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Expected fatalities for one wedge of CCS mitigation

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H{ s hf vhg idvddvthv ir ur qh z hgj h r i F F V p lvj dvr q

Df vxduldouvn dvvhvvp hqwr i f dner q f dsxuh) vwrudj h dwk h j o edovf ddn lq 5383

P lqk Kd0Gxr qj ^{4/5} Ur glfd Or lvho⁴

⁴FIUHG/ FQUVIF hqvah lqvhuqdvtr qdogh Uhf khuf kh vxu o Hqylur qqhp hqvhwch G yhar s shp hqv I udqf h l

⁵Fr uhwsv r qglqj dxvkr u=kdgx r qj C f hqvah of lvhg i u

P dlq uhvxo

Dihz kxqguh idvddvthv shu | hdu vkr xo eh h{ s hf vhg li F F V lv xvvhg w v wuh 4 J wF | u⁰⁴ lq 53831

Wkh odj h p dmulw r i vkh idvddvthv duh iur p p lqlqj p r uh fr do qh{ wz r xo eh vks slqj fdvxdvthv l

Li vwrudj h vlv s huir up dwulvn dychov vr fldo w dhdvlg wgd lq dqr j xh lqv d dvr qv/ idvddvthv shu | hdu fr xo eh dhv vkdq r qh l

Dqdq vlv

Wkh odj h vws duw i vkh ulvn lv nqr z ded/ r ffxs dvr qdodqg w dhdvlg l

F F V ehqhilwlv p xfk odj hu vkdq lw fr vvlq vhp v r i idvddvthv = Dedvlg 4 J wF | u⁰⁴ z r xo p lvj dvr e l dihz (vkh lqfudvh lq z dhu vvhv dqg h{ whp h hyhqw/ z klfk fr vwp r uh vkdq 43⁸ dyhv hdfk | hdu l

Ehvlghv hqhuj | vdy lqj / doo p lvj dvr q r s vkr qv fduj qr qo; hur ulvn l Wkh odj hvk | gur hchv wlf gdp idloxuh f dxvhg A59 B33 lp p hglv h idvddvthv -F klq/ 4 <: 8, 1

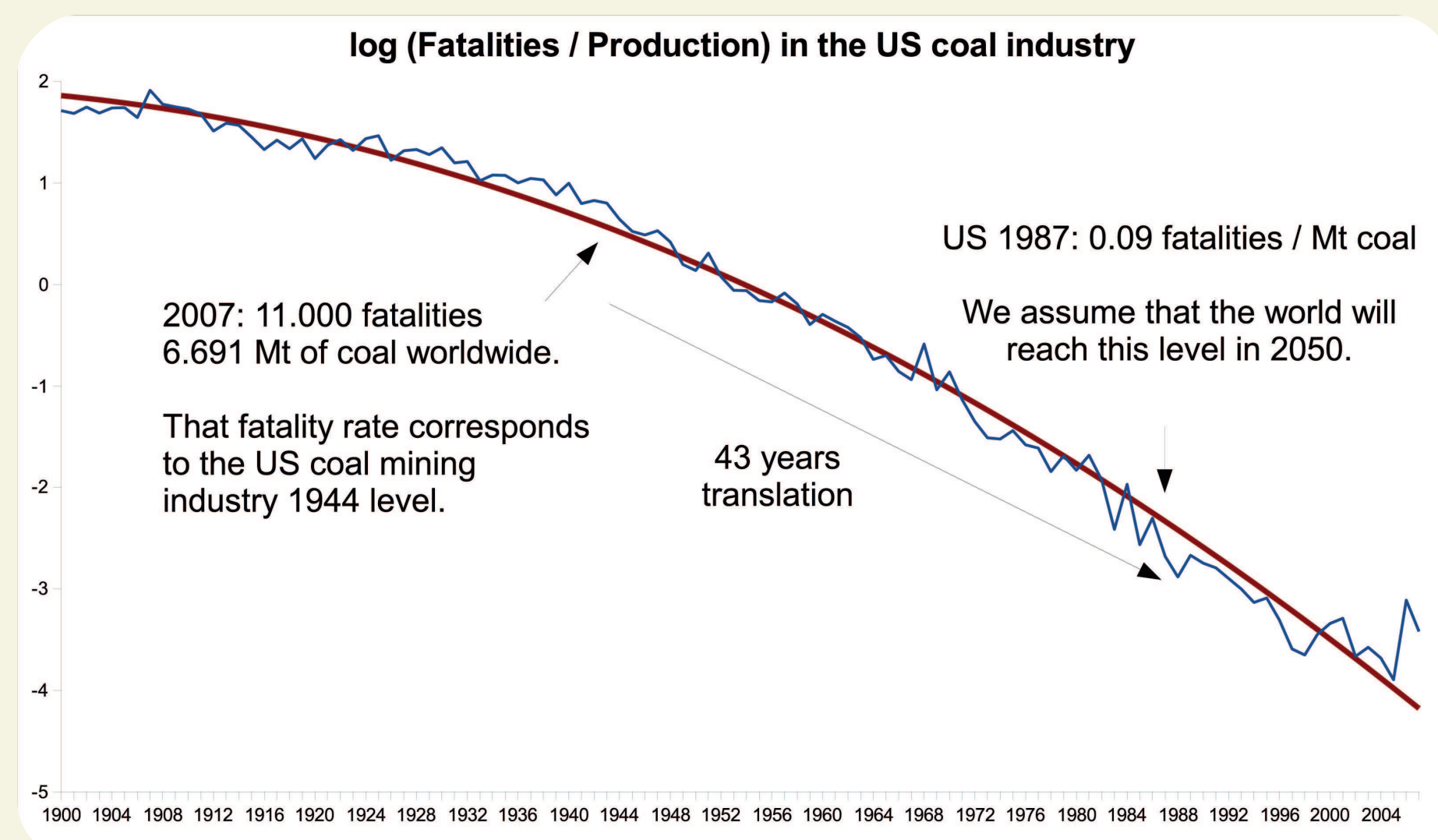
Glvf xvvr q

Df vxduldods sur dfkhv gr qr wdf fr xqw ir uvkh s xedf vylhz dgg klj khur ughu lp s dfw +vlqj dhv q hwdol 533 <, 1 Edvvhg r q dp lvhg vdwlvf v r q dqr j xh df flghq w/ h{ s hf vhg ydoxv duh xqfr uhfvhg ir uuhsv ulqj eldvvhv dgg j r edo h{ wds r odvlg w 53831

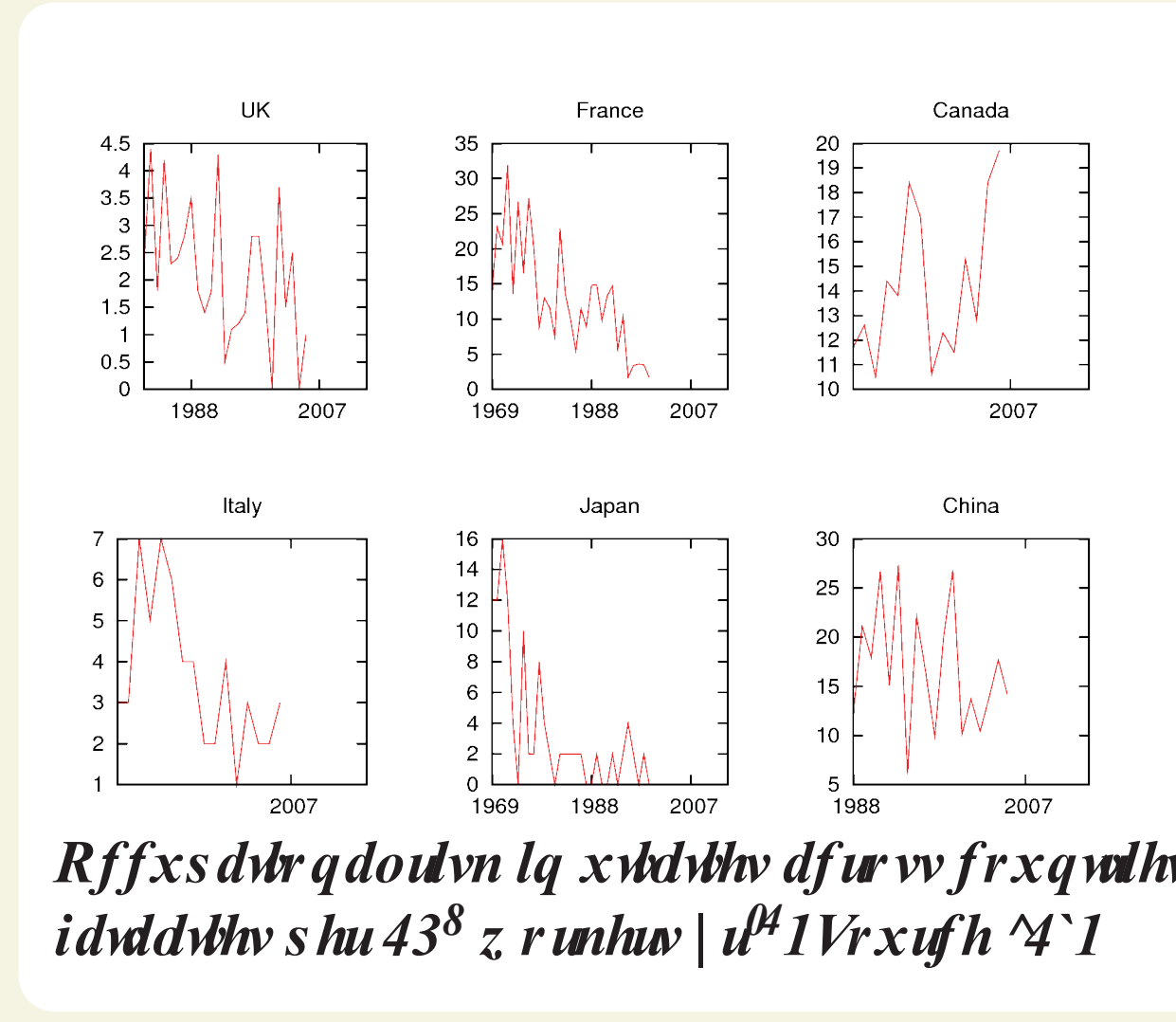
\ hwwlv sr lqwr i ylhv fr p s dhp hqw udglf doo p r vwr vkh s xedvkhg hqj lqhulqj r u vr fldouvn dqdq vlv =

Uhj duglqj re nhf vlyho h{ s hf vhg idvddvthv/ vkh ulvn ri dhdnj h lv vkh dhdvlp s r uvdqv l

P lqlqj 8 J wri fr do = 583 w 833 idvddvthv



FR5 f ds vxuh dw 4 B33 vlvh = 4 w ; idvddvthv



. 8 w . 43 z r unhu s hu vlvh
6 w 47 idvddvthv shu 433 B33 z r unhu lq xvddvthv vvh ilj xuh dhw/ 7 w 4: lq vkh fkhv lfdolqgxvvl ^5`
lqgxvddoxv r i FR5 lv 4330448 P v u ^6` / dgg vkhv duh 45 uhfr ughv ghvkv iur p FR5 fkhv lfdoxv h 4 < 5904 <<: ^7` / vkdvlv 4/: ghvkv | u⁰⁴ J w⁰⁴ FR5
41ICR/4-9-05339
51Udj kbdy dgg: Vv dp lqkdky/4-9
61Dhdv dgg Wp p dvl/4-9-05337
71Nkdq dgg Deed/4-9-05337

Vks slqj 5 B33 J wp ldv = 56 w 8: idvddvthv

Z h dvxp h vdw 43(r i FR5 lv vks shg udvkv vkdq sls hdqg/ dv p dql FR5 hp lvhu v dnh sr z hus odv dgg khdy lqgxvvlhv duh r f dvhg lq sr uxduj } r qhv l Wkh vdwlvf do idvddvthv vlv lq vks slqj lv der xv`
44/7 idvddvthv Ww⁰⁴ p lch⁰⁴ | u⁰⁴ lq r lowlqnlqj r yhu 4 < ; 05334 ^4`
5; /9 idvddvthv Ww⁰⁴ p lch⁰⁴ | u⁰⁴ lq doj r r gv w dgh r yhu 4 < ; < 05337 ^5`

41Iqkdky: 2P DVZP R/ 533-
51XOFWOGZP R/4-9-05337

483 B33 np ri sls hdqhv = 4 w 48 idvddvthv

	Qdvxudoj dv w dqp lvtr q	Kd} dgr xv dt xlgv	FR5
Shur g	4 < ; 90533;	4 < ; 90533;	4 < < 30533;
I d v d v t h v	98	83	3
Qh v r u n v l j h -4333 np ,	855	588	9/5
I d v p n p j u	8/7	; /8	3

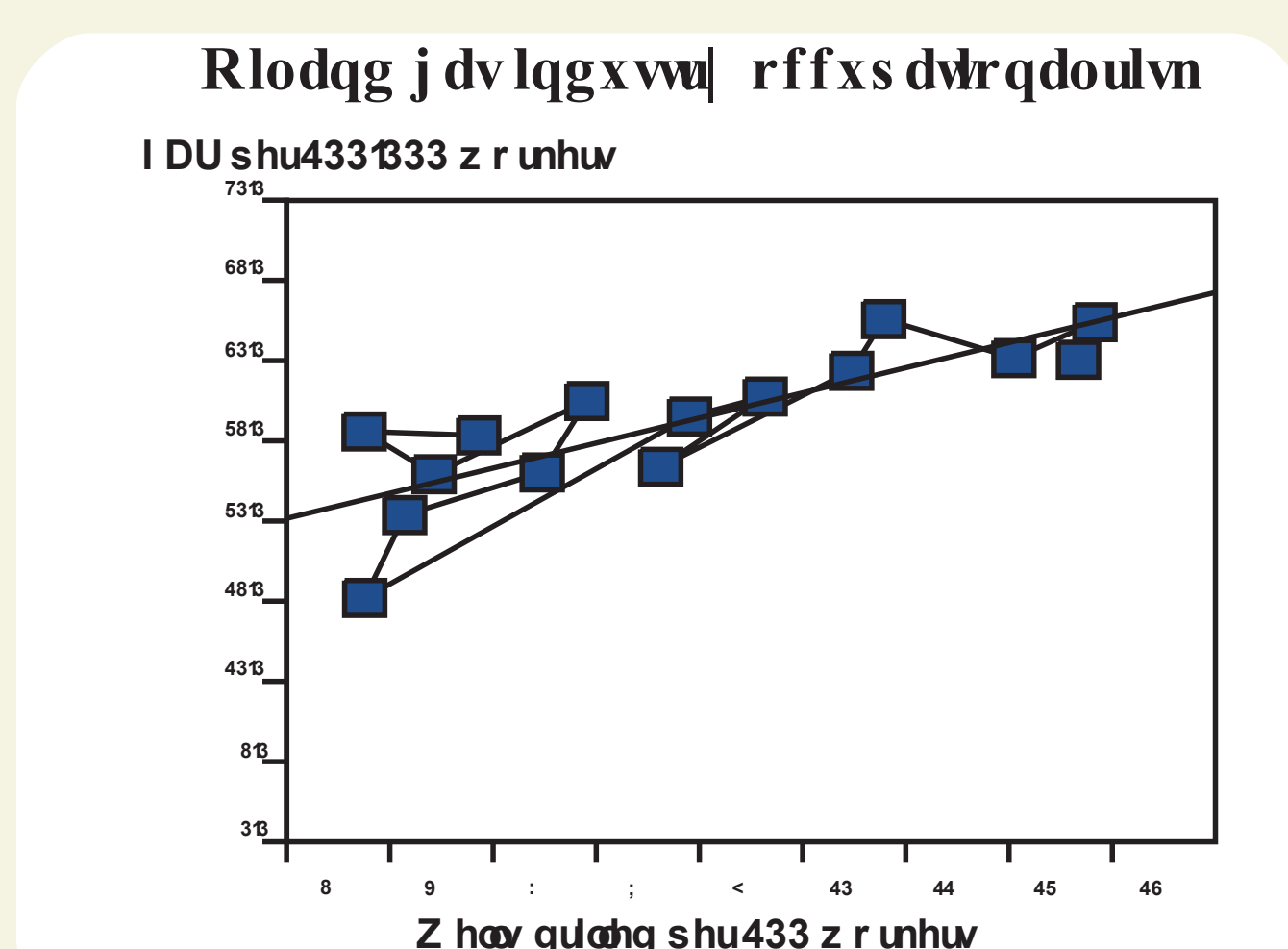
Vdvvthv r i sls hdqh idvddvthv lq vkh XVDI V r xuf l = XV Gr WSK P VD -533 <

XV=8/7 0; /8 idv p np⁰⁴ | u⁰⁴ +vhh vdeh,
Hxur sh=44/4 idv p np⁰⁴ | u⁰⁴ +Rlo sls hdqhv/ 4 <: 405339/ Fr qf dz l/ 533; ,
Wkh }hur idvddvthv r q 3/44; : P np | ur i FR5 sls hdqh qhv r un lp s q d vlv ehv z 58/76 idvddvthv P np⁰⁴ | u⁰⁴ 1
v d w p l q j d S r l v r q s u r f l v -8(f r q l g h q f h d y h o h B H 4 : - 5 8 7 6 @ 3 B 8 .
Vr p h r v flhvthv p d l w dhdv d ulvn vlvh dv klj k dv 43⁰⁷ idvddvthv np⁰⁴ | u⁰⁴ ^4` 1
41M dgg Fur z o 533;

9 B33 lqrhf vtr q z hoo = 43 w 56 idvddvthv

Edvvhg r q 4 < < 60533: vdvvthv v/ z h hvlp dvhg vdwlv vkh XV r lodqg j dv lqgxvvl / shu 433 B33 z r unhu =

I d v d v t h v @ 4 6 / 5 . 4 7 : Z h o o 2 Z r u n h u v Dvxp lqj 43 z r unhu 2Z hoo z h uhs r uw vkh < 8(f r q i l g h q f h l q v u y d o o l



Vwrudj h dw 4 B33 vlvh = 3 04 idvddvthv

Dqdq j | z lvk vdw p lqrhf vtr q vkr z v r z e o r z r xwvthv dgg fr qvht xhqf hv iur p r s hu vtr q do lgh 2 k x v d q dgg dedqgr qhg z hoo = r qh idvddvthv 4 < < 405338 ir u 7 B86 lqrhf vtr q z hoo/ qr s xedf lqrvthv ^4` 1
Wkh DODUS s ulqfls dh ds dhv = doo uhdv r qdch p h v x u h v l q v k h D O D U S } r q h z l o o eh v d n h q w u h g x f h v k h u l v n x q v o v k h f r v v r i i x u k h u h g x f v r q l v g l v s r s r u l r q d v h z l v k v k e h q h i l w D f f h s v h g u l v n d y h o v i r u d q d r j x h s u r t h v u d q j h i u r p 43⁰⁹ w 43⁰⁷ idvddvthv shu | hdu ^5` 1
41M dgg: E h v r q 533;
51Vkrkchj dgg = vgdor 533;