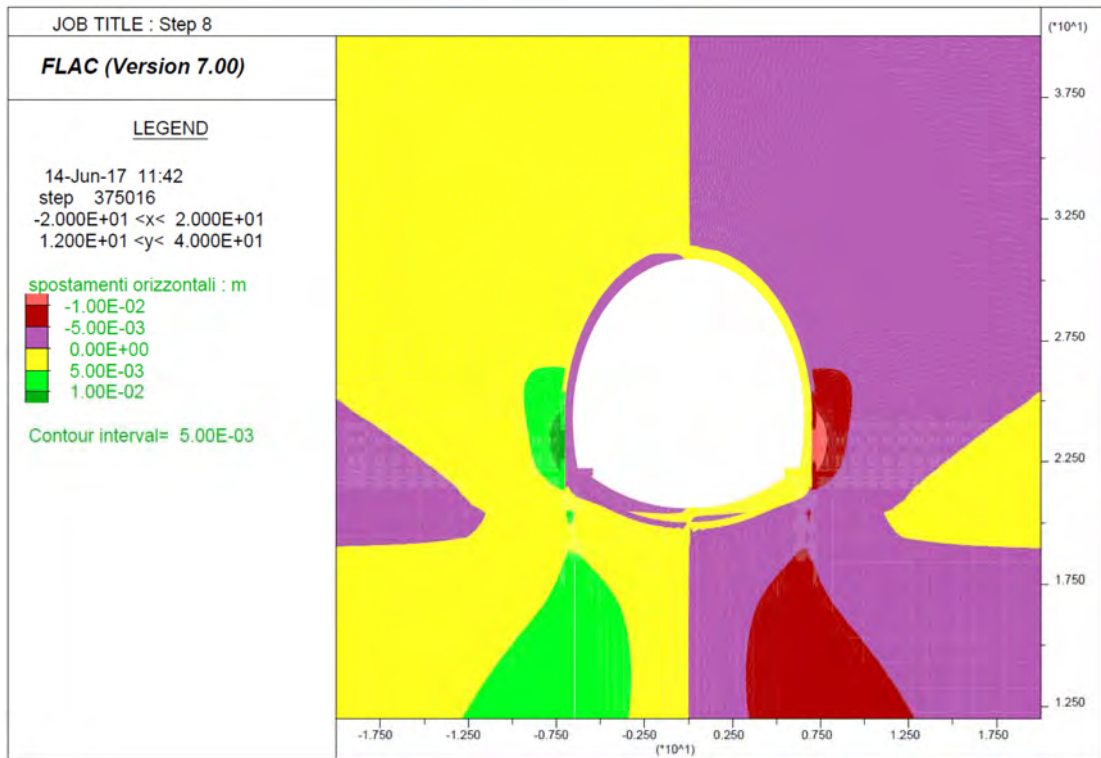
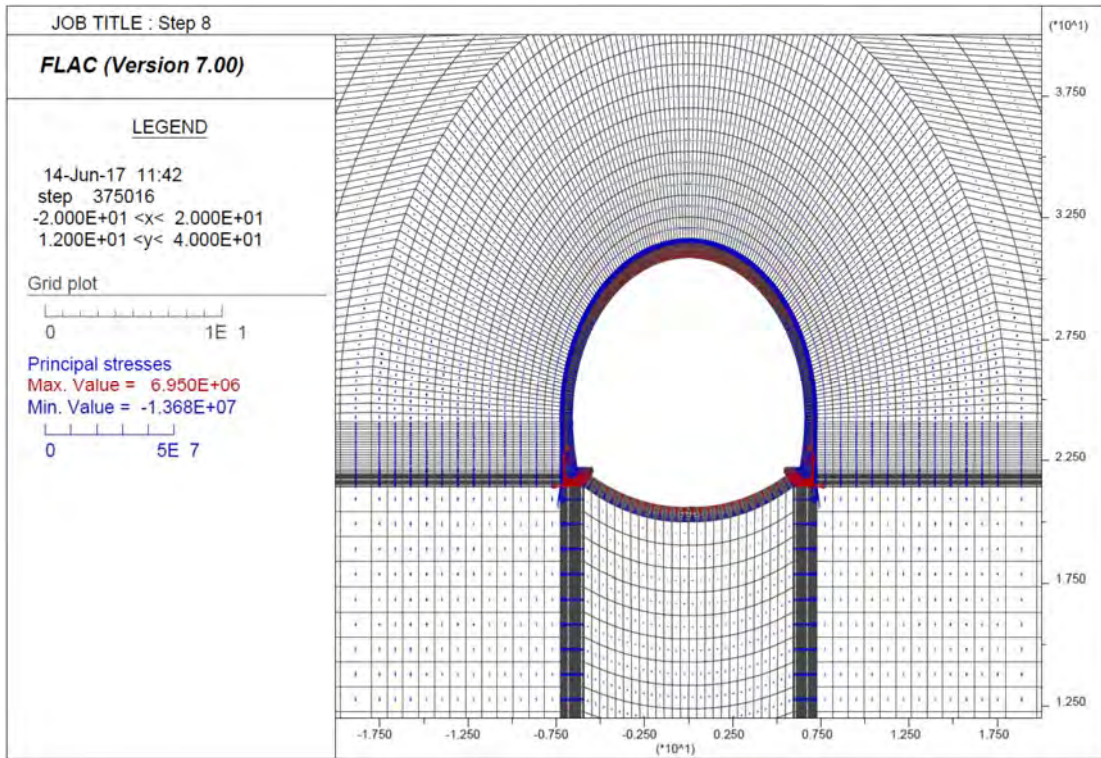


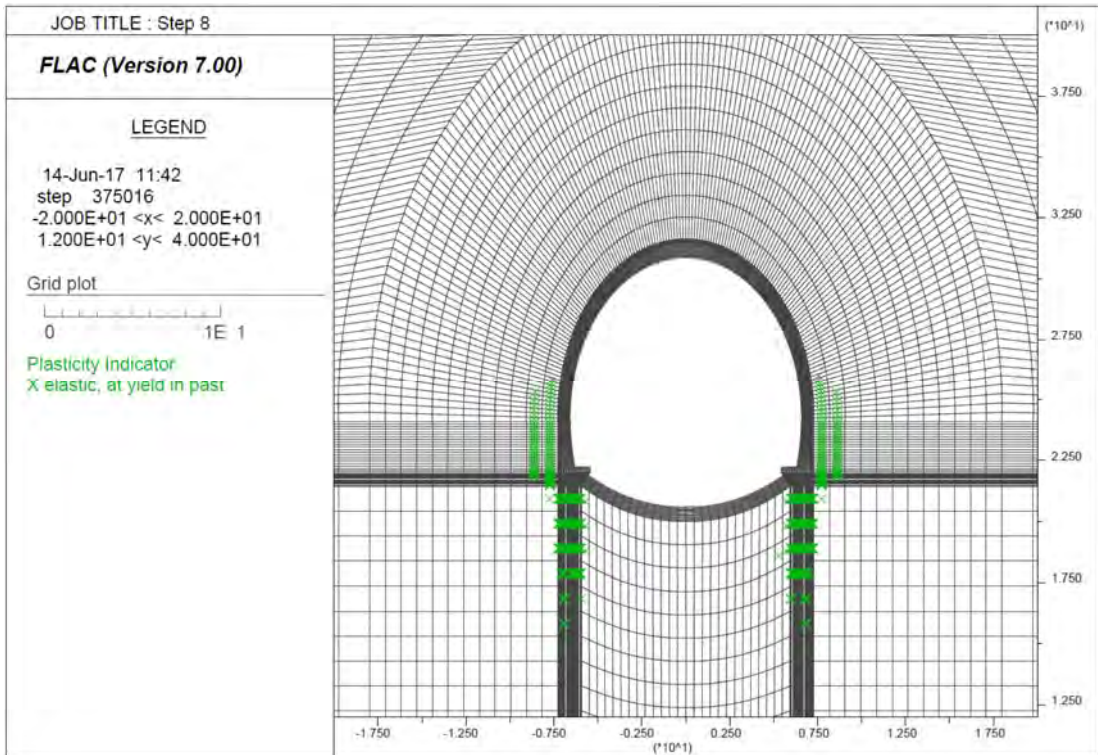
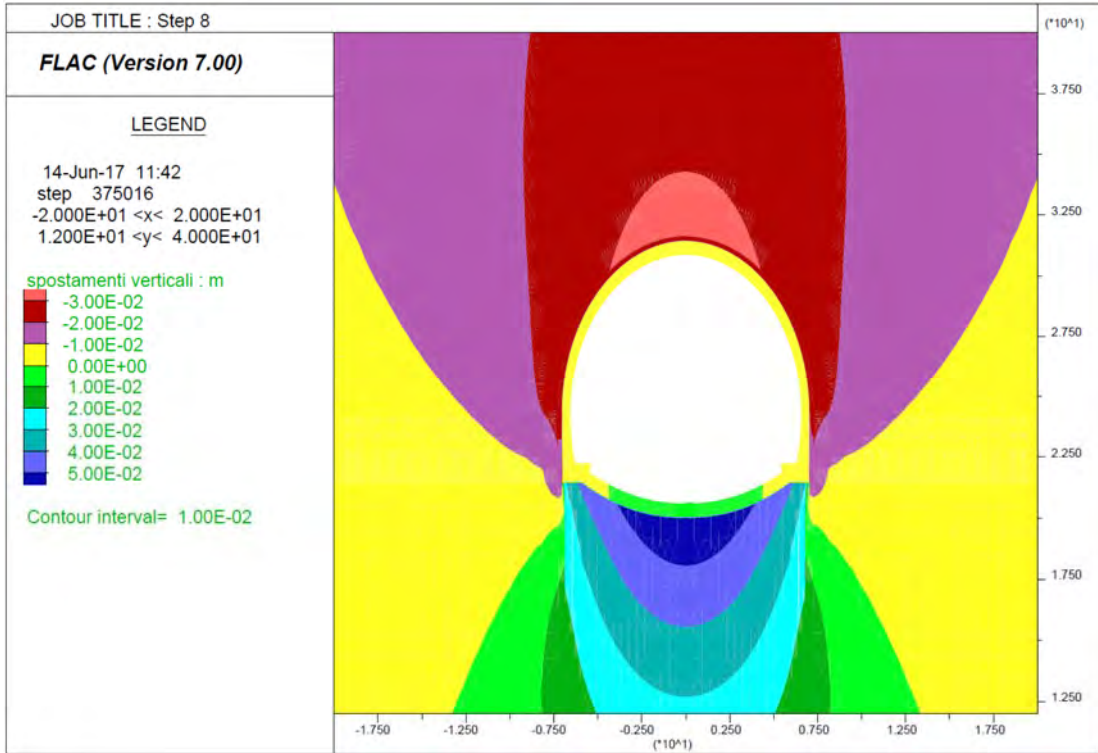
Step 7 - Getto arco rovescio e muretta a 2D e avanzamento fino a deformazioni esaurite



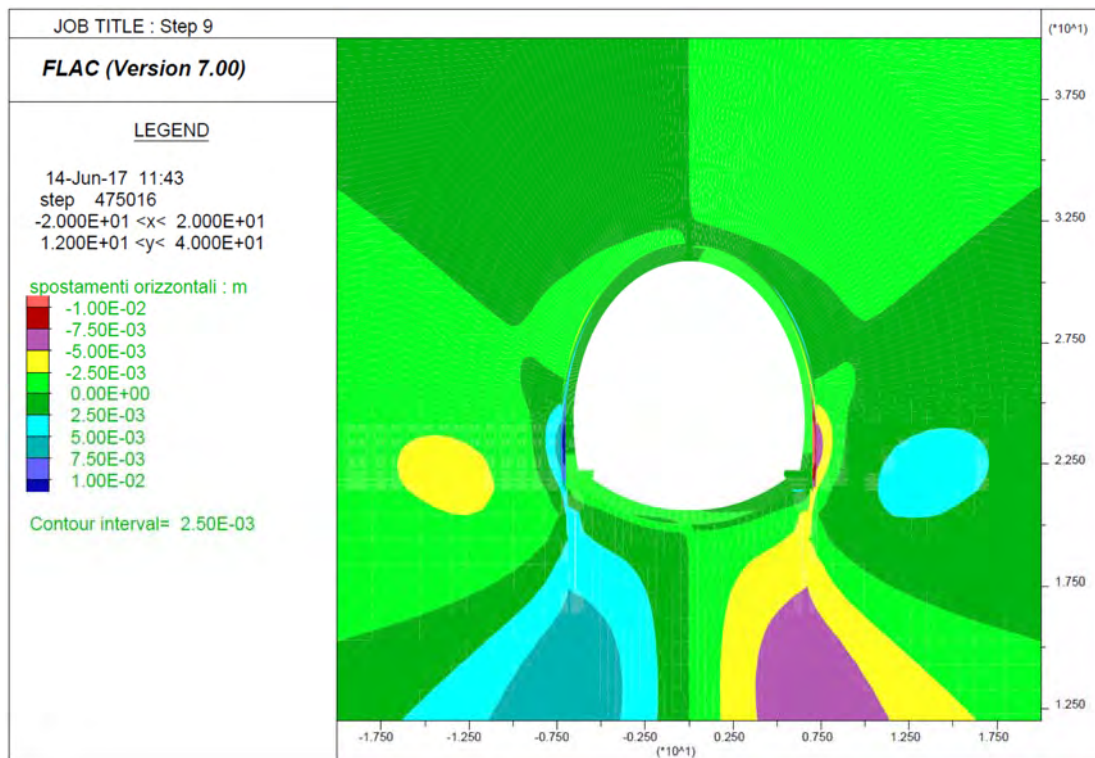
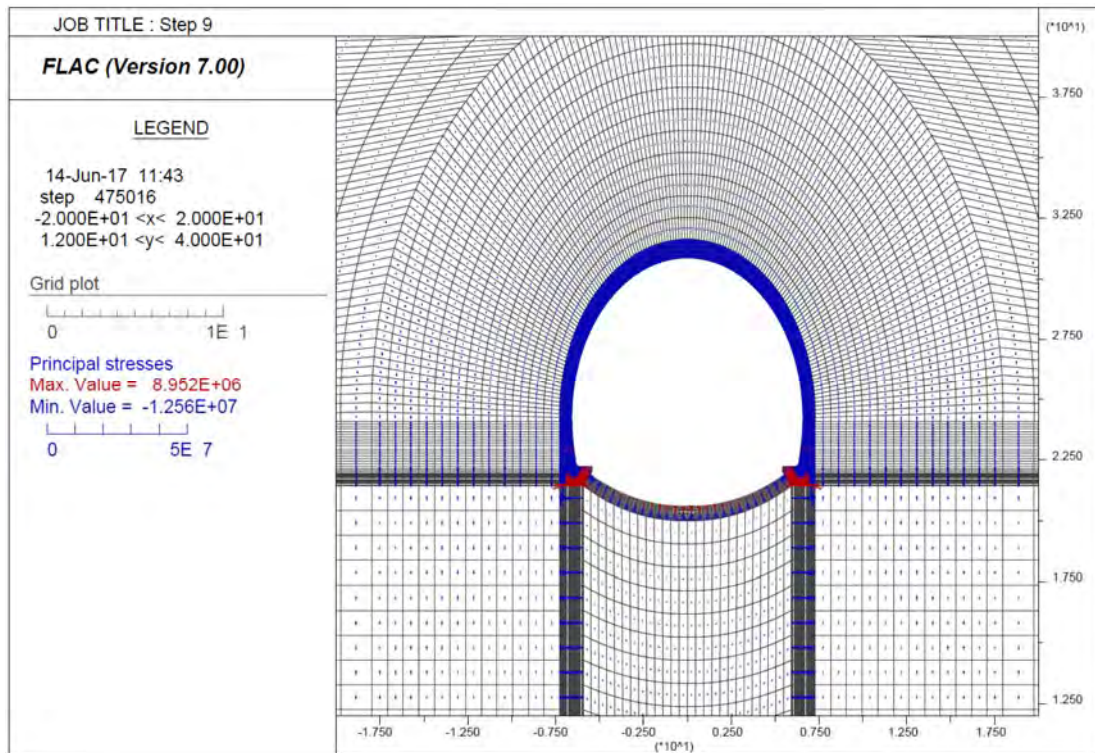


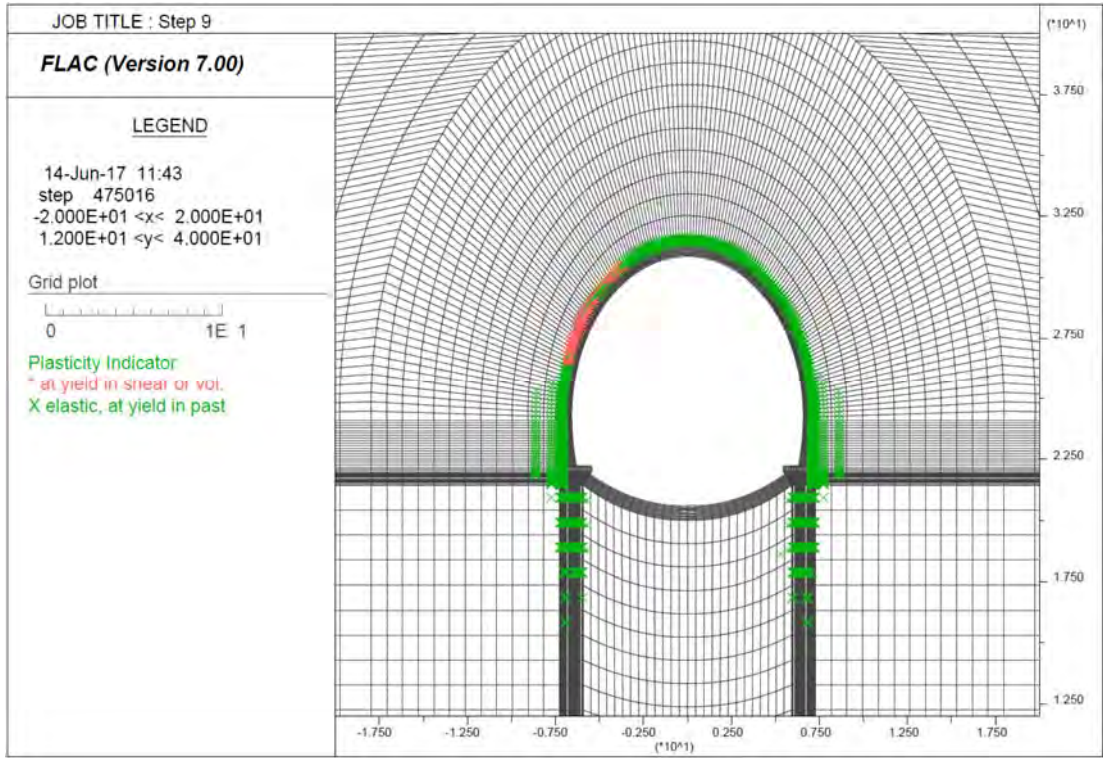
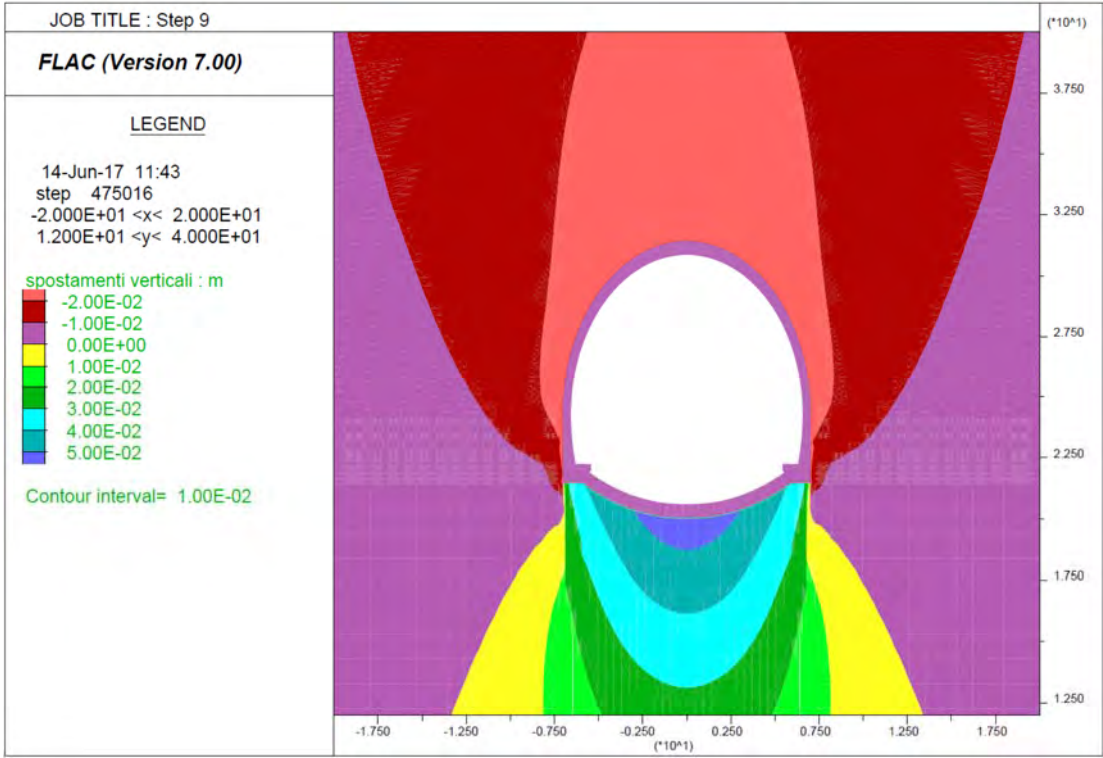
Step 8 - Getto Calotta





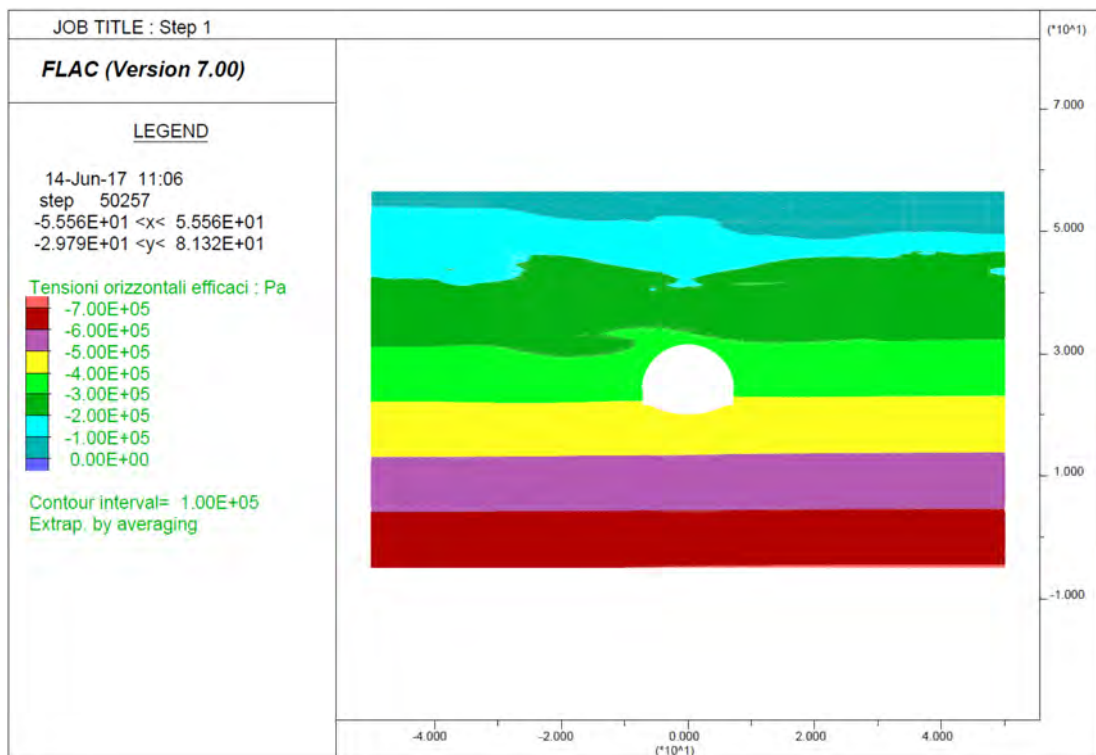
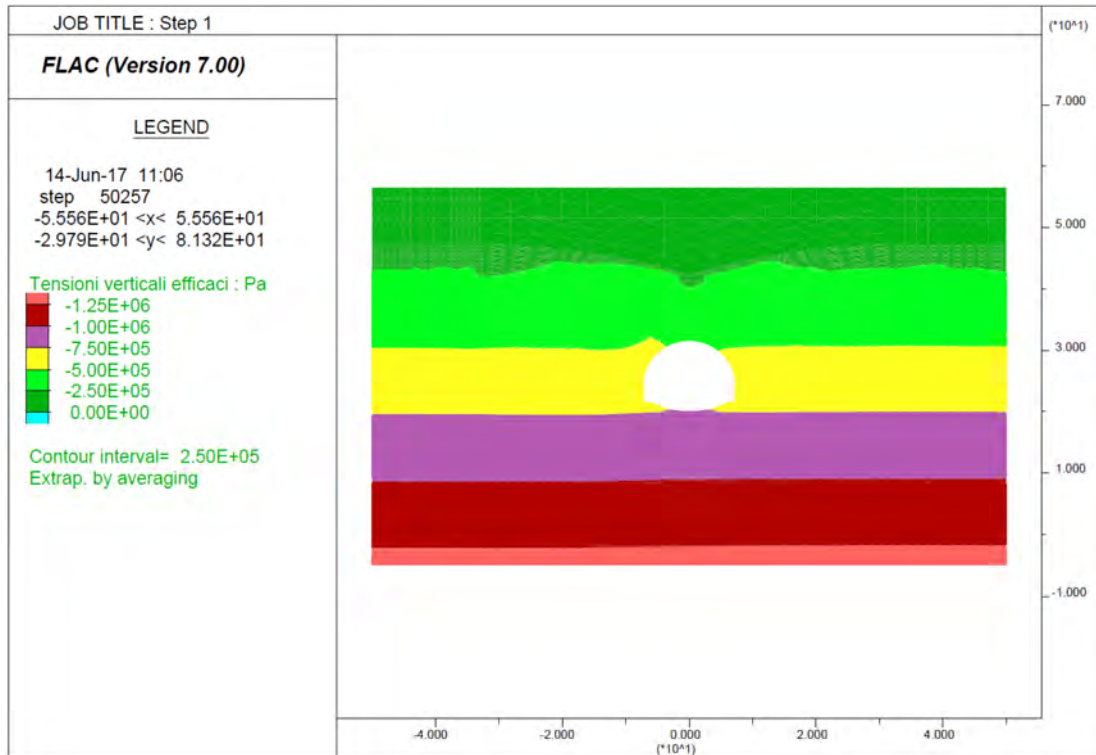
Step 9 - Decadimento dei parametri di resistenza del rivestimento provvisorio



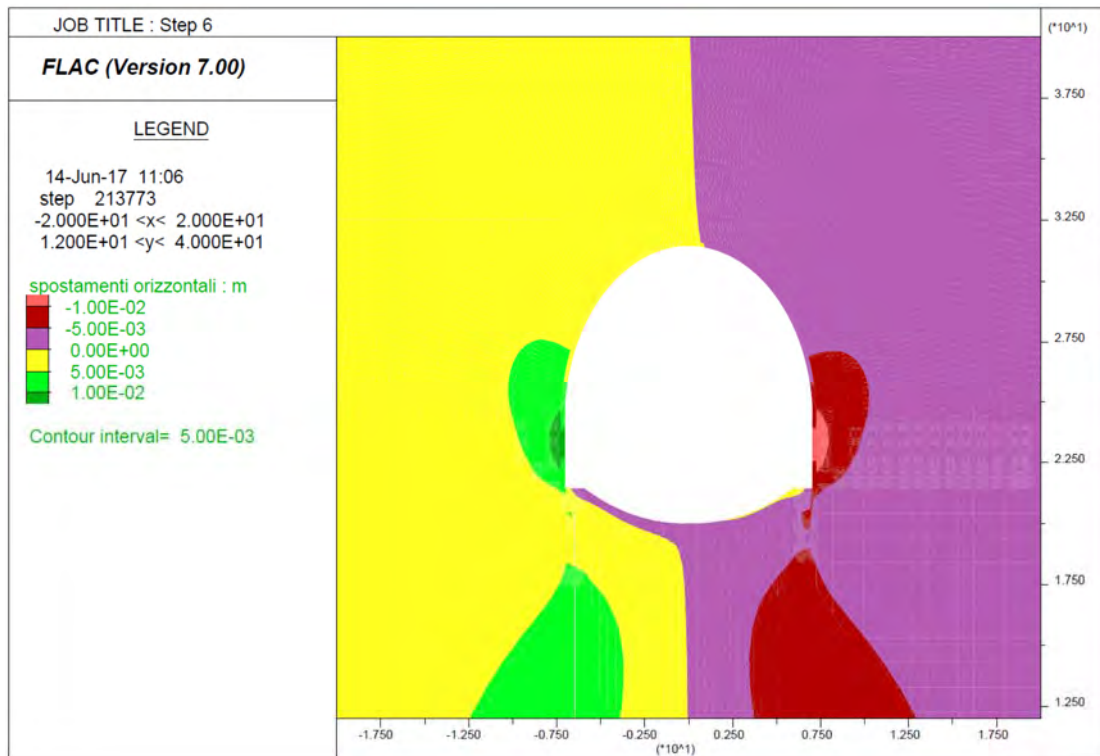
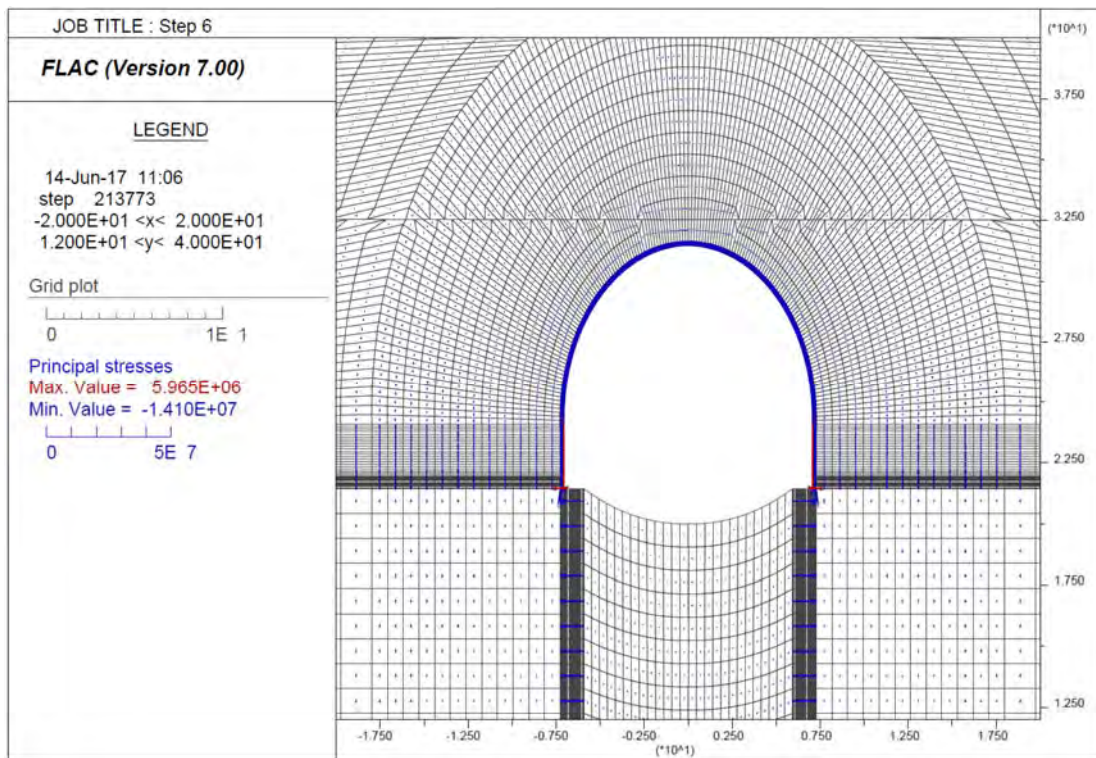


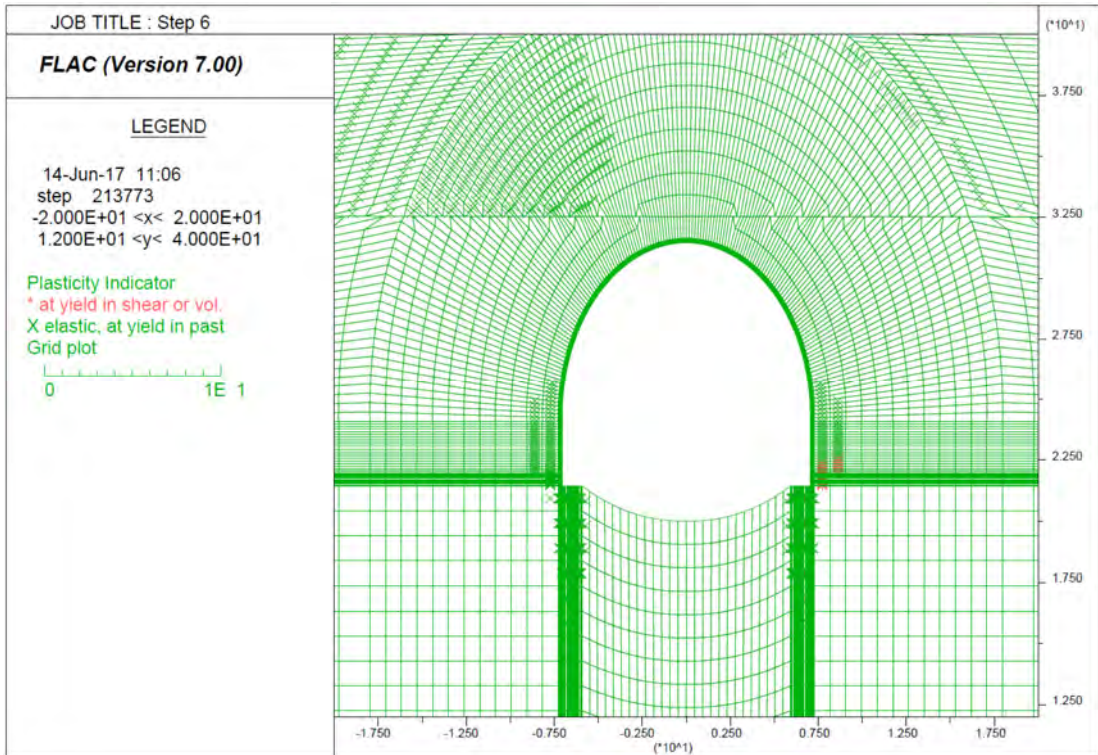
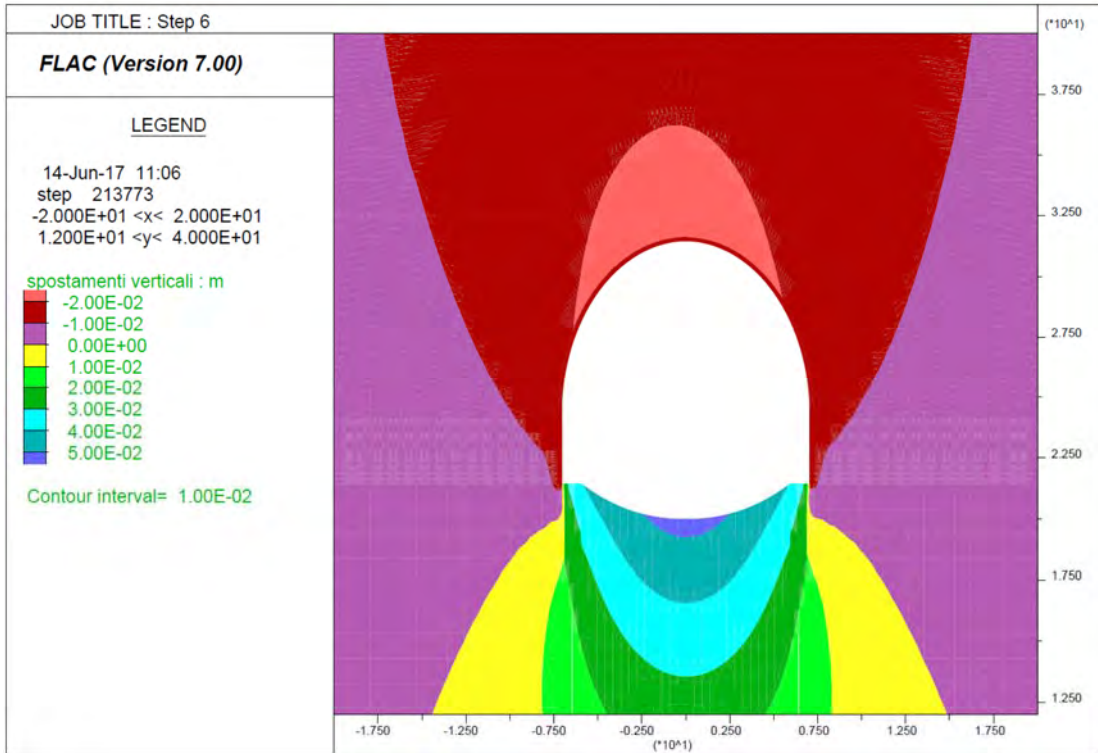
Output Flac – Sezione tipo B2v – Copertura di calcolo = 25 m

Step 1 – Tensioni litostatiche

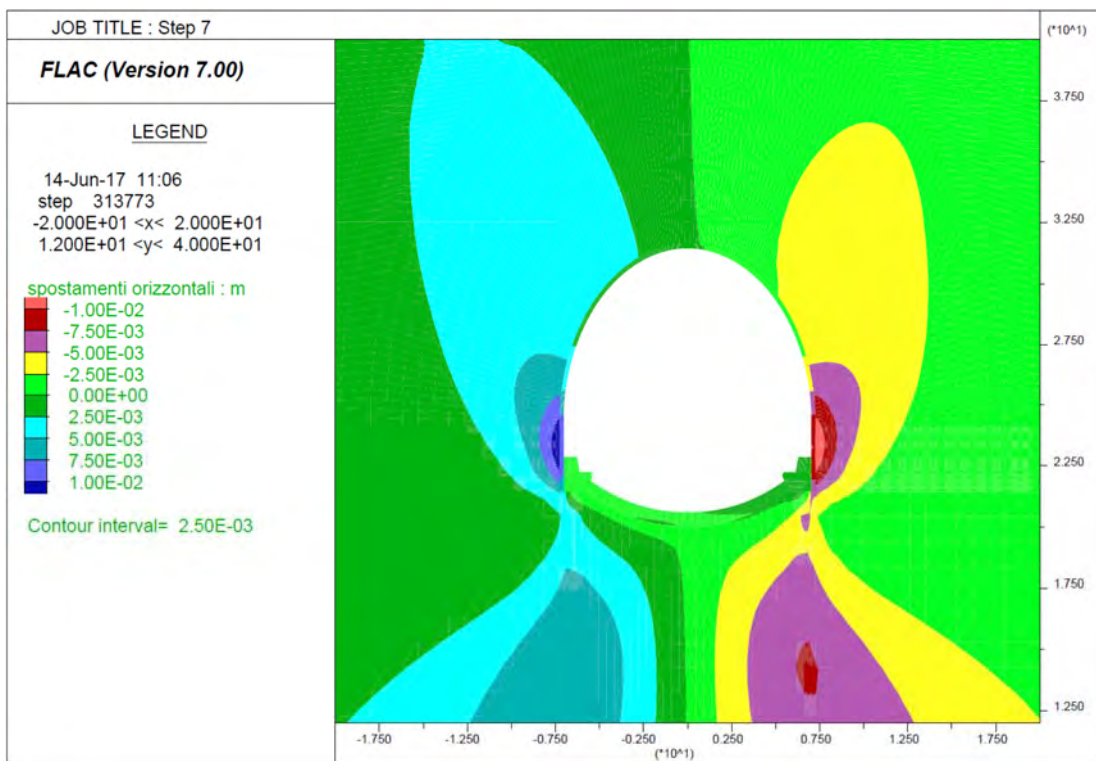
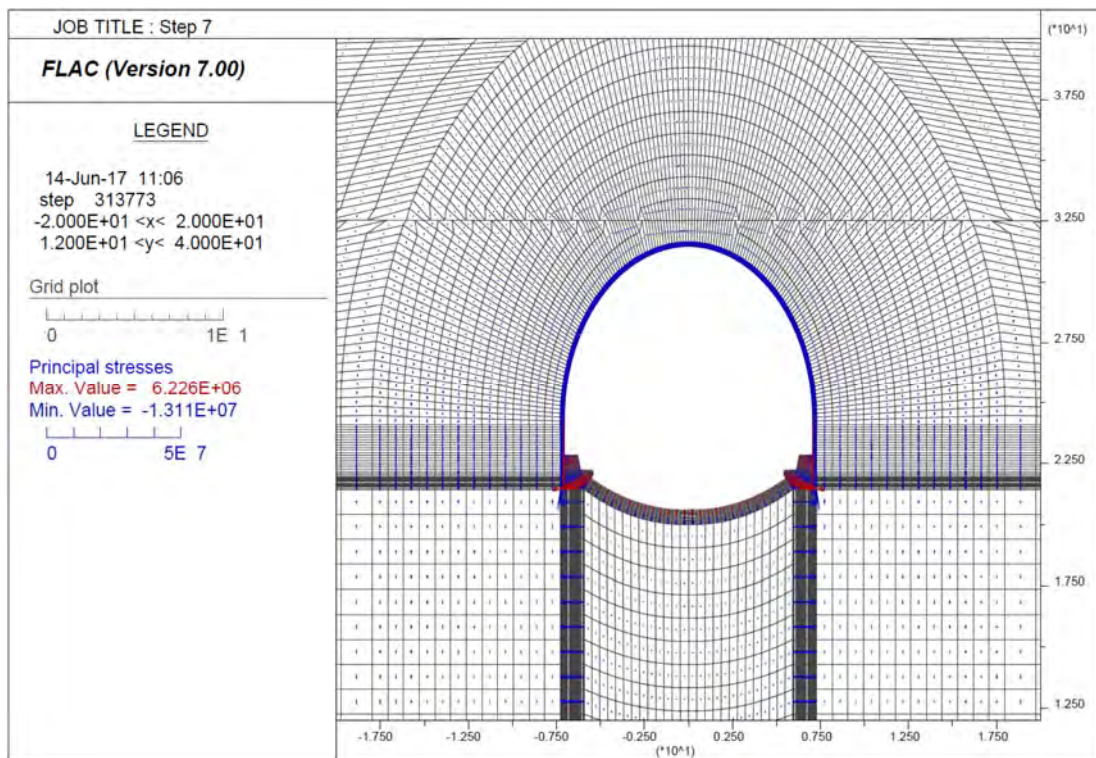


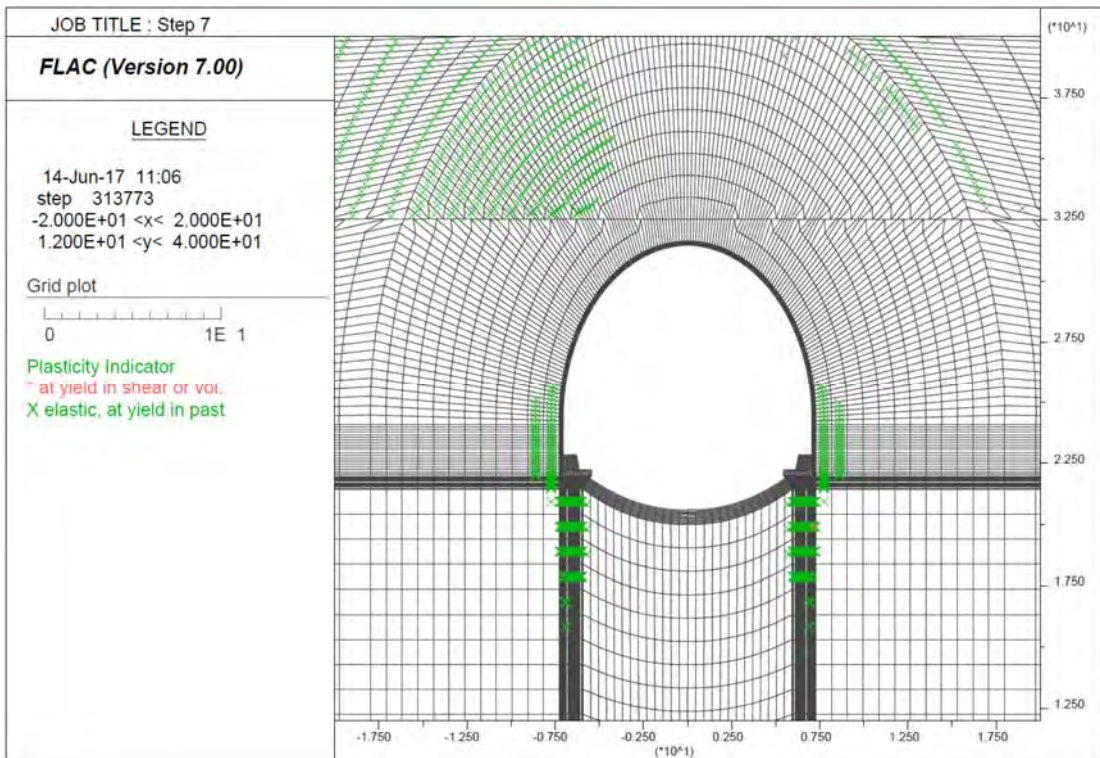
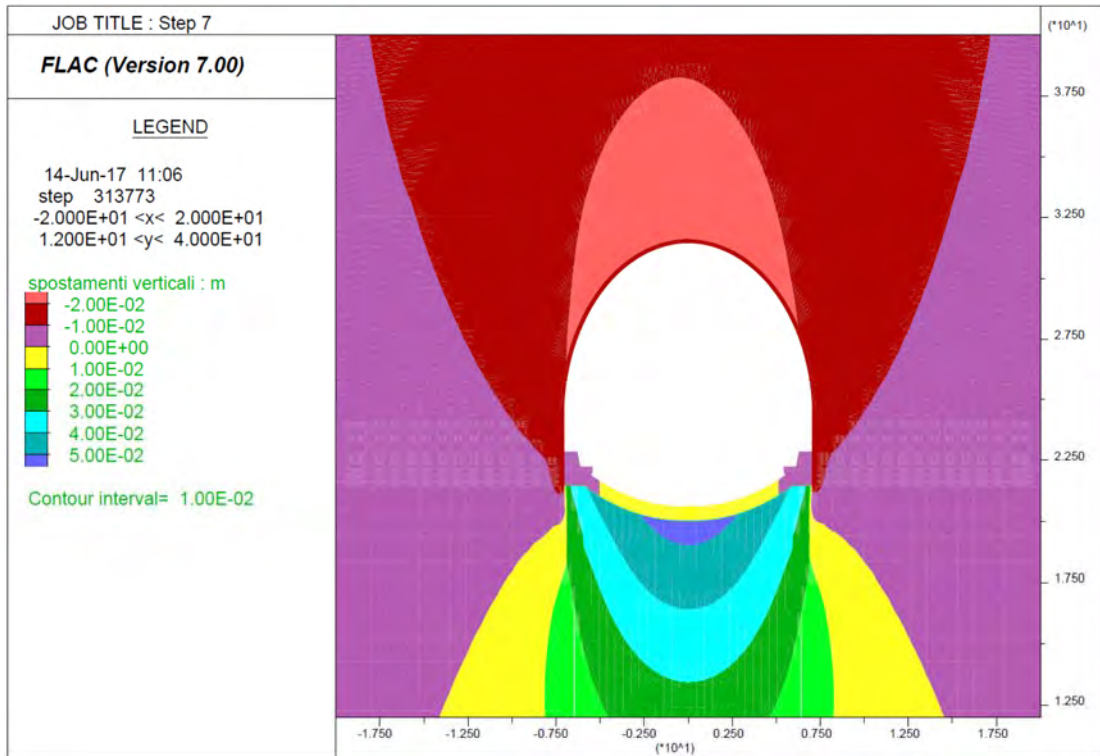
Step 6 – Avanzamento fino a 3D



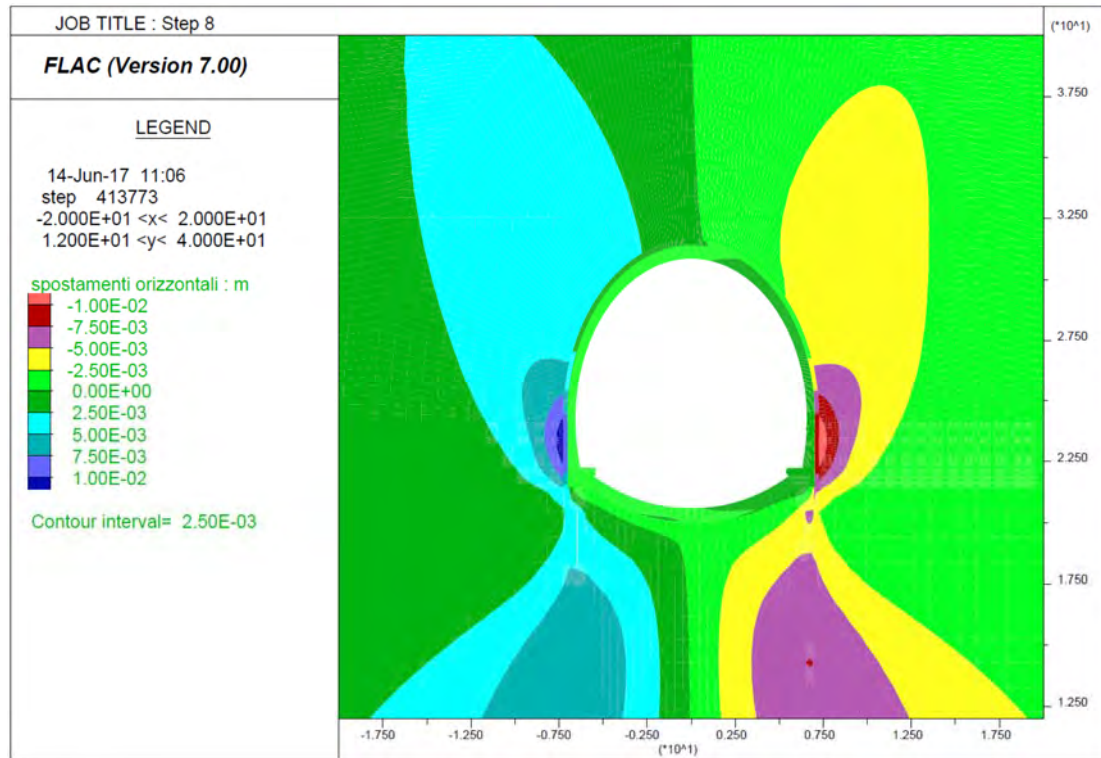
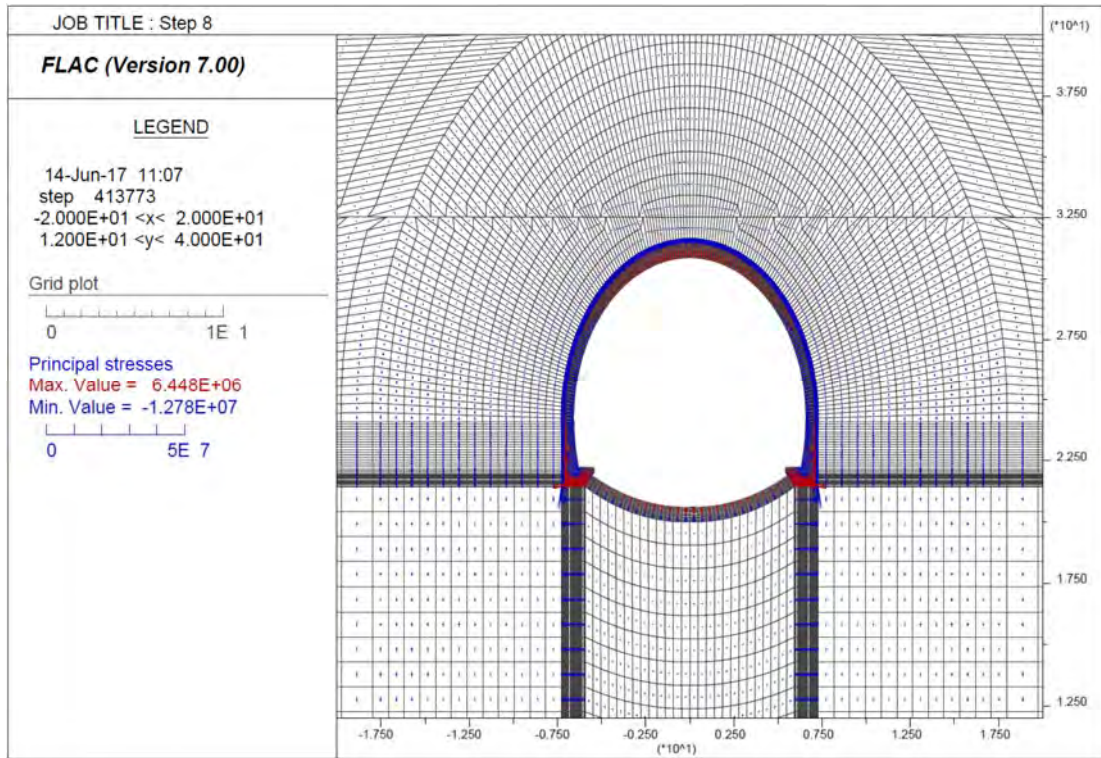


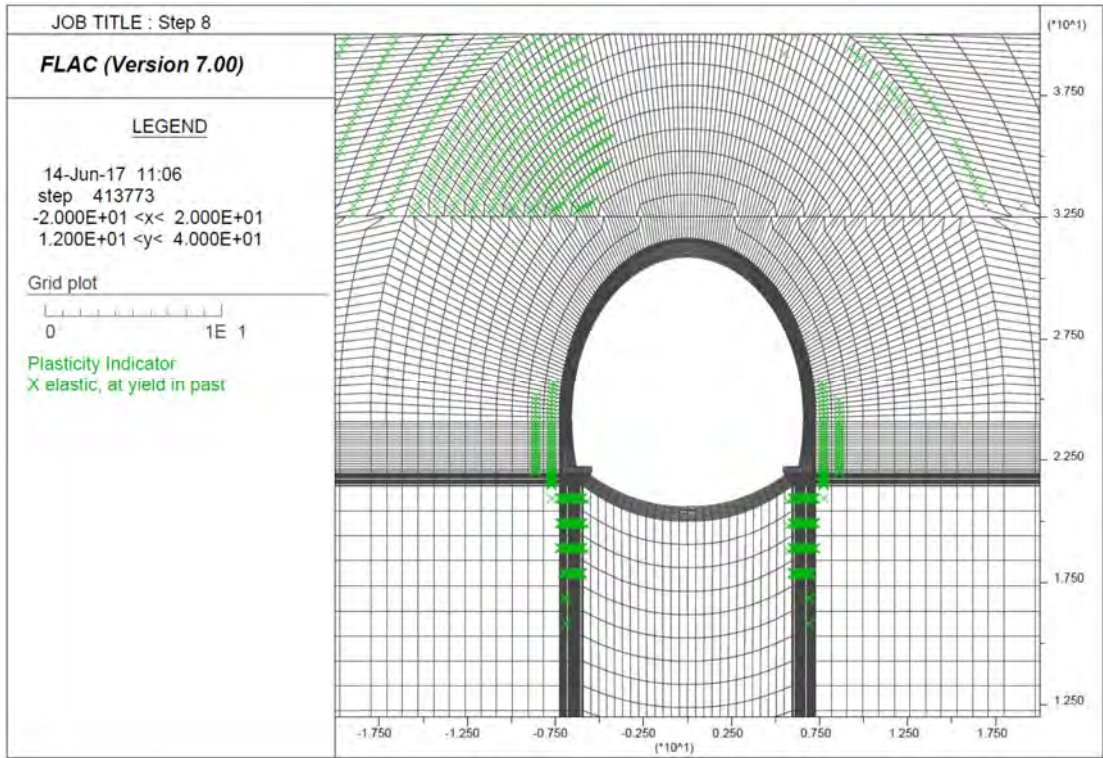
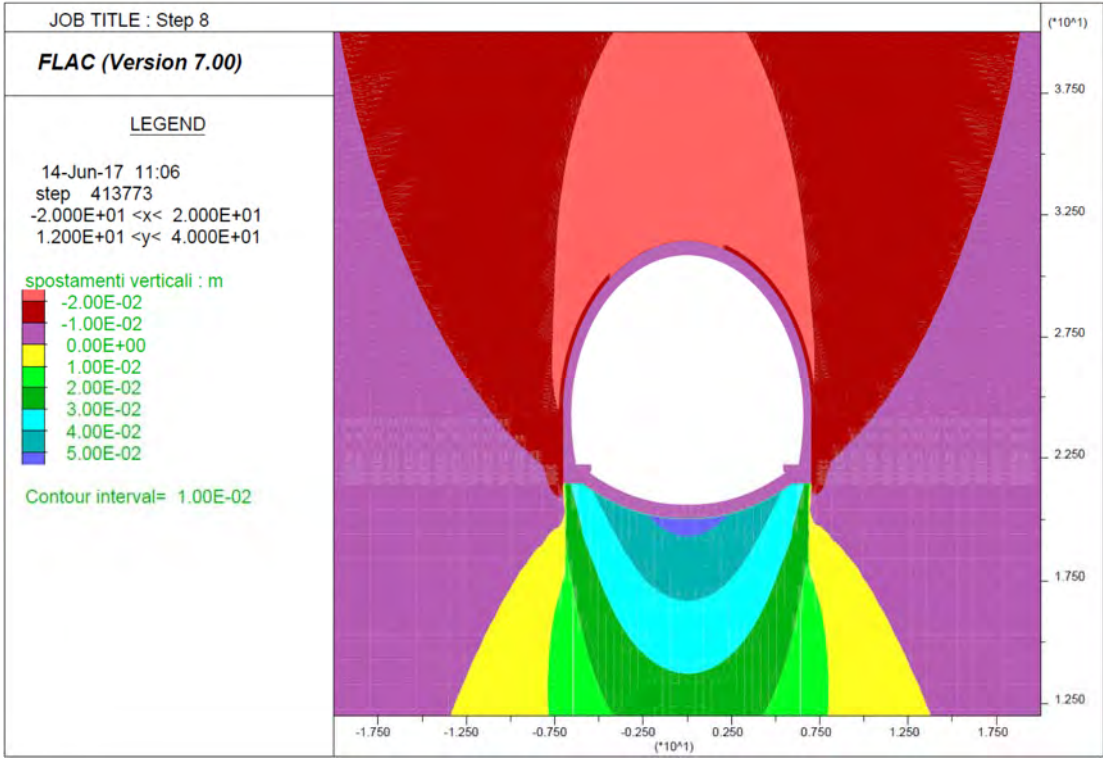
Step 7 - Getto arco rovescio e muretta a 3D e avanzamento fino a deformazioni esaurite



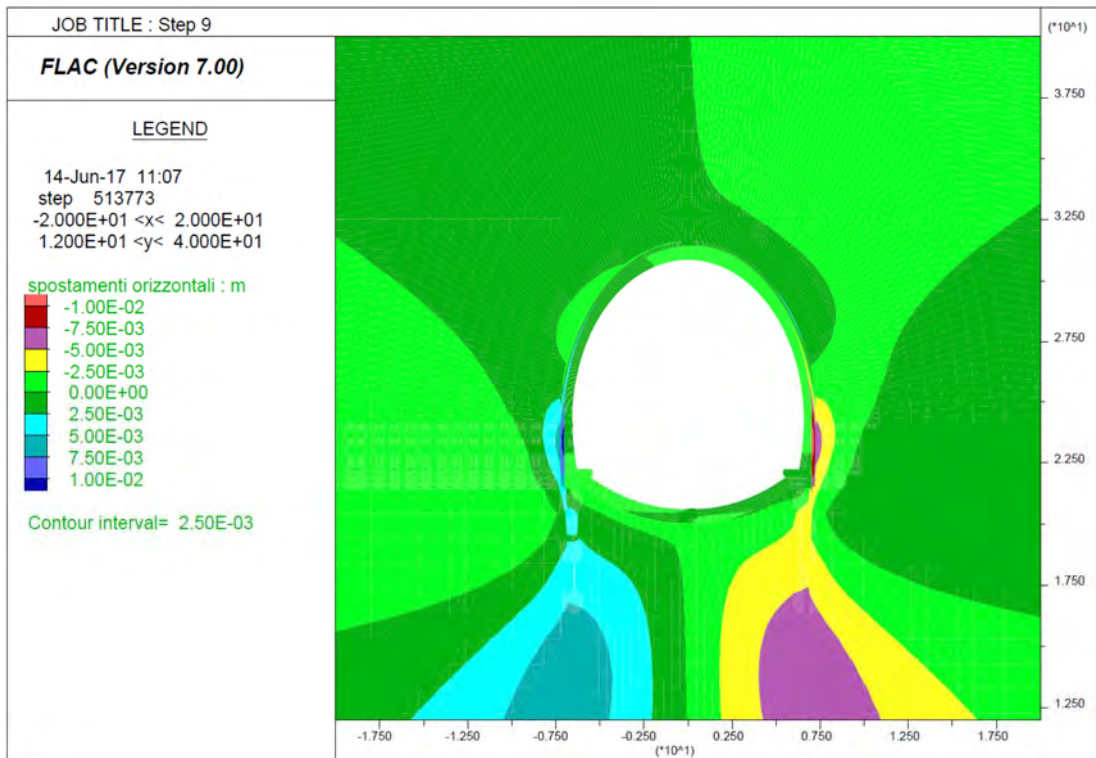
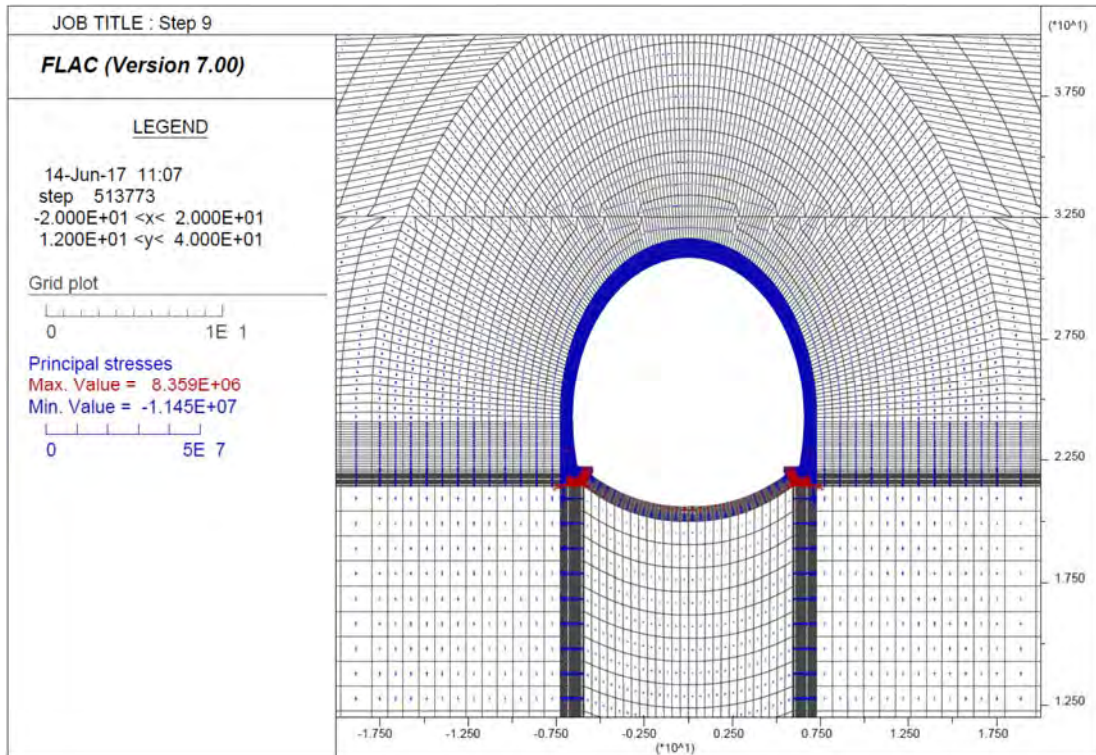


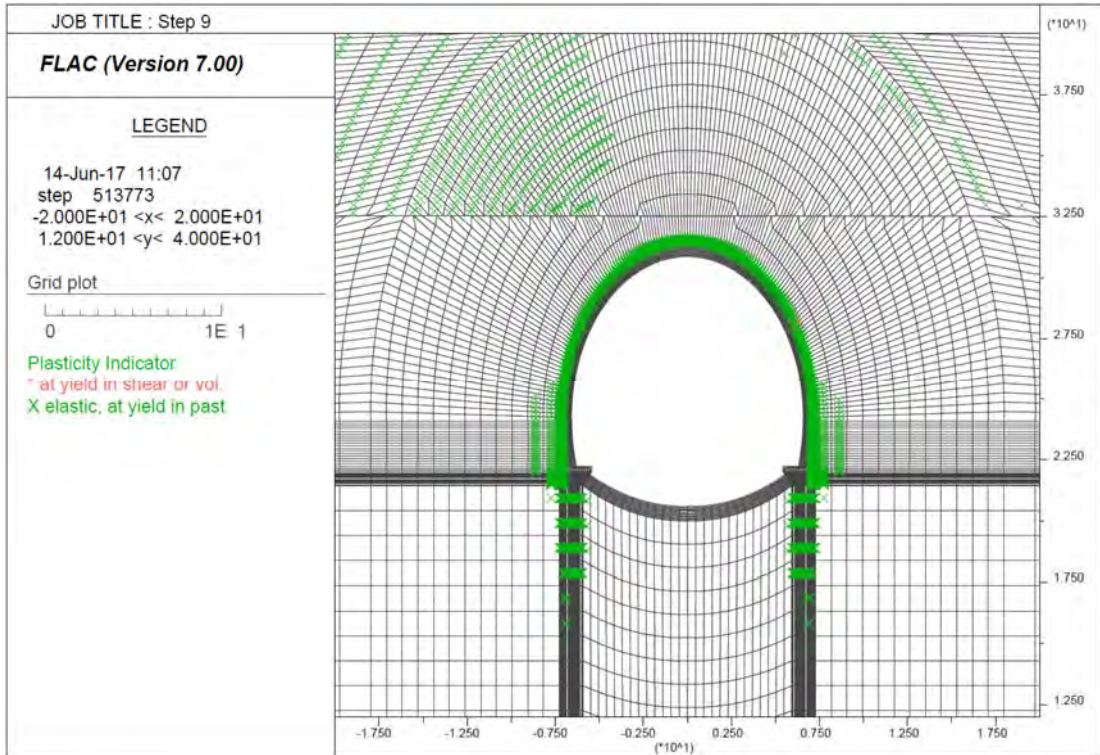
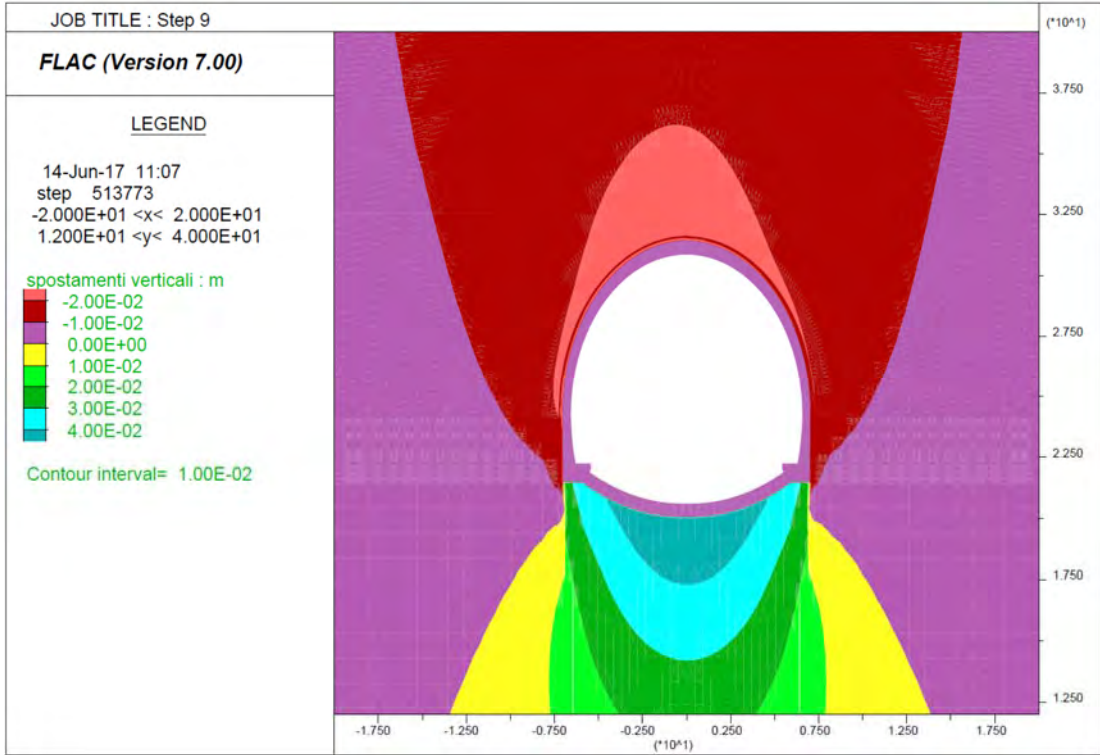
Step 8 - Getto Calotta





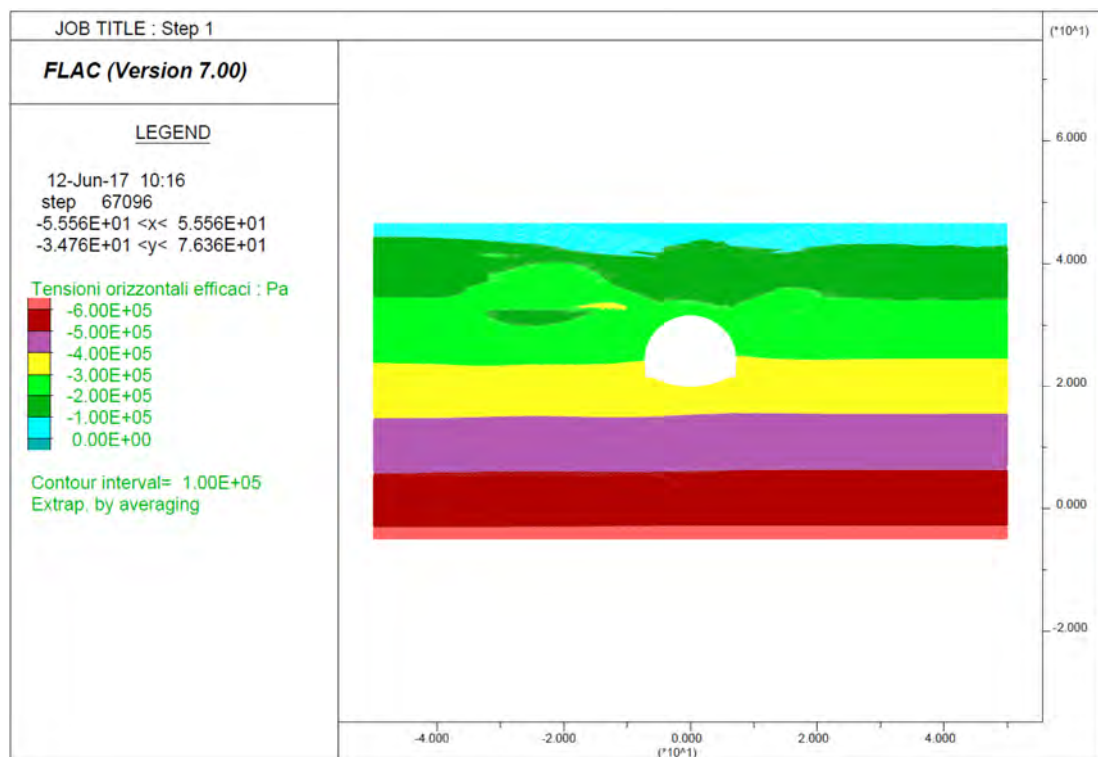
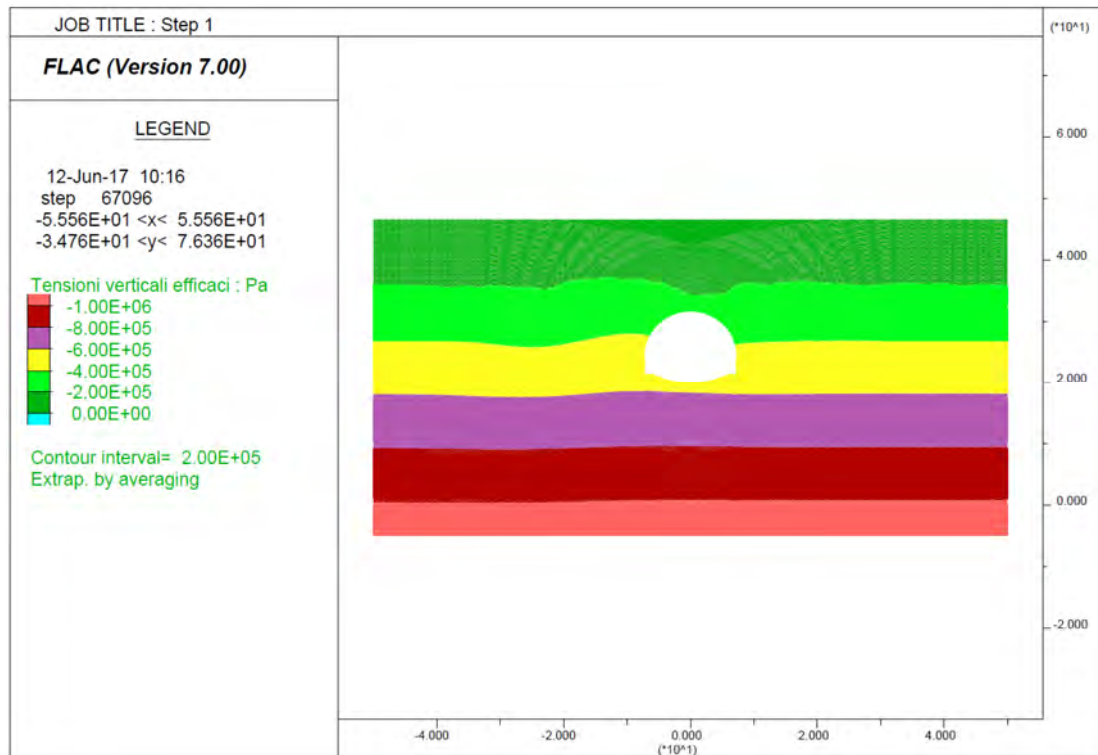
Step 9 - Decadimento dei parametri di resistenza del rivestimento provvisorio



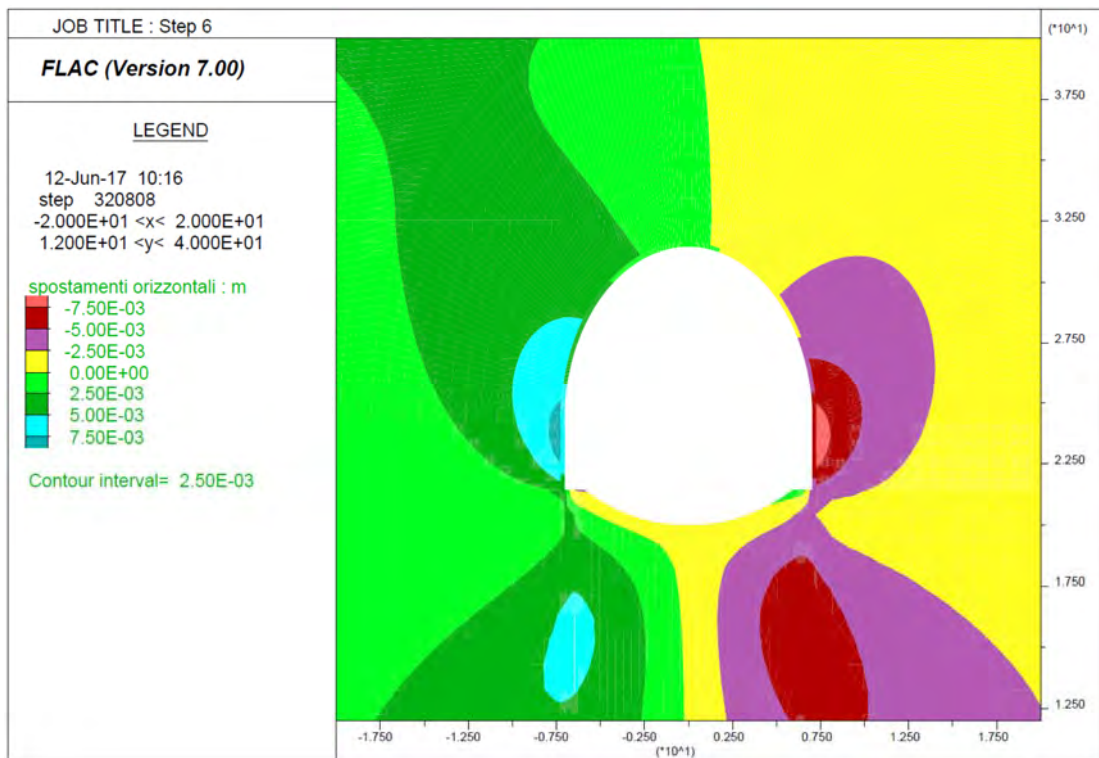
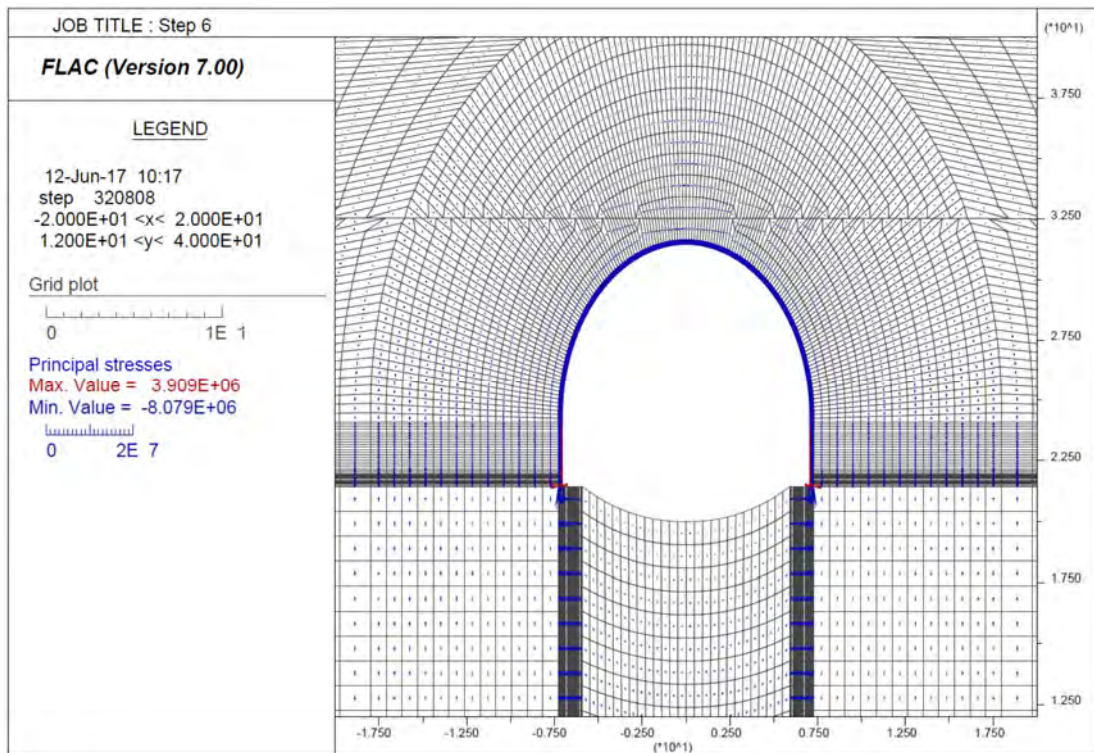


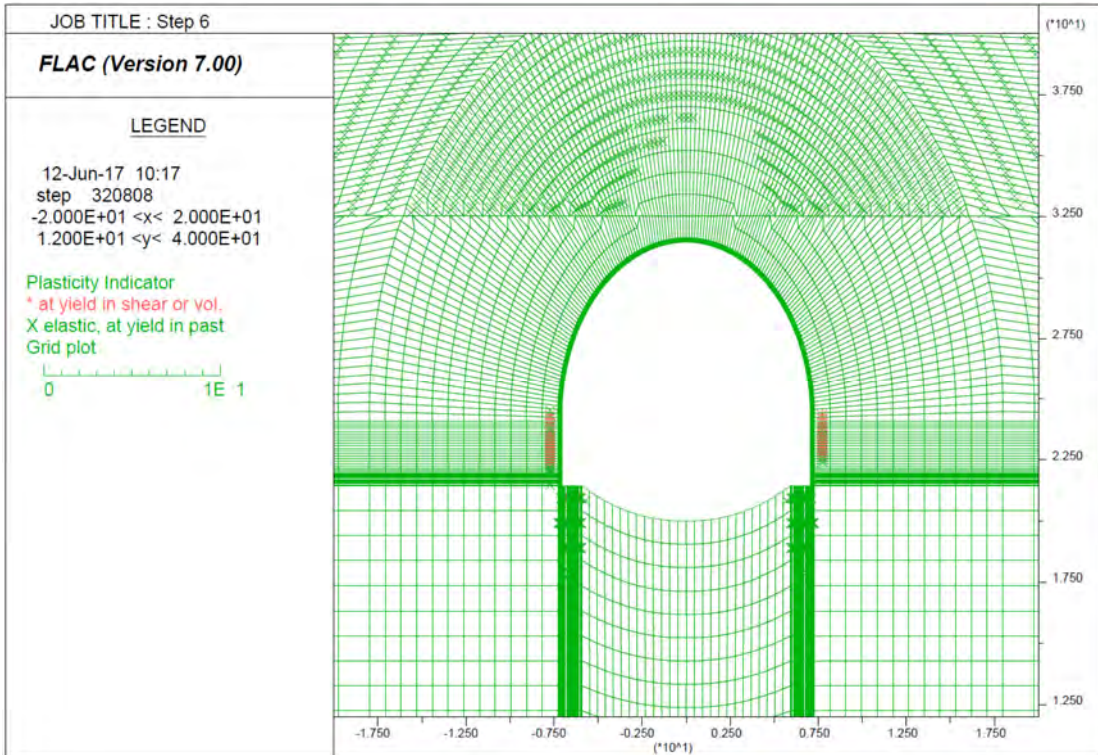
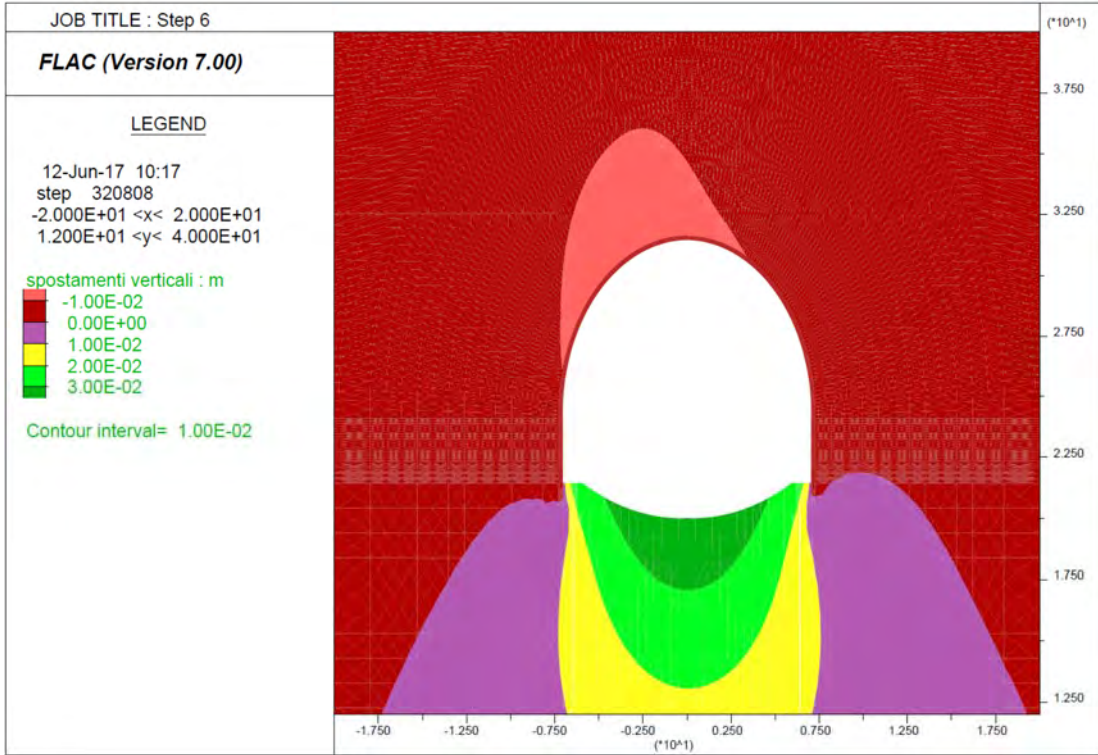
Output Flac – Sezione tipo B2v – Copertura di calcolo = 15 m

Step 1 – Tensioni litostatiche

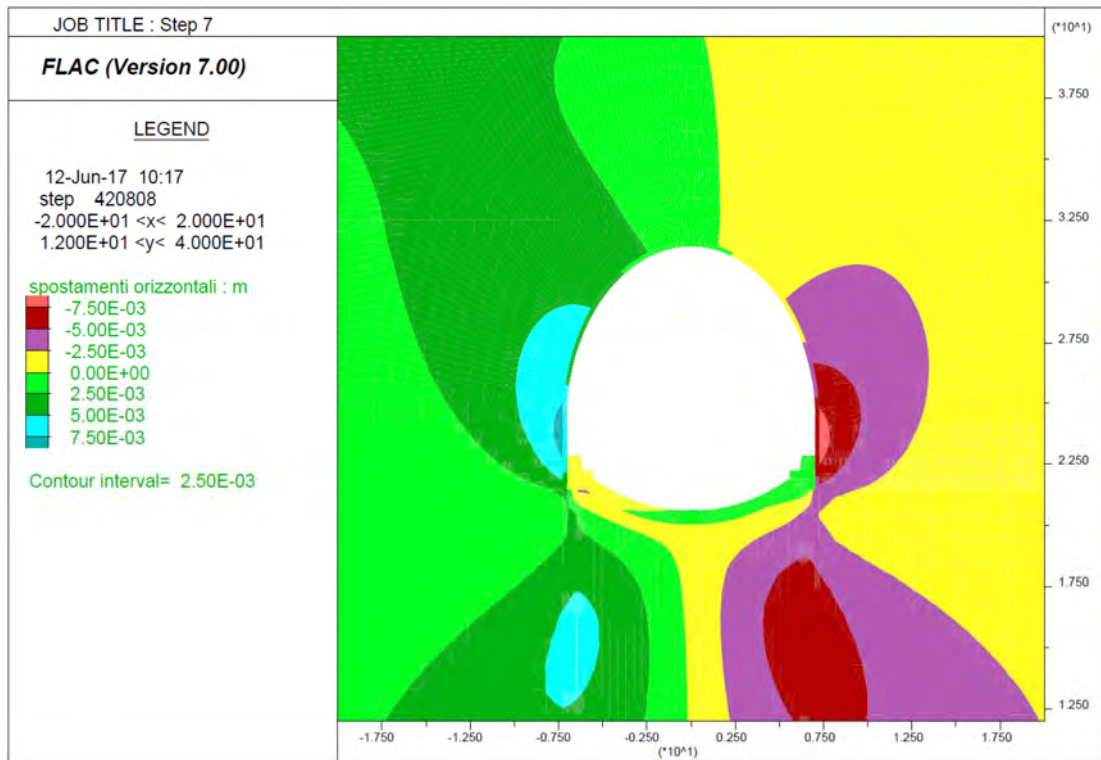
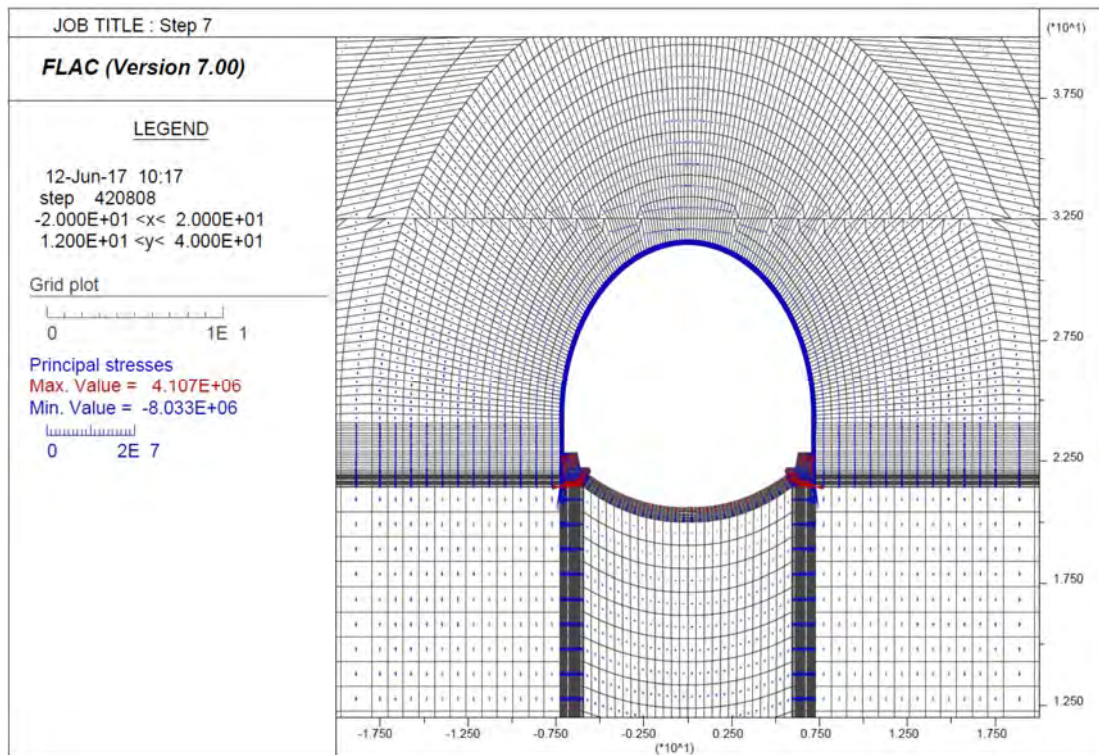


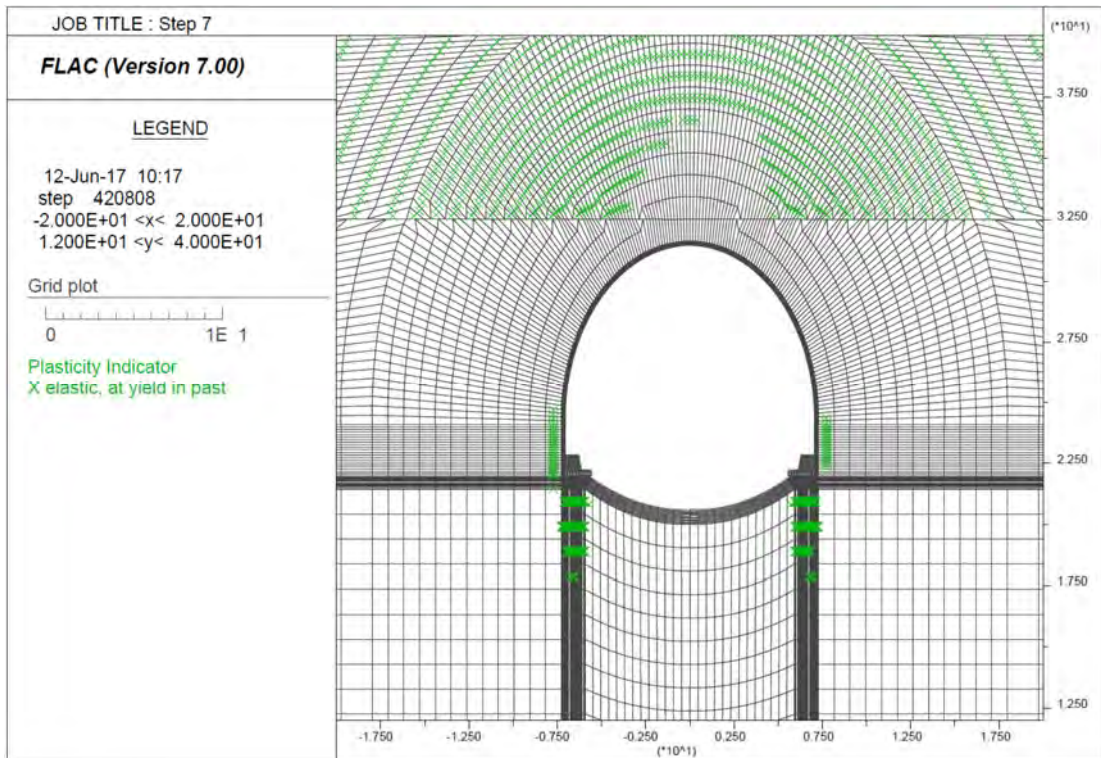
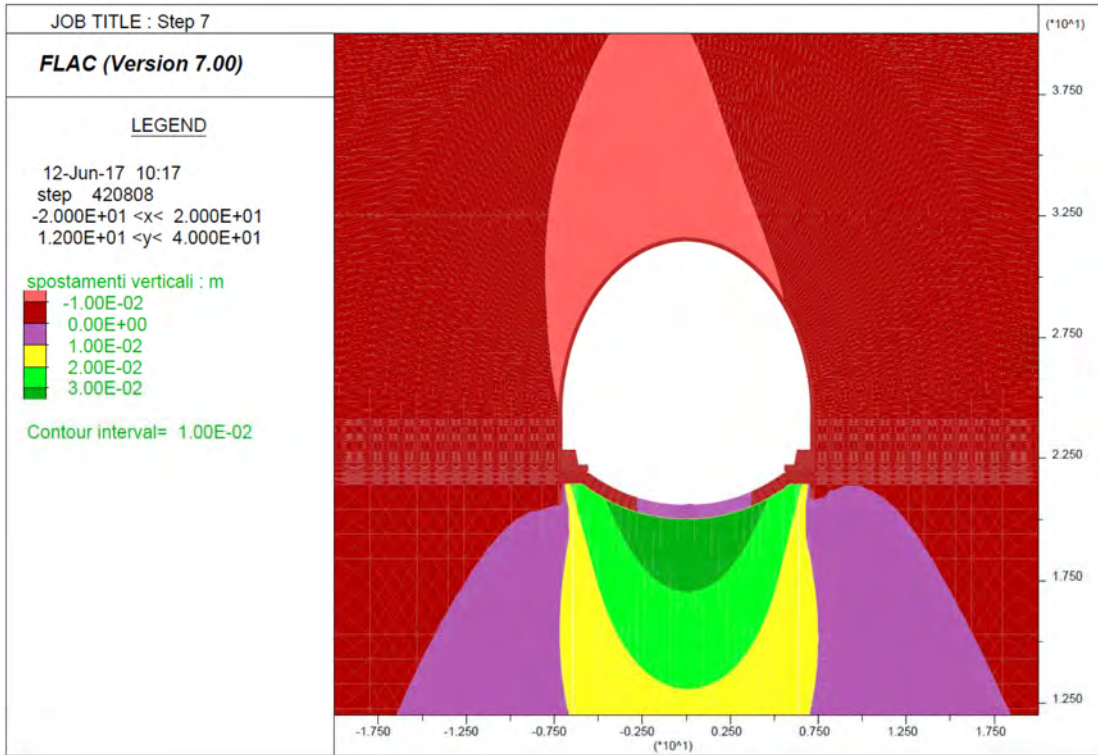
Step 6 – Avanzamento fino a 3D



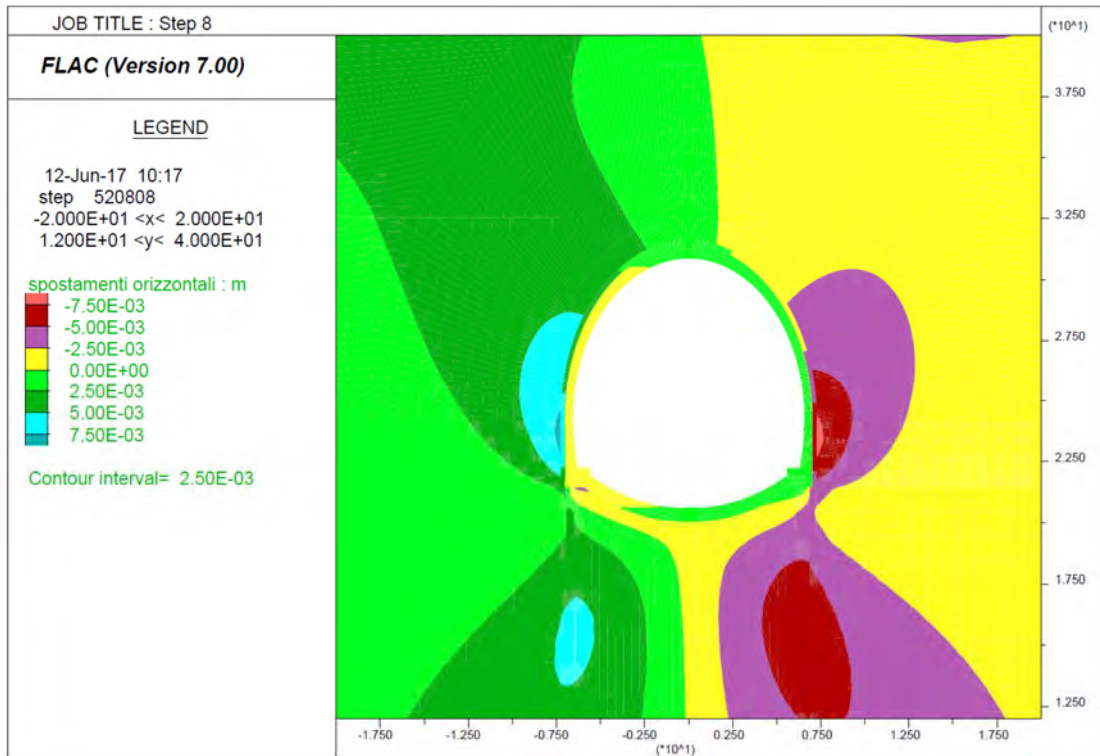
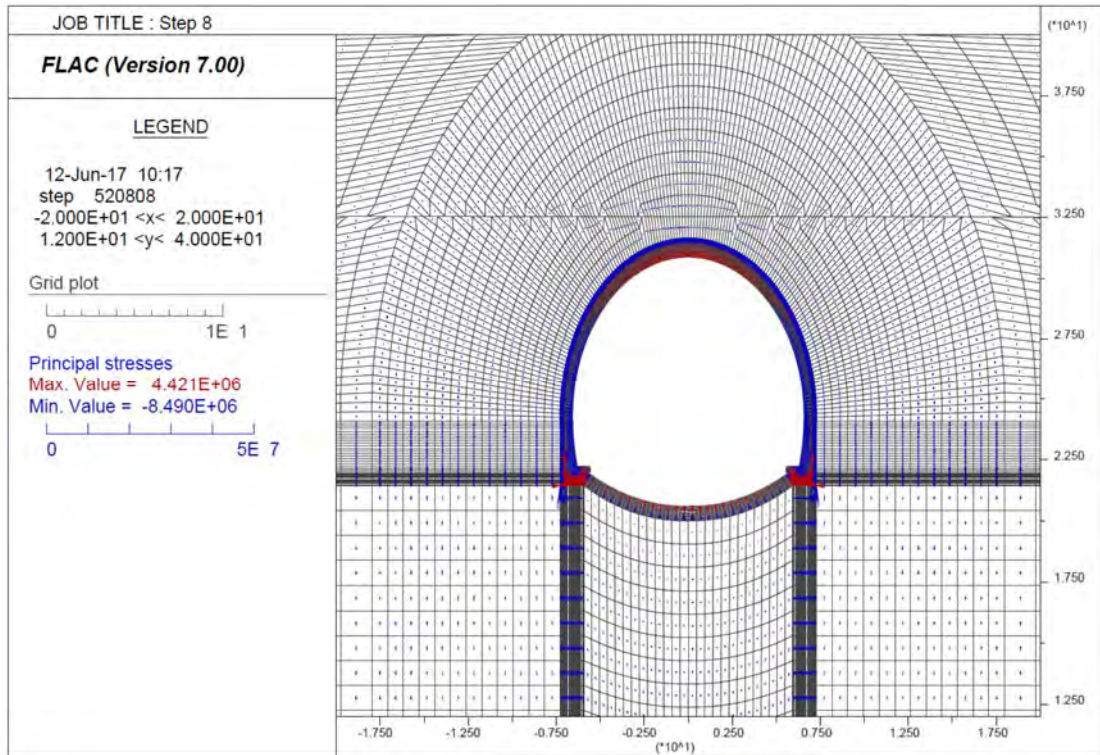


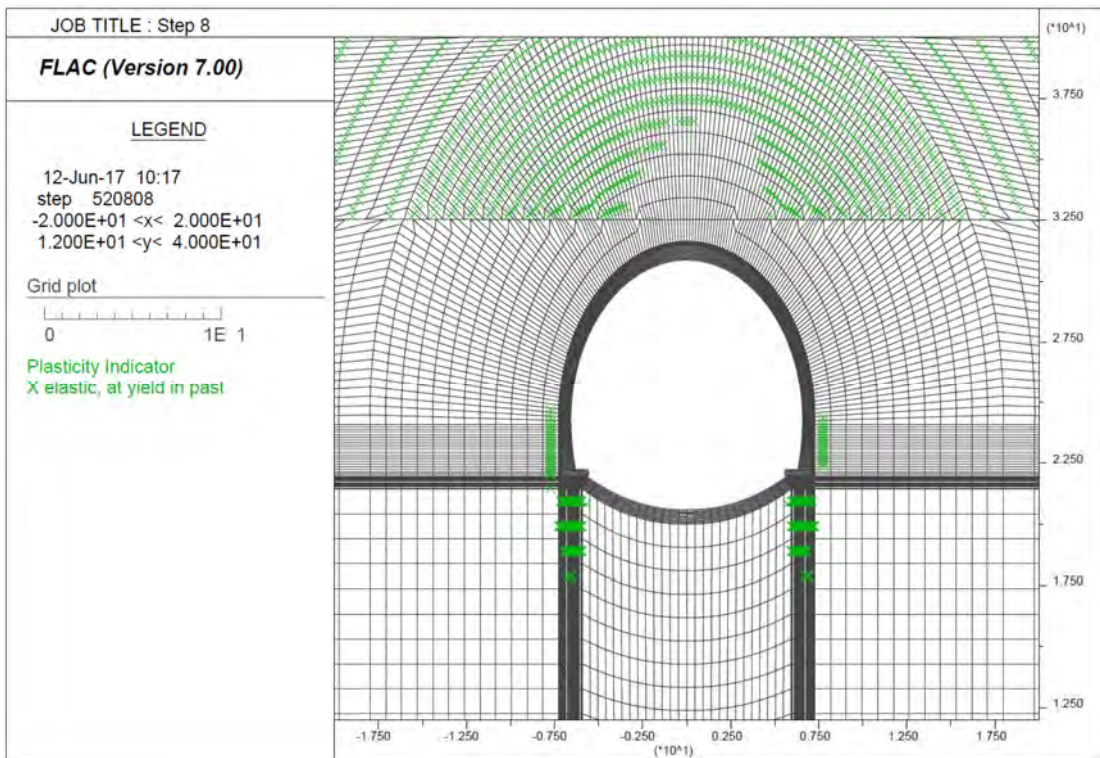
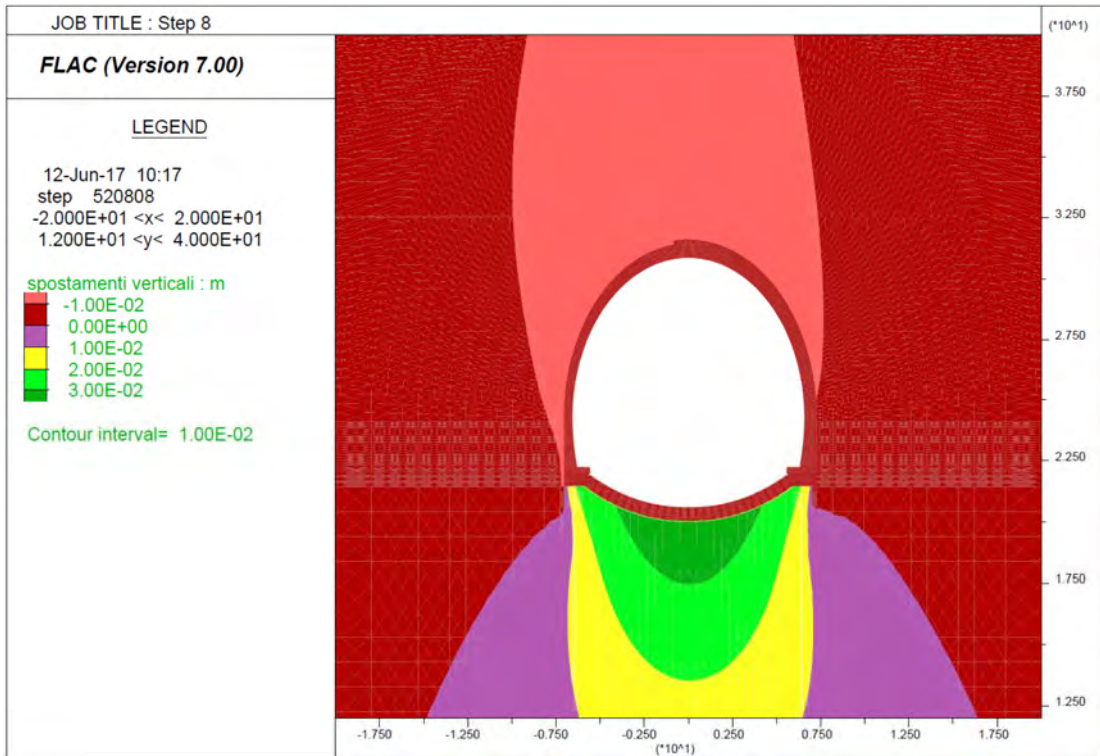
Step 7 - Getto arco rovescio e muretta a 3D e avanzamento fino a deformazioni esaurite





Step 8 - Getto Calotta





Step 9 - Decadimento dei parametri di resistenza del rivestimento provvisorio

