Solar Interference for Spring 2025 - Ku-Band satellite services

07/03/2025 04:13:16

FAQ Article Print

Category:	TECHNICAL FAQ::SATELLITE	**Votes:**	0
State:	public (all)	**Result:**	0.00 %
		Last update:	07:07:15 - 03/23/2025

Symptom (public)

There will be brief mid-day service outages during few days of February and few weeks of March 2025, due to solar interference.

Dear Talia customers,

This notice is to inform that there will be brief mid-day service outages during few days of February and few weeks of March 2025, due to solar interference. This is a normal part of satellite operation and it cannot be avoided.

About solar interference

Twice each year, near the spring and fall equinoxes, the sun crosses the equatorial plane. At these times, the sun aligns directly behind geosynchronous satellites for a few minutes each day. When the sun moves directly behind the satellite relative to your receive antenna, the satellite signal can be overwhelmed by the enormous amount of radio frequency (RF) noise radiated by the sun. This can cause reception interference which briefly and temporarily degrades your satellite signal. You may experience several minutes of service interruption during this time.

Problem (public)

There will be service outage between 5 to 10 minutes due to solar interference and the customers no need to touch their antennas

Solution (public)

There will be no solution to that. Please see the tables below for expected times of interference; actual time at your location will vary. A technical explanation follows. We apologise for any inconvenience.

Note: All times are listed in local civil time with no adjustment for summer time.

SES NSS-12, 57.00E Standard antenna beamwidth at 12 GHz

Site 1

Hameln- Germany, 52.06N, 09.32E, EL=20.10, AZ=125.28, TZ=0.00, D=1.00

Date Begin Peak End Depth Closest(deg)

Feb 26 08:05 08:08 08:11 Low 1.34

Feb 27 08:03 08:08 08:13 Medium 0.96

Feb 28 08:02 08:07 08:13 High 0.59

Mar 1 08:01 08:07 08:13 High 0.20

Mar 2 08:01 08:07 08:13 High 0.18

Mar 3 08:01 08:07 08:13 High 0.56

Mar 4 08:02 08:07 08:12 Medium 0.94

Mar 5 08:03 08:06 08:10 Low 1.33

Site 2

Riyadh - KSA, 24.69N, 46.63E, EL=58.87, AZ=156.34, TZ=3.00, D=1.80

Date Begin Peak End Depth Closest(deg)

Mar 7 11:15 11:16 11:17 Low 0.95

Mar 8 11:13 11:16 11:19 Medium 0.56

Mar 9 11:12 11:16 11:19 High 0.17

Mar 10 11:12 11:15 11:19 High 0.23

Mar 11 11:12 11:15 11:18 Medium 0.62

Site 3

Tehran - Iran, 35.80N, 51.47E, EL=48.04, AZ=170.59, TZ=3.50, D=1.80

Date Begin Peak End Depth Closest(deg)

Mar 3 11:50 11:51 11:52 Low 0.92

Mar 4 11:48 11:51 11:54 Medium 0.53

Mar 5 11:47 11:50 11:54 High 0.15

Mar 6 11:47 11:50 11:54 High 0.24

Mar 7 11:47 11:50 11:53 Medium 0.63

Site 4

Islamabad - Pakistan, 33.72N, 73.11E, EL=47.15, AZ=207.49, TZ=5.00, D=1.80

Date Begin Peak End Depth Closest(deg)

Mar 4 13:31 13:33 13:35 Low 0.83

Mar 5 13:29 13:33 13:36 High 0.45

Mar 6 13:29 13:32 13:36 High 0.06

Mar 7 13:29 13:32 13:36 High 0.34

Mar 8 13:29 13:32 13:34 Low 0.72

Site 5

Kiev - Ukraine, 50.46N, 30.52E, EL=27.01, AZ=147.14, TZ=3.00, D=1.80

Date Begin Peak End Depth Closest(deg)

Feb 27 11:12 11:14 11:15 Low 0.92

Feb 28 11:10 11:14 11:17 Medium 0.55

Mar 1 11:10 11:13 11:17 High 0.17

Mar 2 11:09 11:13 11:17 High 0.22

Mar 3 11:10 11:13 11:16 Medium 0.60

Mar 4 11:12 11:13 11:13 Low 0.98

Site 6

Juba - South Sudan, 4.85N, 31.06E, EL=59.20, AZ=99.86, TZ=3.00, D=1.80

Date Begin Peak End Depth Closest(deg)

Mar 16 11:01 11:03 11:05 Low 0.75

Mar 17 10:59 11:03 11:06 High 0.36

Mar 18 10:59 11:02 11:06 High 0.06

Mar 19 10:59 11:02 11:06 High 0.44

Mar 20 11:00 11:02 11:04 Low 0.83

Site 7

Nairobi - Kenya, 1.28S, 36.83E, EL=66.31, AZ=86.52, TZ=3.00, D=1.20

Date Begin Peak End Depth Closest(deg)

Mar 18 11:03 11:06 11:09 Low 1.03

Mar 19 11:01 11:06 11:10 Medium 0.64

Mar 20 11:00 11:05 11:11 High 0.25

Mar 21 11:00 11:05 11:10 High 0.16

Mar 22 11:00 11:05 11:10 High 0.55

Mar 23 11:01 11:05 11:08 Low 0.94

Mar 24 11:03 11:04 11:05 Low 1.34

Site 8

Baghdad - Iraq, 33.33N, 44.43E, EL=48.94, AZ=157.91, TZ=3.00, D=1.20

Date Begin Peak End Depth Closest(deg)

Mar 3 11:15 11:17 11:19 Low 1.26

Mar 4 11:12 11:17 11:21 Low 0.88

Mar 5 11:11 11:16 11:21 High 0.49

Mar 6 11:11 11:16 11:21 High 0.11

Mar 7 11:11 11:16 11:21 High 0.29

Mar 8 11:11 11:16 11:20 Medium 0.68

Mar 9 11:12 11:15 11:19 Low 1.07

Site 9

Dubai - U.A.E., 25.13N, 55.17E, EL=60.55, AZ=175.70, TZ=4.00, D=1.20

Date Begin Peak End Depth Closest(deg)

Mar 6 12:20 12:22 12:24 Low 1.26

Mar 7 12:18 12:22 12:26 Medium 0.87

Mar 8 12:17 12:22 12:27 High 0.48

Mar 9 12:16 12:22 12:27 High 0.11

Mar 10 12:16 12:21 12:26 High 0.30

Mar 11 12:17 12:21 12:25 Medium 0.70

Mar 12 12:18 12:21 12:24 Low 1.09

Site 10

Kabul - Afghanistan, 34.50N, 69.17E, EL=47.85, AZ=200.84, TZ=4.50, D=1.20

Date Begin Peak End Depth Closest(deg)

Mar 3 12:57 13:01 13:04 Low 1.10

Mar 4 12:56 13:00 13:05 Medium 0.71

Mar 5 12:55 13:00 13:05 High 0.33

Mar 6 12:55 13:00 13:05 High 0.07

Mar 7 12:55 13:00 13:05 High 0.45

Mar 8 12:55 12:59 13:03 Medium 0.84

Mar 9 12:57 12:59 13:01 Low 1.23

Site 11

Kinshasa - DR Congo, 4.33S, 15.31E, EL=41.65, AZ=85.15, TZ=1.00, D=1.20

Date Begin Peak End Depth Closest(deg)

Mar 19 08:51 08:54 08:57 Low 1.15

Mar 20 08:49 08:54 08:58 Medium 0.75

Mar 21 08:48 08:53 08:59 High 0.36

Mar 22 08:48 08:53 08:58 High 0.04

Mar 23 08:48 08:53 08:58 High 0.43

Mar 24 08:48 08:53 08:57 Medium 0.83

Mar 25 08:50 08:52 08:55 Low 1.22

Site 12

Lubumbashi - DR Congo, 11.66S, 27.47E, EL=53.26, AZ=70.36, TZ=2.00, D=1.20

Date Begin Peak End Depth Closest(deg)

Mar 22 09:57 09:59 10:02 Low 1.23

Mar 23 09:55 09:59 10:03 Medium 0.84

Mar 24 09:54 09:59 10:04 High 0.44

Mar 25 09:53 09:59 10:04 High 0.07

Mar 26 09:53 09:58 10:03 High 0.34

Mar 27 09:54 09:58 10:02 Medium 0.74

Mar 28 09:55 09:58 10:01 Low 1.12

Telesat Telstar-11N, 37.50W Standard
antenna beamwidth at 12 GHz

Site 1

Hameln- Germany, 52.06N, 9.32E, EL=16.59, AZ=233.50, TZ=0.00, D=1.00

Date Begin Peak End Depth Closest(deg)

Feb 25 15:00 15:00 15:00 Low 1.59

Feb 26 14:56 15:00 15:03 Low 1.22

Feb 27 14:54 14:59 15:05 Medium 0.85

Feb 28 14:53 14:59 15:05 High 0.47

Mar 1 14:53 14:59 15:05 High 0.10

Mar 2 14:53 14:59 15:05 High 0.29

Mar 3 14:53 14:59 15:04 High 0.68

Mar 4 14:54 14:58 15:03 Low 1.06

Mar 5 14:56 14:58 15:01 Low 1.45

Site 2

Havana - Cuba, 23.13N, 82.42W, EL=33.39, AZ=111.50, TZ=-5.00, D=1.80

Date Begin Peak End Depth Closest(deg)

Mar 8 09:14 09:16 09:17 Low 0.89

Mar 9 09:12 09:16 09:19 High 0.50

Mar 10 09:12 09:15 09:19 High 0.11

Mar 11 09:11 09:15 09:19 High 0.29

Mar 12 09:12 09:15 09:17 Low 0.68

Site 3

Panama - Panama, 8.97N, 79.53W, EL=40.61, AZ=99.81, TZ=-5.00, D=1.80

Date Begin Peak End Depth Closest(deg)

Mar 14 09:11 09:13 09:16 Low 0.77

Mar 15 09:10 09:13 09:17 High 0.38

Mar 16 09:09 09:13 09:17 High 0.04

Mar 17 09:09 09:13 09:16 High 0.41

Mar 18 09:10 09:12 09:14 Low 0.81

Site 4

Lima - Peru, 14.04S, 77.06W, EL=41.96, AZ=73.63, TZ=-5.00, D=1.80

Date Begin Peak End Depth Closest(deg)

Mar 24 09:10 09:12 09:15 Low 0.70

Mar 25 09:08 09:12 09:15 High 0.30

Mar 26 09:08 09:12 09:15 High 0.10

Mar 27 09:08 09:11 09:15 High 0.48

Mar 28 09:09 09:11 09:13 Low 0.87

Site 5

Dakar - Senegal, 14.69N, 17.45W, EL=61.14, AZ=235.21, TZ=0.00, D=1.20

Date Begin Peak End Depth Closest(deg)

Mar 10 14:52 14:54 14:55 Low 1.31

Mar 11 14:49 14:53 14:57 Low 0.91

Mar 12 14:48 14:53 14:58 High 0.52

Mar 13 14:48 14:53 14:58 High 0.12

Mar 14 14:47 14:52 14:58 High 0.28

Mar 15 14:48 14:52 14:57 Medium 0.66

Mar 16 14:49 14:52 14:55 Low 1.06

Site 6

Lagos - Nigeria, 6.27N, 3.28E, EL=42.42, AZ=262.78, TZ=1.00, D=1.20

Date Begin Peak End Depth Closest(deg)

Mar 14 16:02 16:04 16:07 Low 1.21

Mar 15 16:00 16:04 16:08 Medium 0.81

Mar 16 15:59 16:04 16:09 High 0.42

Mar 17 15:58 16:03 16:09 High 0.03

Mar 18 15:58 16:03 16:08 High 0.38

Mar 19 15:58 16:03 16:07 Medium 0.77

Mar 20 16:00 16:02 16:05 Low 1.16

Site 7

Cape Town - South Africa, 33.93S, 18.42E, EL=19.54, AZ=290.69, TZ=2.00, D=1.20

Date Begin Peak End Depth Closest(deg)

Mar 30 16:57 17:00 17:03 Low 1.14

Mar 31 16:55 16:59 17:04 Medium 0.75

Apr 1 16:54 16:59 17:04 High 0.37

Apr 2 16:54 16:59 17:04 High 0.04

Apr 3 16:54 16:59 17:04 High 0.40

Apr 4 16:54 16:58 17:03 Medium 0.78

Apr 5 16:55 16:58 17:01 Low 1.16

Site 8

Kinshasa - DR Congo, 4.33S, 15.31E, EL=29.51, AZ=273.28, TZ=1.00, D=1.20

Date Begin Peak End Depth Closest(deg)

Mar 19 16:04 16:08 16:11 Low 1.01

Mar 20 16:03 16:07 16:12 High 0.61

Mar 21 16:02 16:07 16:12 High 0.23

Mar 22 16:01 16:07 16:12 High 0.18

Mar 23 16:02 16:06 16:11 High 0.57

Mar 24 16:02 16:06 16:10 Low 0.96

Mar 25 16:05 16:06 16:06 Low 1.36

Site 9

Lubumbashi - DR Congo, 11.66S, 27.47E, EL=16.17, AZ=275.39, TZ=2.00, D=1.20

Date Begin Peak End Depth Closest(deg)

Mar 22 17:06 17:09 17:13 Low 0.96

Mar 23 17:04 17:09 17:14 High 0.57

Mar 24 17:03 17:09 17:14 High 0.17

Mar 25 17:03 17:08 17:14 High 0.22

Mar 26 17:03 17:08 17:13 High 0.61

Mar 27 17:04 17:08 17:11 Low 1.00