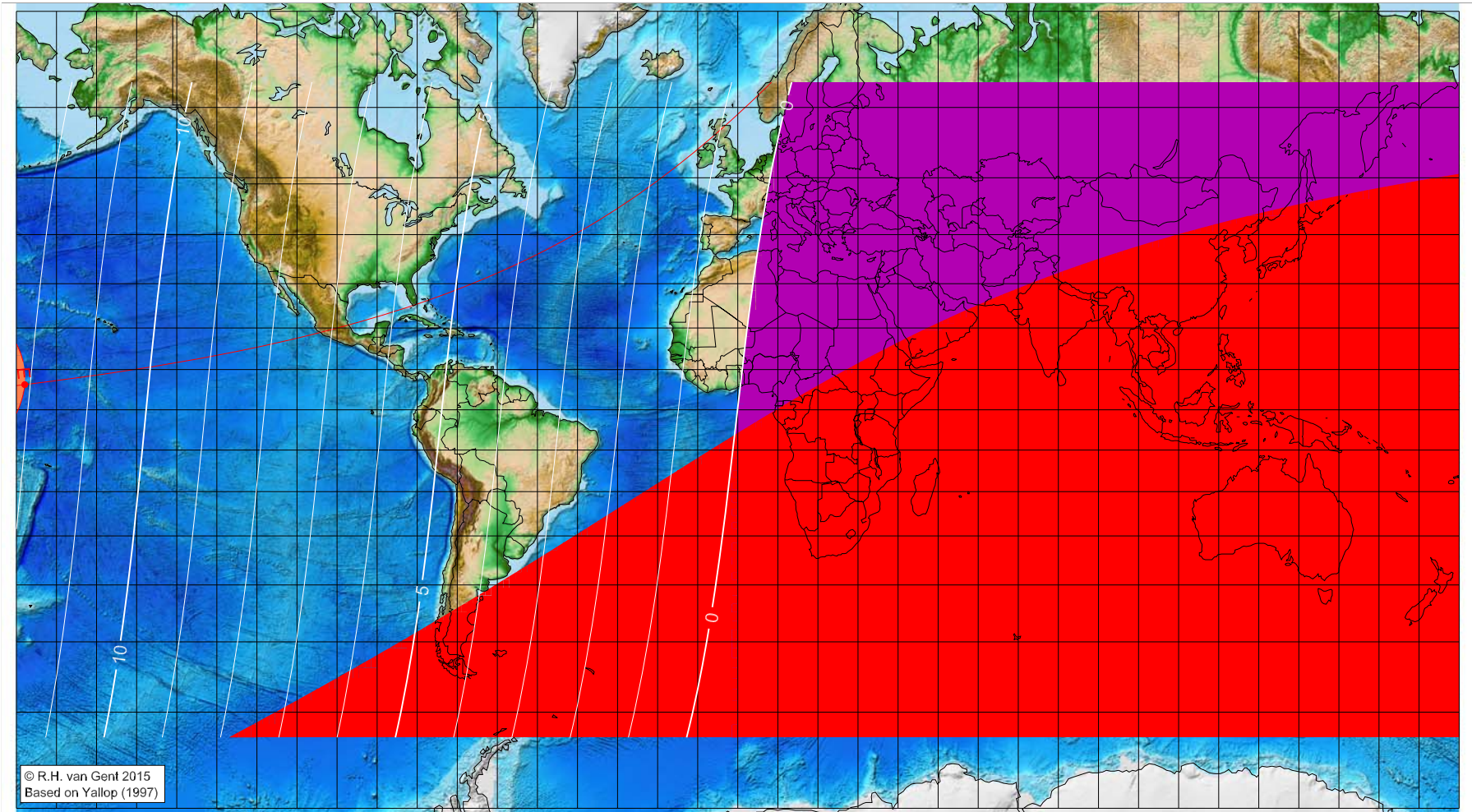


First visibility lunar crescent for Muḥarram 1440 AH

Global visibility map for 9 September 2018 [Sunday]
Day of luni-solar conjunction



Astronomical New Moon: 9 September 2018, 18h 1.5m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = 1184
Islamic Lunation Number = 17269
TT - UT [= ΔT] = 1.2 min

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

Longitude (°)	Latitude (°)	Lunar age (h)
-177.92	6.27	12.09

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

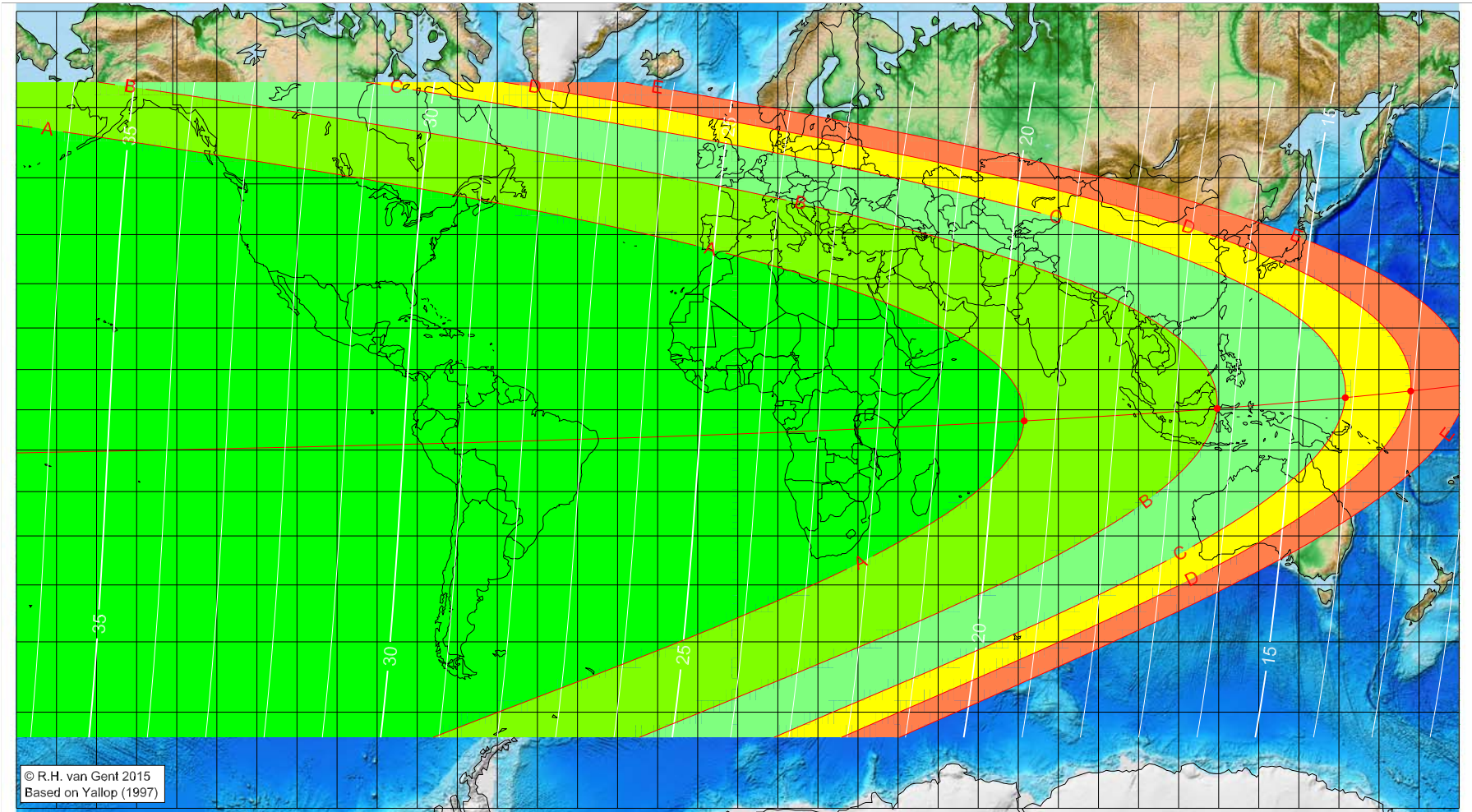
■ moonset before sunset

■ before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Muḥarram 1440 AH

Global visibility map for 10 September 2018 [Monday]
Day after luni-solar conjunction



Astronomical New Moon: 9 September 2018, 18h 1.5m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = 1184

Islamic Lunation Number = 17269

TT - UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

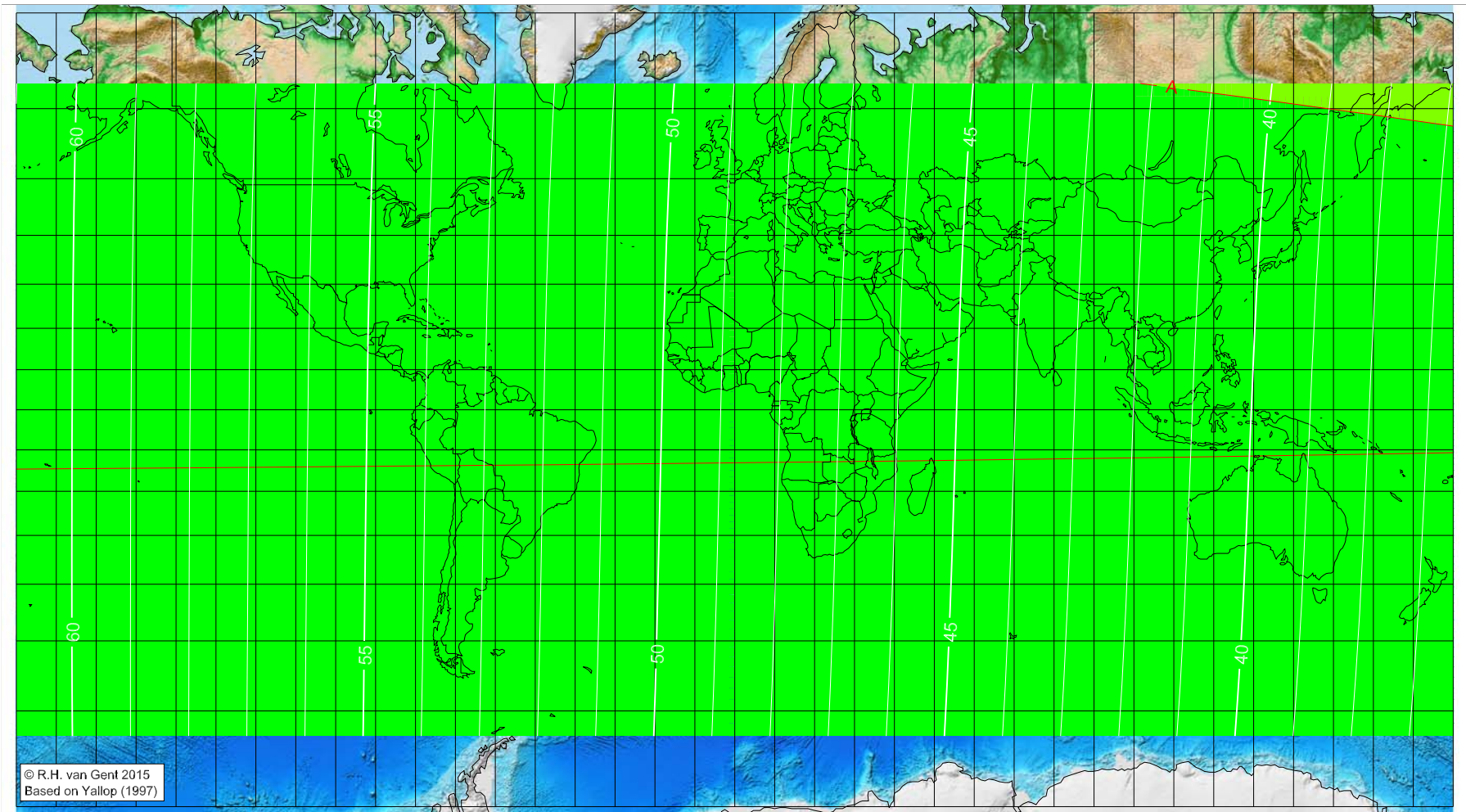
Longitude (°)	Latitude (°)	Lunar age (h)
71.47	-2.77	19.53
119.61	0.33	16.29
151.60	3.02	14.14
167.91	4.66	13.04

visible on the previous evening

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Muḥarram 1440 AH

Global visibility map for 11 September 2018 [Tuesday]
Second day after luni-solar conjunction



Astronomical New Moon: 9 September 2018, 18h 1.5m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

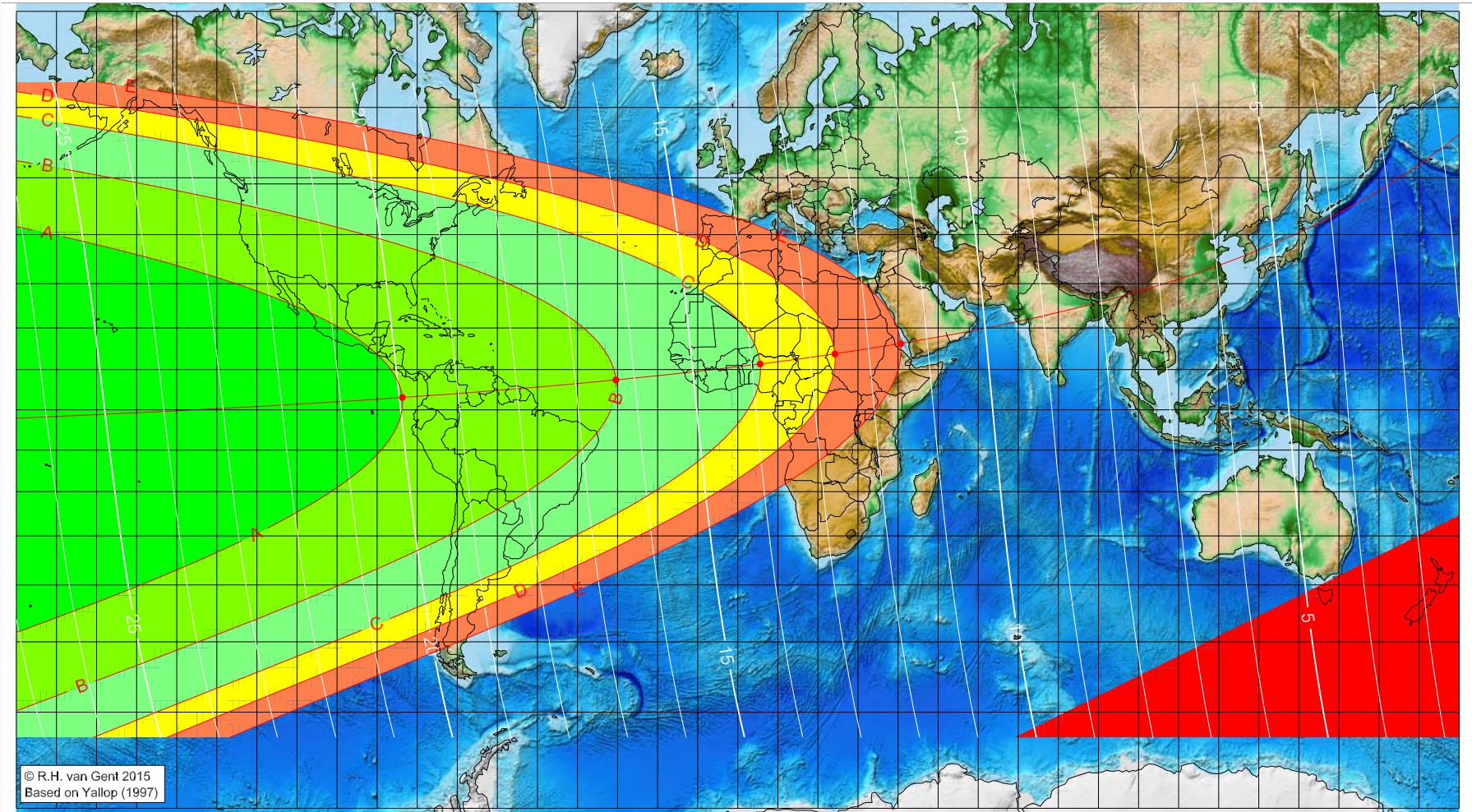
Astronomical (Brown) Lunation Number = 1184
Islamic Lunation Number = 17269
 $TT - UT [= \Delta T] = 1.2 \text{ min}$

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Şafar 1440 AH

Global visibility map for 9 October 2018 [Tuesday]
Day of luni-solar conjunction



Astronomical New Moon: 9 October 2018, 3h 46.9m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = 1185

Islamic Lunation Number = 17270

TT - UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

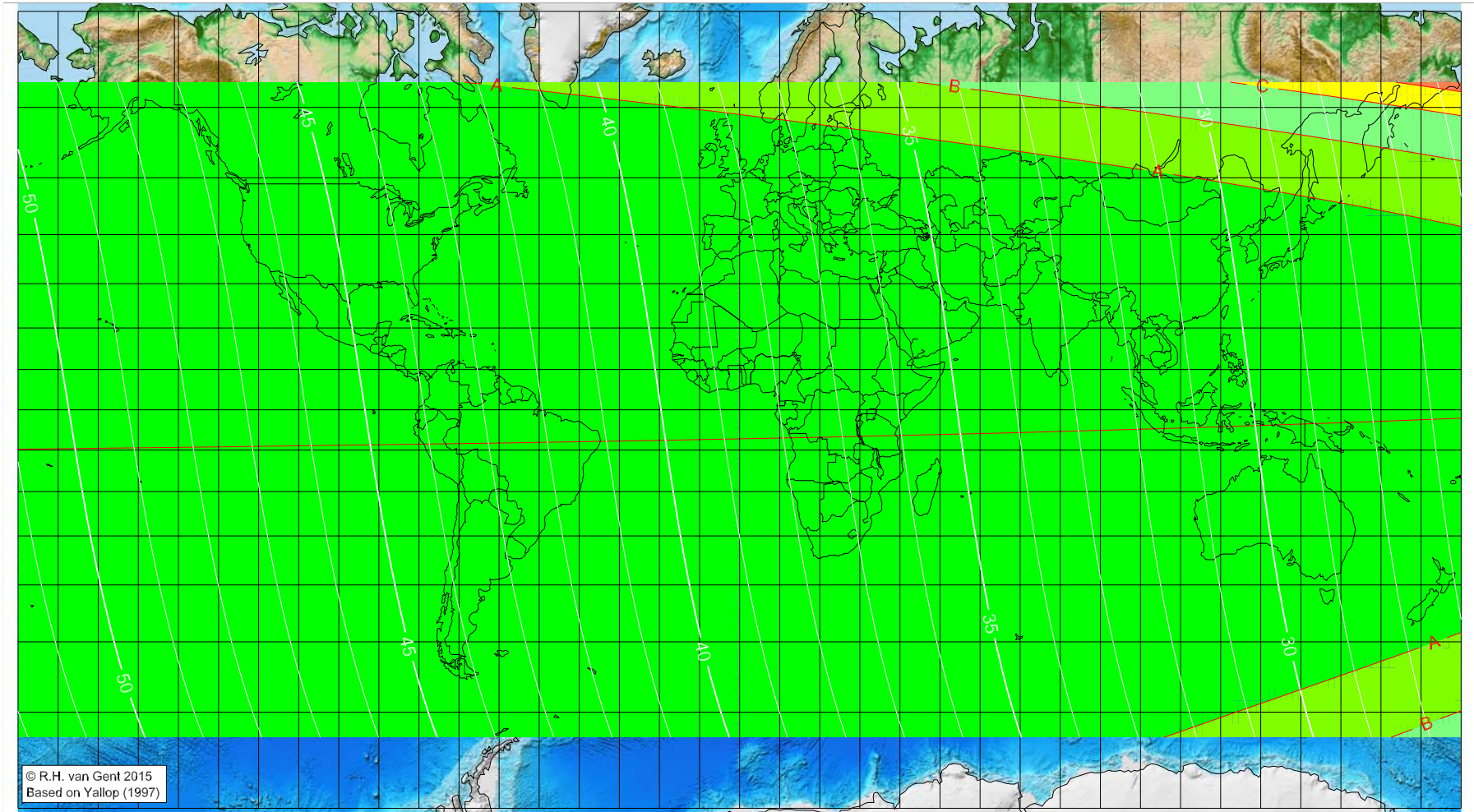
- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Longitude (°)	Latitude (°)	Lunar age (h)
-83.71	3.08	19.95
-30.41	7.43	16.31
5.59	11.35	13.85
24.24	13.81	12.57
40.66	16.27	11.45

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Şafar 1440 AH

Global visibility map for 10 October 2018 [Wednesday]
Day after luni-solar conjunction



Astronomical New Moon: 9 October 2018, 3h 46.9m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening

Astronomical (Brown) Lunation Number = 1185
Islamic Lunation Number = 17270
TT - UT [= ΔT] = 1.2 min

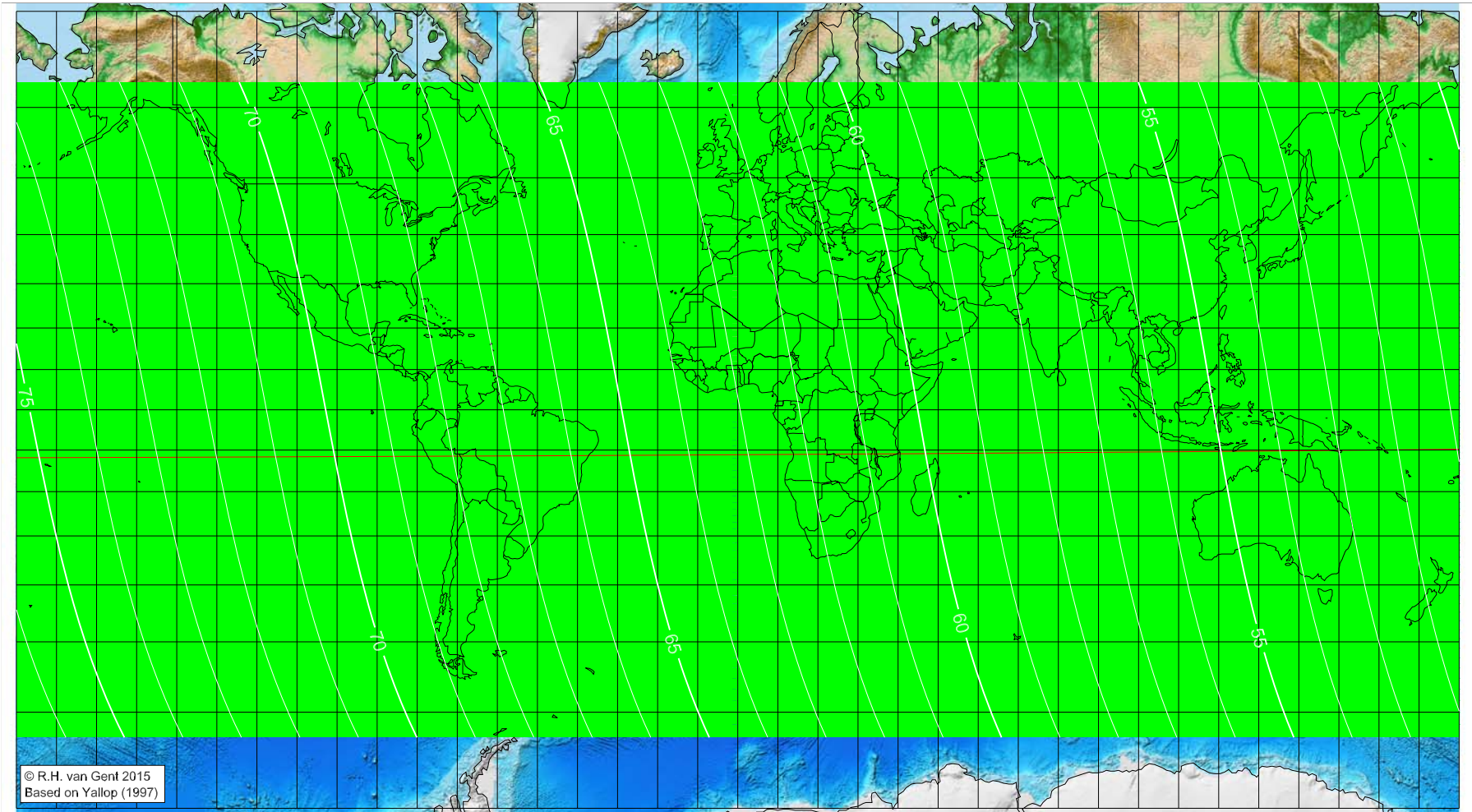
Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Şafar 1440 AH

Global visibility map for 11 October 2018 [Thursday]
Second day after luni-solar conjunction



Astronomical New Moon: 9 October 2018, 3h 46.9m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

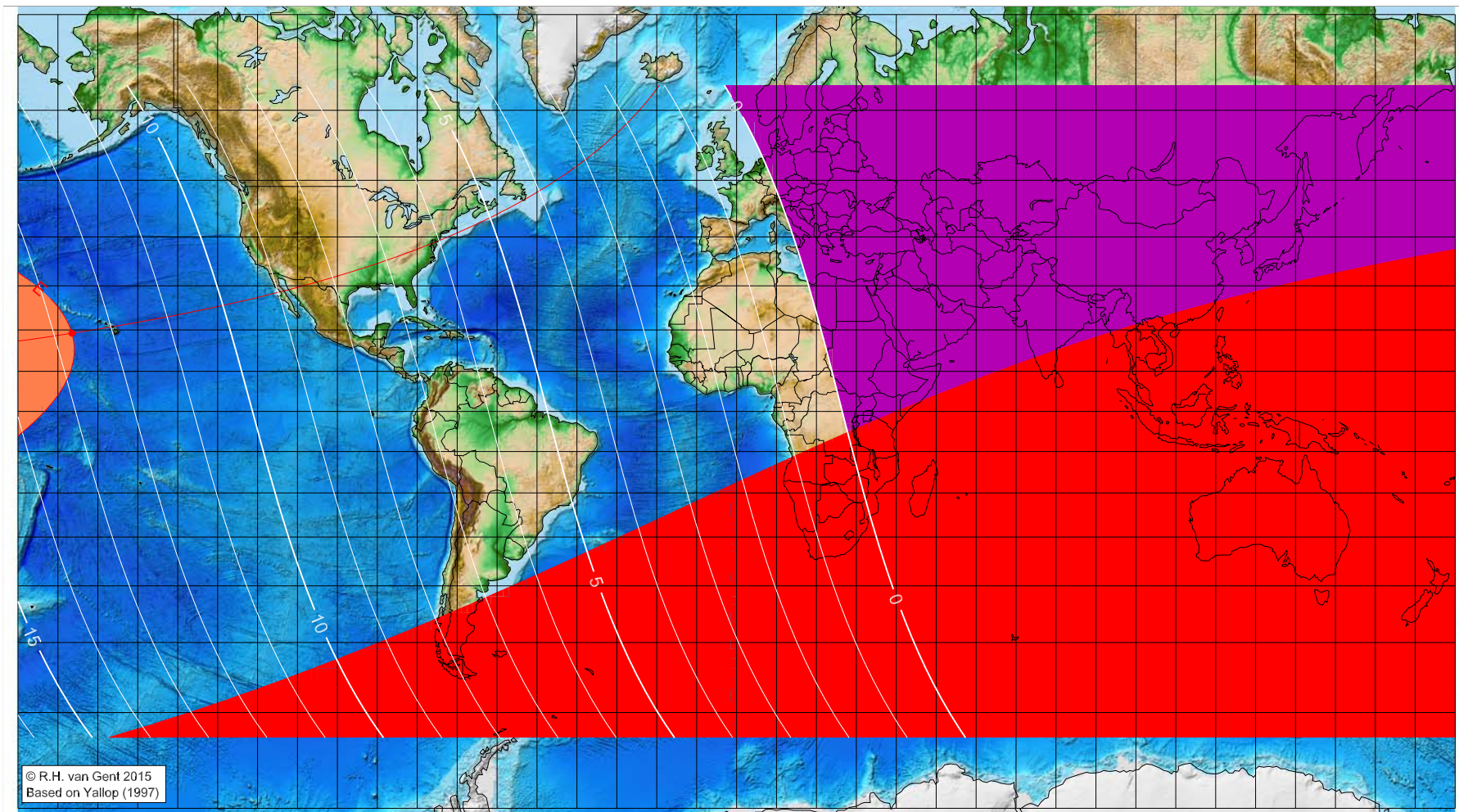
Astronomical (Brown) Lunation Number = 1185
Islamic Lunation Number = 17270
 $TT - UT [= \Delta T] = 1.2 \text{ min}$

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabīʿ al-Awwal 1440 AH

Global visibility map for 7 November 2018 [Wednesday]
Day of luni-solar conjunction



Astronomical New Moon: 7 November 2018, 16h 2.1m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = 1186
Islamic Lunation Number = 17271
TT - UT [= ΔT] = 1.2 min

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

Longitude (°)	Latitude (°)	Lunar age (h)
-166.49	19.21	12.69

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

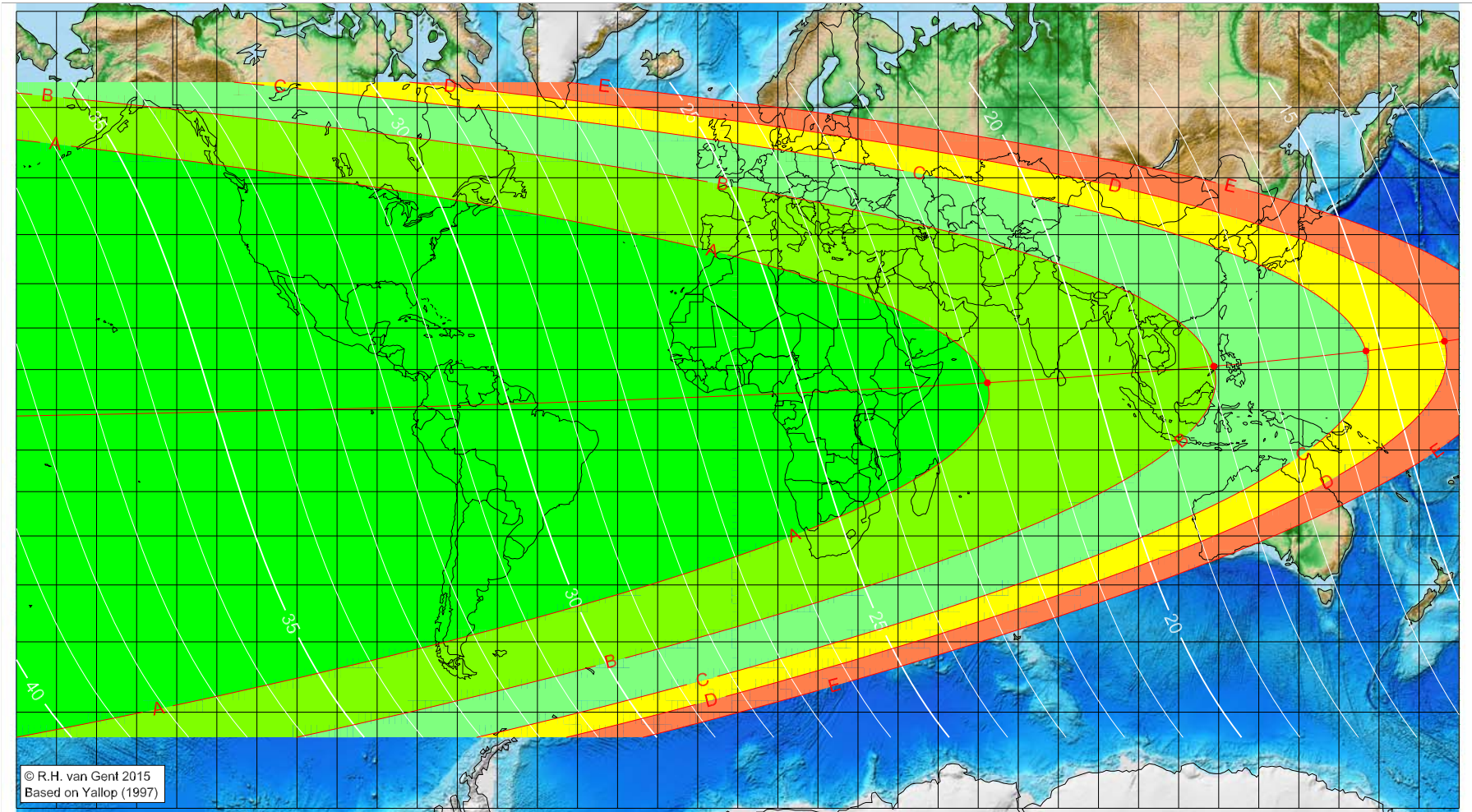
■ moonset before sunset

■ before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabīʿ al-Awwal 1440 AH

Global visibility map for 8 November 2018 [Thursday]
Day after luni-solar conjunction



Astronomical New Moon: 7 November 2018, 16h 2.1m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = 1186

Islamic Lunation Number = 17271

TT - UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

Longitude (°)	Latitude (°)	Lunar age (h)
62.28	6.73	21.81
118.78	10.81	17.91
156.75	14.52	15.27
176.33	16.86	13.90

visible on the previous evening

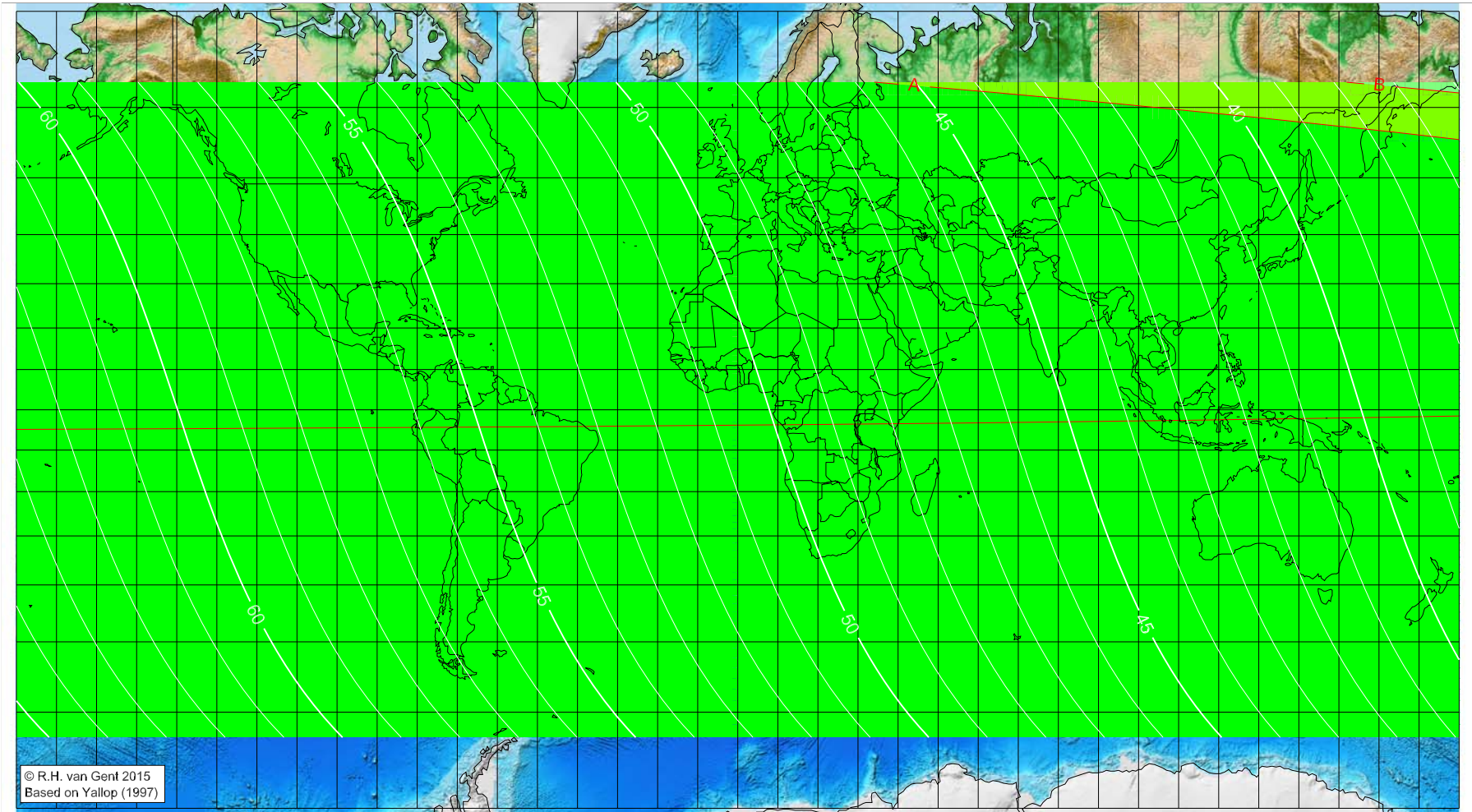
■ moonset before sunset

■ before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabīʿ al-Awwal 1440 AH

Global visibility map for 9 November 2018 [Friday]
Second day after luni-solar conjunction



Astronomical New Moon: 7 November 2018, 16h 2.1m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

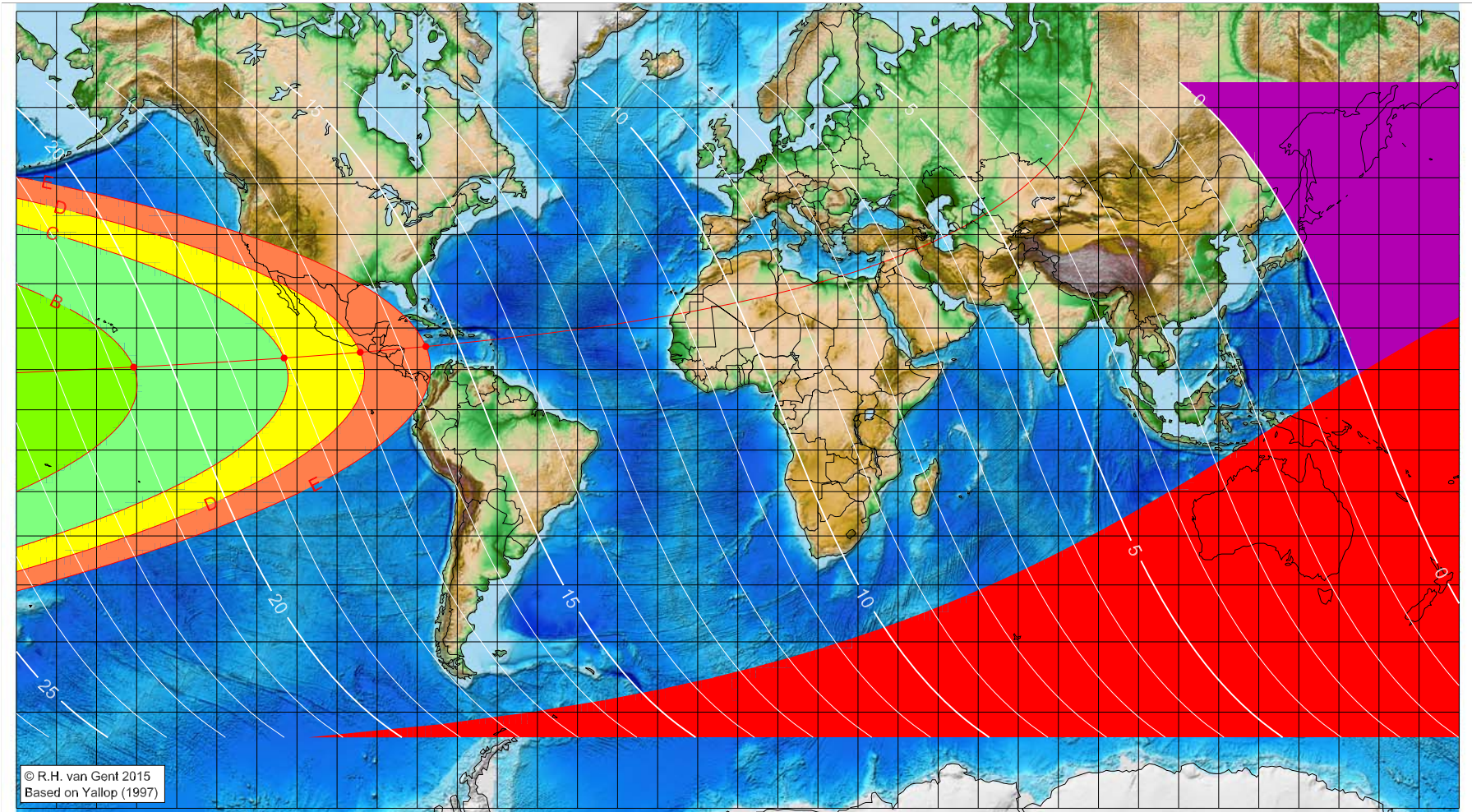
Astronomical (Brown) Lunation Number = 1186
Islamic Lunation Number = 17271
TT – UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabī' al-Ākhir 1440 AH

Global visibility map for 7 December 2018 [Friday]
Day of luni-solar conjunction



Astronomical New Moon: 7 December 2018, 7h 20.3m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = 1187
Islamic Lunation Number = 17272
TT - UT [= ΔT] = 1.2 min

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

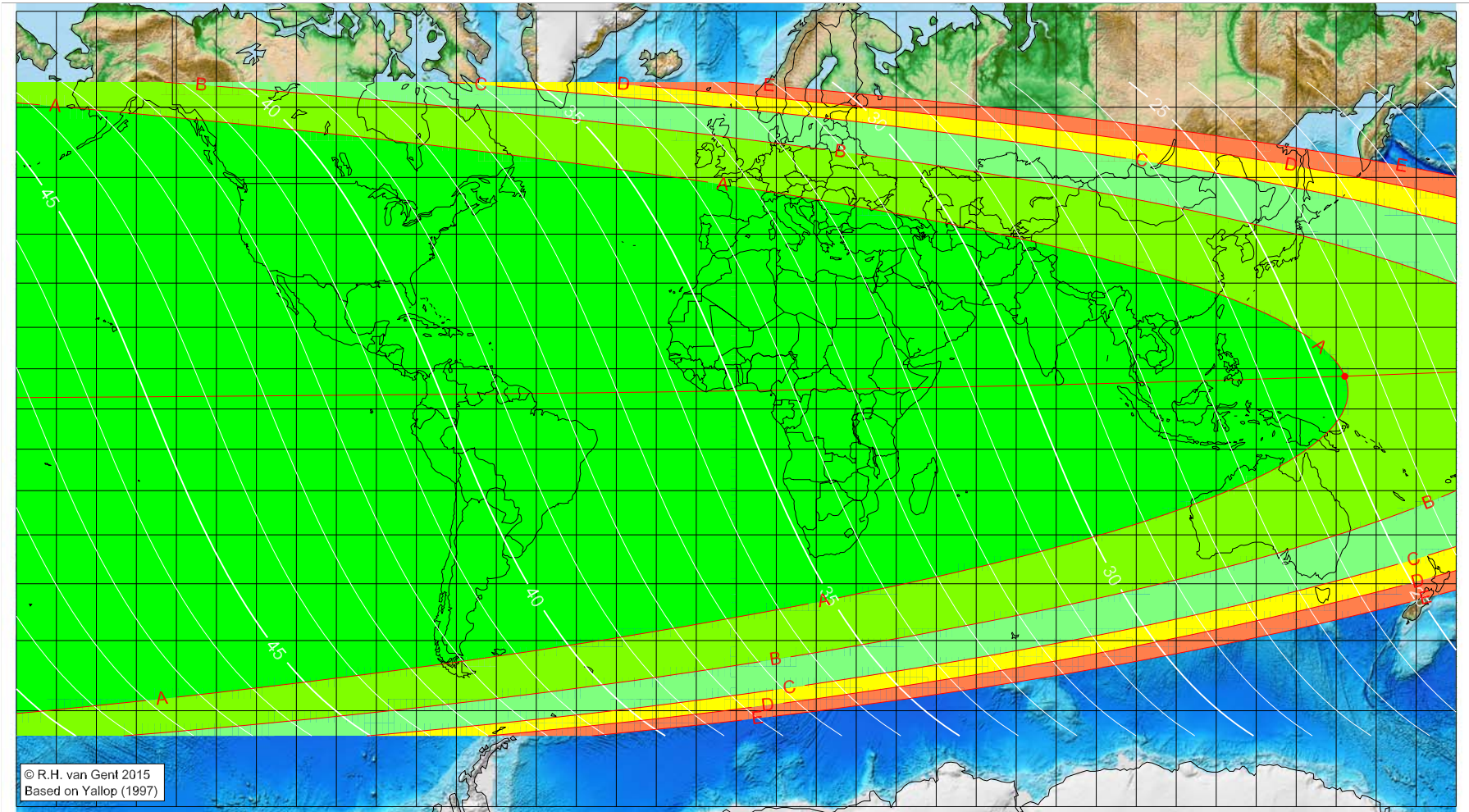
Longitude (°)	Latitude (°)	Lunar age (h)
-150.76	10.59	20.64
-113.21	12.82	18.04
-94.22	14.21	16.71
-77.84	15.59	15.57

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabī al-Ākhir 1440 AH

Global visibility map for 8 December 2018 [Saturday]
Day after luni-solar conjunction



Astronomical New Moon: 7 December 2018, 7h 20.3m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
152.15	8.13	24.58
visible on the previous evening		
visible on the previous evening		
visible on the previous evening		

Astronomical (Brown) Lunation Number = 1187
Islamic Lunation Number = 17272
TT - UT [= ΔT] = 1.2 min

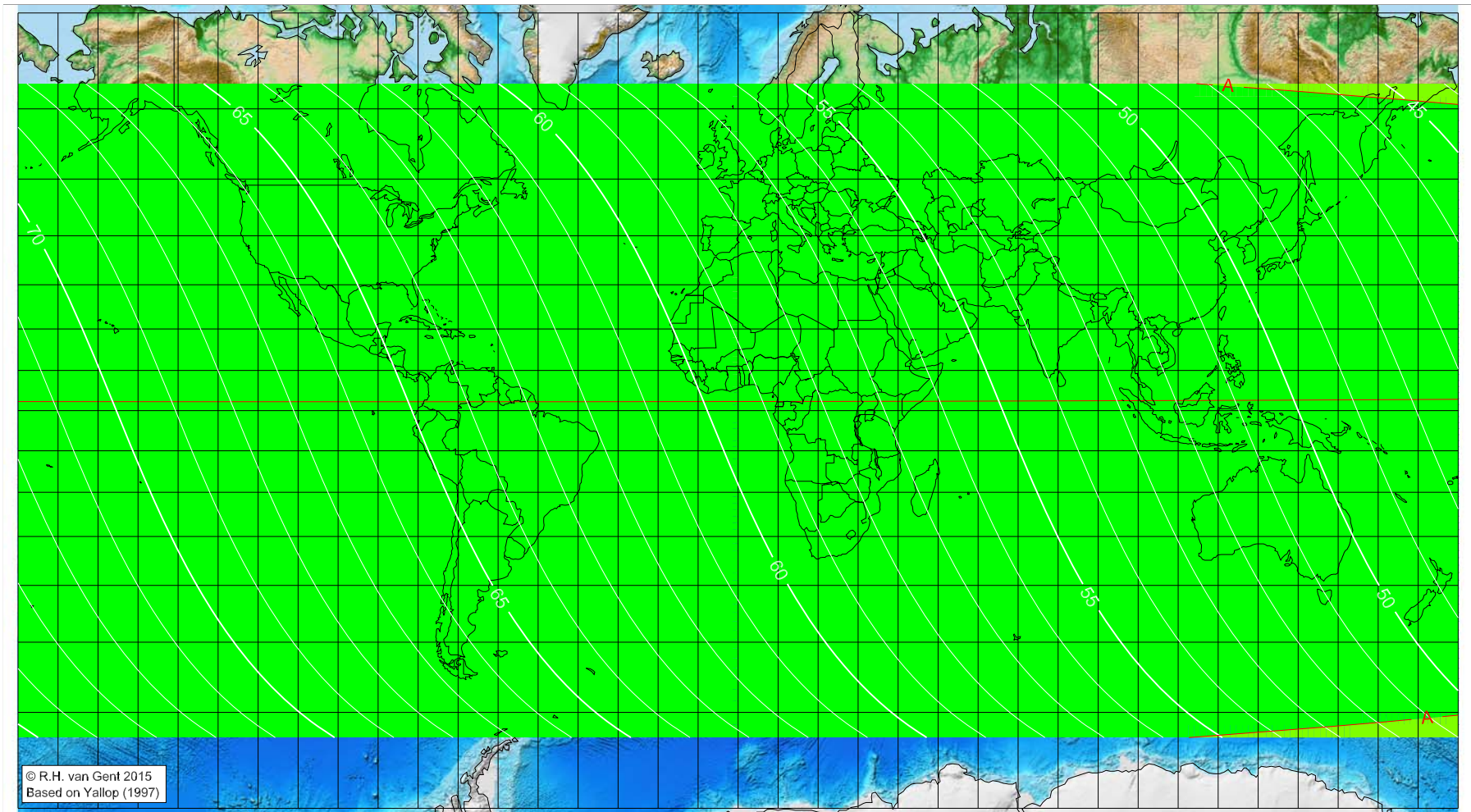
Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabī al-Ākhir 1440 AH

Global visibility map for 9 December 2018 [Sunday]
Second day after luni-solar conjunction



Astronomical New Moon: 7 December 2018, 7h 20.3m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

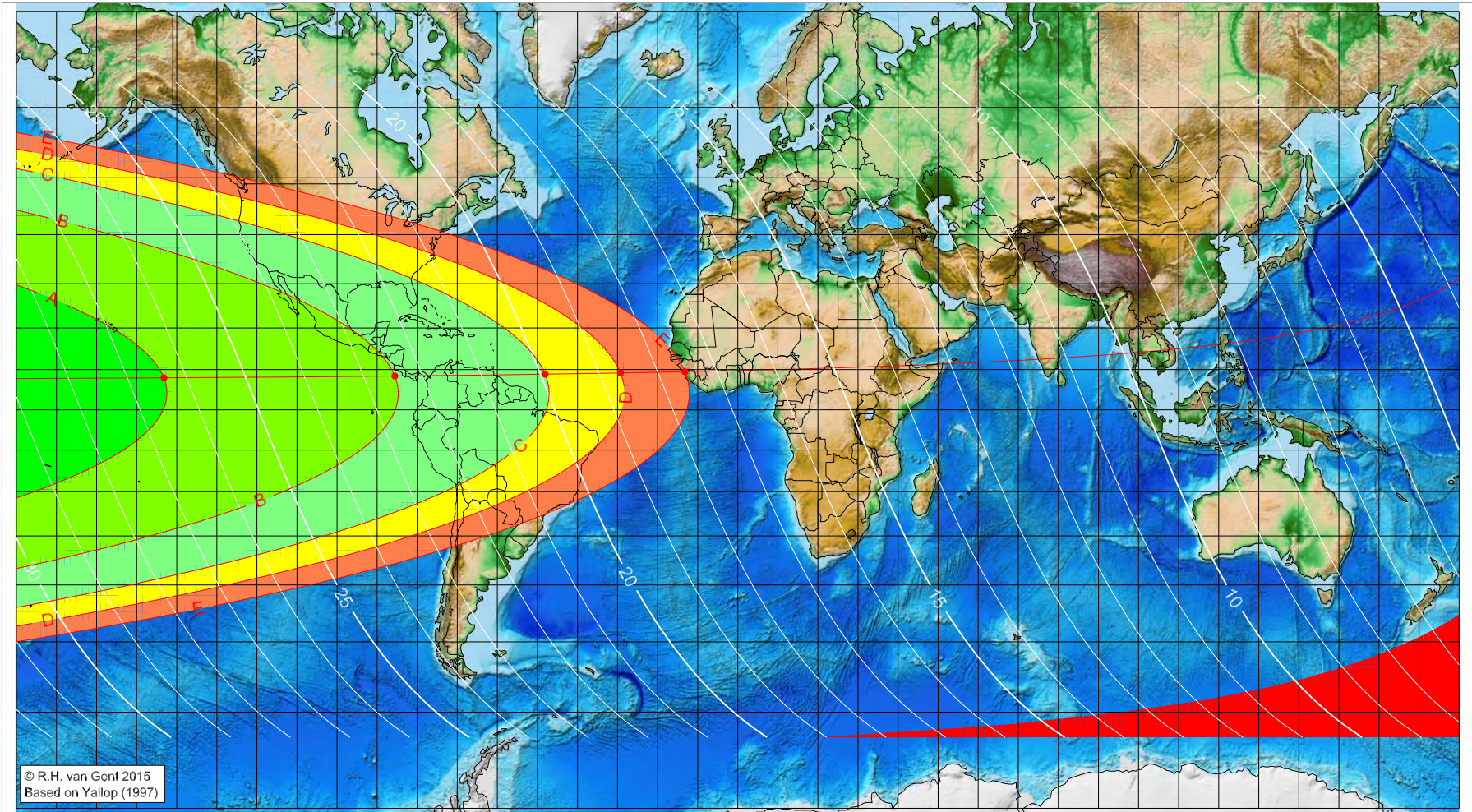
Astronomical (Brown) Lunation Number = 1187
Islamic Lunation Number = 17272
TT – UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'I-Ūlā 1440 AH

Global visibility map for 6 January 2019 [Sunday]
Day of luni-solar conjunction



Astronomical New Moon: 6 January 2019, 1h 28.1m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = 1188

Islamic Lunation Number = 17273

TT - UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

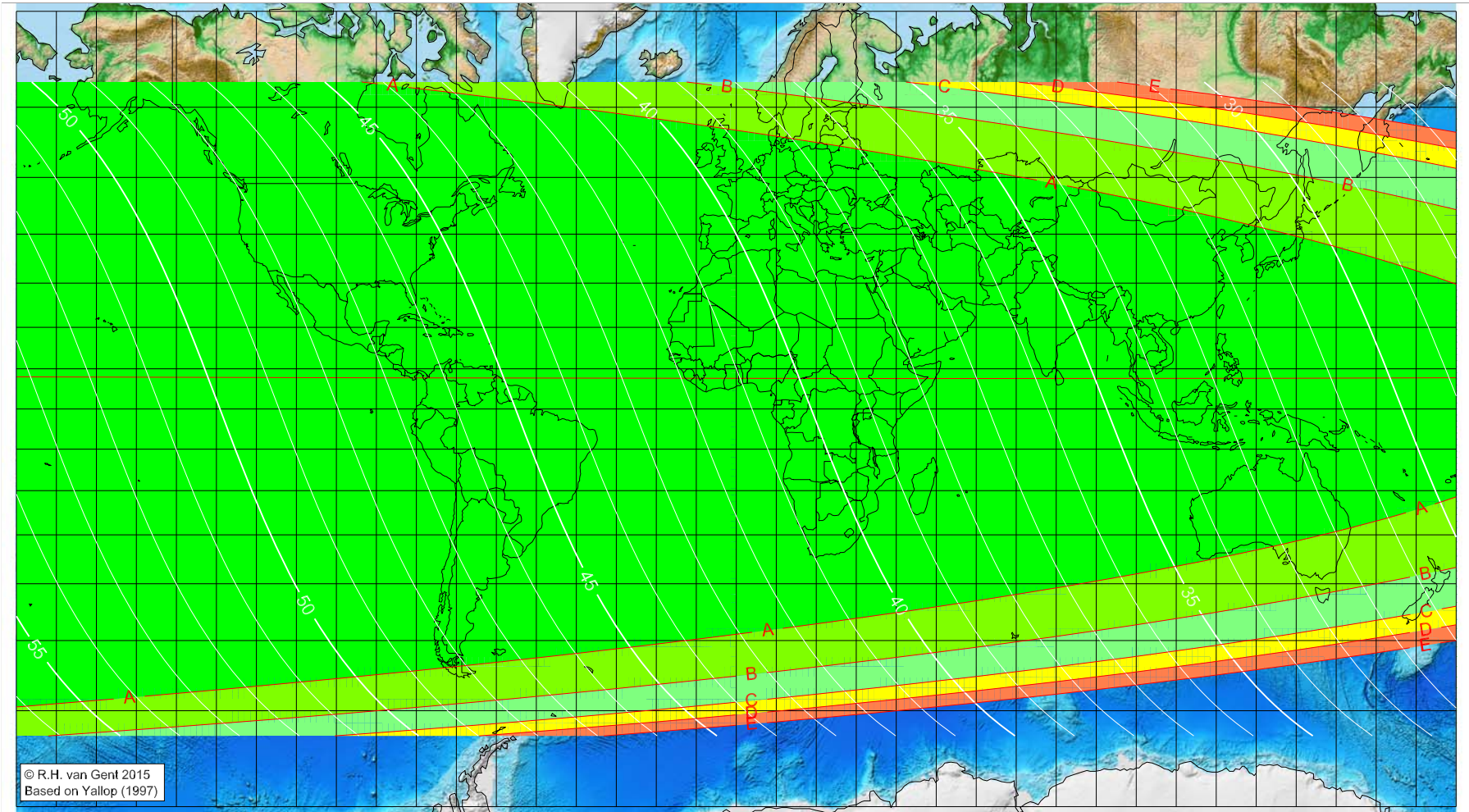
- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Longitude (°)	Latitude (°)	Lunar age (h)
-143.19	7.95	26.38
-85.58	8.39	22.47
-48.07	8.85	19.92
-29.27	9.15	18.64
-13.19	9.45	17.54

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'I-Ūlā 1440 AH

Global visibility map for 7 January 2019 [Monday]
Day after luni-solar conjunction



© R.H. van Gent 2015
Based on Yallop (1997)

Astronomical New Moon: 6 January 2019, 1h 28.1m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening

Astronomical (Brown) Lunation Number = 1188

Islamic Lunation Number = 17273

TT - UT [= ΔT] = 1.2 min

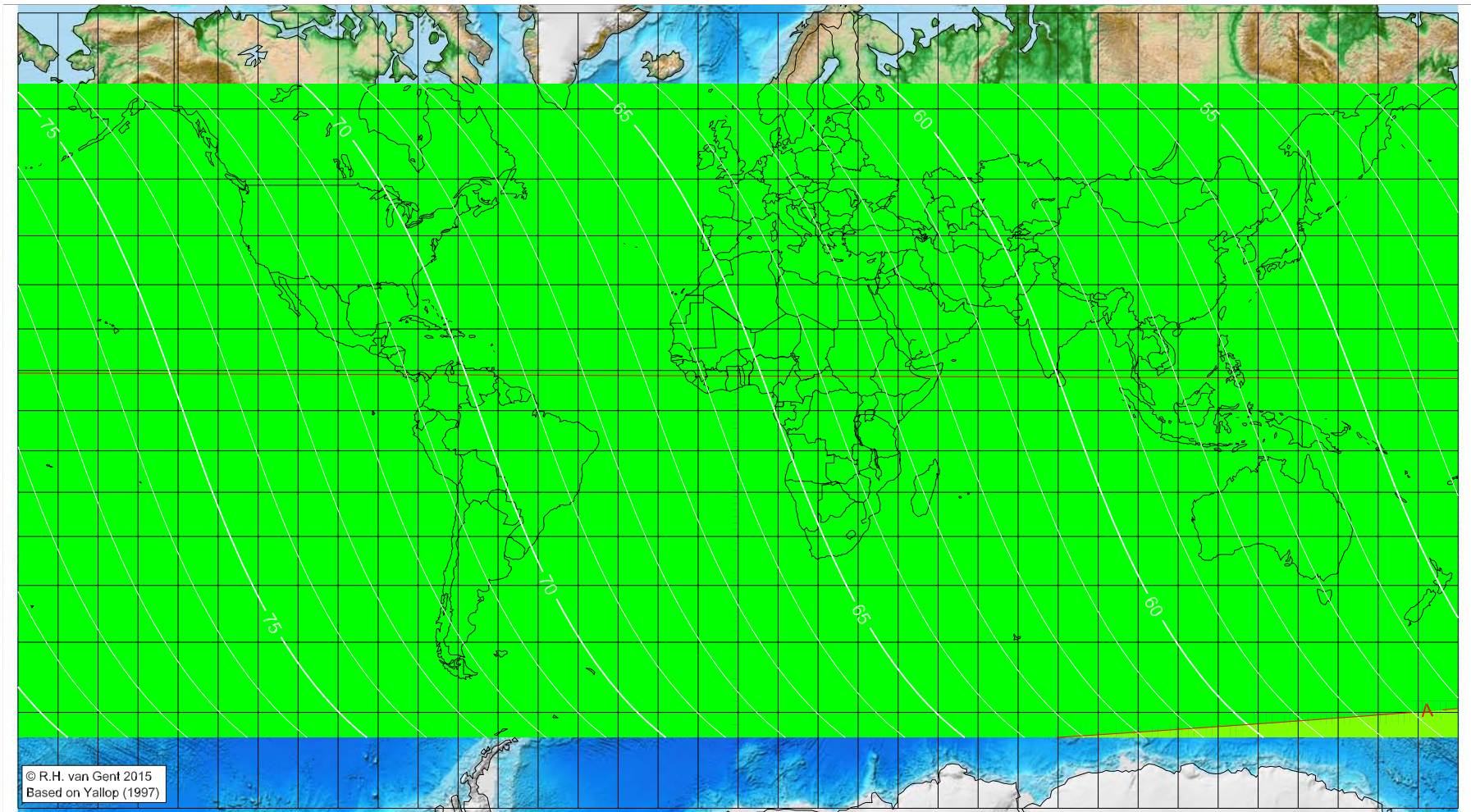
Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'l-Ūlā 1440 AH

Global visibility map for 8 January 2019 [Tuesday]
Second day after luni-solar conjunction



Astronomical New Moon: 6 January 2019, 1h 28.1m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

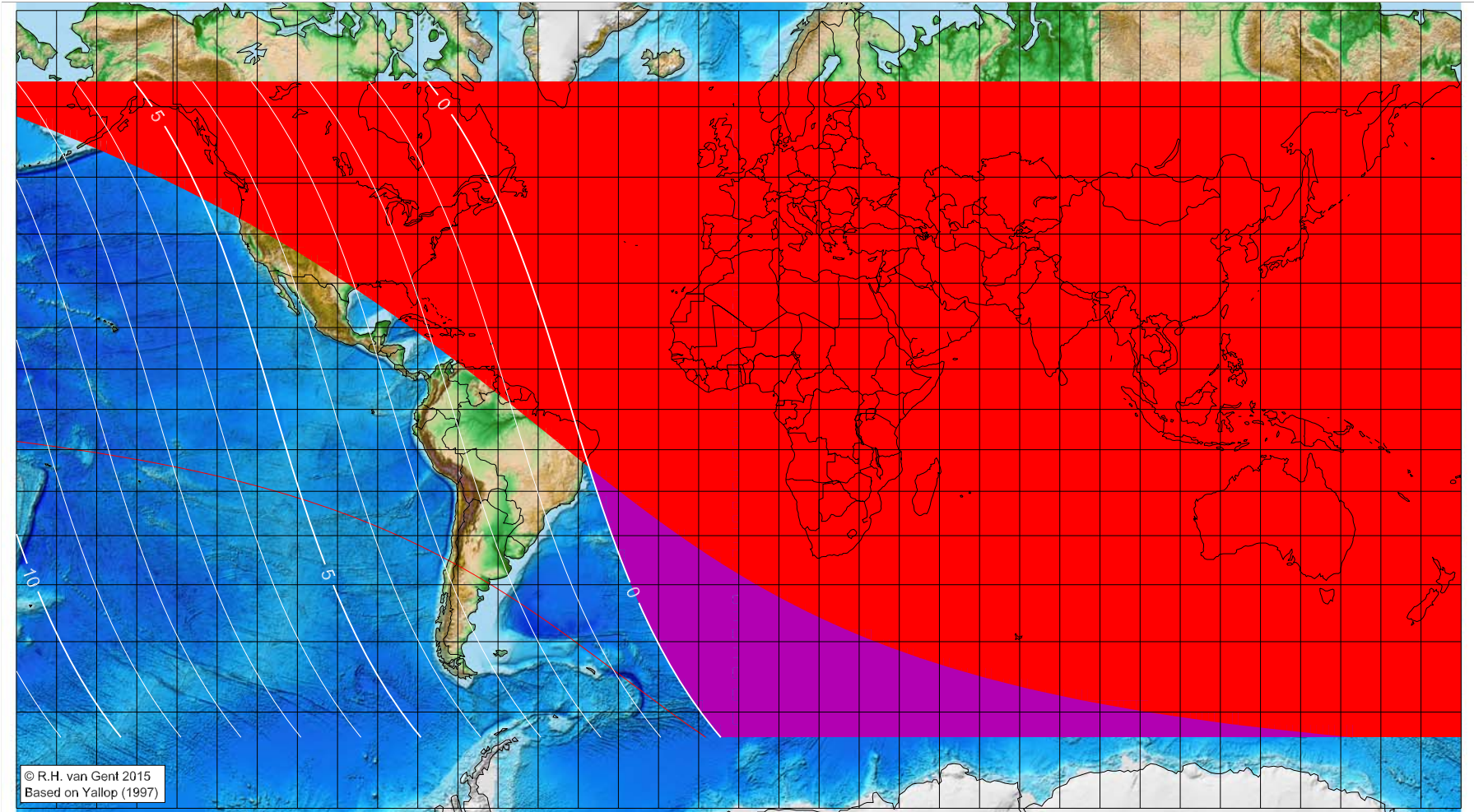
Astronomical (Brown) Lunation Number = 1188
Islamic Lunation Number = 17273
 $TT - UT [= \Delta T] = 1.2 \text{ min}$

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'l-Ākhira 1440 AH

Global visibility map for 4 February 2019 [Monday]
Day of luni-solar conjunction



Astronomical New Moon: 4 February 2019, 21h 3.5m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = 1189
Islamic Lunation Number = 17274
TT - UT [= ΔT] = 1.2 min

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset

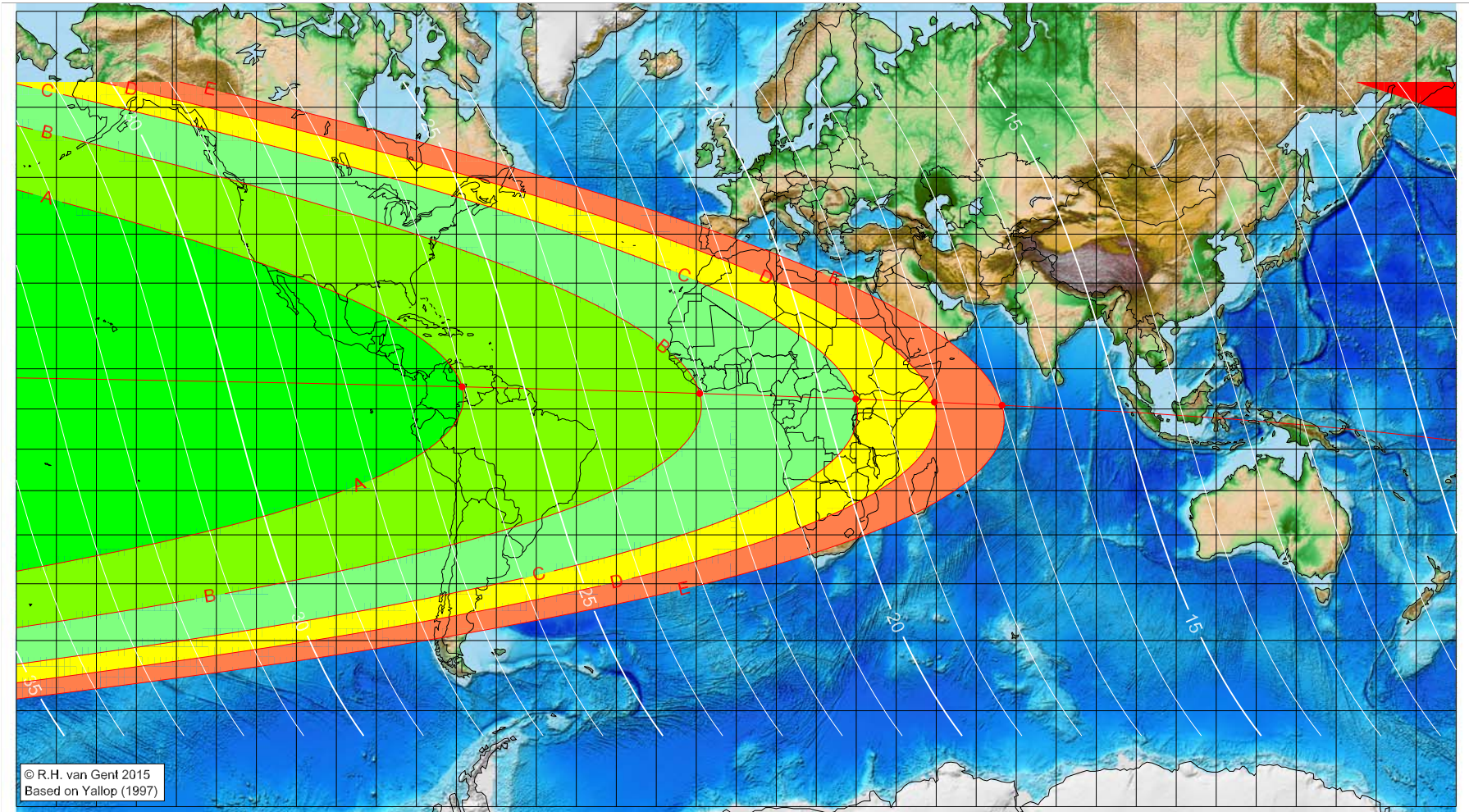
Longitude (°) Latitude (°) Lunar age (h)
not visible until the next evening
not visible until the next evening
not visible until the next evening
not visible until the next evening
not visible until the next evening

■ before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'l-Ākhira 1440 AH

Global visibility map for 5 February 2019 [Tuesday]
Day after luni-solar conjunction



Astronomical New Moon: 4 February 2019, 21h 3.5m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = 1189

Islamic Lunation Number = 17274

TT - UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

■ moonset before sunset

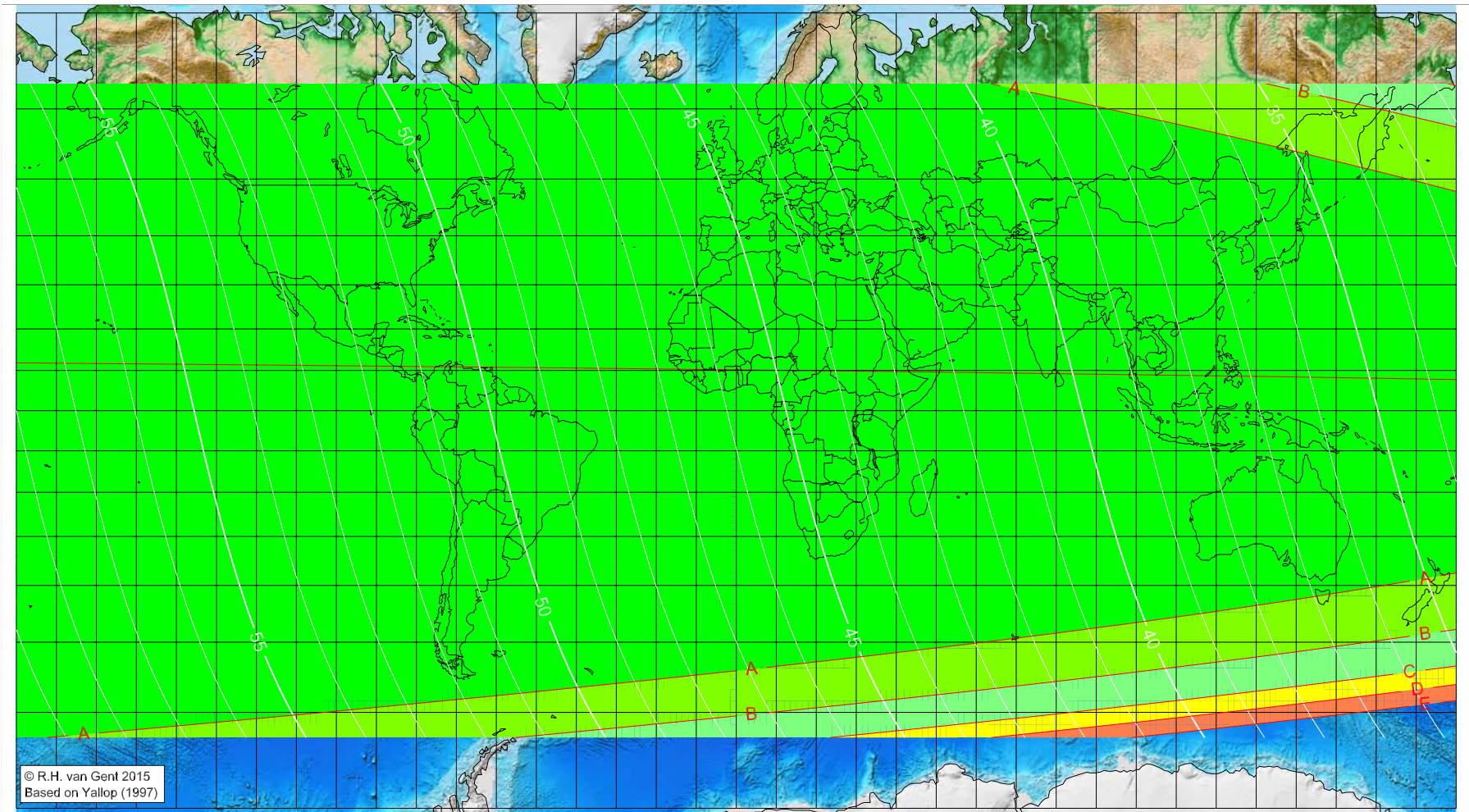
■ before conjunction (astronomical new moon)

Longitude (°)	Latitude (°)	Lunar age (h)
-68.56	5.52	26.05
-9.14	3.88	22.06
29.87	2.51	19.45
49.53	1.70	18.14
66.45	0.92	17.01

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'l-Ākhira 1440 AH

Global visibility map for 6 February 2019 [Wednesday]
 Second day after luni-solar conjunction



Astronomical New Moon: 4 February 2019, 21h 3.5m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

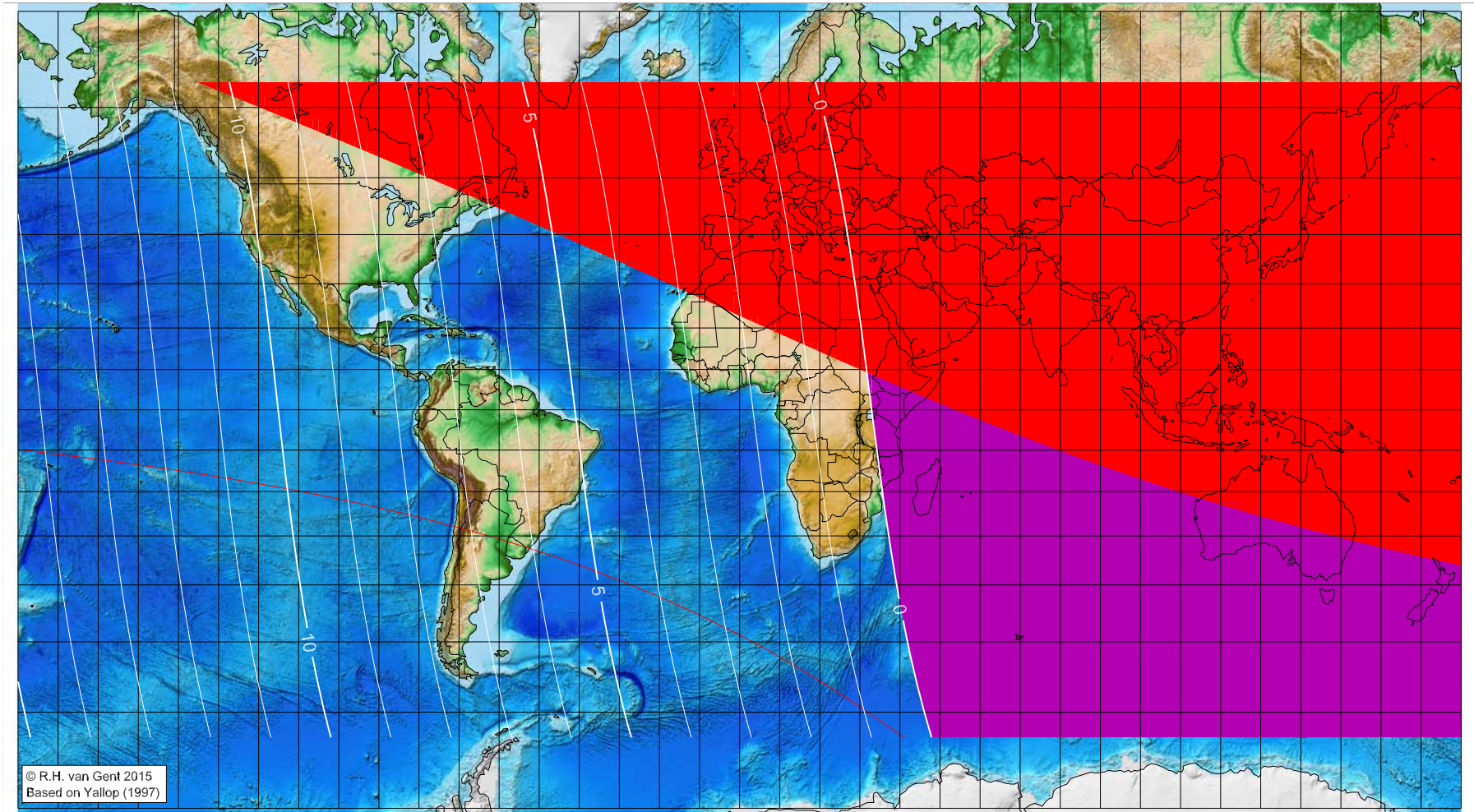
Astronomical (Brown) Lunation Number = 1189
 Islamic Lunation Number = 17274
 $TT - UT [= \Delta T] = 1.2 \text{ min}$

Lunar age (in hours) is given for the 'best time',
 defined as the moment 4/9ths between sunset
 and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rajab 1440 AH

Global visibility map for 6 March 2019 [Wednesday]
Day of luni-solar conjunction



Astronomical New Moon: 6 March 2019, 16h 3.9m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = 1190
Islamic Lunation Number = 17275
TT - UT [= ΔT] = 1.2 min

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

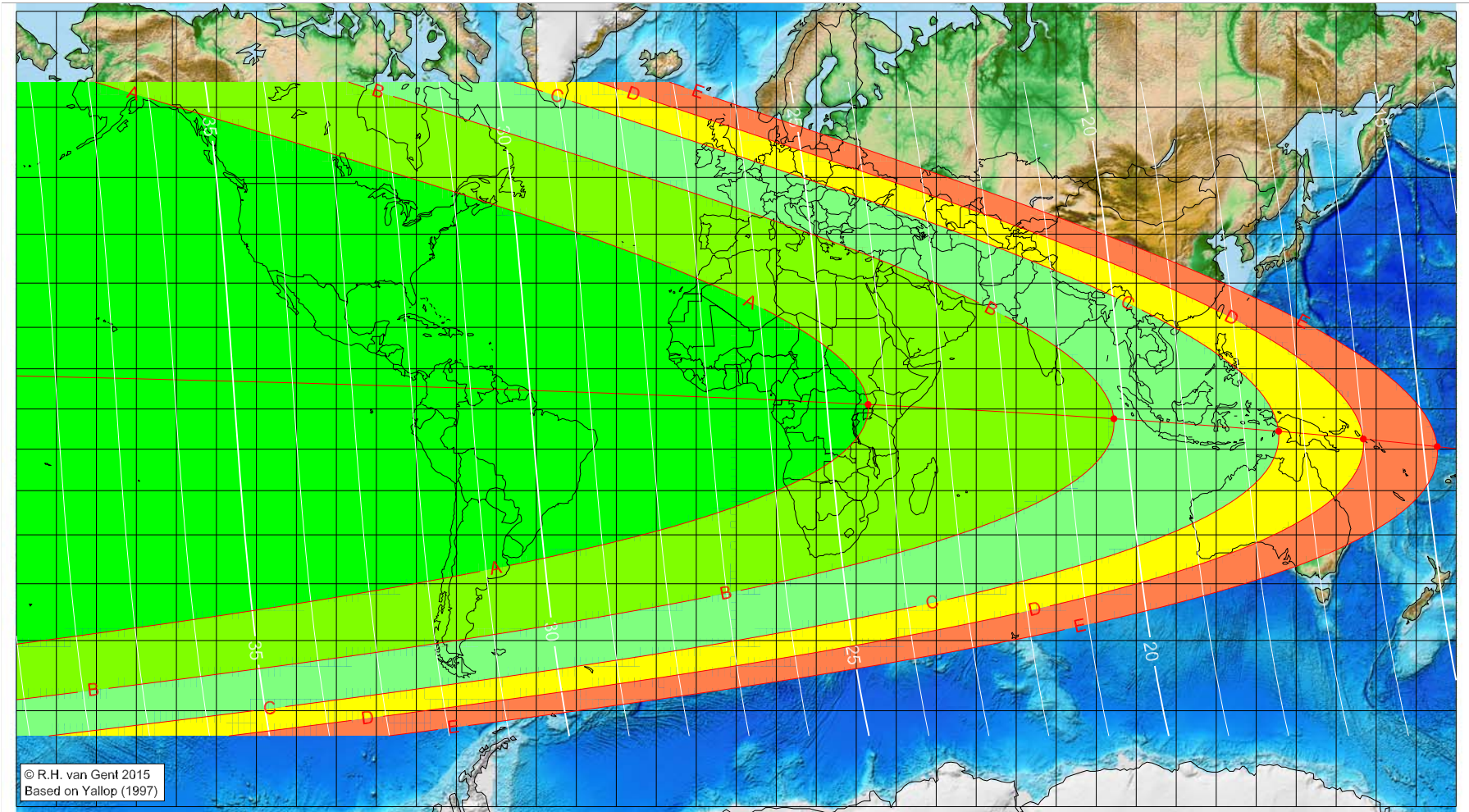
Longitude (°)	Latitude (°)	Lunar age (h)
		not visible until the next evening
		not visible until the next evening
		not visible until the next evening
		not visible until the next evening
		not visible until the next evening

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rajab 1440 AH

Global visibility map for 7 March 2019 [Thursday]
Day after luni-solar conjunction



Astronomical New Moon: 6 March 2019, 16h 3.9m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = 1190

Islamic Lunation Number = 17275

TT - UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

■ moonset before sunset

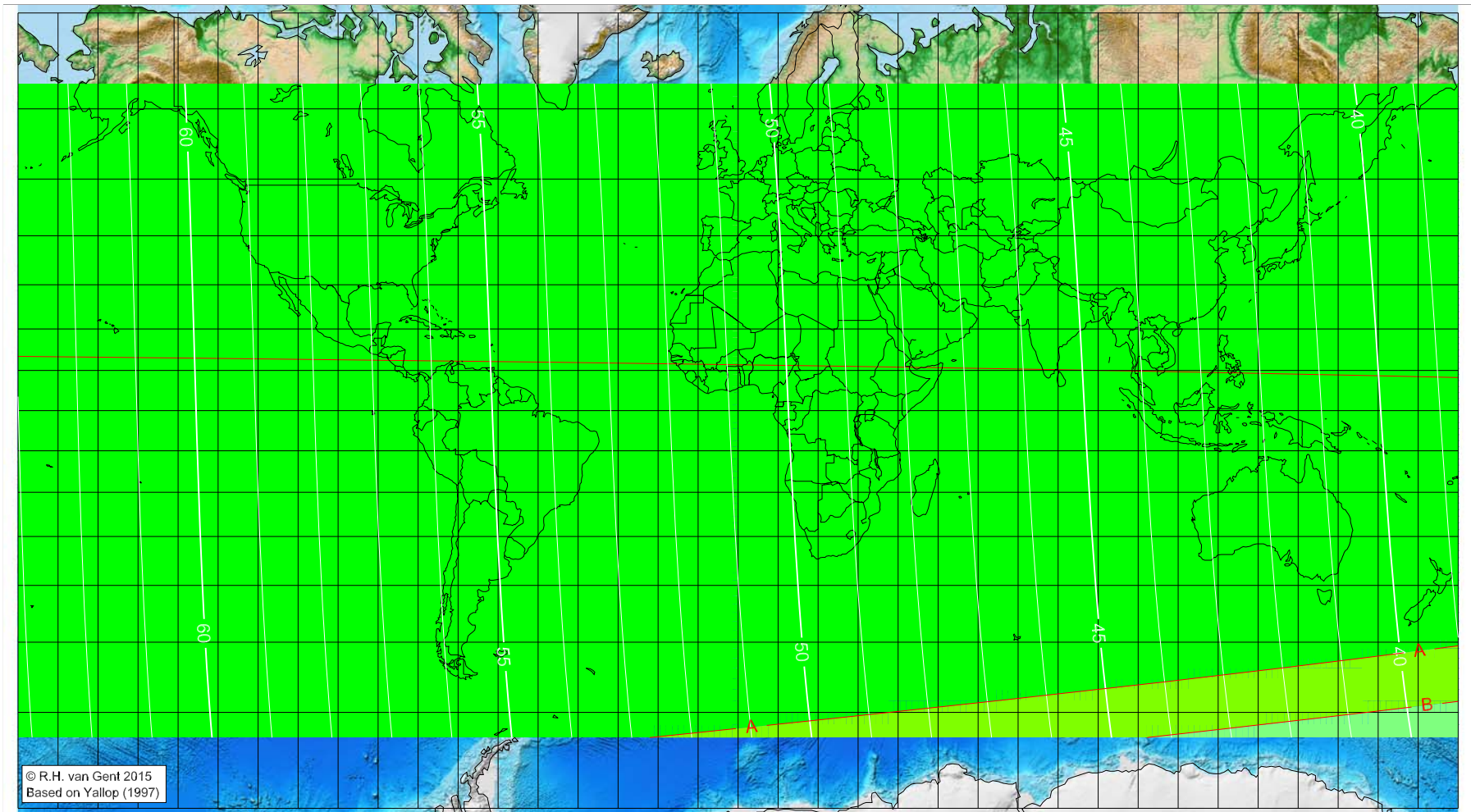
■ before conjunction (astronomical new moon)

Longitude (°)	Latitude (°)	Lunar age (h)
32.95	1.13	24.31
94.41	-2.44	20.18
135.62	-5.56	17.42
156.79	-7.48	16.00
175.27	-9.37	14.77

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rajab 1440 AH

Global visibility map for 8 March 2019 [Friday]
Second day after luni-solar conjunction



Astronomical New Moon: 6 March 2019, 16h 3.9m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

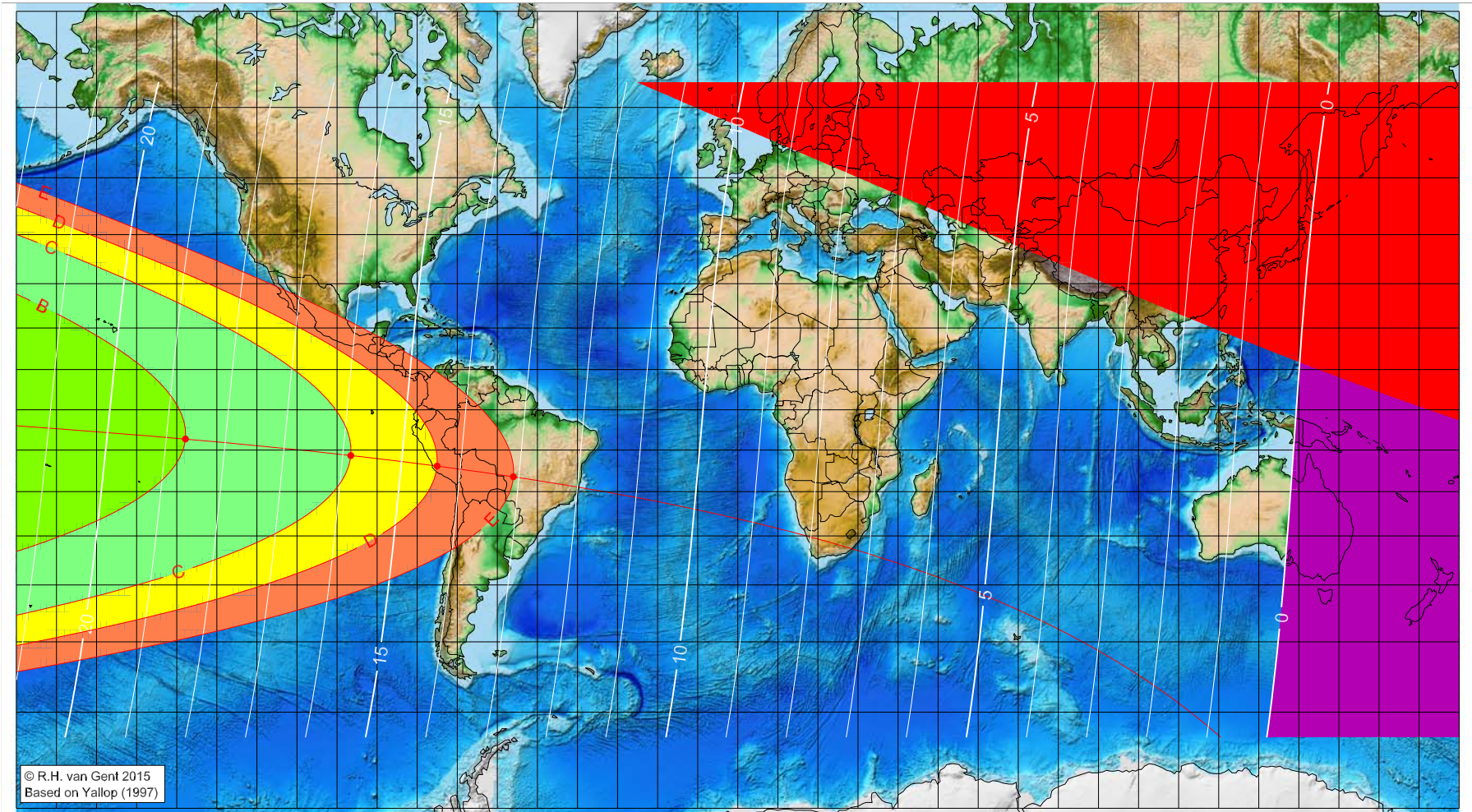
Astronomical (Brown) Lunation Number = 1190
Islamic Lunation Number = 17275
TT – UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Shaʿbān 1440 AH

Global visibility map for 5 April 2019 [Friday]
Day of luni-solar conjunction



© R.H. van Gent 2015
Based on Yallop (1997)

Astronomical New Moon: 5 April 2019, 8h 50.4m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = 1191
Islamic Lunation Number = 17276
TT - UT [= ΔT] = 1.2 min

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

Longitude (°)	Latitude (°)	Lunar age (h)
-137.84	-7.27	18.68
-96.57	-11.35	15.86
-75.04	-13.91	14.39
-56.00	-16.48	13.09

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

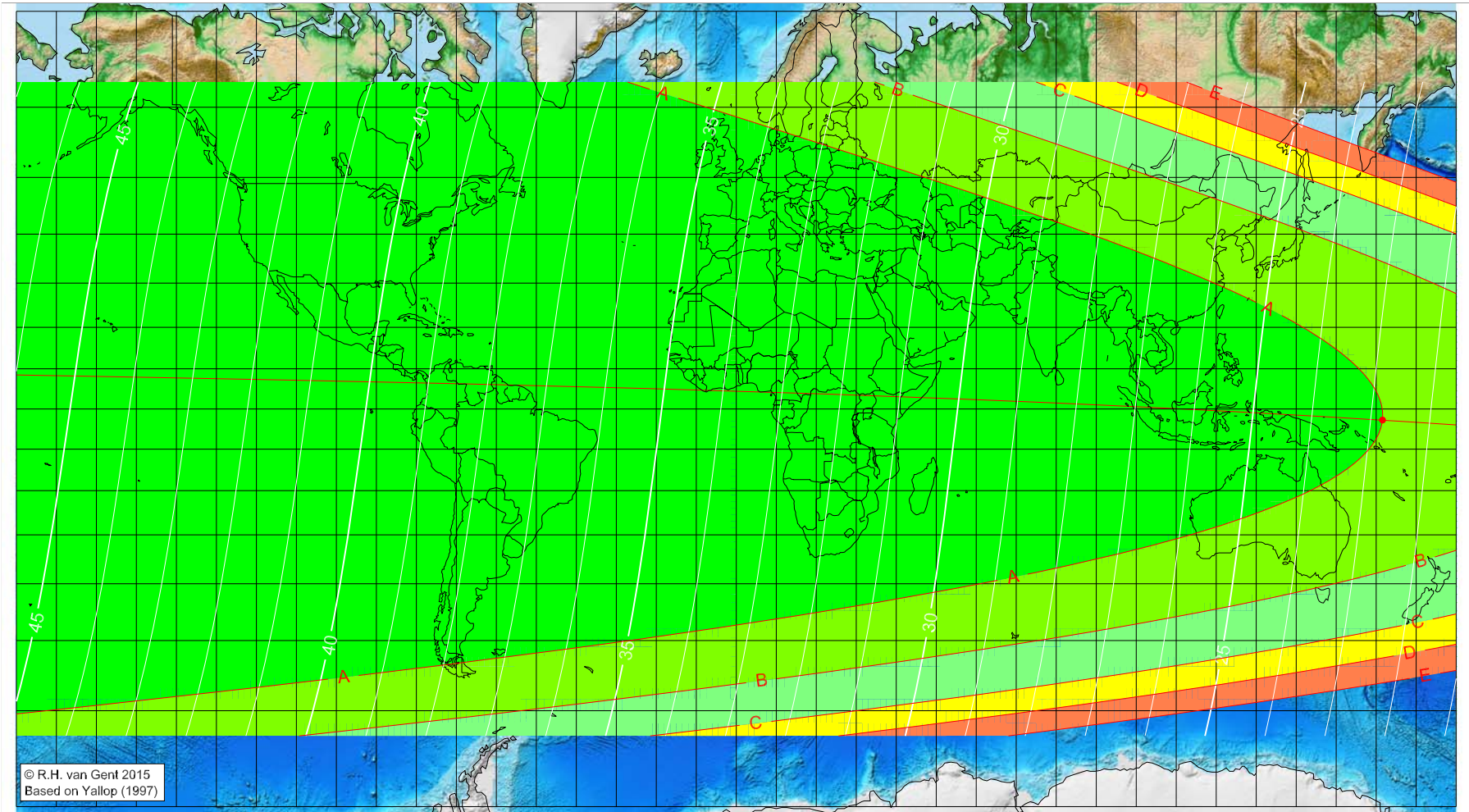
■ moonset before sunset

■ before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Shaʿbān 1440 AH

Global visibility map for 6 April 2019 [Saturday]
Day after luni-solar conjunction



© R.H. van Gent 2015
Based on Yallop (1997)

Astronomical New Moon: 5 April 2019, 8h 50.4m (UTC)

First visibility (●)

Longitude (°)	Latitude (°)	Lunar age (h)
161.58	-2.77	22.80

visible on the previous evening
visible on the previous evening
visible on the previous evening

Astronomical (Brown) Lunation Number = 1191
Islamic Lunation Number = 17276
TT - UT [= ΔT] = 1.2 min

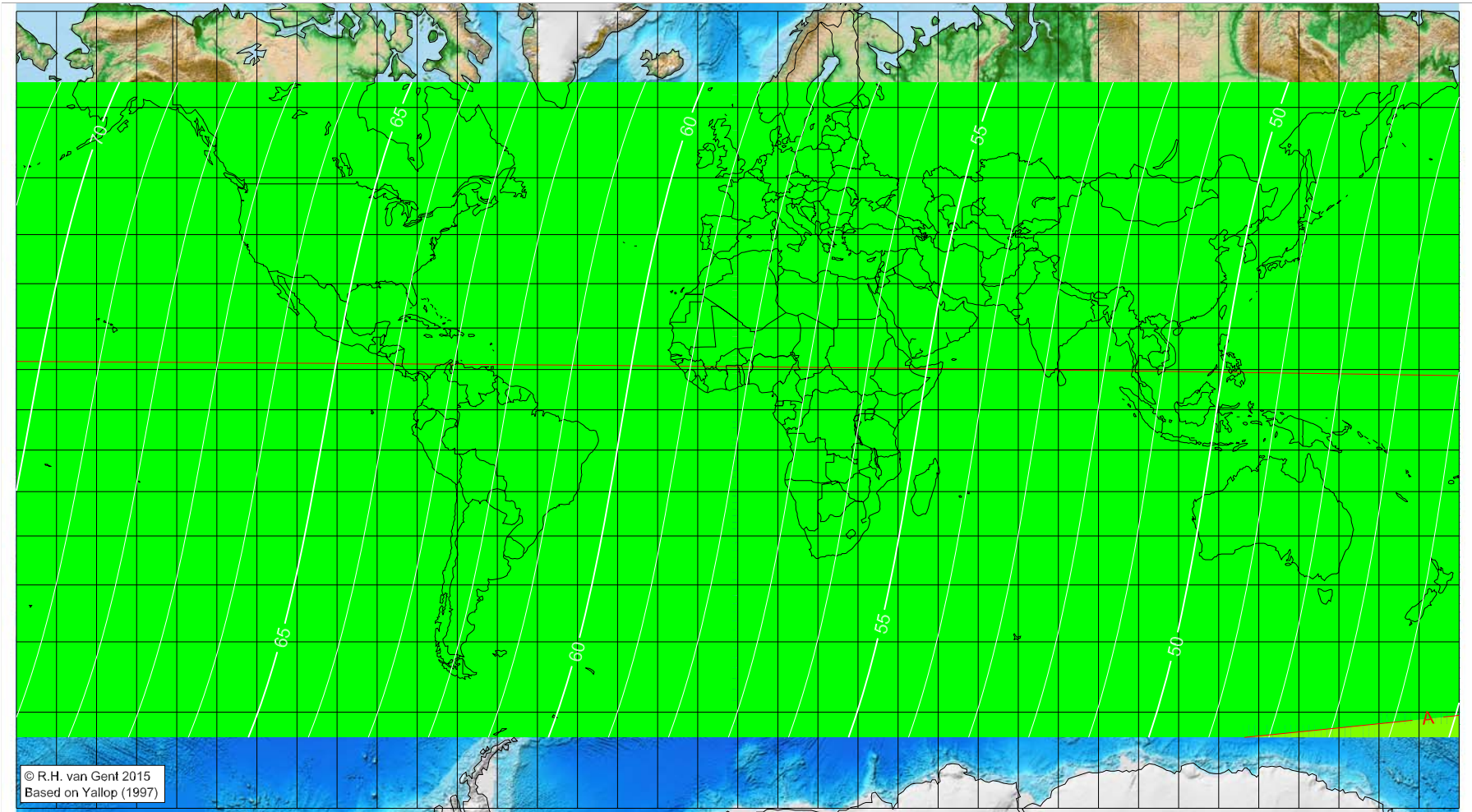
- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Sha'bān 1440 AH

Global visibility map for 7 April 2019 [Sunday]
Second day after luni-solar conjunction



Astronomical New Moon: 5 April 2019, 8h 50.4m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

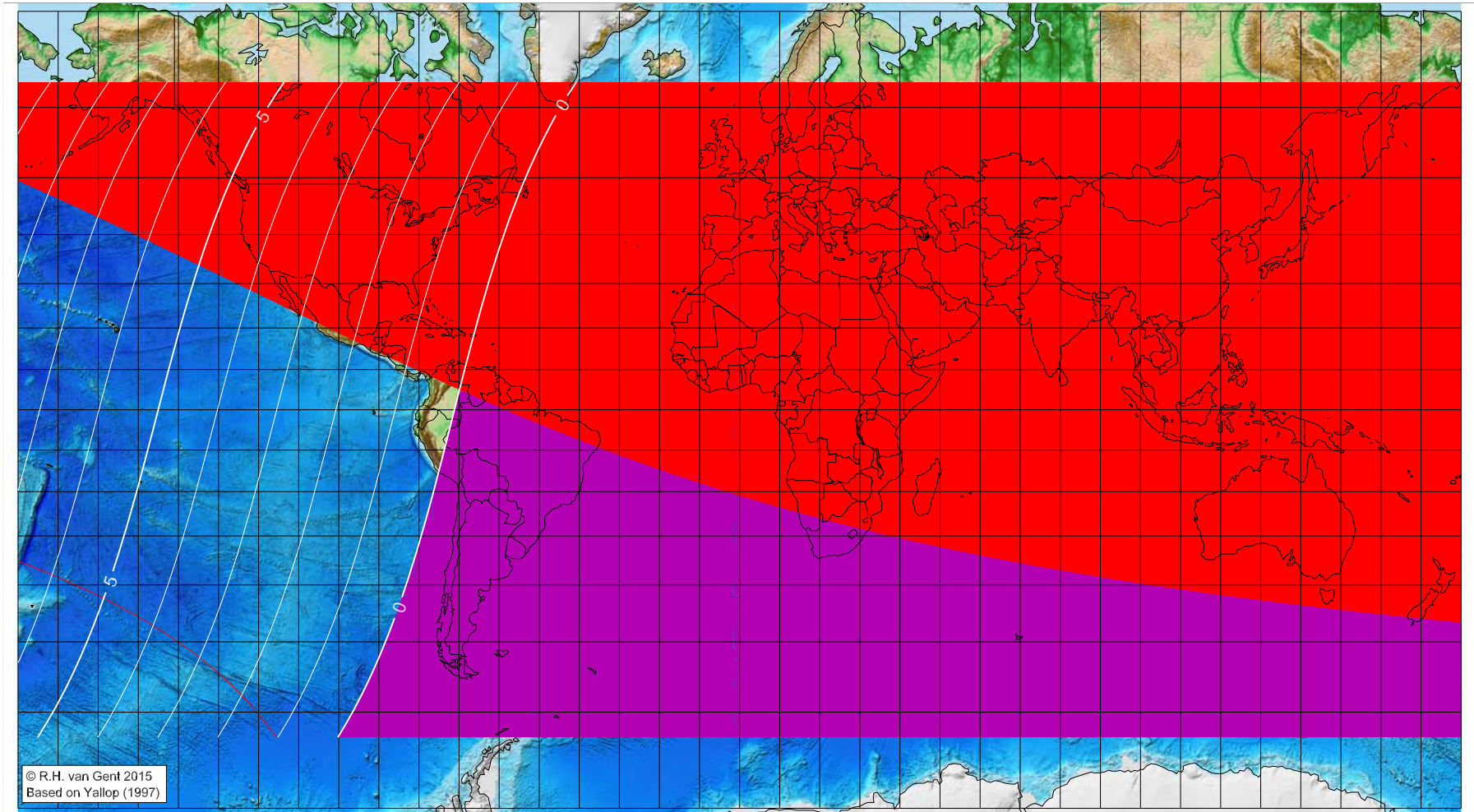
Astronomical (Brown) Lunation Number = 1191
Islamic Lunation Number = 17276
TT – UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Ramaḍān 1440 AH

Global visibility map for 4 May 2019 [Saturday]
Day of luni-solar conjunction



Astronomical New Moon: 4 May 2019, 22h 45.5m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = 1192
Islamic Lunation Number = 17277
TT - UT [= ΔT] = 1.2 min

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

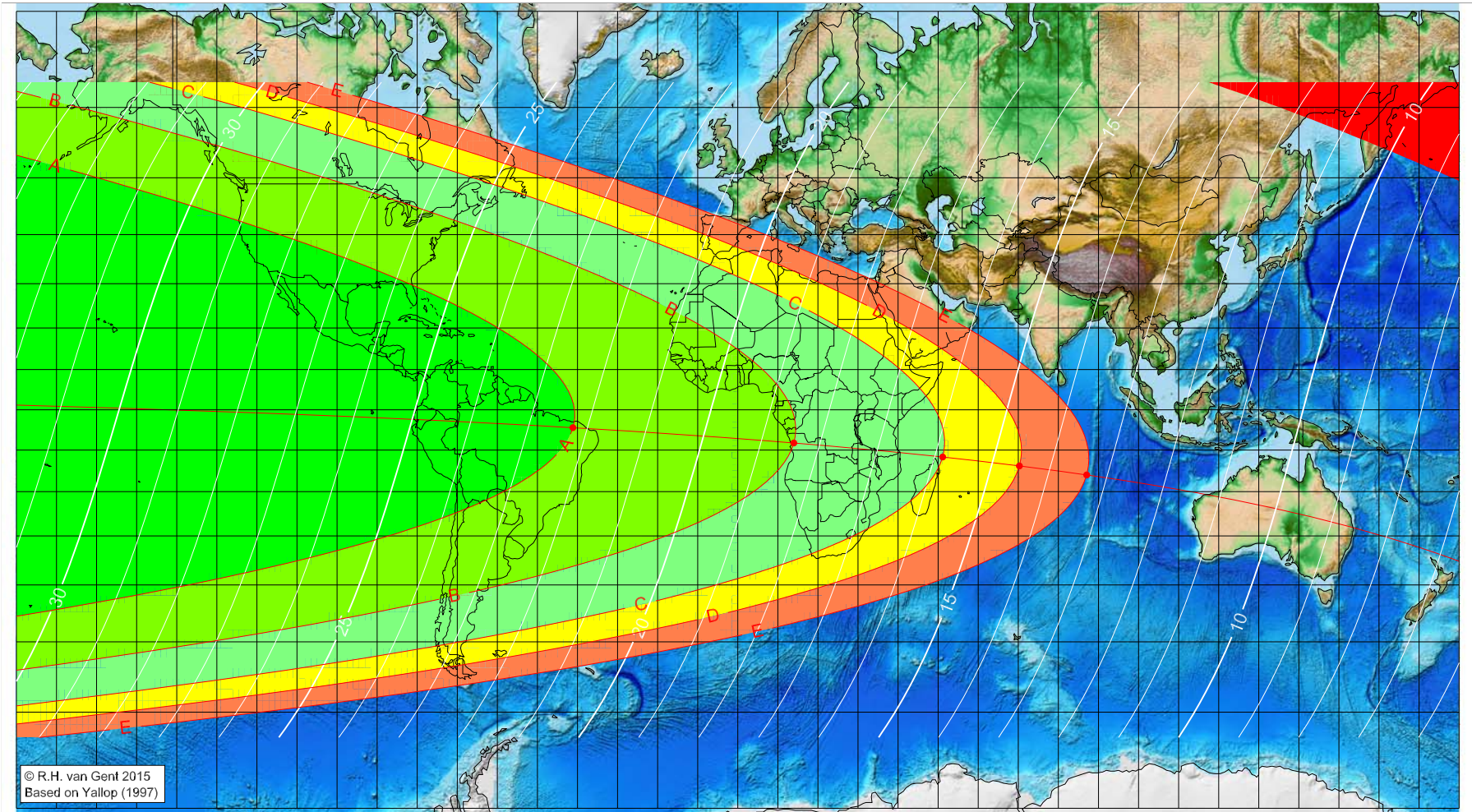
Longitude (°)	Latitude (°)	Lunar age (h)
		not visible until the next evening
		not visible until the next evening
		not visible until the next evening
		not visible until the next evening
		not visible until the next evening

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Ramaḍān 1440 AH

Global visibility map for 5 May 2019 [Sunday]
Day after luni-solar conjunction



© R.H. van Gent 2015
Based on Yallop (1997)

Astronomical New Moon: 4 May 2019, 22h 45.5m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = 1192
Islamic Lunation Number = 17277
TT - UT [= ΔT] = 1.2 min

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

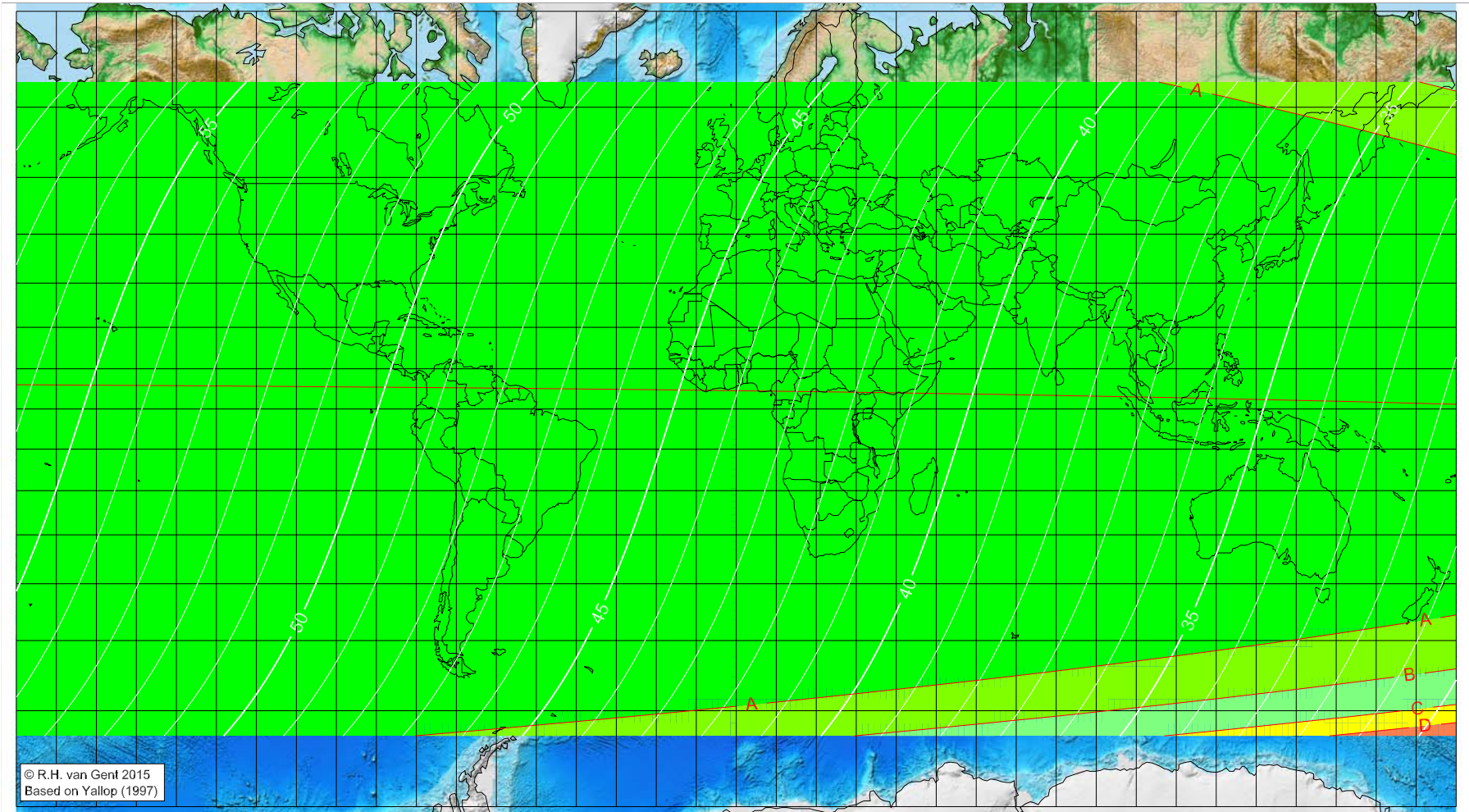
Longitude (°)	Latitude (°)	Lunar age (h)
-41.15	-4.45	22.25
13.98	-8.25	18.44
51.12	-11.70	15.87
70.27	-13.87	14.53
87.07	-16.04	13.35

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Ramaḍān 1440 AH

Global visibility map for 6 May 2019 [Monday]
Second day after luni-solar conjunction



© R.H. van Gent 2015
Based on Yallop (1997)

Astronomical New Moon: 4 May 2019, 22h 45.5m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

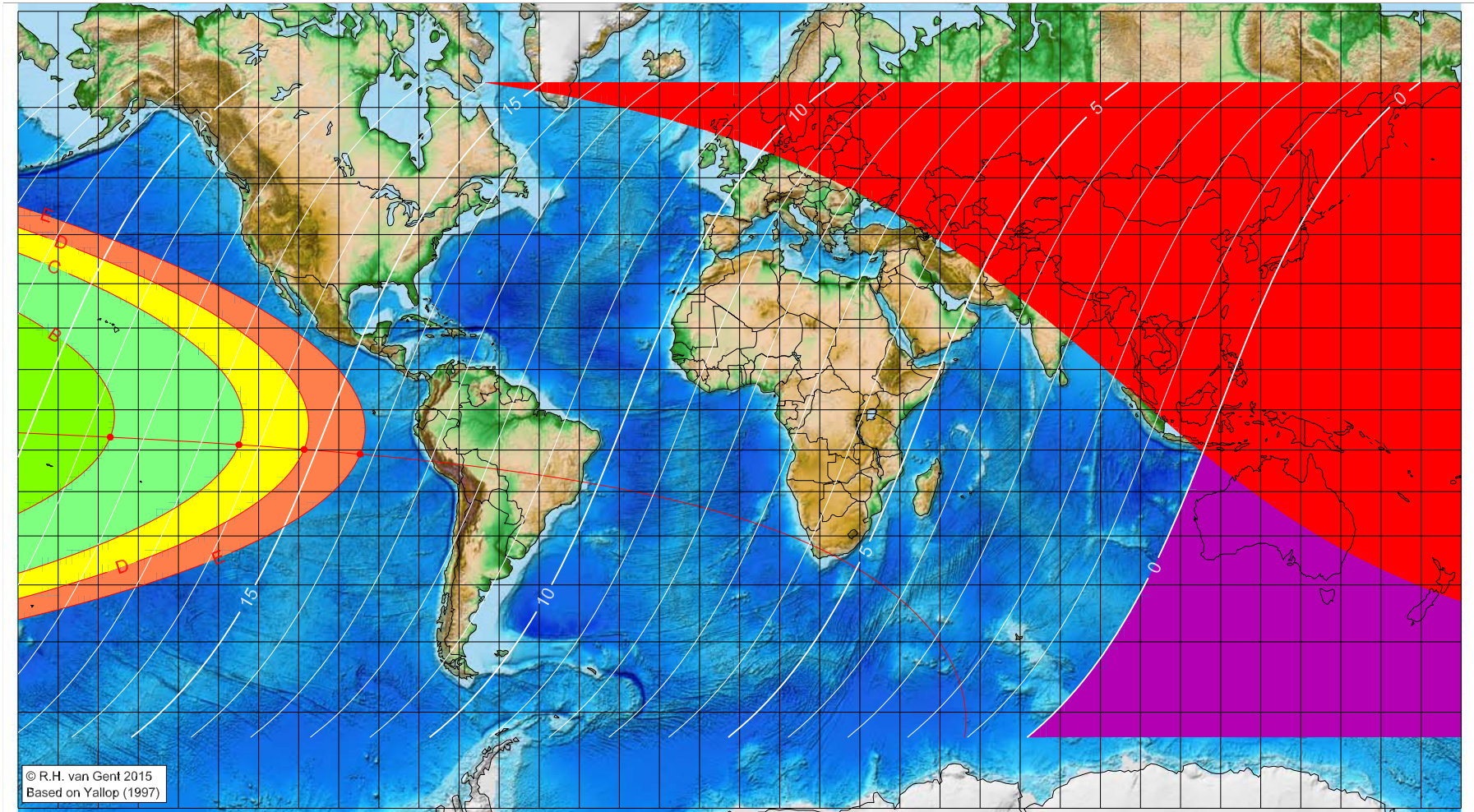
Astronomical (Brown) Lunation Number = 1192
Islamic Lunation Number = 17277
TT – UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Shawwāl 1440 AH

Global visibility map for 3 June 2019 [Monday]
Day of luni-solar conjunction



© R.H. van Gent 2015
Based on Yallop (1997)

Astronomical New Moon: 3 June 2019, 10h 1.9m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
-157.00	-6.80	18.58
-124.90	-8.68	16.35
-108.66	-9.85	15.22
-94.67	-11.01	14.24

Astronomical (Brown) Lunation Number = 1193
Islamic Lunation Number = 17278
TT - UT [= ΔT] = 1.2 min

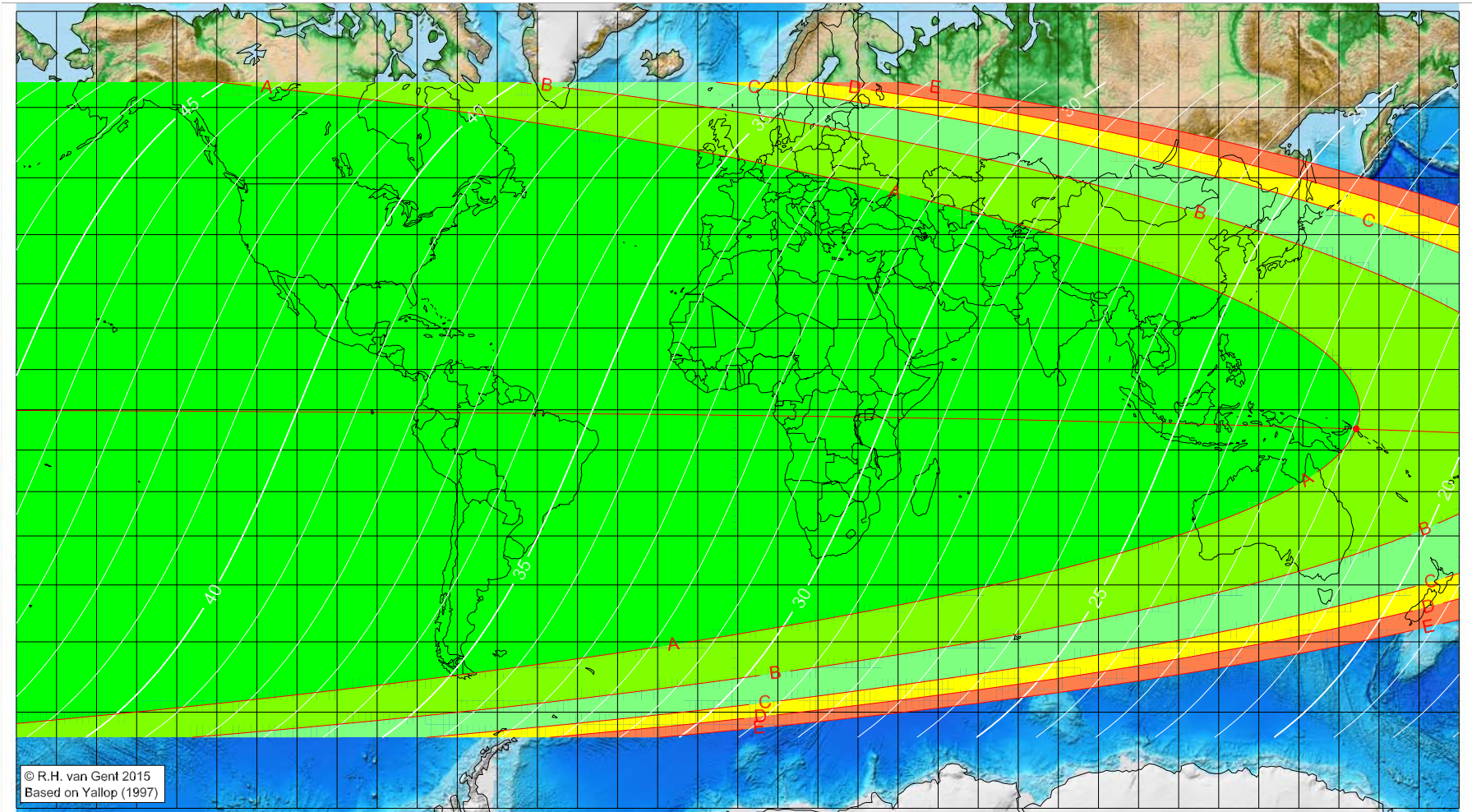
Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Shawwāl 1440 AH

Global visibility map for 4 June 2019 [Tuesday]
Day after luni-solar conjunction



Astronomical New Moon: 3 June 2019, 10h 1.9m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
154.30	-4.74	21.94

visible on the previous evening
visible on the previous evening
visible on the previous evening

Astronomical (Brown) Lunation Number = 1193
Islamic Lunation Number = 17278
TT - UT [= ΔT] = 1.2 min

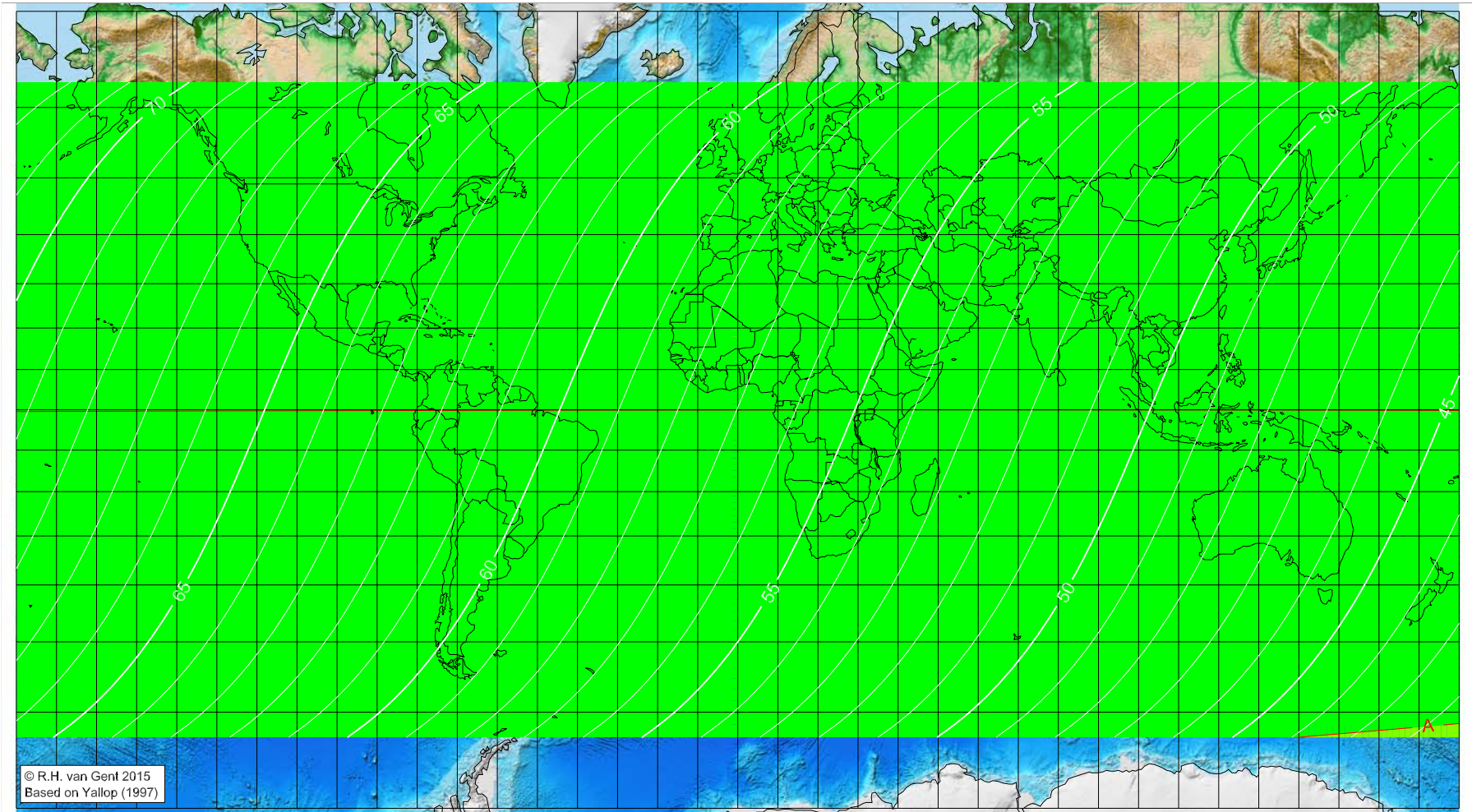
- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Shawwāl 1440 AH

Global visibility map for 5 June 2019 [Wednesday]
Second day after luni-solar conjunction



Astronomical New Moon: 3 June 2019, 10h 1.9m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

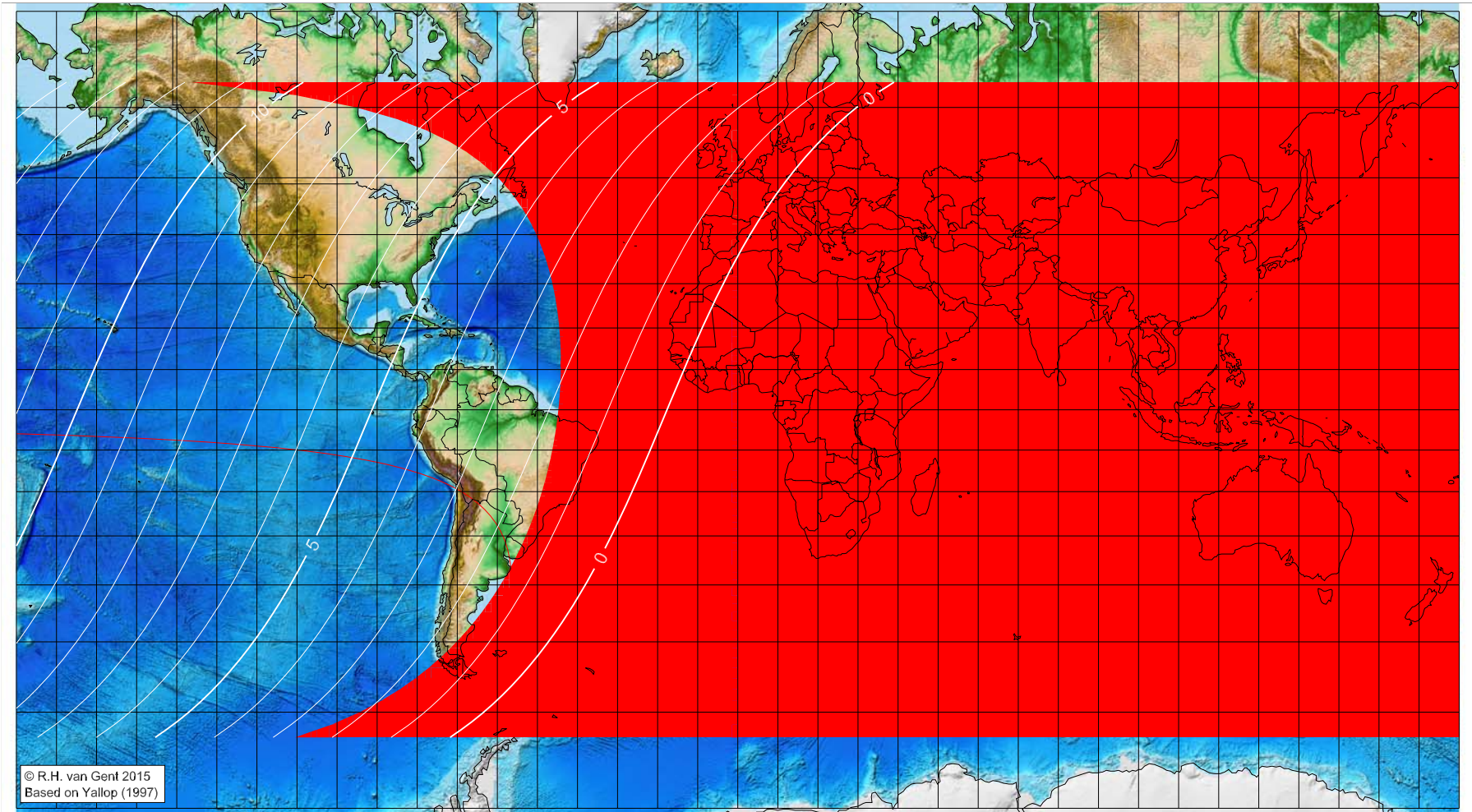
Astronomical (Brown) Lunation Number = 1193
Islamic Lunation Number = 17278
TT – UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhu 'l-Qa'da 1440 AH

Global visibility map for 2 July 2019 [Tuesday]
Day of luni-solar conjunction



Astronomical New Moon: 2 July 2019, 19h 16.2m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = 1194
Islamic Lunation Number = 17279
TT - UT [= ΔT] = 1.2 min

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

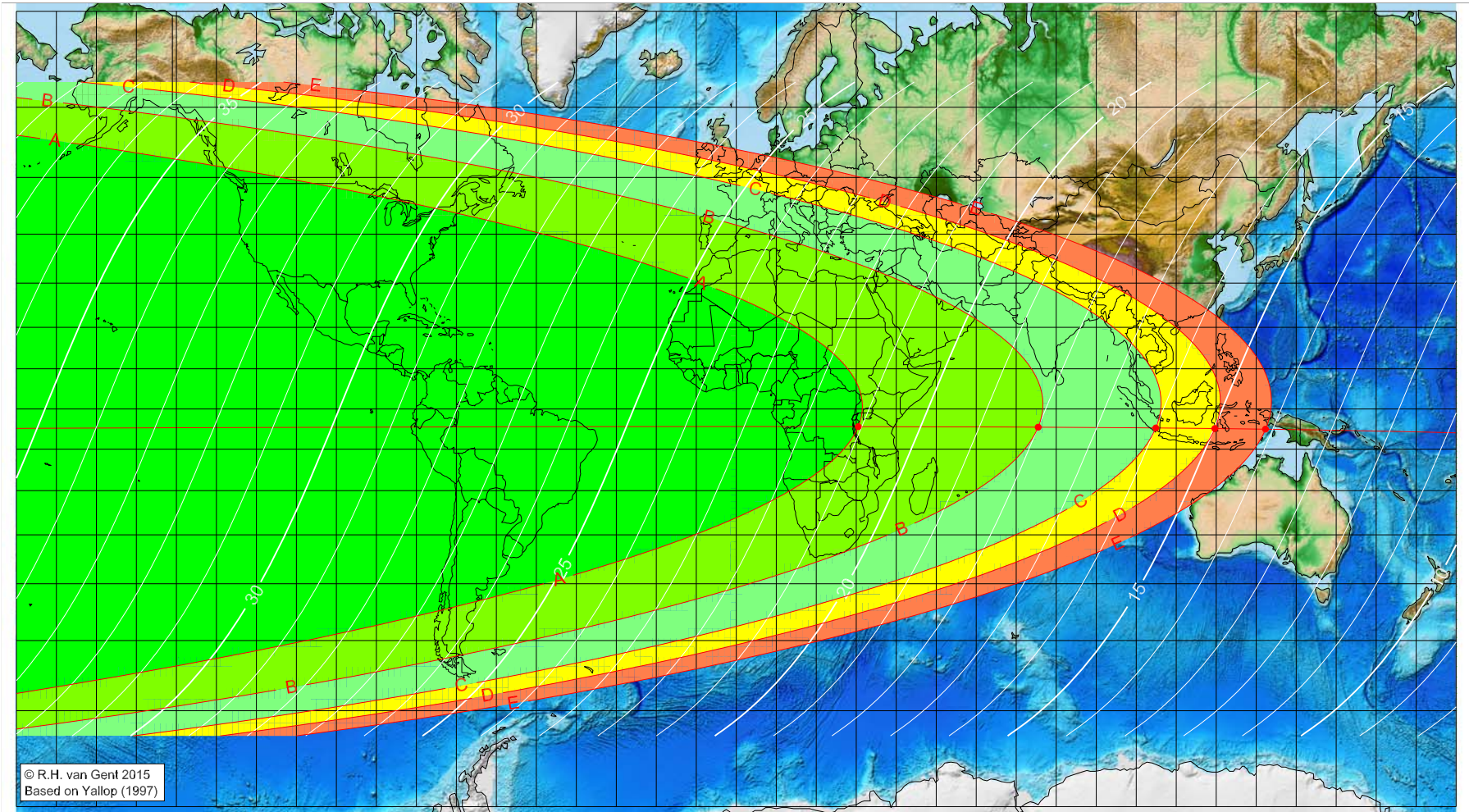
Longitude (°) Latitude (°) Lunar age (h)
not visible until the next evening
not visible until the next evening
not visible until the next evening
not visible until the next evening
not visible until the next evening

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhu 'l-Qa'da 1440 AH

Global visibility map for 3 July 2019 [Wednesday]
Day after luni-solar conjunction



© R.H. van Gent 2015
Based on Yallop (1997)

Astronomical New Moon: 2 July 2019, 19h 16.2m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = 1194

Islamic Lunation Number = 17279

TT - UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

Longitude (°)	Latitude (°)	Lunar age (h)
30.50	-4.41	21.06
75.49	-4.55	18.00
104.89	-4.75	16.00
119.66	-4.89	14.99
132.32	-5.04	14.12

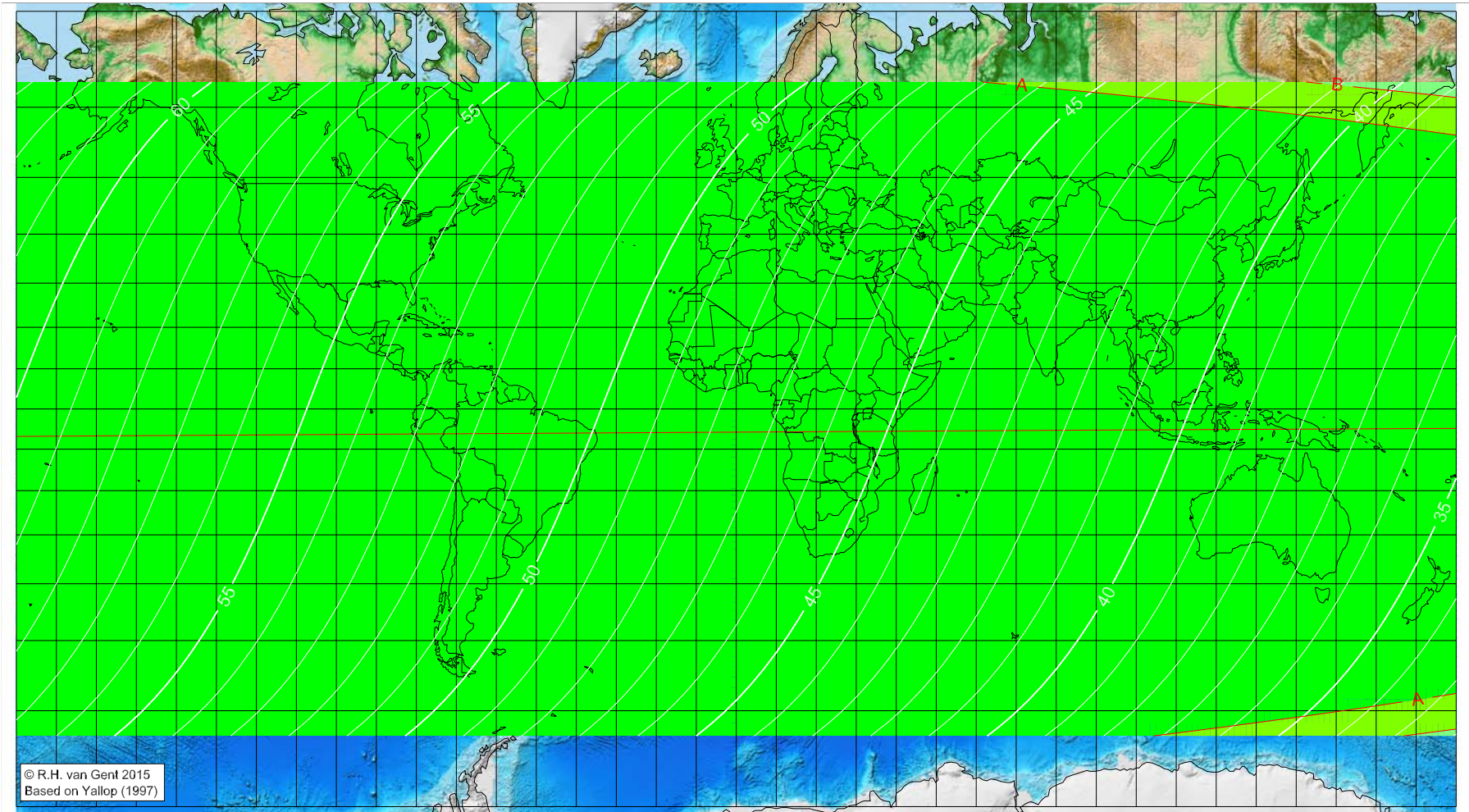
■ moonset before sunset

■ before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhu 'l-Qa'da 1440 AH

Global visibility map for 4 July 2019 [Thursday]
Second day after luni-solar conjunction



Astronomical New Moon: 2 July 2019, 19h 16.2m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

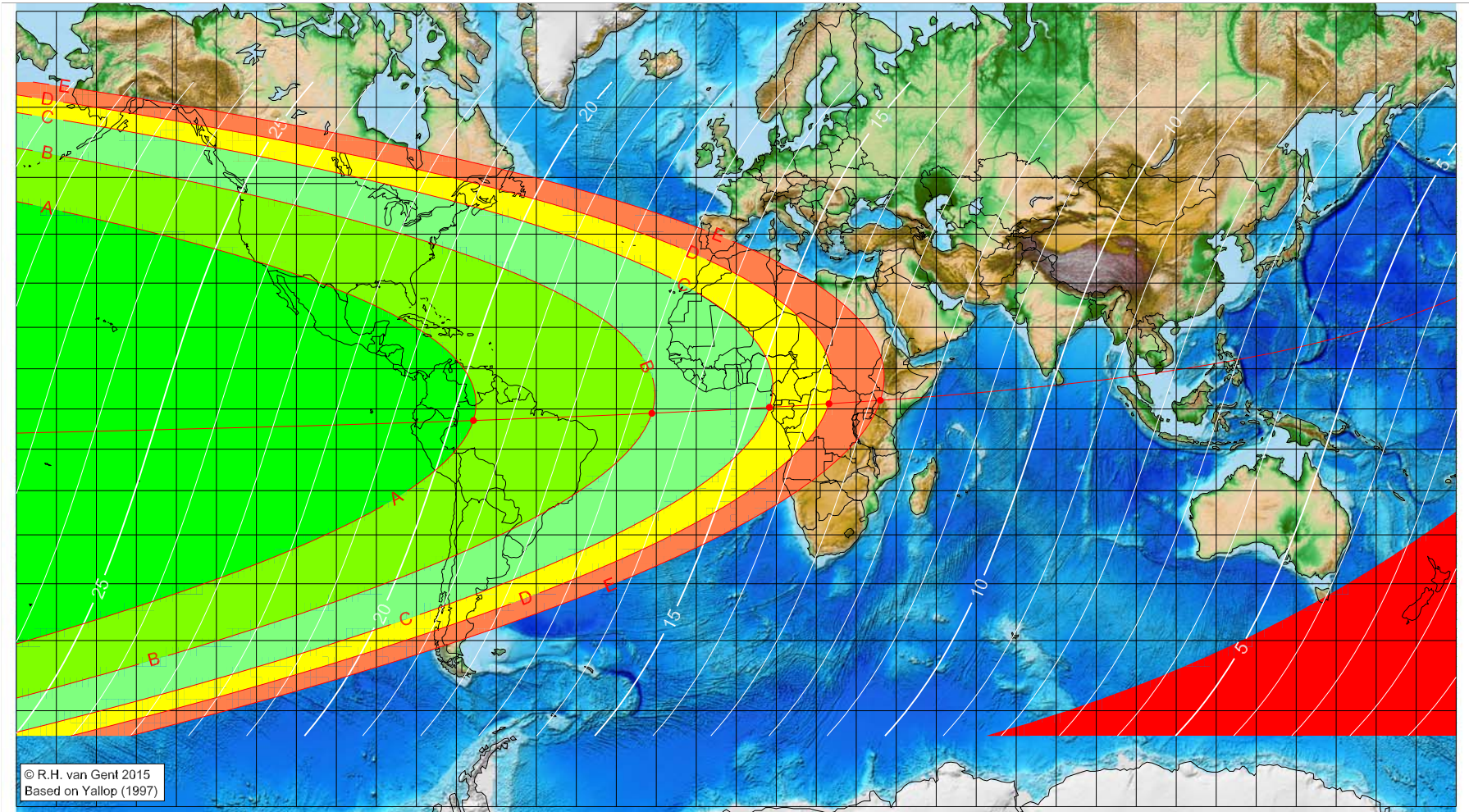
Astronomical (Brown) Lunation Number = 1194
Islamic Lunation Number = 17279
 $TT - UT [= \Delta T] = 1.2 \text{ min}$

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhu 'l-Hijja 1440 AH

Global visibility map for 1 August 2019 [Thursday]
Day of luni-solar conjunction



Astronomical New Moon: 1 August 2019, 3h 11.9m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = 1195

Islamic Lunation Number = 17280

TT - UT [= ΔT] = 1.2 min

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

Longitude (°)	Latitude (°)	Lunar age (h)
-65.73	-2.88	19.63
-21.11	-1.08	16.64
8.30	0.41	14.67
23.18	1.30	13.68
36.02	2.15	12.83

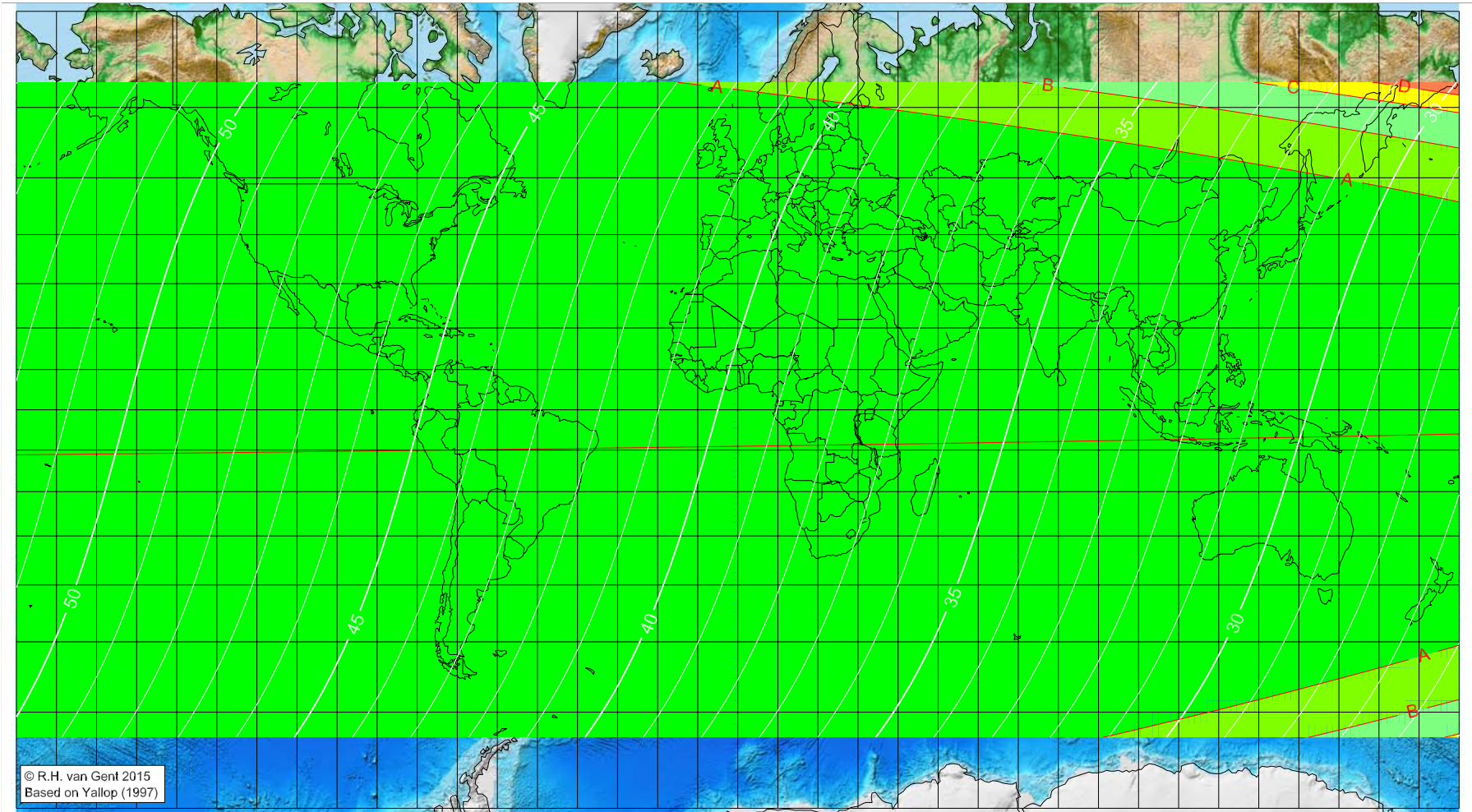
■ moonset before sunset

■ before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhu 'l-Hijja 1440 AH

Global visibility map for 2 August 2019 [Friday]
Day after luni-solar conjunction



© R.H. van Gent 2015
Based on Yallop (1997)

Astronomical New Moon: 1 August 2019, 3h 11.9m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening

Astronomical (Brown) Lunation Number = 1195
Islamic Lunation Number = 17280
TT - UT [= ΔT] = 1.2 min

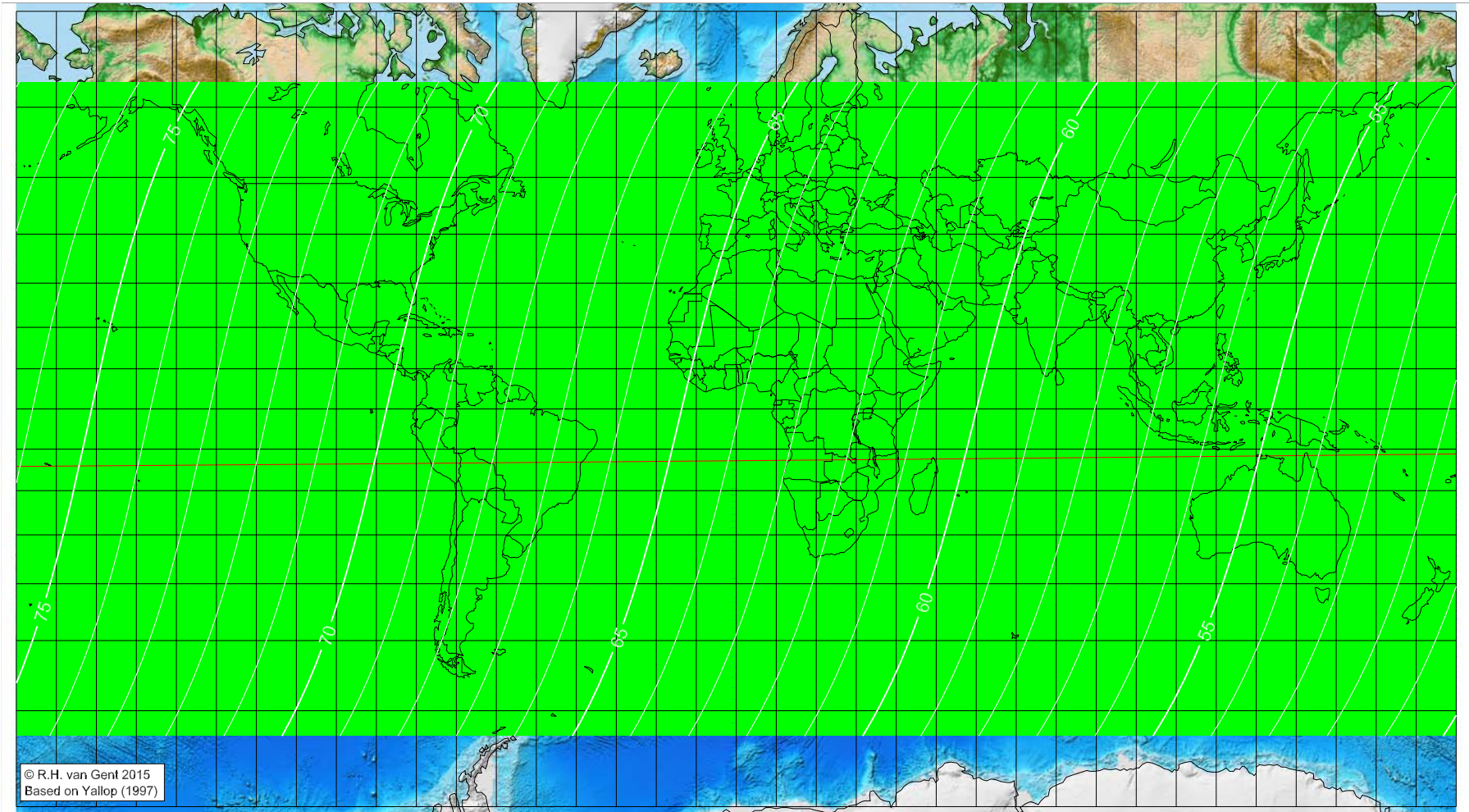
Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhu 'l-Hijja 1440 AH

Global visibility map for 3 August 2019 [Saturday]
Second day after luni-solar conjunction



Astronomical New Moon: 1 August 2019, 3h 11.9m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Astronomical (Brown) Lunation Number = 1195
Islamic Lunation Number = 17280
 $TT - UT [= \Delta T] = 1.2 \text{ min}$

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>