Online Appendix: Robustness Tests

Table A1: Placebo Test for Pre-discovery Trends in Night-Lights

	MD_{dt-j}: Mineral discovery made in year $t-j$	First Discoveries 2002-2012 (1)	First Discoveries 1997-2007 (2)
Pre-Discovery	$j=-10$	0.030	
		(0.101)	
	$j=-9$	0.063	
		(0.083)	
	$j=-8$	-0.059	
		(0.110)	
	$j=-7$	-0.047	
		(0.088)	
	$j=-6$	-0.016	
		(0.090)	
	$j=-5$	-0.064	-0.037
		(0.092)	(0.179)
	$j=-4$	0.020	0.027
		(0.055)	(0.214)
	$j=-3$	0.022	0.037
		(0.061)	(0.199)
	$j=-2$	-0.033	0.042
		(0.043)	(0.202)
	$j=-1$	-0.048	-0.004
		(0.046)	(0.201)
Post-Discovery	$j=0$		0.016
			(0.215)
	$j=1$		0.048
			(0.217)
	$j=2$		0.037
			(0.220)
	$j=3$		0.033
			(0.220)
	$j=4$		0.050
			(0.220)
	$j=5$		0.072
			(0.213)
	Population density & Rainfall	Yes	Yes
	Year Fixed Effects	Yes	Yes
	District Fixed Effects	Yes	Yes
	F-test of joint significance of pre-discovery dummies (p-val)	0.15	0.59
	N	73,106	73,253
	N Discoveries	34	42
	N(Districts/Regions/Countries)	3,497/514/42	3,505/515/42
	R-squared adj.	0.944	0.944

Notes: This table tests for pre-treatment effects in mineral discoveries. Because information on discoveries post-2012 is unavailable, we apply the following symmetric pre-/post discovery windows. Column (1) shows 10-year pre-discovery trends for discoveries that were made between 2002 and 2012. Column (2) shows trends in night-lights 5-years pre-/ post-discovery for discoveries that were made between 1997 and 2007. All regressions include year and district fixed effects. Robust standard errors in parentheses are clustered by region. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A2: Association between mineral production and nightlights in a country's major cities

	Capital city	Capital city	Two brightest cities in 1992	Two brightest cities in 1992
	(1)	(2)	(3)	(4)
Capital City x Log(Mineral exports value)	-0.007			
	(0.011)			
Capital city x (Mineral rents as % of GDP)		-0.010		
		(0.006)		
Country's two brightest cities in 1992 x Log(Mineral exports value)			-0.003	
			(0.013)	
Country's two brightest cities in 1992 x (Mineral rents as % of GDP)				-0.008
				(0.009)
Pop. density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes	Yes
N	69,569	74,781	69,569	74,781
N(Regions/Districts)	494/ 3,524	503/ 3,561	494/ 3,524	503/ 3,561
Adjusted R-squared	0.949	0.947	0.949	0.947

Notes: This table shows the correlation between a country's mining activities and nightlights in a country's major cities using a panel of district-year observations. Column (1) reports the interaction effect between being the capital city and the natural log of total value of mineral exports. Instead of export values, column (2) uses mineral rents as a percentage of GDP. Column (3) and (4) examine the patterns in the two highest lit districts as of 1992 instead of the capital city. Estimator is OLS. All regressions include population density, rainfall and year and district fixed effects. Robust standard errors clustered by region are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A3: Mine Closure and Development

	(1)	(2)	(3)
District has been mined	0.722***	0.725***	0.722***
	(0.162)	(0.161)	(0.162)
Shutdown	-0.491*	-0.224	-0.224
	(0.264)	(0.137)	(0.137)
Shutdown and not reopened by 2012		-0.837	-0.531
		(0.700)	(0.787)
Population density & Rainfall	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes
N	76,335	76,335	76,314
N(Districts/Regions/Countries)	3,635/519/42	3,635/519/42	3,634/519/42
R-squared adj.	0.947	0.947	0.947

Notes: This table shows association between a stop in mining activities and night-lights in a panel of district-year observations for the period 1992-2012. Dependent variable is log(0.01+nighttime lights density) at the district-year level. "District has been mined" is a dummy variable equal to 1, once a district had at least one producing mine. "Shutdown" is a dummy variable equal to 1, if all mines in a district shut down (it may be temporary or permanent). "Shutdown and not reopened by 2012" is a dummy variable equal to 1 if all mines in a district shut down and none has reopened by 2012. Column (1) and (2) include all districts. Column (3) excludes Bonthe District in Sierra Leone, where the closure was reportedly caused by rebels during the civil war. Data from MinEx. Robust standard errors clustered by region are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A4: Associations between Mineral Production and Night-Lights at District Level (District-year observations dropped if production data is missing)

	Intensive margin		
	(1)	(2)	(3)
Log(Mineral production value in 1992 USD)	0.040**		-0.083
	(0.018)		(0.065)
Log(Mineral prod. value in 1992 commodity prices)		0.079**	0.163*
		(0.032)	(0.088)
Population density & rainfall	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes
N	776	776	776
N(Districts/Regions/Countries)	126/77/28	126/77/28	126/77/28
R-squared adj.	0.985	0.985	0.986

Notes: In the main analysis we replaced missing values in production quantities by linear interpolation. This may affect estimates of the intensive margin. This table is a re-estimation of Table 3 in the main text. It shows associations between mining activities and night-lights in a panel of district-year observations for the period 1992-2012. In this table, district-year observations are dropped if production quantity is missing for at least one commodity for one mine in that district. This results in an unbalanced panel and fewer observations. Coefficients in this table are larger and more significant, which can be attributed to selection and measurement error. Dependent variable is log(0.01+nighttime lights density) at the district-year level. Column (1) expresses the mineral production value in 1992 constant USD. Column 2 expresses the mineral production value in 1992 constant commodity prices. Column 3 includes both those indicators. Robust standard errors clustered by region are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A5: Associations between Mineral Production and Night-Lights at District Level (Excluding sparsely populated districts with less than four people per square kilometre)

	Intensive margin			Extensive margin
	(1)	(2)	(3)	(4)
Log(Mineral production)	0.032*		-0.011	
	(0.016)		(0.039)	
Log(Mineral production in		0.039*	0.050	
1992 commodity prices)		(0.020)	(0.049)	
Mineral production (1=yes)				0.567***
				(0.131)
Population density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes	Yes
N	1,579	1,579	1,579	70,615
N(Districts/Regions/Countries)	121/71/ 27	121/71/ 27	121/71/ 27	3410/496/42
R-squared adj.	0.980	0.980	0.980	0.947

Notes: This table is a re-estimation of Table 3 in the main text. It shows associations between mining activities and night-lights in a panel of district-year observations for the period 1992-2012. In this table, district-year observations are dropped if the population density is less than 4 (i.e. sparsely populated districts are excluded). Dependent variable is log(0.01+nighttime lights density) at the district-year level. Column (1) expresses the mineral production value in 1992 constant USD. Column 2 expresses the mineral production value in 1992 constant commodity prices. Column 3 includes both those indicators. Column 4 uses a dummy variable equal to one if the district had a producing mine thereby using the full sample. Robust standard errors clustered by region are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A6: Associations between Mineral Production and Night-Lights at District Level (Excluding districts with zero luminosity from the sample)

	Intensive margin			Extensive margin
	(1)	(2)	(3)	(4)
Log(Mineral production)	0.021*		-0.065	
	(0.011)		(0.045)	
Log(Mineral production in		0.035**	0.102*	
1992 commodity prices)		(0.016)	(0.056)	
Mineral production (1=yes)				0.343***
				(0.087)
Population density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes	Yes
N	1,772	1,772	1,772	51,609
N(Districts/Regions/Countries)	136/79/28	136/79/28	136/79/28	3182/516/42
R-squared adj.	0.983	0.983	0.983	0.959

Notes: This table is a re-estimation of Table 3 in the main text. It shows associations between mining activities and night-lights in a panel of district-year observations for the period 1992-2012. In this table, district-year observations are dropped if the sum of light intensity values for the district is zero. Dependent variable is log(0.01+nighttime lights density) at the district-year level. Column (1) expresses the mineral production value in 1992 constant USD. Column 2 expresses the mineral production value in 1992 constant commodity prices. Column 3 includes both those indicators. Column 4 uses a dummy variable equal to one if the district had a producing mine thereby using the full sample. Robust standard errors clustered by region are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A7: Associations between Mineral Production and Night-Lights at District Level (Weighting districts by district population size)

	Intensive margin			Extensive margin
	(1)	(2)	(3)	(4)
Log(Mineral production)	0.024*		-0.061	
	(0.014)		(0.047)	
Log(Mineral production in		0.038**	0.102*	
1992 commodity prices)		(0.018)	(0.057)	
Mineral production (1=yes)				0.554***
				(0.117)
Population density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes	Yes
N	1,802	1,802	1,802	76,335
N(Districts/Regions/Countries)	137/80/28	137/80/28	137/80/28	3,635/519/42
R-squared adj.	0.973	0.974	0.974	0.935

Notes: This table is a re-estimation of Table 3 in the main text. It shows associations between mining activities and night-lights in a panel of district-year observations for the period 1992-2012. In this table, the dependent variable is light density minus log population density (i.e. log luminosity per capita) based on Cogneau and Dupraz (2014). Column (1) expresses the mineral production value in 1992 constant USD. Column 2 expresses the mineral production value in 1992 constant commodity prices. Column 3 includes both those indicators. Column 4 uses a dummy variable equal to one if the district had a producing mine thereby using the full sample. Robust standard errors clustered by region are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A8: Associations between Mineral Production and Night-Lights at District Level (Weighting districts by the inverse of total number of districts in the country)

	Intensive margin			Extensive margin
	(1)	(2)	(3)	(4)
Log(Mineral production)	0.019		-0.089	
	(0.017)		(0.070)	
Log(Mineral production in		0.036*	0.128*	
1992 commodity prices)		(0.019)	(0.077)	
Mineral production (1=yes)				0.898***
				(0.204)
Population density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes	Yes
N	1,802	1,802	1,802	76,335
N(Districts/Regions/Countries)	137/80/28	137/80/28	137/80/28	3,635/519/42
R-squared adj.	0.941	0.941	0.942	0.896

Notes: This table is a re-estimation of Table 3 in the main text. It shows associations between mining activities and night-lights in a panel of district-year observations for the period 1992-2012. In this table, the dependent variable (i.e. sum of nighttime lights density) is weighted by the inverse total number of the districts within a country. Column (1) expresses the mineral production value in 1992 constant USD. Column 2 expresses the mineral production value in 1992 constant commodity prices. Column 3 includes both those indicators. Column 4 uses a dummy variable equal to one if the district had a producing mine thereby using the full sample. Robust standard errors clustered by region are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A9: Associations between Mineral Production and Night-Lights at District Level (Grid-year observations)

	Intensive margin			Extensive margin
	(1)	(2)	(3)	(4)
Log(Mineral production)	0.106***		0.086	
	(0.034)		(0.086)	
Log(Mineral production in		0.116***	0.025	
1992 commodity prices)		(0.038)	(0.094)	
Mineral production (1=yes)				0.701***
				(0.096)
Population density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes	Yes
N	1,200	1,200	1,200	171,633
N(Grids/Regions/Countries)	170/80/29	170/80/29	170/80/29	8173/366/41
R-squared adj.	0.957	0.957	0.957	0.934

Notes: In the main analysis we used district level administrative boundaries as units of interest. Administrative boundaries are endogenous by construction, as it is likely to be determined by local geographic and demographic characteristics.This table is a re-estimation of Table 3 in the main text using grid level boundaries corresponding to a spatial resolution of 0.5 x 0.5 degrees latitude and longitude. It shows associations between mining activities and night-lights in a panel of district-year observations for the period 1992-2012. Dependent variable is log(0.01+nighttime lights density) at the district-year level. Column (1) expresses the mineral production value in 1992 constant USD. Column 2 expresses the mineral production value in 1992 constant commodity prices. Column 3 includes both those indicators. Robust standard errors clustered by region are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A10: Associations between Mineral Production and Night-Lights at District Level (controlling for year and region fixed effects)

	Intensive margin			Extensive margin
	(1)	(2)	(3)	(4)
Log(Mineral production)	0.039*		-0.125*	
	(0.022)		(0.070)	
Log(Mineral production in		0.048*	0.183**	
1992 commodity prices)		(0.027)	(0.090)	
Mineral production (1=yes)				0.642***
				(0.087)
Population density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
N	1,802	1,802	1,802	76,335
N(Districts/Regions/Countries)	137/80/28	137/80/28	137/80/28	3,635/519/42
R-squared adj.	0.917	0.918	0.919	0.762

Notes: This table is a re-estimation of Table 3 in the main text, using region fixed effects instead of district fixed effects. It shows associations between mining activities and night-lights in a panel of district-year observations for the period 1992-2012. Dependent variable is log(0.01+nighttime lights density) at the district-year level. Column (1) expresses the mineral production value in 1992 constant USD. Column 2 expresses the mineral production value in 1992 constant commodity prices. Column 3 includes both those indicators. Column 4 uses a dummy variable equal to one if the district had a producing mine thereby using the full sample. For a detailed variable description, see Data Appendix. Robust standard errors clustered by region are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A11: Effect of Mineral Resource Discoveries on Night-Lights in Virgin Districts (Excluding sparsely populated districts with less than four people per square kilometre)

MD_{dt-j}: Mineral discovery made in year $t-j$	First Discoveries (1)	Single, First Discoveries (2)	Giant Discoveries (3)	Major Discoveries (4)
$j=0$	-0.019	-0.029	-0.040	-0.029
	(0.115)	(0.068)	(0.098)	(0.081)
$j=1$	0.075	0.030	0.088	-0.011
	(0.127)	(0.082)	(0.111)	(0.091)
$j=2$	0.061	0.000	0.063	-0.052
	(0.118)	(0.088)	(0.107)	(0.098)
$j=3$	0.065	0.019	-0.032	0.030
	(0.142)	(0.096)	(0.131)	(0.094)
$j=4$	0.202	0.078	0.070	0.059
	(0.151)	(0.114)	(0.167)	(0.112)
$j=5$	0.244	0.140	0.128	0.110
	(0.161)	(0.119)	(0.174)	(0.115)
$j=6$	0.298*	0.214*	0.296	0.123
	(0.166)	(0.128)	(0.221)	(0.118)
$j=7$	0.318*	0.245*	0.324	0.180
	(0.179)	(0.139)	(0.235)	(0.123)
$j=8$	0.415**	0.433***	0.465*	0.319*
	(0.175)	(0.158)	(0.236)	(0.162)
$j=9$	0.480**	0.447***	0.456*	0.343**
	(0.197)	(0.168)	(0.248)	(0.172)
$j=10$	0.468**	0.460***	0.514**	0.359**
	(0.198)	(0.168)	(0.253)	(0.167)
Pop. density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes	Yes
N	68,140	68,830	67,914	68,592
N(Districts/Regions/Countries)	3298/494/42	3347/495/42	3289/496/42	3326/497/42
R-squared adj.	0.946	0.946	0.946	0.946

Notes: This table is a re-estimation of Table 6 in the main text. It reports the effect of mineral resource discoveries on night-lights in a panel of district-year observations. In this table, district-year observations are dropped if the population density is less than 4 (i.e. sparsely populated districts are excluded). Dependent variable is log(0.01+nighttime lights density) at the district-year level. In column (1), the variable of interest MD_{dt-j} is a dummy variable equal to 1 if a giant or major mineral deposit was discovered j years ago, 0 if no discovery has been made and missing for every post-discovery year $j > 10$. In column (2), the dummies are set to missing the year a second discovery was made in the same district. In column (3) and (4), the dummy refers to giant and major deposit discoveries respectively. Because of the 10-year lag, the discoveries and numbers referred to by each dummy variable may vary. All regressions include year and district fixed effects. We also control for population density and annual average rainfall. Robust standard errors in parentheses are clustered by region. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A12: Effect of Mineral Resource Discoveries on Night-Lights in Virgin Districts (Excluding districts with zero luminosity from the sample)

MD_{dt-j}: Mineral discovery made in year $t-j$	First Discoveries (1)	Single, First Discoveries (2)	Giant Discoveries (3)	Major Discoveries (4)
$j=0$	-0.015	-0.003	-0.007	-0.029
	(0.075)	(0.062)	(0.100)	(0.081)
$j=1$	0.014	0.011	0.104	-0.012
	(0.101)	(0.075)	(0.112)	(0.093)
$j=2$	-0.090	-0.054	0.085	-0.062
	(0.109)	(0.083)	(0.107)	(0.101)
$j=3$	-0.086	-0.059	0.006	0.017
	(0.126)	(0.086)	(0.133)	(0.097)
$j=4$	0.047	0.058	0.111	0.044
	(0.108)	(0.088)	(0.170)	(0.114)
$j=5$	0.073	0.024	0.159	0.090
	(0.124)	(0.093)	(0.175)	(0.118)
$j=6$	0.049	0.073	0.342	0.108
	(0.120)	(0.090)	(0.222)	(0.121)
$j=7$	0.075	0.078	0.372	0.164
	(0.123)	(0.100)	(0.238)	(0.127)
$j=8$	0.104	0.150	0.502**	0.310*
	(0.118)	(0.102)	(0.237)	(0.162)
$j=9$	0.213	0.275**	0.496**	0.340*
	(0.131)	(0.115)	(0.251)	(0.175)
$j=10$	0.170	0.244*	0.551**	0.342**
	(0.138)	(0.126)	(0.260)	(0.171)
Pop. density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes	Yes
N	49,063	49,620	48,919	49,597
N(Districts/Regions/Countries)	3,058/513/42	3,107/513/42	3,048/512/42	3,085/512/42
R-squared adj.	0.959	0.959	0.959	0.959

Notes: This table is a re-estimation of Table 6 in the main text. It reports the effect of mineral resource discoveries on night-lights in a panel of district-year observations. In this table, district-year observations are dropped if the sum of light intensity values for the district is zero. Dependent variable is log(0.01+nighttime lights density) at the district-year level. In column (1), the variable of interest MD_{dt-j} is a dummy variable equal to 1 if a giant or major mineral deposit was discovered j years ago, 0 if no discovery has been made and missing for every post-discovery year $j > 10$. In column (2), the dummies are set to missing the year a second discovery was made in the same district. In column (3) and (4), the dummy refers to giant and major deposit discoveries respectively. Because of the 10-year lag, the discoveries and numbers referred to by each dummy variable may vary. All regressions include year and district fixed effects. We also control for population density and annual average rainfall. Robust standard errors in parentheses are clustered by region. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A13: Effect of Mineral Resource Discoveries on Night-Lights in Virgin Districts (Weighting district areas by its population size i.e. population density times surface area)

MD_{dt-j}: Mineral discovery made in year $t-j$	First Discoveries (1)	Single, First Discoveries (2)	Giant Discoveries (3)	Major Discoveries (4)
$j=0$	-0.024	-0.028	-0.032	-0.024
	(0.106)	(0.063)	(0.098)	(0.081)
$j=1$	0.060	0.024	0.100	-0.005
	(0.118)	(0.075)	(0.111)	(0.091)
$j=2$	0.046	-0.008	0.075	-0.043
	(0.111)	(0.081)	(0.106)	(0.098)
$j=3$	0.048	0.006	-0.015	0.039
	(0.132)	(0.087)	(0.131)	(0.094)
$j=4$	0.174	0.068	0.085	0.070
	(0.141)	(0.104)	(0.167)	(0.111)
$j=5$	0.212	0.114	0.146	0.122
	(0.151)	(0.109)	(0.174)	(0.114)
$j=6$	0.257	0.190	0.314	0.134
	(0.157)	(0.118)	(0.220)	(0.118)
$j=7$	0.277	0.218*	0.342	0.190
	(0.169)	(0.126)	(0.235)	(0.123)
$j=8$	0.363**	0.391***	0.484**	0.331**
	(0.167)	(0.147)	(0.235)	(0.161)
$j=9$	0.427**	0.402***	0.477*	0.355**
	(0.187)	(0.155)	(0.247)	(0.171)
$j=10$	0.430**	0.431***	0.538**	0.373**
	(0.187)	(0.156)	(0.253)	(0.166)
Pop. density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes	Yes
N	73,428	74,178	73,150	73,828
N(Districts/Regions/Countries)	3,560/516/42	3,557/516/42	3,493/515/42	3,530/515/42
R-squared adj.	0.933	0.933	0.933	0.933

Notes: This table is a re-estimation of Table 6 in the main text. It reports the effect of mineral resource discoveries on night-lights in a panel of district-year observations. In this table, the dependent variable is light density minus log population density (i.e. log luminosity per capita) based on Cogneau and Dupraz (2014). In column (1), the variable of interest MD_{dt-j} is a dummy variable equal to 1 if a giant or major mineral deposit was discovered j years ago, 0 if no discovery has been made and missing for every post-discovery year $j > 10$. In column (2), the dummies are set to missing the year a second discovery was made in the same district. In column (3) and (4), the dummy refers to giant and major deposit discoveries respectively. Because of the 10-year lag, the discoveries and numbers referred to by each dummy variable may vary. All regressions include year and district fixed effects. We also control for population density and annual average rainfall. Robust standard errors in parentheses are clustered by region. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A14: Effect of Mineral Resource Discoveries on Night-Lights in Virgin Districts (Weighting districts by the inverse of total number of districts in the country)

MD_{dt-j}: Mineral discovery made in year $t-j$	First Discoveries (1)	Single, First Discoveries (2)	Giant Discoveries (3)	Major Discoveries (4)
$j=0$	-0.039	-0.051	0.126	-0.095
	(0.235)	(0.135)	(0.306)	(0.167)
$j=1$	0.131	0.043	0.487	-0.107
	(0.279)	(0.191)	(0.309)	(0.218)
$j=2$	0.240	-0.023	0.500	-0.205
	(0.289)	(0.195)	(0.330)	(0.214)
$j=3$	0.042	0.083	0.179	0.155
	(0.315)	(0.192)	(0.328)	(0.199)
$j=4$	0.249	0.008	0.273	-0.006
	(0.318)	(0.226)	(0.404)	(0.223)
$j=5$	0.296	0.173	0.554	0.108
	(0.339)	(0.220)	(0.392)	(0.223)
$j=6$	0.464	0.348	0.692	0.218
	(0.298)	(0.214)	(0.421)	(0.190)
$j=7$	0.445	0.420*	0.747*	0.321
	(0.322)	(0.241)	(0.428)	(0.231)
$j=8$	0.709**	0.677**	0.939**	0.540*
	(0.331)	(0.264)	(0.442)	(0.277)
$j=9$	0.672*	0.529	0.801*	0.417
	(0.380)	(0.326)	(0.485)	(0.366)
$j=10$	0.706*	0.658**	0.950*	0.520
	(0.384)	(0.316)	(0.484)	(0.344)
Pop. density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes	Yes
N	73,428	74,178	73,150	73,828
N(Districts/Regions/Countries)	3,560/516/42	3,557/516/42	3,493/515/42	3,530/515/42
R-squared adj.	0.892	0.892	0.892	0.892

Notes: This table is a re-estimation of Table 6 in the main text. It reports the effect of mineral resource discoveries on night-lights in a panel of district-year observations. In this table, the dependent variable (i.e. sum of nighttime lights density) is weighted by the inverse total number of the districts within a country. In column (1), the variable of interest MD_{dt-j} is a dummy variable equal to 1 if a giant or major mineral deposit was discovered j years ago, 0 if no discovery has been made and missing for every post-discovery year $j > 10$. In column (2), the dummies are set to missing the year a second discovery was made in the same district. In column (3) and (4), the dummy refers to giant and major deposit discoveries respectively. Because of the 10-year lag, the discoveries and numbers referred to by each dummy variable may vary. All regressions include year and district fixed effects. We also control for population density and annual average rainfall. Robust standard errors in parentheses are clustered by region. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A15: Effect of Mineral Resource Discoveries on Night-Lights in Virgin Districts (Grid-year observation)

MD_{dt-j}: Mineral discovery made in year $t-j$	First Discoveries (1)	Single, First Discoveries (2)	Giant Discoveries (3)	Major Discoveries (4)
$j=0$	0.160*	0.078	0.088	0.071
	(0.090)	(0.055)	(0.111)	(0.061)
$j=1$	0.234***	0.153**	0.078	0.152**
	(0.088)	(0.065)	(0.097)	(0.074)
$j=2$	0.289***	0.144*	-0.050	0.162**
	(0.108)	(0.075)	(0.129)	(0.082)
$j=3$	0.271**	0.187**	-0.113	0.240***
	(0.109)	(0.079)	(0.123)	(0.092)
$j=4$	0.335***	0.181**	-0.124	0.246**
	(0.126)	(0.091)	(0.131)	(0.101)
$j=5$	0.409***	0.308***	0.157	0.385***
	(0.144)	(0.100)	(0.106)	(0.118)
$j=6$	0.457***	0.323***	0.259*	0.389***
	(0.138)	(0.099)	(0.134)	(0.121)
$j=7$	0.435***	0.385***	0.415***	0.416***
	(0.148)	(0.114)	(0.151)	(0.145)
$j=8$	0.667***	0.654***	0.695***	0.656***
	(0.147)	(0.119)	(0.180)	(0.152)
$j=9$	0.647***	0.681***	0.777***	0.657***
	(0.173)	(0.137)	(0.219)	(0.176)
$j=10$	0.695***	0.742***	0.907***	0.681***
	(0.158)	(0.130)	(0.221)	(0.163)
Pop. density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Grid Fixed Effects	Yes	Yes	Yes	Yes
N	168,244	169,203	167,949	168,861
N(Grids/Regions/Countries)	8,022/366/41	8,088/366/41	8,009/366/41	8,059/366/41
R-squared adj.	0.932	0.932	0.932	0.932

Notes: In the main analysis we used district level administrative boundaries as units of interest. Administrative boundaries are endogenous by construction, as it is likely to be determined by local geographic and demographic characteristics. This table is a re-estimation of Table 6 in the main text using grid level boundaries corresponding to a spatial resolution of 0.5 x 0.5 degrees latitude and longitude. It reports the effect of mineral resource discoveries on night-lights in a panel of district-year observations. Dependent variable is log(0.01+nighttime lights density) at the district-year level. In column (1), the variable of interest MD_{dt-j} is a dummy variable equal to 1 if a giant or major mineral deposit was discovered j years ago, 0 if no discovery has been made and missing for every post-discovery year $j > 10$. In column (2), the dummies are set to missing the year a second discovery was made in the same district. In column (3) and (4), the dummy refers to giant and major deposit discoveries respectively. Because of the 10-year lag, the discoveries and numbers referred to by each dummy variable may vary. All regressions include year and district fixed effects. We also control for population density and annual average rainfall. Robust standard errors in parentheses are clustered by region. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table A16: Effect of Mineral Resource Discoveries on Night-Lights in Virgin Districts (controlling for year and region fixed effects)

MD_{dt-j}: Mineral discovery made in year $t-j$	First Discoveries (1)	Single, First Discoveries (2)	Giant Discoveries (3)	Major Discoveries (4)
$j=0$	-0.138	-0.138	-0.236	-0.095
	(0.129)	(0.129)	(0.235)	(0.151)
$j=1$	-0.057	-0.041	-0.032	-0.063
	(0.128)	(0.129)	(0.209)	(0.154)
$j=2$	-0.027	-0.009	0.142	-0.101
	(0.136)	(0.136)	(0.222)	(0.160)
$j=3$	-0.002	0.015	0.073	-0.035
	(0.129)	(0.132)	(0.230)	(0.146)
$j=4$	-0.004	0.011	0.208	-0.092
	(0.115)	(0.115)	(0.184)	(0.146)
$j=5$	0.076	0.081	0.309	-0.034
	(0.121)	(0.119)	(0.209)	(0.150)
$j=6$	0.172	0.190	0.476**	0.016
	(0.124)	(0.121)	(0.209)	(0.167)
$j=7$	0.250**	0.254**	0.484**	0.130
	(0.124)	(0.126)	(0.225)	(0.161)
$j=8$	0.399***	0.409***	0.675***	0.236
	(0.146)	(0.151)	(0.228)	(0.198)
$j=9$	0.430***	0.455***	0.673***	0.271
	(0.146)	(0.150)	(0.236)	(0.187)
$j=10$	0.460***	0.491***	0.730***	0.265
	(0.142)	(0.151)	(0.214)	(0.190)
Pop. density & Rainfall	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
N	74,234	74,178	73,150	73,828
N Discoveries	[66, 79]	[57, 77]	[21, 28]	[38, 55]
N(Districts/Regions/Countries)	3,560/516/42	3,557/516/42	3,493/515/42	3,530/515/42
R-squared adj.	0.756	0.756	0.757	0.756

Notes: This table is a re-estimation of Table 6, using region fixed effects instead of district fixed effects. The table reports the effect of mineral resource discoveries on night-lights in a panel of district-year observations. Districts with pre-existing mining activities were dropped from the regression. In column (1), the variable of interest MD_{dt-j} is a dummy variable equal to 1 if a giant or major mineral deposit was discovered j years ago, 0 if no discovery has been made and missing for every post-discovery year $j > 10$. In column (2), the dummies are set to missing the year a second discovery was made in the same district. In column (3) and (4), the dummy refers to giant and major deposit discoveries respectively. Because of the 10-year lag, the discoveries and numbers referred to by each dummy variable may vary. Coefficients in column (1) and (2) show the same order of magnitude as Table 5. In contrast, coefficients in column (3) and (4) indicate a somewhat larger and smaller effect respectively. All regressions include year and region fixed effects. We also control for population density and annual average rainfall. Robust standard errors in parentheses are clustered by region. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.